

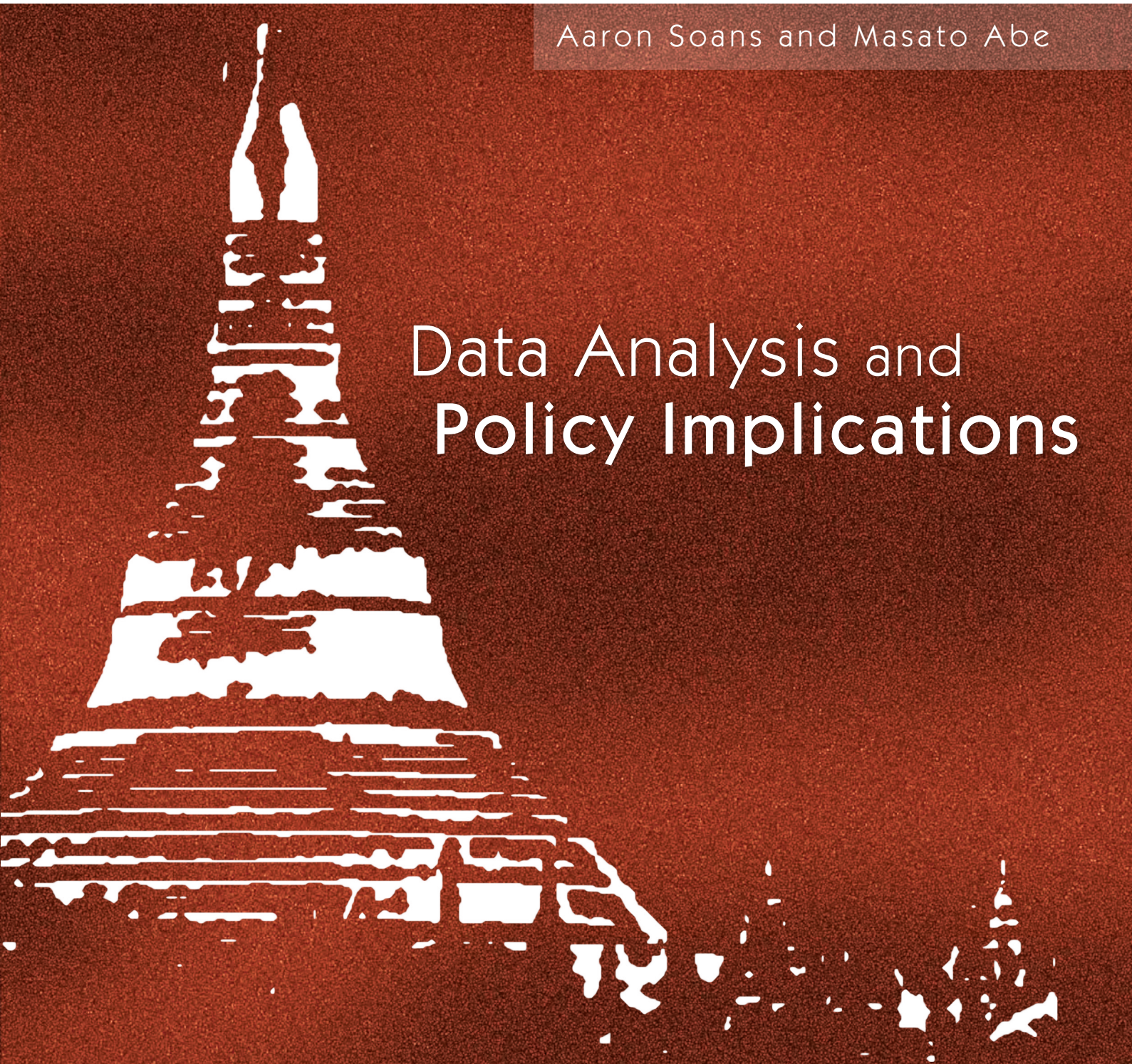


Myanmar

Business Survey

Aaron Soans and Masato Abe

Data Analysis and Policy Implications



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FOREWORD

With vast natural resources, a young and abundant population and ongoing political and economic reforms that have been enthusiastically supported by the international community, Myanmar has the potential to achieve fast economic development. The success of this process is highly dependent on the adoption of a coherent and appropriate combination of policy measures in key industrial sectors of its economy. However, a lack of information on the conditions and environment in which businesses operate presents a major obstacle in identifying effective policy options for Myanmar's industrialization. This publication, which is aimed at filling this gap, assesses the status of the business community by presenting the results of the first-ever nationwide business survey in Myanmar. Its main purpose is to provide much needed information on businesses in Myanmar and the conditions they face.

The business survey on which this book is based is part of a comprehensive policy review in Myanmar. Since the end of 2012, ESCAP and the Organisation for Economic Co-operation and Development (OECD) have jointly conducted a multi-dimensional policy review of Myanmar, in coordination with the Ministry of National Planning and Economic Development of Myanmar. The multi-dimensional policy review, which is a comprehensive policy-diagnostic approach, blends the strengths of proven ESCAP and OECD analytical instruments, tailored to the context of a multi-faceted economy with multiple opportunities and challenges. The business survey was designed to collect and analyse scarce data on firms in order to provide more specific and concrete policy recommendations for the multi-dimensional policy review, particularly in the area of supporting business initiatives in Myanmar. In other words, these recommendations need to be underpinned by a more accurate assessment of the dynamic business environment in Myanmar.

Against this background, ESCAP, OECD and the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI) jointly carried out this business survey from the end of 2013 to early 2014. The survey covers all the States and Regions of Myanmar and almost all industrial sectors. The Government of Japan, The Asia Foundation, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI), the United Nations Industrial Development Organization (UNIDO) and other agencies provided financial and in-kind support for the survey project. As a result, the survey successfully collected more than 3 000 interviews with firms, which is unprecedented in Myanmar. Although ESCAP and OECD have already published part of the survey results at a few outlets, a comprehensive publication has been requested by a number of stakeholders in order to make the entire results of the survey available to the public. Therefore, the Mekong Institute, ESCAP's long-time strategic partner, decided to provide additional financial and technical assistance to the development of this publication on the survey results.

The results of the survey, which are fully displayed in the present publication, provide better information on the situation in Myanmar's business sector. It allows the Government of Myanmar, various development partners and other stakeholders to become equipped with better information on the present business climate as well as to contribute to the development of effective policy options for creating an enabling environment for business in Myanmar.



Mia Mikic
Officer-in-Charge, a.i.
Trade and Investment Division
ESCAP



MESSAGE FROM THE MEKONG INSTITUTE

The Mekong Institute welcomes this publication on the first nation-wide business survey in Myanmar.

The Mekong Institute is an intergovernmental organization working in the Greater Mekong Subregion (GMS). It provides, implements and facilitates integrated human resource development, capacity-building programmes and development projects related to regional cooperation and integration issues in the GMS economies, i.e., Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam, and Yunnan Province and Guangxi Zhuang Autonomous Region of China. The organization's current goals and strategies support the GMS Cooperation Programme and the formation of the ASEAN Economic Community (AEC), emphasizing enhanced physical connectivity in the GMS economic corridors and the realization of a single market and production base, equitable growth and sustainable resource management.

To achieve these goals, the Mekong Institute seeks to assist emerging economies such as Myanmar in making the transition from an isolated and controlled economy to one that is integrated and liberalized. In Myanmar, however, the lack of information on business conditions on the ground is a serious obstacle to the development of appropriate policies that enable reform. By providing much-needed information, this survey will be of substantial benefit to policymakers, businesses and investors in Myanmar. A strong, open and healthy economy in Myanmar will be of tremendous value to the Greater Mekong Subregion.

The Mekong Institute would like to extend its gratitude to ESCAP, OECD, UMFCCI and other agencies for their cooperation in the development of the Myanmar business survey.



Watcharas Leelawath
Director
Mekong Institute

May 2015



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This publication was jointly prepared by ESCAP and the Mekong Institute with the latter's financial support. The business survey was developed and conducted jointly by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the Organisation for Economic Co-operation and Development (OECD) and the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI) with financial assistance from the Government of Japan, The Asia Foundation, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the OECD, the UMFCCI and the United Nations Industrial Development Organization (UNIDO). The survey instruments were designed by ESCAP and OECD in technical consultations with The Asia Foundation, the German Institute for Development Evaluation (DEval) and the Swiss Agency for Development and Cooperation (SDC). Hanns Seidel Foundation organized the launch event and technical seminars of the business survey in Myanmar.

This survey project is the brainchild of Margit Molnar, former Head of Competitiveness and Structural Analysis Unit, OECD Development Centre. The implementation of the project was led by Masato Abe, Economic Affairs Officer, Business and Development Section, under the supervision of Marc Proksch, Chief, Business and Development Section, Trade and Investment Division, ESCAP. Derek Carnegie and Martha Baxter (both at OECD) provided significant inputs to the development of the survey project and its implementation. Madhurjya Kumar Dutta, Programme Manager of Trade and Investment Facilitation Department, and Wen Hao, Programme Facilitator, provided their technical expertise and advice to the project under the supervision of Dr. Watcharas Leelawath, Director, Mekong Institute. Special thanks go to the entire survey team managed by UMFCCI, and in particular, to U Win Aung, President, U Zaw Min Win, Vice-President, U Moe Myint Kyaw, Secretary-General, U Myint Zaw, Joint Secretary-General, Captain Aung Khin Myint, Executive Director of the Myanmar Business Survey Project and Sai Aung Mane, Project Manager. The survey team, comprising (in alphabetical order) Yaw Htung, Wazo Chan Myei, Than Naing Oo, Khin Cho Thein and Thiha Thaug Yin as well as Nwe Nwe Oo, Ei Ei Kay Khaing and Pann Pann Su Mon, made important contributions to the project.

This publication was co-authored by Aaron Soans (formerly ESCAP and Mekong Institute; now OECD) and Masato Abe. Toru Adachi (Embassy of Japan in Bangkok) prepared the section on agribusiness and food industries. Sai Aung Mane contributed extensively to the data collection and data cleaning sections in Chapter 2. Substantive inputs were made by Gordon Israel who also designed the cover of the book. Veronika Marinova managed the production of the publication with substantive inputs. Robert Oliver edited the manuscripts. Natthika Charoenphon, Shan Ni and Pranee Suriyan provided administrative support. The authors are also grateful for insightful comments provided by David Abonyi (ESCAP), Shervin Majlessi (UNODC Bangkok), Adam McCarty (Mekong Economics), Mia Mikic (ESCAP) and Teemu Puutio (ESCAP).



EXECUTIVE SUMMARY

Myanmar is emerging from decades of military rule, central planning and economic isolation as it implements political and economic reforms and, as a result, faces fewer international sanctions. The country has great potential for rapid development due to its vast natural resources, abundant labour force and geostrategic location.¹ Capitalizing on these assets to achieve its goal requires well-implemented regulatory and institutional reform.

To assist in these efforts, ESCAP and OECD conducted a multi-dimensional policy review of Myanmar from the end of 2012 in coordination with the Government of Myanmar.² During the policy review, the lack of information on the business conditions on the ground was found to be a serious impediment to the development of appropriate policies. To address this issue, ESCAP and OECD carried out a business survey jointly with the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI).

The survey provides a rich dataset of more than 3 000 firms in all sectors and geographic regions to help in understanding the characteristics of firms on the ground, their business environment and the challenges they face. This publication explores the survey results in depth, in order to develop policies that address these challenges and promote private sector development in Myanmar.

The survey results are discussed from various key perspectives of businesses in order to identify effective policy prescriptions. They include the business environment, market conditions, innovation, human resources, access to finance, productivity, corruption, agribusiness and food industries, which are briefly summarized below.

1. Business environment

The development of an enabling business environment is crucial to the promotion of growth, productivity, employment and well-being. Although the country has instituted various reforms since the early 1990s the regulatory and policy framework remains fragmented. Permission from parallel line ministries is often required and coordination is reportedly lacking. This has led to the growth of a large informal sector, which makes conditions very difficult for small and medium-sized enterprises (SMEs).

The survey results have revealed wide-spread dissatisfaction with several aspects of the business environment. Corruption, access to skilled labour, technology and access to land are most frequently cited as very severe obstacles faced by businesses in Myanmar. Access to finance is also found to be a major obstacle, especially by SMEs. Although infrastructure such as access to electricity and water supplies are not rated as severe obstacles overall, they are more severe in some geographical regions.

The Government of Myanmar will therefore need to streamline administrative procedures for obtaining registration, licences and permits perhaps by providing a “single-window” service, which will also reduce the opportunities of irregularities. Infrastructure must not only be improved but also distributed equitably throughout the nation with a specific industrial zone development plan. Specialized assistance should be provided to entrepreneurs and SMEs in addressing issues such as access to finance and bureaucracy.

¹ The nation is part of the Association of Southeast Asian Nations (ASEAN) and borders two major economies, China and India.

² OECD has, so far, published two books under the project (see OECD, 2015 and 2013). Both publications are available at www.keepeek.com/Digital-Asset-Management/oecd/development/multi-dimensional-review-of-myanmar_9789264202085-en#page1 and www.keepeek.com/Digital-Asset-Management/oecd/development/multi-dimensional-review-of-myanmar_9789264220577-en#page1, respectively.

2. Market conditions

As the country opens its borders and prepares for regional integration, it must be ready to face opportunities as well as challenges. Enhanced trade could bring huge benefits to the economy but firms will also face stiff competition.

The survey shows that firms still have more localized concerns, as they do not find issues such as foreign competition and international sanctions to be very severe obstacles. Firms are also ambivalent with regard to the launch of the ASEAN Economic Community (AEC).

The Government must spread awareness of the potential benefits and challenges of regional integration. Improving productivity, quality and management is crucial to being able to compete globally. Access to foreign investors and trade finance will be very useful for SMEs.

3. Innovation

Innovation is widely regarded as a key element in quickening the pace of development and growth in any country. For example, the use of transformative technologies such as the Internet has been shown to have dramatic effects on gross domestic product (GDP) growth in many developing countries.

As firms in Myanmar become exposed to global competition, it will be increasingly important for them to develop innovative products or services as well as utilize technology more effectively. However, investment in research and development (R&D) remains low in Myanmar and the country has performed poorly in international rankings of innovation capabilities.

Firms reported in the survey that they considered innovation to be important, yet few in fact spend much money on it. Firms do not appear to be using intellectual property (IP) protection as much as they should with many reportedly relying on trust between staff members to safeguard their innovations. These issues could be addressed by subsidizing expenditure on R&D, streamlining patent applications, disseminating information on the benefits of IP protection and improving enforcement of IP.

4. Human resources

A modern economy requires a workforce that is well-skilled. Myanmar currently spends less than its peers on education and has fewer tertiary graduates. The quality of education is also of concern.

The survey helps in identifying areas where skills are lacking. Technical and professional skills are needed in the manufacturing and services sectors. Computer and ICT skills are required by micro- and small-sized firms. Larger firms require more communication and interpersonal skills.

Although Myanmar provides relatively favourable business environment to women, their participation in the business sector can be further enhanced with well-designed public interventions. Such actions may particularly focus on the skill development of women entrepreneurs and managers.

Addressing these challenges requires increased funding to the tertiary sector together with greater accountability and quality assessments. Vocational training institutes, public administration and management schools and e-education programmes could be developed in association with the private sector.

5. Access to finance

The financial sector has long been tightly controlled and overly regulated. The types of financing instruments available to private enterprises are limited with unreasonably high costs. Many turn to informal money lenders instead. The Government has attempted reforms but the pace has been slow as it is a difficult task.

More than half of the survey respondents reported that financing options were inadequate. Stringent collateral requirements, complicated application procedures, small loan sizes and high interest rates are reportedly the biggest financing obstacles. Informal lenders provide loans at very high interest rates and require greater trust while accepting a wider range of collateral.

The Government must complete the reform process by reducing regulation and allowing banks more flexibility. While the local financial sector is upgrading rapidly, the Government must foster their institutional capacity by providing various technical and financial assistance. Foreign banks should be allowed to operate in the country to encourage competition. Informal lenders should be integrated into the formal system; SMEs should have access to subsidized loans.

6. Productivity

After decades of being sheltered from global competition, productivity remains low in Myanmar. The economy is still dominated by agriculture, which is still a low-productivity sector. Productivity in other sectors is also low by international standards. Improving productivity is crucial to achieving rapid growth.

The survey shows that smaller firms tend to have a higher level of productivity (measured as gross revenue per worker) compared with larger firms. Hotels and restaurants report a much higher profit margin, on average, compared with that of firms in other sectors.

Many of the policies discussed above will also have an impact on productivity. Access to skilled labour, finance, innovation and technology will lead to dramatic improvements in productivity. Further interventions at SOEs (and former SOEs) that encourage the adoption of modern managerial and production techniques and practices will also be useful in improving productivity.

7. Corruption

Corruption remains one of the most significant challenges facing Myanmar. The Government has attempted reforms through a new Anti-Corruption Law and Anti-Corruption Commission; however, the country is still ranked 156 out of 175 in Transparency International's Corruption Perception Index 2014.

Corruption was most frequently cited as a very severe obstacle by the firms surveyed. Bribery is reportedly more common among larger firms as well as firms in the extractive industries sector. Firms that pay bribes, particularly younger firms, do so because they find red tape to be a more severe obstacle compared to firms that do not, suggesting that red tape may be used as a way of extracting bribes.

Although regulatory and legal approaches are important, the root causes of corruption must be addressed. Excessive regulation across the board must be reduced; administrative processes streamlined; accountability of public officials enhanced; and transparency improved.

8. Agribusiness and food industries

The agribusiness and food industries are a key strategic sector in Myanmar's socio-economic development, having long played an important role within the nation's economy. The sector has several unique characteristics. They are dominant industries in rural areas while contributing to the economy through exports of agro-products; thus, the sector is the key to equitable and inclusive development in Myanmar. The average age of firms in this sector is older than those in other sectors, thus confirming its status as a traditional industry of Myanmar. Whereas the sizes of firms in the sector are relatively bigger than firms in other sectors, the agribusiness and food industries appear to make less profit than that earned by businesses in other sectors. The sector relies on informal lenders who are available in rural areas. Some special interventions in this sector may be appropriate for enhancing its exporting contribution as well as rural development.

Conclusion

Myanmar faces several challenges in its transition to a modern economy. The information in this publication provides the much-needed perspective of businesses on the ground in Myanmar, the conditions they experience and the obstacles they face. The policy suggestions contained herein, if implemented, will address these obstacles and help to create an enabling environment that will allow firms to flourish and will promote growth, employment and development in general.

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AEC	ASEAN Economic Community
AFFs	agriculture, fisheries and food industries
AFTA	ASEAN Free Trade Area
ASEAN	Association of Southeast Asian Nations
ASEAN+6	ASEAN plus Australia, China, India, Japan, New Zealand and Republic of Korea
BDS	Business development services
CCI	chamber of commerce and industry
DCED	Donor Committee for Enterprise Development
DEval	German Institute for Development Evaluation
DICA	Directorate of Investment and Company Administration
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
FDI	foreign direct investment
GCI	Global Competitiveness Index
GDP	gross domestic product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GMS	Greater Mekong Subregion
GVC	Global value chain
HACCP	Hazard Analysis and Critical Control Points
ICT	information and communications technology
IFC	International Finance Corporation
INSEAD	Institut Européen d'Administration des Affaires (European Institute of Business Administration)
IP	intellectual property
IPRs	intellectual property rights
ISIC	International Standard Industrial Classification
ISO	International Organization for Standardization
JETRO	Japan External Trade Organization
Lao PDR	Lao People's Democratic Republic
MGI	McKinsey Global Institute
MNPED	Ministry of National Planning and Economic Development of Myanmar
NGO	non-governmental organization
OECD	Organisation for Economic Co-operation and Development
PPP	public-private partnership
R&D	research and development
RTA	regional trade agreement
SDC	Swiss Agency for Development and Cooperation
SEZ	special economic zone
SME	small and medium-sized enterprise
SOE	state-owned enterprises
UMFCCI	Union of Myanmar Federation of Chambers of Commerce and Industry
UNIDO	United Nations Industrial Development Organization
UNODC	United Nations Office on Drugs and Crime
VAT	value-added tax
WEF	World Economic Forum

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INTRODUCTION

After decades of isolationism, military rule and a controlled economy, Myanmar is awakening to the potential of achieving rapid economic growth, development and widespread prosperity. Realizing these goals will depend, to a large degree, on its ability to institute much-needed regulatory and institutional reforms. However, while the private sector must be the engine of growth for the nation, the lack of information on the conditions faced by businesses of all sizes in various sectors and locations throughout the country complicates the creation of effective policy recommendations.

ESCAP and OECD recognized this issue while conducting a multi-dimensional policy review of Myanmar – a comprehensive policy-diagnostic programme – during 2013 and 2014.¹ They sought to conduct a survey to resolve the lack of information on the business climate in order to help develop practical policy recommendations to the Government of Myanmar. This led to the collaboration between ESCAP, OECD and the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI) – the national chamber of commerce and industry – in developing and implementing the current survey project in Myanmar.² The survey is the first-ever to seek opinions from businesses on a nationwide basis in Myanmar.

In order to adequately illustrate the status of the entire business sector in Myanmar, the survey targeted various types of businesses throughout the country. A survey team was established at the premises of UMFCCI in Yangon, comprising of seven area teams and totalling more than 100 people. Survey questionnaires were developed in both Burmese and English, in consultation with a number of country and industrial experts. Data collection took approximately three months from early January to early April 2014. It must be noted that the survey could not have been completed without the

massive contributions made by various cooperating agencies that are duly acknowledged at the beginning of this publication.

The implementation and outcomes of the business survey project, including a literature review, methodology, data collection, data analysis and policy recommendations, are detailed in full in this publication. Chapter I provides a useful background for the survey results by describing the current business climate in Myanmar. The status of the business environment, in particular, is discussed based on the results of earlier business surveys conducted by various development agencies.

Questionnaire development, sampling methods, the survey team, the data collection process and respondent profiles are then discussed in detail in chapter II. The survey covered more than 3 000 firms in all sectors, sizes, types of ownership and geographic locations with a satisfactory response rate, which is rare for business surveys conducted in developing countries (World Bank, 2015). Data were principally collected through face-to-face interviews that were conducted on-site.

Chapter III provides an in-depth analysis of the survey results. An overview of firms participating in the survey is presented and relevant survey data on the key aspects of business environment are then displayed graphically. Those key issues include the business environment, market and supply conditions, innovation and technology, human resource management, access to finance, productivity and corruption. The agribusiness and food industries are then reviewed as a sectoral study since this sector is particularly important to Myanmar's socio-economic development. The results provide a detailed picture of the situation on the ground.

Chapter IV combines the context of the business environment discussed in chapter I with the survey results in Chapter III in order to develop suggestions for policies and actions to be taken by the Government of Myanmar and businesses. Chapter V discusses the limitations of the survey and the possible areas of future research and chapter VI provides the conclusion.

¹ The results of this joint technical assistance programme are available in two OECD publications (2013 and 2015).

² The initial results of this business survey are also available in Abe and Molnar, 2014.

CHAPTER 1. BUSINESS ENVIRONMENT



This chapter explores the current business environment in Myanmar based on existing literature, and provides a useful background to the survey results. The importance of the business environment is explained through theories from institutional economics, transaction cost economics and resource dependency theory (El-Ansary and Stern, 1972; North, 1990; and Williamson, 1985). The status of the current business environment in Myanmar is then discussed by focusing on several important aspects, including the regulatory framework, market conditions, innovation, human resources, access to finance, productivity and corruption.¹

The regulatory environment is shown to be overly cumbersome and in urgent need of simplification. Market conditions provide great opportunities as well as challenges for firms in Myanmar under ongoing regional integration. The importance of innovation and technology adoption cannot be understated, especially with the onset of global competition. The availability of highly skilled human resources is somewhat lacking due to low expenditure on education and quality shortfalls. While it is largely underdeveloped, the finance sector is tightly controlled and overly regulated, leading to a shortage of available credit. Labour productivity is low by international standards and in urgent need of improvement, while corruption levels remain high by international standards. Reforms have been attempted but have not been effective yet.

IMPORTANCE

Just as species are dependent on the natural environment for their survival and flourishing so too are firms dependent on the business environment. While it is possible to change the business environment to a degree, certain forces such as technology and globalization require firms to adapt to the new realities or face extinction. As firms must navigate through policy, legal, institutional, regulatory, and physical and market conditions in the course of their business activities, Governments should ensure that there are no unnecessary hurdles in their path (DCED, 2008). Governments should therefore create a healthy business environment that allows people to start (and

dissolve) businesses easily and remove barriers in order to promote profitability and competitiveness. An appropriate business environment is essential for the entire economic ecosystem as it can increase growth, productivity, employment and wellbeing (DCED, 2008).

The importance of the business environment is effectively backed by theories on institutional economics, transaction cost economics and resource dependency. North (1990) described institutions as humanly constructed “rules of the game” that provide incentives (or disincentives) for firms to invest and grow. These institutions can be either formal or informal. Formal institutions involve mechanisms of state such as constitutions, laws and property rights while informal institutions are the norms, values, taboos and codes of conduct, which together contribute to the maintenance of order in society (North, 1990).

As economies develop, formal institutions are required to enable complex interactions. In small communities, trust between members of tight-knit groups allows business transactions to occur as violators stand to face sanctions from the community such as the loss of reputation or membership. In larger economies, anonymity decreases the cost of cheating; therefore, mechanisms such as contracts, courts, laws and enforcement by police are necessary to deter opportunistic behaviour (Williamson, 1985). Even in smaller societies the need for trust limits the possibilities of transaction to individuals in one’s social circle or to those whose reputation can be verified. Trust requirements therefore limit the extent of economic interactions and need to be supplemented with formal institutions to enable wider growth and prosperity (Jaffe, Carciente and Zandoni, 2007).

Another reason for the necessity of formal institutions comes from resource dependence theory which holds that organizations are unable to internally generate all resources or functions required to survive (El-Ansary and Stern, 1972). Thus, organizations enter into relations and transactions with other organizations such as public authorities, suppliers, service providers and academia that can provide the necessary facilities, resources, functions, technology or services. Transactions such

as those between the Government and firms (e.g., infrastructure, utilities and licensing) often lead to the firms' dependence on public services (Heide, 1994). One result is that certain facilities, resources or services become important, even crucial, to performance and growth of the firms.

The dependence of firms on the business environment, however, could potentially be exploited by one party at the expense of another. Formal institutions such as property rights, independent judiciary and state security become necessary to guard against vertical expropriation by the State and horizontal expropriation by other entities (Acemoglu and Johnson, 2005). The lack of formal institutions dramatically increases transaction costs as firms may have to pay bribes for property or hire private security for example. Reducing transaction costs by improving the business environment is thus crucial to creating widespread prosperity.

An improved business environment has been shown to benefit economies through higher employment, increased trade and reduced corruption (World Bank, 2008). For example, a fair and transparent regulatory regime allows entrepreneurs to invest in new businesses and hire more workers without fearing unnecessary intervention by the State. By reducing excessive regulation of goods that cross borders more firms are able to engage in international trade. This is particularly important in today's globalized world where competition is so intense that an unfavourable environment can pose a severe handicap for local firms. Simplifying processes and increasing transparency can reduce opportunities for corruption and can help to promote a competitive and vibrant private sector (World Bank, 2008).

CURRENT STATUS

After decades of authoritarian military rule and economic isolation, in 2011 Myanmar began to introduce democratic reforms that have led to the reduction of sanctions imposed by many countries. As Myanmar begins to open its market and restructure its economy, it faces several challenges particularly in creating the right environment for businesses to flourish. The impediments that exist today can be explained, to an extent, by Myanmar's history of a centrally planned economy in which major businesses were once nationalized, markets dismantled, prices of essential commodities fixed, bureaucratic mismanagement rife and borders closed (OECD, 2013).

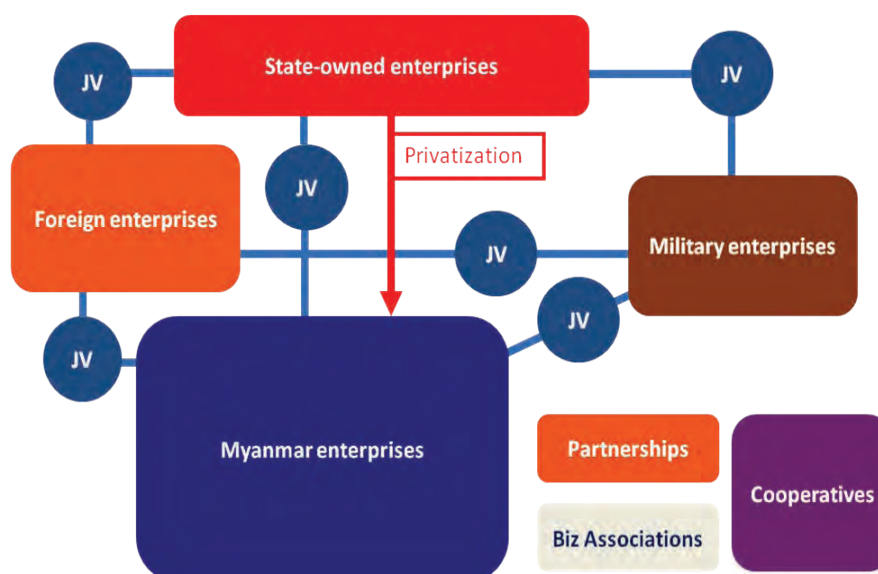
OECD (2013) estimated that Myanmar had approximately 750 000 business entities in total, while 127 000 of which were registered enterprises and 99.4 per cent of them are small and medium-sized enterprises (SMEs), including micro businesses. The share of SMEs as a percentage of all businesses is in line with international baselines (Abe and others, 2012), although Myanmar has yet to formally define SMEs on a sector-wide basis.² Among them, 620 000 business entities, constituting more than 83 per cent of all Myanmar businesses, are in the informal sector whose majority comprises family-based establishments and self-employed workers (OECD, 2013). As a result, the majority of business entities have not been captured by the official data.

In Myanmar there are only 2.6 registered SMEs per 1 000 people, which are far lower than other least developed countries and developing countries that report 9 and 27 SMEs per 1 000 people, respectively (Abe and Dutta, 2014). The Government has recognized the importance of SMEs and is working to promote their development. The SME Development Central Committee was established in 2013 to coordinate the eight or so line ministries involved in SME development. A working group from this Committee has drafted a new SME law to help overcome obstacles such as overly complex tax procedures, labour regulations and collateral requirements among other issues (Abe and Dutta, 2014).

Myanmar categorizes business establishments into various types and segments. Figure 1.1 presents an overview of the business sector categories in Myanmar: (a) state-owned enterprises (SOEs); (b) Myanmar enterprises;³ (c) foreign enterprises;⁴ (d) military enterprises;⁵ (e) partnerships; (f) joint ventures;⁶ (g) cooperatives; and (h) business associations.

The present survey results have subsequently shed light on various facets of the business environment and conditions currently facing firms in Myanmar. However, before moving on to the in-depth review of the survey results such as data collection and analysis, these aspects are discussed here briefly in order to provide the relevant background to the survey results. They include regulatory framework, market conditions, innovation, human resources, access to finance, productivity and corruption.

Figure 1.1. Structure of the business sector in Myanmar



Source: Compilation of the authors.

Note: JV – joint ventures. The visual size of each enterprise category in this figure does not reflect its exact share in the Myanmar business sector. Myanmar enterprises are by far the largest firm category in Myanmar.

1. Regulatory framework

Since Myanmar moved away from its socialist regime in 1988, the Government has initiated economic reforms and fostered private sector development in Myanmar by developing several key legal and regulatory frameworks. These reforms can be broadly divided into two phases: (a) the first phase from 1988 to 1996; and (b) the second phase from 2011 to the present. The detailed laws passed since the reform process was initiated are listed in table 1.1.

During the first phase of reforms (1988-1996), the Government focused on the development of local firms that were at the nascent stage after the three decades under the socialist regime, and encouraged both domestic and foreign investment in the private sector while opening up the economy and privatizing a number of SOEs⁷ (OECD, 2015). During that phase, the Government also tried to achieve balanced industrial development among the major provinces of Myanmar by developing a number of industrial zones at the regional level, except in those areas affected by security uncertainties (Abe, 2014). Figure 1.2 presents the locations of the industrial zones.

Table 1.1. The two phases of economic reforms in the post-socialist era

Phases	Laws and regulations	Years enacted	Responsible authorities
First phase (1988 to 1996)	Foreign Investment Law	1988	DICA, MNPED
	State-owned Economic Enterprises Law	1989	DICA, MNPED
	Private Industrial Enterprise Law	1990	Ministry of Industry
	Promotion of Cottage Industries Law	1991	Ministry of Cooperatives
	Cooperative Society Law	1992	Ministry of Cooperatives
	Myanmar Citizens Investment Law	1994	DICA, MNPED
Second phase (2011 to the present)	Law Amending the Promotion of Cottage Industries Law	2011	Ministry of Cooperatives
	SEZ Law and Dawei SEZ Law	2011	MNPED
	New Foreign Investment Law	2012	DICA, MNPED
	Revised SEZ Law	2013	MNPED
	New Myanmar Citizens Investment Law	2013	DICA, MNPED
	SME Law	Expected in 2015	Ministry of Industry

Source: Modified from OECD, 2015.

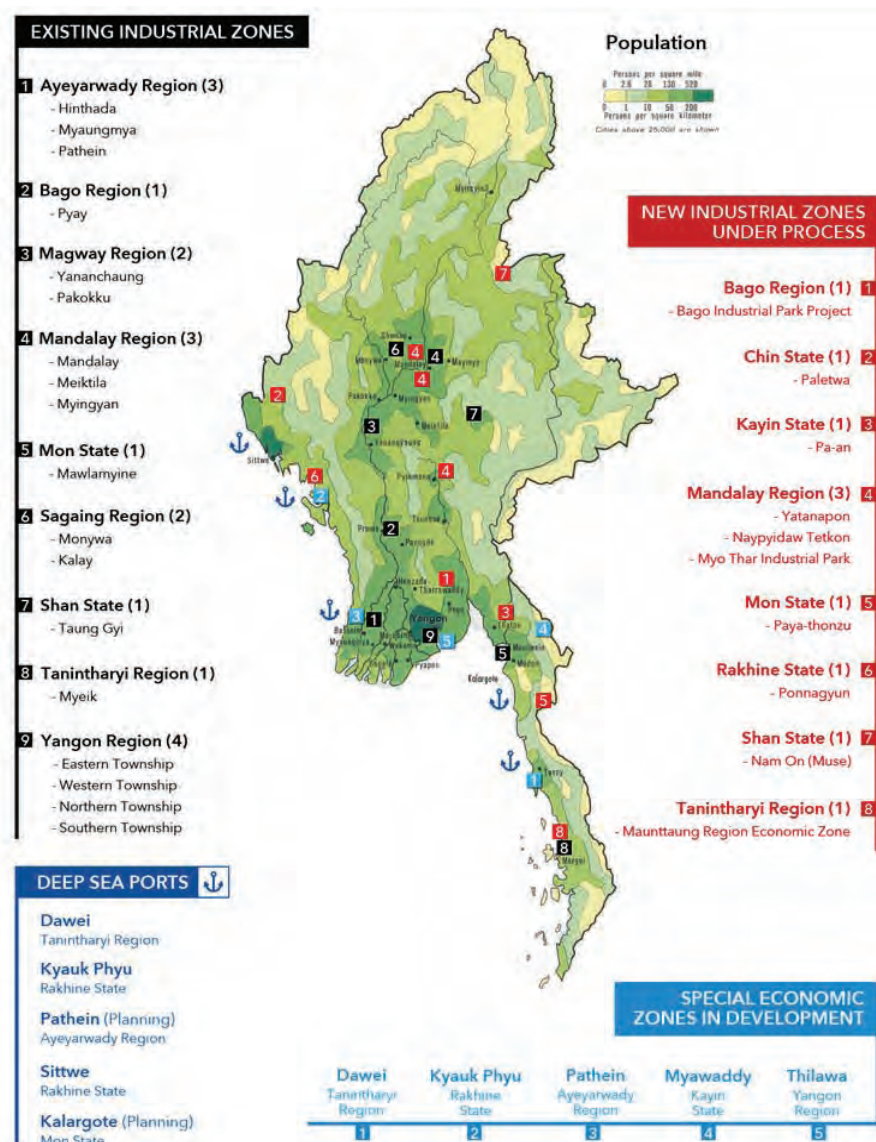
While the first phase of the reforms achieved only limited economic growth, the reform process stagnated from 1997 to 2010 due to various reasons such as the still-dominant roles of SOEs in industries, negative sentiment towards foreign investments, international economic sanctions and on-going civil wars with ethnic minorities. During that period, however, the Government maintained its national accounts mainly with its rich natural resources such as minerals, natural gas, hydroelectricity and lucrative border trade (OECD, 2015).

The second and current phase of reforms, initiated in 2011, has promoted development strategies led by exports and foreign direct investment (FDI), while trying to create a positive business environment for investors, mainly through the development of special economic zones⁸ (see figure 1.2) and the enforcement

of new business laws (table 1.1). The present phase also emphasizes the development of necessary infrastructure and utilities, such as upgrading roads, building power plants and opening deep-sea ports, particularly for fostering cross-border production networks. It is apparent that Myanmar aims to follow the success of its neighbouring countries through export and FDI-driven development (Abe, 2014).

Although the Government has initiated economic reforms and streamlined their roles in working with business, the basic legal and regulatory framework for business is still provided by the colonial-era Companies Act (1914) and associated rules (1940) and regulations (1957).⁹ A number of line ministries plus various local municipal authorities are involved in the registration and licensing of individual businesses as well as supervision of different industries (e.g., agribusiness, manufacturing,

Figure 1.2. Industrial zones and special economic zones in Myanmar



tourism and foreign enterprises) and industrial zones (OECD, 2013 and 2015). As a result, the country's regulatory and policy framework remains fragmented and less transparent, with businesses having to deal with a number of parallel line ministries that often fail to adequately coordinate activities between themselves (OECD, 2013).

One of the consequences of the present regulatory framework is that the informal sector has become large and diverse, comprising everything from small family businesses to large enterprises (OECD, 2013). Small informal firms tend to have low productivity and inadequate access to financing while large informal firms may avoid paying tax which leads to less revenue for the Government and unfair competition for formal businesses. A transition to the formal economy is essential for Myanmar's development, and this will require the Government to pay greater attention to the regulatory framework in particular and business environment more generally (Abe, 2014).

2. Market conditions

Myanmar has a population of 51.4 million and is the second-largest country in South-East Asia in terms of geographical territory. Although it is categorized in the low-income group as a least developed country, the country is rich in natural resources and fertile terrain, with large agricultural areas. Myanmar is part of ASEAN and strategically located between two giant markets, China and India, which enable it to benefit from a rapidly growing Asia that is likely to become the most prosperous region in the world in the next few decades. Thus, the country has much untapped potential for future growth and development (ESCAP, 2015).

The favourable geostrategic characteristics and location of Myanmar offer the country an opportunity to become a major production hub in the region and a key exporter to its high-growth neighbours (e.g., other ASEAN members). The country borders not only the major markets of China and India but also the emerging markets of Bangladesh, the Lao PDR and Thailand. The integration of ASEAN into one economic community (i.e., AEC) offers Myanmar the opportunity to benefit immensely from integration with subregional, regional and global economies (ADB, 2012). Myanmar could potentially join regional business and production networks by strengthening trade and investment ties with other ASEAN members (ADB,

2012). The McKinsey Global Institute (MGI) (2013) has estimated that by 2025 the country will be within a five-hour plane ride of 2.5 billion consumers.

These opportunities, however, come with challenges as an open border will bring greater competition to local firms that have been shielded for decades. SMEs are particularly vulnerable as they are not prepared to face the global transformation of business strategies and practices (Abe and Dutta, 2014). This means that they might lose market share domestically while being unable to take advantage of the benefits that integration provides. It therefore becomes all the more essential for SMEs as well as larger firms to enhance their competitiveness, product quality and management practices so that they can integrate seamlessly into the global economy (Abe and Dutta, 2014). At the same time, the Government of Myanmar will have to work hard to enhance the competitiveness of local business by (a) upgrading various key factors such as infrastructure, human resources, technology and business development services, and (b) further liberalizing trade and investment together with the implementation of trade facilitation measures (ESCAP, 2015).

3. Innovation

Innovation and technology are widely regarded as essential to quickening the pace of development and growth in any country. Increasing productivity and competitiveness as well as developing innovative products are all the more important to gain market share overseas and to resist domestic competition.

The use of transformative technologies such as the Internet has been shown to have dramatic effects on GDP growth. A World Bank study of 120 low- and middle-income countries found that a 10 per cent increase in broadband penetration between 1980 and 2002 yielded an additional 1.38 per cent in GDP growth (Qiang and Rossotto, 2009). Another study (MGI, 2012) estimated that the Internet had accounted for as much as 12 per cent of cumulative GDP growth during the previous five years in a group of developing countries.

Given the potential of the Internet and other technologies, it is unclear whether Myanmar businesses are utilizing those technologies to their full potential. Furthermore, investment in research and development (R&D) remains low in Myanmar, which is particularly problematic

with the onset of global competition (Abe and Dutta, 2014). The country currently performs poorly in international rankings of innovation capabilities. In 2014, the Global Innovation Index, which uses 81 indicators across a range of seven themes¹⁰ to analyse innovation, found that Myanmar ranked 140 out of 143 countries (Cornell University, Institut Européen d'Administration des Affaires and World Intellectual Property Organization, 2014). This puts the country at a competitive disadvantage.

Entrepreneurs and SMEs drive innovation in many countries because they are more flexible and able to adapt to market conditions (Abe and others, 2012). However, they also face many challenges particularly in accessing knowledge, skilled labour, finance and IP protection (Abe and Dutta, 2014). These issues will also need to be addressed in Myanmar in order to release the potential of its private sector.

4. Human resources

At the most basic level innovation requires a well-developed education system to produce highly-skilled individuals. In 2010, however, only 5 per cent of Myanmar's workforce had completed tertiary education and only 15 per cent had completed secondary education. This figure is low even when compared with other developing countries in the region. Almost 30 per cent of workers in Thailand and Viet Nam have completed secondary education with the figure rising to 60 per cent for workers in China and Malaysia (MGI, 2013).

Following the decades-long trend after the student demonstration in 1988, public expenditure on education in Myanmar has also remained low with the country spending only 0.8 per cent of GDP in 2011 (OECD, 2013). Moreover, funds are concentrated on primary education, which consumes more than half the education budget, leaving 24 per cent and 19 per cent for the secondary and tertiary levels, respectively (OECD, 2013). In contrast, countries such as India and Malaysia spend a third of their budgets on primary education, leaving one third each for the secondary and tertiary levels (OECD, 2013).

However, additional funding alone will not be sufficient as the quality of education is of equal concern. The Government has instituted reforms such as enhanced teacher training and qualification requirements as well as a revamped curriculum and assessment

programmes (OECD, 2013). Since a transformed economy will require a workforce with new skills, educational institutions must be able to adapt to the changing needs of the labour market. This would require additional information from firms to identify skills that are in short supply and which can then be used to guide policy and planning.

5. Access to finance

Access to finance remains one of the most crucial issues facing businesses in Myanmar (OECD, 2013 and 2015). The banking sector is characterized by strict regulation, cumbersome loan procedures, high interest rates and tight collateral requirements (OECD, 2013). Short-term loans for less than one year at a fixed interest rate dominate in the banking sector as the major and often sole financing instrument available to private enterprises. The Government is actively considering policies to extend financing especially to entrepreneurs and SMEs. The Small and Medium Industrial Development Bank, for example, plans to offer three-year loans and a lower interest rate of 8.5 per cent compared to the standard 13 per cent (Abe and Dutta, 2014).

The Government is also considering allowing commercial banks to extend long-term loans and use a wider range of collateral instruments (Abe and Dutta, 2014). However, it remains to be seen whether these policies translate into better access to credit for firms. The Government is also looking to increase sources of capital by allowing foreign banks to operate. Up until recently foreign financial institutions were not allowed to operate commercially in the country. This has changed recently with the Government granting nine foreign banks licences to operate as part of its reform programme (Wall Street Journal, 2014). However, these foreign banks will be limited to servicing foreign companies and dealing in foreign currencies, and they will not be able to operate retail banking locally (Wall Street Journal, 2014).

6. Productivity

While Myanmar's economy has grown at an average of 4.7 per cent per year during the past 20 years, this has been mainly driven by population growth rather than increases in productivity (MGI, 2013). As a result, growth in Myanmar was much lower than the average of 6 per cent recorded by its Asian neighbours.¹¹ Relatively low rates of growth and productivity have left the country with low levels of GDP per capita.

Myanmar has the potential to achieve rapid economic growth of more than 8 per cent per annum, but this will require increasing the rate of labour productivity growth to 7 per cent from the current level of 2.7 per cent (MGI, 2013). This will be challenging but not unprecedented as China was able to increase its labour productivity by seven per cent from 1994 to 2006 and reached a GDP per capita level that is four times the level of Myanmar today (MGI, 2013).

Myanmar's productivity challenge is twofold. First, the economy must undergo a structural shift away from sectors such as agriculture, which are characterized by low productivity internationally. Second, productivity within sectors is low compared to regional peers and must be increased. For example, in manufacturing, labour productivity in Myanmar is 50-75 per cent lower than the weighted average for China, India, Indonesia, Thailand and Viet Nam (MGI, 2013). Improving productivity is all the more important to increasing competitiveness in the face of increasing regional integration.

7. Corruption

After decades of the military rule and a tightly-controlled economy, corruption remains one of the most significant challenges facing Myanmar. The level of corruption is high by international standards, with the country ranking 156 out of 175 in Transparency International's Corruption Perception Index 2014, alongside Cambodia and Zimbabwe (Transparency International, 2014a).¹² Corruption pervades the entire economy from high level nepotism and cronyism to everyday bribery and harassment. Businesses and individuals requiring licences and permits from public officials are often asked for bribes-colloquially referred to as 'tea money' (OECD, 2013).

The Government has acknowledged the problem and has made commitments to achieve good governance and a clean government as part of its reform agenda (OECD, 2013). A new Anti-Corruption Law was passed in 2013. A key provision in this law was the establishment of an Anti-Corruption Commission that came into force in 2014 with the stated aim of reducing corruption and bribery. Corruption cases are now being investigated more frequently, with the Government announcing that nearly 17 000 civil servants had been punished between April 2011 and December 2012 (OECD, 2013).

However, the Anti-Corruption Commission has also come under criticism for lacking impartiality, as the Commissioners are appointed by the President and the Lower and Upper Houses of Parliament (Linn, 2014). The inclusion of former senior military officers in the Commission is also of concern as they may have vested interests and may be unwilling to investigate their former colleagues (Thompson, 2014).

The Myanmar Enterprise Survey 2014 conducted by the World Bank also found that corruption was still prevalent in the country. More than 40 per cent of respondents reported having experienced at least one bribe payment request (World Bank, 2014a). Thus, more work remains to be done to extinguish corruption in the country.

BUSINESS SURVEYS IN MYANMAR

A major challenge to implementing the required reforms is the dearth of information on the business conditions on the ground. In Myanmar several international surveys have been conducted to assess the business environment and assist policymakers in determining the right course of action. These surveys include, among others: (a) the Global Competitiveness Index; (b) the World Bank's two business surveys – the "Doing Business" report and Myanmar Enterprise Survey 2014; (c) the Heritage Foundation's Index of Economic Freedom; and (d) Japan External Trade Organization (JETRO) surveys of Japanese companies operating in Asia and the Pacific, including Myanmar.

The World Economic Forum (WEF) Global Competitiveness Index has been reporting and benchmarking the factors that underpin national competitiveness in more than 100 countries for more than three decades. The index defines competitiveness as the "set of institutions, policies, and factors that determine the level of productivity of a country" (WEF, 2014; p.4). Many different factors that drive productivity and competitiveness are arranged into 12 pillars of competitiveness. These include: (a) institutions; (b) infrastructure; (c) macroeconomic environment; (d) health and primary education; (e) higher education and training; (f) goods market efficiency; (g) labour market efficiency; (h) financial market development; (i) technological readiness; (j) market size; (k) business sophistication; and (l) innovation (WEF, 2014).

The index reveals that although Myanmar's institutional quality is low, it has improved recently. When Myanmar

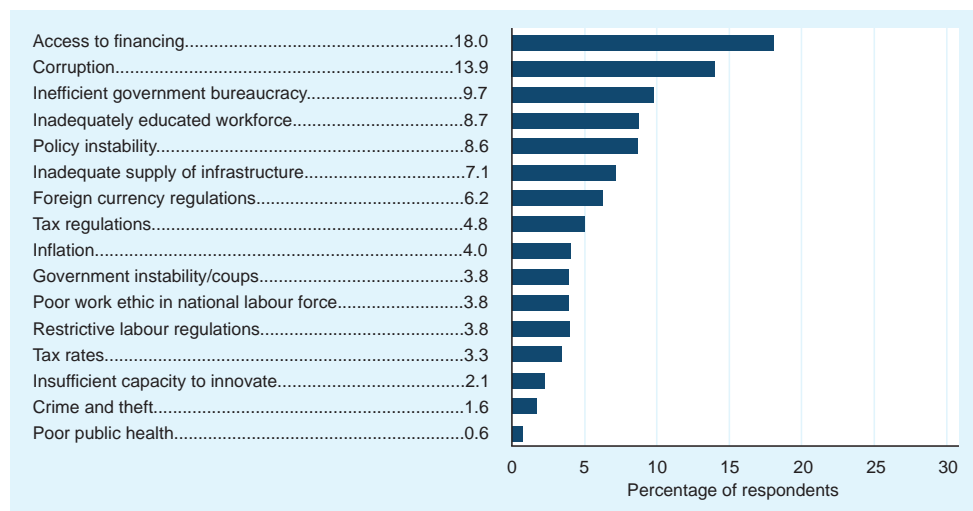
was assessed for the first time in 2013, it was ranked at 139 out of 148 countries (WEF, 2013); however, since then its ranking has advanced to 134 of 144 countries (WEF, 2014). However, challenges still remain as the country ranks beyond 100 in all pillars apart from labour market efficiency and market size. The labour market is ranked at 72, mainly driven by flexible wage determination and the high female-male ratio in the labour force (WEF, 2014). Market size refers to the domestic market, as the export market is not well-developed. During 2013-2014 the country has seen improvements in all pillars except health and primary education where its rank has been downgraded from 111 out of 148 countries to 117 out of 144 (WEF, 2013 and 2014).

A key ingredient of the Global Competitiveness Index is the Executive Opinion Survey which captures the opinion of business leaders from around the world on a broad range of topics. In the latest survey in Myanmar, a total of 165 leaders were asked to name the issues they believed were most problematic for

conducting business in Myanmar. Access to finance, corruption and inefficient bureaucracy topped the list, followed by lack of skilled workers and unstable policies (WEF, 2014). The detailed results of the Executive Opinion Survey are presented in figure 1.3.

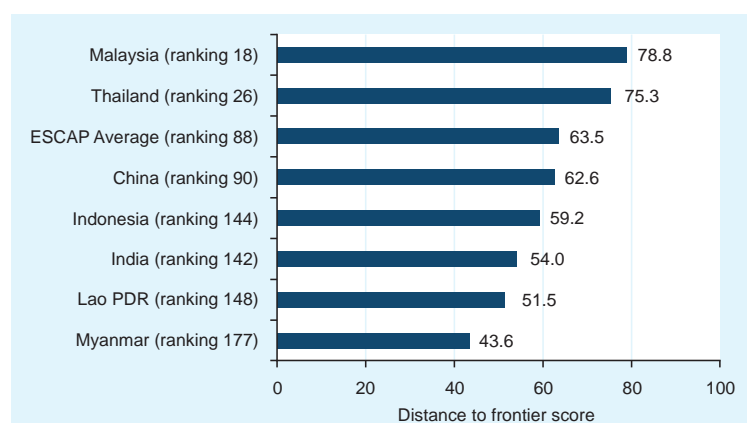
The World Bank's annual "Doing Business" report conducts a comprehensive survey of business conditions in more than 180 countries. It reviews quantitative indicators on regulatory conditions faced by a local SMEs by tracking changes in regulations affecting 11 areas in the operations of a business: (a) starting a business; (b) dealing with construction permits; (c) getting electricity; (d) registering property; (e) getting credit; (f) protecting investors; (g) paying taxes; (h) trading across borders; (i) enforcing contracts; (j) resolving insolvency; and (k) employing workers (World Bank, 2013). The report provides policymakers with a useful view of the position of their country compared to other countries in the region. As shown in figure 1.4, Myanmar is lagging behind its neighbours considerably (World Bank, 2014a). The distance from the frontier

Figure 1.3. The most problematic factors in doing business in Myanmar



Source: WEF, 2014.

Figure 1.4. Myanmar lagging behind its neighbours in doing business



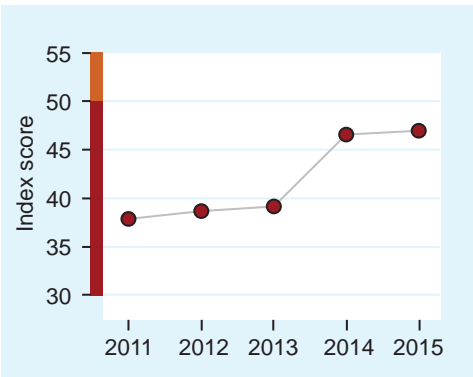
Sources: Doing business database; authors' calculations.

score in the figure indicates that Myanmar is 56.4 percentage points away from the best performance across all countries (World Bank, 2014a).

In 2014 the World Bank also conducted its first Enterprise Survey in Myanmar. This firm-level survey¹³ obtained information from owners and top managers on a broad range of business environment topics. In Myanmar, the sample comprised 632 registered small, medium and large sized enterprises, mostly in manufacturing and services (World Bank, 2014b). The main constraints found were access to finance, land and electricity (figure 1.5). While corruption was not frequently reported as a major obstacle, the incidence of corruption was quite high with more than 50 per cent of firms reporting that bribes were necessary for being granted an import licence (World Bank, 2014b). This discrepancy may reflect acceptance by the business community of corruption as a “fact of life”.

Myanmar also remains low in The Heritage Foundation’s Index of Economic Freedom, which has been published annually in cooperation with the *Wall Street Journal* (Heritage Foundation, 2015). The Index is based on 10 factors under four economic categories: rule of law; fiscal policy; regulatory efficiency; and market openness. For 2015, Myanmar is ranked at 161 out of 186 countries, while it is also at 38 out of 42 countries in Asia and the Pacific. During the past five years, however, the country has showed substantial improvement among the participating countries, particularly by liberalizing

Figure 1.6. Index of Economic Freedom: Myanmar (2011-2015)

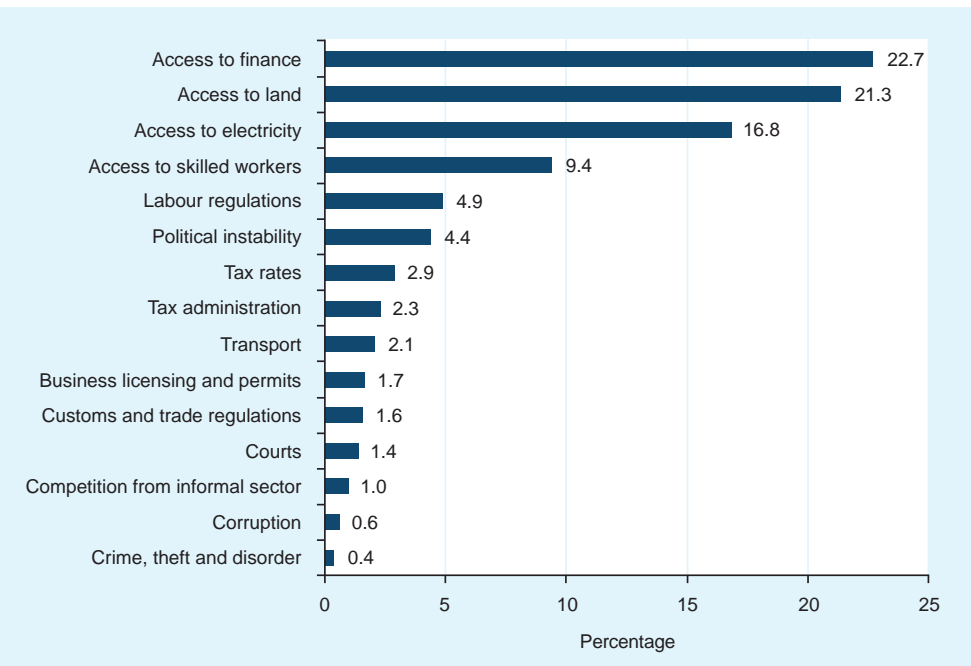


Source: Heritage Foundation, 2015.

economy and opening up markets (figure 1.6). Much improvement has also been observed in the areas of corruption, labour market, business regulation and the banking sector. The Government is encouraged to continue its reform process with particular emphasis on corruption, property rights, independent judiciary and further trade and investment liberalization (Heritage Foundation, 2015).

JETRO (2014) has been conducting surveys of Japanese companies operating in the Asia-Pacific region in order to better understand their business activities and the challenges they face. In the 2013 survey only 6.9 per cent of 2 500 sampled Japanese firms were engaged in trade with Myanmar compared with 61 per cent for China and more than 30 per cent for Indonesia, Malaysia and Viet Nam. A substantial

Figure 1.5. Main constraints to doing business in Myanmar



Source: World Bank, 2014b.

portion of Japanese firms trading with Myanmar find the environment appealing in only two out of 15 issues: (a) market scale and growth potential; and (b) low labour cost and abundant workforce (JETRO, 2014). In fact, many Japanese firms remain concerned about business risks in Myanmar such as inadequate infrastructure, the weak legal system and enforcement, and political instability (JETRO, 2014).

JETRO (2009 and 2012) also conducted two business surveys in 2009 and 2012 in the Greater Mekong Subregion, which comprises Cambodia, the Lao PDR, Myanmar, Thailand and Viet Nam, in 2009 and 2012. Both surveys interviewed Japanese investors and local enterprises, operating mainly in Myanmar's manufacturing sectors, to identify corporate strategies and challenges in their cross-border operations, including the quality of infrastructure, and related policies and regulations (JETRO, 2009 and 2012). Although the two surveys adopted the semi-structured interview method some informants participated in the surveys through telephone interviews and questionnaires. The major findings from the two surveys are summarized below:

- (a) A number of surveyed firms have expanded or intend to expand their operations to Myanmar through, for example, investment in new factories and upgrading of existing facilities;
- (b) The motives for Japanese investment to Myanmar are to: (i) seek greater access to the market; (ii) secure key factor inputs such as labour; and (iii) reduce operational costs through the pro-business policy framework in the host country;
- (c) Investors tried to reap benefits from various free trade agreements, such as AFTA and ASEAN+6, by sourcing parts and components from other ASEAN members and ASEAN+6 partners;
- (d) A number of obstacles to the growth of business in Myanmar were also highlighted. Those obstacles can be categorized into six groups: (i) the policy and regulatory framework; (ii) infrastructure; (iii) labour market; (iv) entrepreneurship; (v) trade liberalization; and (vi) logistics services.

All the abovementioned business surveys took a horizontal approach, using standardized questionnaires across a large number of countries to enable comparisons. While immensely useful, this approach necessarily comes at the cost of the depth and detail required for a thorough analysis of the unique characteristics of Myanmar. The individual surveys were

also limited in different ways. The three JETRO surveys were conducted mainly with Japanese companies whose experience or perception is expectedly quite different from local companies or those of other nationalities. The World Bank's Enterprise Survey was limited to the manufacturing and service sectors in five cities, mainly focusing on medium and large-sized enterprises. This survey excluded: agriculture (which remains the largest sector in the economy); industries in the countryside; and micro and small enterprises (which account for the majority of businesses in Myanmar). The Executive Opinion Survey of the WEF Global Competitiveness Index comprised a small sample of only 165 respondents and therefore was unlikely to give a comprehensive picture. The Heritage Foundation's Index of Economic Freedom shared little information on survey methodology, and the detailed sample data are not available to researchers. For all of these reasons, ESCAP and OECD decided to conduct the comprehensive survey of businesses in Myanmar spanning more than 3 000 firms in all sizes and industries, and in all geographic regions.¹⁴

Endnotes

¹ Abe and others (2012) also proposed that entrepreneurship and business development services be considered as two of other important elements of business environment, although they are not fully covered by this survey.

² Myanmar developed the definitions of micro and SME manufacturers in the early 1990s with a minor modification on the definition of micro firms in 2011 (see OECD, 2013). The new SME law, which is currently under the final enforcement process, will define Myanmar SMEs in all industrial sectors, including services. The draft definition, which is available at www.smedevelopmentcenter.gov.mm/?q=en/def_sme, more or less meets international standards (cf. Abe and others, 2012).

³ By definition Myanmar enterprises are business entities wholly owned or controlled by Myanmar citizens. By regulation, however, they are those registered under Myanmar Citizens Investment Laws (1994 and 2013) (cf. OECD, 2013).

⁴ They are either wholly or partially owned or controlled by foreigners or branches of foreign enterprises.

⁵ Military enterprises were initially established to supply necessary goods and services for military operations under the control of the Ministry of Defence. Over the years they grew into major conglomerates in Myanmar, covering almost all industries, such as extraction, rubber products, fisheries, food and beverages, garment and apparel, industrial materials and manufacturing, real estate and construction, trade, tourism, transportation, banking and telecommunications (OECD, 2013).

⁶ As shown in figure 1.1, there are several patterns of establishing joint ventures among different types of enterprises, such as joint ventures between SOEs and foreign

enterprises, joint ventures between Myanmar enterprises and foreign enterprises.

⁷ At the same time, the Government encouraged the establishment of joint ventures between SOEs and domestic and foreign investors in order to upgrade the capacity of SOEs through the transfer of technology and knowhow.

⁸ In addition to financial incentives such as tax and duty exemptions, special economic zones are directly managed by the central Government and provide the international standard facilities. Traditional industrial zones are typically developed by subnational government authorities, and equipped with substandard facilities and utility supplies.

⁹ The Myanmar Company Act and associated rules and regulations are expected to be revised within a couple of years, while other business-related laws, such as the new Private Industrial Enterprise Law and legislation on intellectual property and arbitration, have also been drafted in cooperation with international donor agencies (OECD, 2015).

¹⁰ Those seven themes include: institutions; human capital and research; infrastructure; market sophistication; business sophistication; knowledge and technology outputs; and creative outputs.

¹¹ China, India, Indonesia, the Philippines, Sri Lanka, Thailand and Viet Nam.

¹² Transparency International has published the Corruption Perception Index (CPI) annually for the past 18 years. The CPI allows comparisons of public sector corruption across countries. The CPI is a composite indicator based on various surveys of corruption perceptions from business people and country experts in each country. In the case of Myanmar, CPI 2014 is based on seven surveys: (a) the World Bank's Country Performance and Institutional Assessment for Myanmar; (b) the WEF Executive Opinion Survey; (c) the International Country Risk Guide; (d) the Economist Intelligence Unit's Country Risk Assessment; (e) the Global Insight Country Risk Rating; (f) World Justice Project-Rule of Law index; and (g) the Bertelsmann Foundation Transformation Index (Transparency International, 2014b).

¹³ This global business survey mainly focused on medium and large-sized enterprises, and excluded micro or smaller enterprises.

¹⁴ It should be noted, however, that both the Institute of Economic Development and JETRO have conducted a number of business surveys in Myanmar. Although they addressed limited geographical or sectoral issues, the surveys made substantive and substantial contributions to enhancing the understanding of the current situation of the Myanmar economy and its challenges (see, for example, Aung, 2011; JETRO, 2013; and Kudo, 2005).



CHAPTER 2. METHODOLOGY AND DATA COLLECTION¹

This first-ever nationwide survey on business sought to capture a comprehensive picture of the current business activities and environment in Myanmar. The survey covered more than 3 000 firms in almost all industries including agriculture, extractive industries, manufacturing, services and most other economic activities categorized under the United Nations International Standard Industrial Classification (ISIC) Rev. 4.² While the survey focused on the four main industrial sectors above, it also covered various sub-sectors in each of the sectors, including all types, sizes, ownership and number of nationalities (e.g., large, SMEs and micro enterprises, informal businesses, foreign companies, state-owned enterprises, military enterprises, partnerships and cooperatives). The six-month business survey project was implemented by ESCAP, OECD and UMFCCI in October 2013.

SURVEY QUESTIONNAIRE

The survey project began with the development of a structured survey questionnaire, which was jointly prepared by ESCAP, OECD and UMFCCI with technical inputs from The Asia Foundation, the German Institute for Development Evaluation (DEval) and the Swiss Agency for Development and Cooperation (SDC). In developing the questionnaire, the procedure followed Dillman's (1978) total design method for surveys to make them appear "easy to complete" and "professional" in order to enhance the quality of the data while also increasing the response rate. A number of industrial and country experts were consulted, and many existing business survey questionnaires, which had previously conducted by international and bilateral agencies and academics in Myanmar and neighbouring developing countries, were reviewed (e.g., JETRO, 2009 and 2012; OECD, undated; and World Bank, 2013).

Questions were selected or modified from the existing business surveys, or were newly formulated, in order to address the key elements of the business environment³ adequately and comprehensively together with an

extensive literature review on business environment (e.g., Abe and others, 2012; DCED, 2008; International Financial Corporation, 2008; International Labour Organization, 2003; Japan International Cooperation Agency, 2006; Ministry of Economy and Finance of Cambodia, 2005; Transparency International, 2014b; World Economic Forum, 2013; and World Bank, 2013). In addition to descriptive statistics, the questions were drafted to fit with advanced statistical techniques including multivariate statistics to enable a more in-depth data analysis.⁴

Using the forward-backward translation method, the questionnaire was first drafted in English and then translated into Burmese, by two independent English and Burmese translators.⁵ The two-language questionnaire was finalized in late December 2013 after pre-tests with 13 business executives in Yangon.⁶ The final questionnaire both in English (20 pages, A4 sized) and in Burmese (24 pages, A4 sized), contains 73 questions, which typically use six-point Likert scale instruments, covering key business issues in Myanmar, i.e., general business climate; market and supply conditions; innovation and technology management; human resources management; access to financing; labour productivity; and the general corporate background. The questionnaire was designed and printed in a professional-looking format with front and back covers and an introductory statement signed by the three implementing agencies – ESCAP, OECD and UMFCCI. The survey project took nearly three months to draft and finalize the questionnaire in order to avoid the "garbage-in, garbage-out" issue that could occur with a substandard questionnaire. The English language questionnaire is provided in annex 1.

SAMPLING METHOD

In Myanmar, due to the lack of a nationwide business registration/licensing system, reliable business/industry directories or up-to-date lists of business association memberships, neither a target population nor a

sampling frame were available to the survey team. Consequently, convenience, snow-balling and seminar sampling methods,⁷ all of which are non-probability sampling methods, were used to minimize the cost of the survey while maximizing the number of responses and the accuracy of the survey.⁸ The survey consisted of pre-appointed onsite interviews by trained personnel to enhance the quality of the data collection while increasing the response rate. Interview guides were prepared for the interviewers and updated from time to time as data collection progressed.

A large sample was targeted (i.e., at least 2 500 firms) in order to achieve a reasonable representation of the business sector in Myanmar. All 14 States/Regions and Nay Pyi Taw Union Territory, the capital of Myanmar, were covered by the survey. Specifically, the survey was administered in the capital of each State/Region.⁹

Events such as press conferences and meetings with business associations were also frequently held to inform the business communities in Myanmar of the business survey in advance and to seek their cooperation. The survey team also contacted local chambers of commerce and industry to inform them of the survey and to request collaboration.

One potential drawback of this survey is that the sample is not strictly representative in a statistical sense, although it covers a very large number of firms in all geographic locations. As mentioned above, the unique circumstances of Myanmar have made information on businesses a scarce commodity. Information on the total business population and its district characteristics does not exist, making conventional sampling methods unviable. In fact Myanmar has only recently completed its first census in more than 30 years. Furthermore, several key sectors and enterprises are still controlled by the public sector and its associates which make access challenging for international surveys such as the present survey. As a result, even the best sampling methods would likely introduce unintentional bias. Although the sample may not, strictly speaking, be representative, it still provides the most comprehensive view currently available of the situation on the ground for many firms in Myanmar.

SURVEY TEAM

The 120-member survey team comprised members from UMFCCL as well as advisors from ESCAP and OECD. In total, it included 15 task force executives, two international advisers, one executive director, one project manager, two survey team assistants, five area managers, 94 volunteers. The detailed survey team structure is shown in figure 2.1.

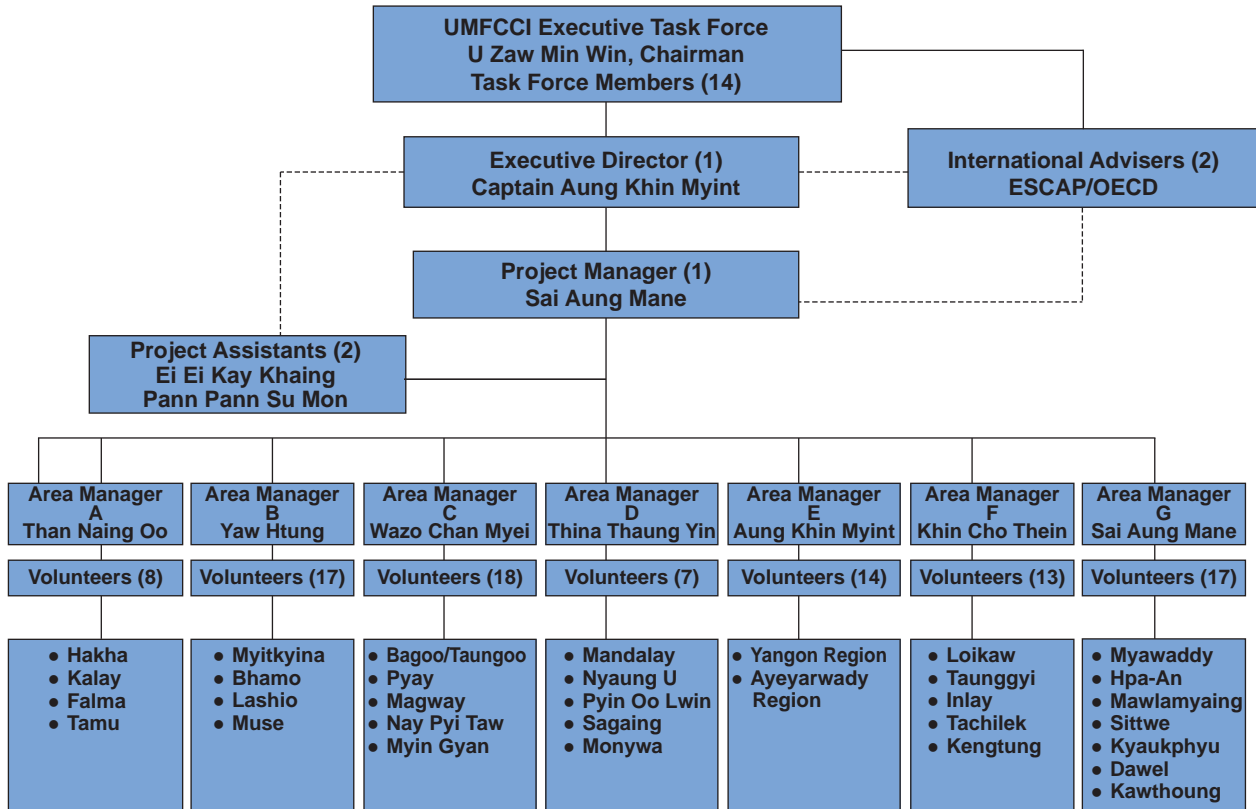
One three-day training workshop was conducted for the project manager and the area managers by the ESCAP adviser at UMFCCL in early December 2013. Then more than 100 volunteers, or interviewers, were recruited by project and area managers in different cities/towns across Myanmar and given intensive training. In late December 2013 and January 2014, a total of 16 training sessions were conducted by the managers in different cities and towns for the interviewers.

DATA COLLECTION

Data collection was started in the first week of January 2014 when the printed questionnaire (in both Burmese and English) was distributed to the area managers, who then assigned teams of trained volunteers to conduct interviews in their designated areas or cities. Even though there were more than 110 volunteers in January 2014, some of them were dismissed due to the lack of competency in conducting interviews. The project had employed 94 volunteers or interviewers, including some team leaders, by the end of data collection in the second week of March 2014. Either a Burmese or an English questionnaire was used for the interview, according to the interviewee's preference; however, the English version was typically used for foreigners or foreign enterprises. If requested, the interactive form of the questionnaire was distributed by hand or email to informants, usually larger firms or foreigners, and collected later.

To ensure the effectiveness and efficiency of the data collection, a two-day training workshop on survey methodology was organized in Bangkok at the end of January 2014 by ESCAP for all the survey team managers. During the workshop, difficulties and challenges faced by the survey team in the field were

Figure 2.1. Structure of the survey team



Source: Myanmar Business Survey Project, 2013-2014.

discussed and some possible solutions were proposed (see annex 2 for details). Experiences and lessons learnt were also shared among the survey managers to enhance their knowledge of data collection. After they returned from the workshop and were back in the field, the survey team managers again provided more onsite training for qualified volunteers.

By the middle of March 2014, 3 016 interviews questionnaires had been held. An additional 39 interviews were held, and questionnaires collected, in industrial zones in and around the Yangon region. Onsite interviews lasted 57 minutes each on average.¹⁰ Data entry or computerization of the collected data was completed by the middle of April 2014,¹¹ and the key project staff had cleaned the dataset by the end of April 2014 for data analysis.

The final dataset, which has a relatively low missing data rate (World Bank, 2014a), contains 3 055 valid responses from all types of firms in the major business centres of Myanmar. This is 555 more than the original target of 2 500. To ensure broad coverage, the survey was not only conducted in the capitals of

all 14 States/Regions and the national capital, but also in other economically vibrant cities. In total, 34 cities/towns were covered for the survey project (table 2.1). Figure 2.2 presents the geographic locations covered by this business survey.

DATA CLEANING

The data cleaning process involved four major steps. They are briefly described below.

First, prior to entry into the database, the raw survey results were checked for completeness. If at least 75 per cent of questions relevant¹² to the respondent were answered, then the interview results were retained; if not, they were discarded. In this regard, an area manager first checked the questionnaire to ensure it was had been completed and only then was it sent to the survey team's head office at UMFCFI in Yangon. The project manager then randomly double-checked the questionnaires sent by the area managers to ensure that they had been completed. In total, 60 questionnaires that arrived to the head office were excluded for being incomplete.

Table 2.1. Geographic locations covered by the survey and the number of samples

State/Region	City/town	Sample
Chin State	Hakha	33
	Falam	18
Sagaing Region	Kalay	68
	Tamu	46
	Sagaing	24
	Monywa	42
	Myin Gyan	9
Kachin State	Myitkyina	100
	Bhamo	30
Shan State	Lashio	100
	Muse	100
	Taunggyi	43
	Inlay	27
	Tachilek	50
Bago Region	Kengtung	10
	Bago and Taungoo	100
	Pyay	99
Magway Region	Magway	110
Nay Pyi Taw	Nay Pyi Taw	74
Mandalay Region	Mandalay	428
	Nyaung U	50
	Pyin Oo Lwin	46
Yangon Region and Ayeyarwady Region	Yangon, Hlegu and Pathein	994
Kayah State	Loikaw	59
Kayin State	Myawaddy	50
	Hpa-An	65
Mon State	Mawlamyaing	98
Rakhine State	Sittwe	55
	Kyaukphyu	26
Tanintharyi Region	Dawei	52
	Kawthoung	44
Email		5
Total		3 055

Source: Myanmar Business Survey Project 2013-2014.

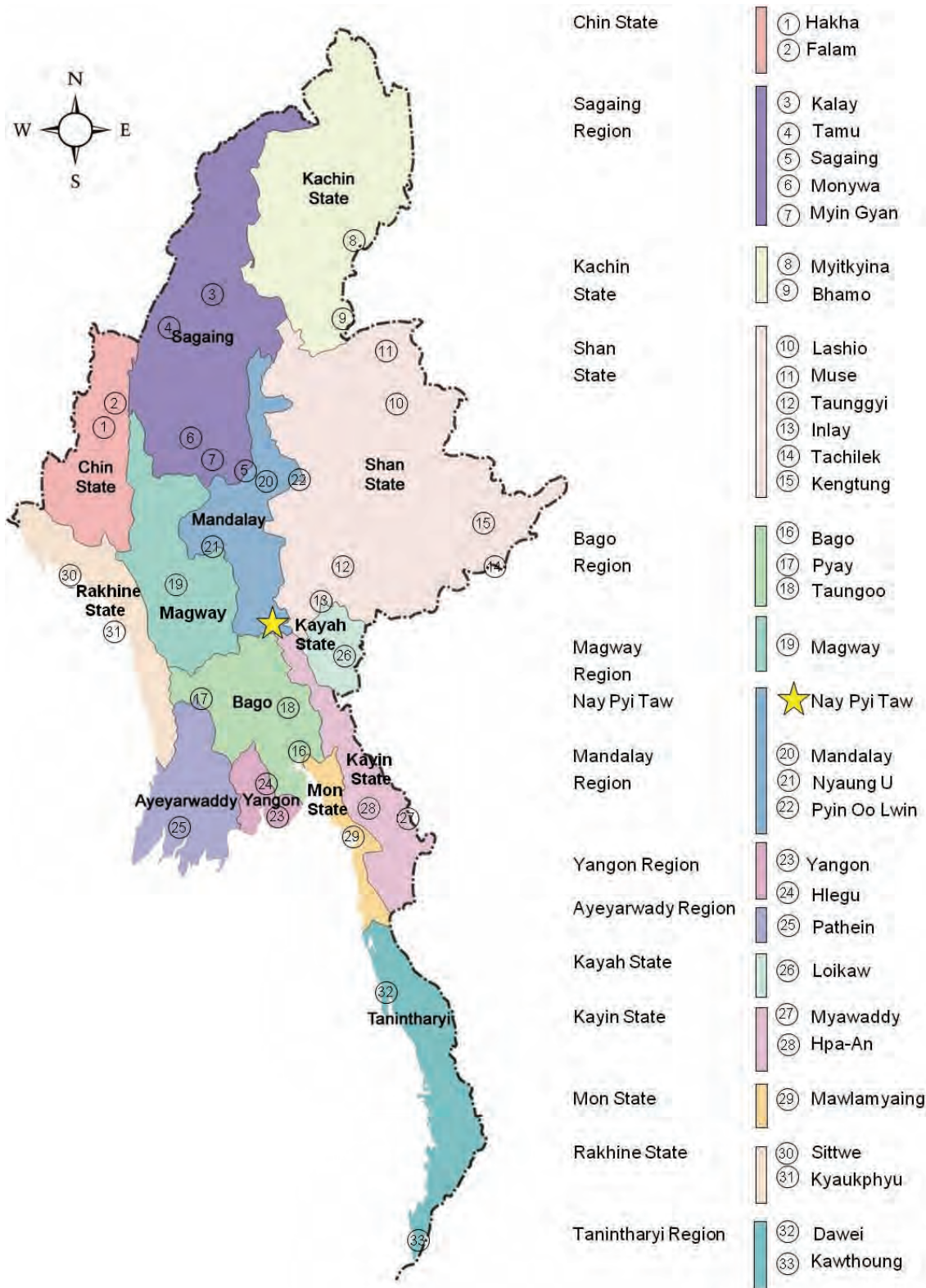
Second, data entry was conducted using customized software that prevents typographical errors during the process of transferring data from paper surveys to a digital database. During the data entry phase, responses that were not logical were identified. The interviewer who had conducted that survey then followed up with the respondent to verify the correct response. If the respondent could not be contacted for the follow-up, the survey team excluded the entire survey of that respondent from the database. Twenty such surveys were excluded.

Third, once the entire dataset was compiled, it was then checked for any technical problems or errors on account of the software used. A few duplicate columns were found and removed.

Fourth, the data was checked again in more detail to ensure there were no logical or typographical errors during the data entry phase. Nearly 20 errors were found and then corrected by referring to the paper surveys.

The prevalence of missing data is of concern in any dataset. In this survey, most questions received a decent response rate, such as more than 80-90 per cent, although for some questions the percentage of missing respondents was as high as 50 per cent. These cases with an abnormally high percentage of missing observations are identified alongside the relevant survey results in the data analysis section.

Figure 2.2. Locations of data collection



Source: Compiled by the authors.

Endnotes

¹ This chapter describes the detailed implementation of the survey project in general and the survey methodology in particular, including questionnaire development and data collection, to provide a source of information for future survey projects in Myanmar and other developing countries.

² The United Nations International Standard Industrial Classification of All Economic Activities Revision 4, or ISIC Rev. 4, is used for the sectoral identification of individual enterprises. Details are available at <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27>.

³ As described in the preceding chapter, those key elements covered by the survey include: the regulatory environment; market conditions; innovation; human resources; access to finance; productivity; and corruption.

⁴ The business surveys used in developing countries in the past were often unsuitable for use in advanced statistical analysis due to their more descriptive nature, mainly collecting categorical data.

⁵ The first translator conducted the forward translation from English to Burmese. The second translator then translated the questionnaire from Burmese back into English. This method is common among business scholars to ensure the accuracy of translation into the home country language when the questionnaire is developed in another language (cf. Behling and Law, 2000).

⁶ A number of questions were added, deleted or modified according to the results of the pretests. One example is that interval-scale questions on sales revenue and profits were added to direct continuous-scale questions on the same topics due to the observed low response rates during the pretests.

⁷ The seminar, or conference, sampling method is a variation of the convenience sampling method. It is used for conducting data collection by inviting potential informants through human or institutional networks or associations, such as local chambers of commerce, to a specific site, often a medium to large-sized conference room. The data collection normally follows a seminar/workshop type programme, which consists of an introduction to the survey, a briefing on survey instruments, demonstrations and question and answer sessions. Individual surveys are typically conducted using a self-administrative questionnaire or interview.

⁸ Although the online survey through the Internet generally works well for simple survey instruments and has become increasingly popular for international surveys, the survey team intentionally did not use this method due to the poor ICT infrastructure in Myanmar, the lack of ICT skills in smaller businesses and the complicated nature of the present survey.

⁹ Before going into the field for data collection, the survey team predetermined the cities and towns to be surveyed and the target numbers of samples to be collected in those cities/towns, broadly based on the sizes of their populations and economies. However, the survey team did not strictly follow the quota. The survey team also intentionally tried to access a variety of different industrial sectors, corporate

sizes and structures as well as types ownership in order to adequately cover Myanmar's heterogeneous business community. In this sense, the sampling method of the present survey can also be viewed as a loose combination of quota sampling and heterogeneity sampling.

¹⁰ This interview duration was in line with the results of the pretests.

¹¹ Survey data management software was purchased and used for data entry to increase accuracy and efficiency.

¹² Where questions were irrelevant to a respondent, it was not necessary to answer them. For example, a firm that had not taken out a loan did not need to answer the question on interest rates.



CHAPTER 3. DATA ANALYSIS

This chapter provides the detailed results of the survey data analysis. The first section describes the profile of participating firms and business entities. The next section analyses the overall business environment, particularly with regard to the major obstacles to private investment and business operations in Myanmar. Next, specific topics – i.e., market and supply conditions, innovation and technology management, human resources management, access to financing, labour productivity and degree of corruption – are reviewed in depth. Finally, a specific analysis of the agribusiness and food industries provides useful insights for modernizing and upgrading this sector, a move that is crucial to achieving Myanmar's goals of economic growth and industrial transformation.

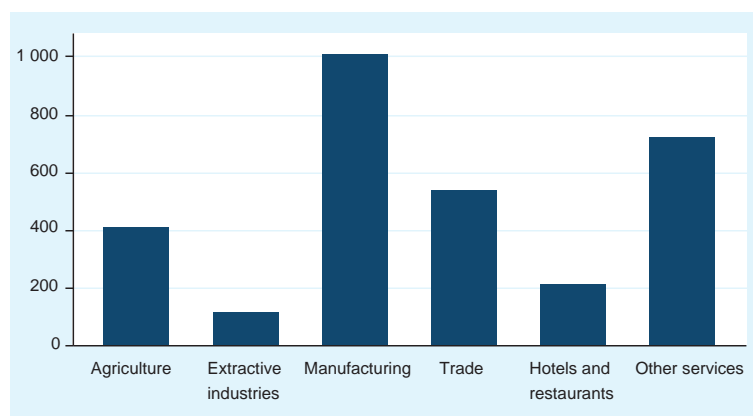
OVERVIEW OF PARTICIPATING FIRMS

The survey dataset comprises 3 055 firms that operate in agriculture, extractive industries, the manufacturing sector and the services sector, and covers almost all economic activities that are categorized by the United Nations International Standard Industrial Classification of All Economic Activities (ISIC), Rev.4.¹ In the survey, the primary, secondary and tertiary sectors accounted for 17.7 per cent, 33.1 per cent and 49.2 per cent, respectively. More than 40 per cent of the firms in

the secondary sector are in the food products and beverages subsector.² Among tertiary industries, trade, hotels and restaurants, transport and construction are major subsectors (see annex 3 for the sector distribution in the sample). These figures support the comprehensive nature of the present survey, which can properly reflect the multi-faceted structure of the Myanmar economy.

More than 400 firms (13 per cent of the sample) are operating in the agriculture sector (figure 3.1). This includes firms involved in agriculture, forestry and fishing. Only 121 firms (4 per cent of the sample) are engaged in the extractive industries (mining and quarrying of coal, petroleum, metal ores and other products). Almost one third of the sample (1 016 firms) consists of firms primarily in the manufacturing sector, including the production of food and beverages, textiles and apparel, steel and other metals automobiles and recycling.³ Eighteen per cent (544 firms) of the sample firms are in the trading sector, and operate primarily in the wholesale, commission and retail trade. More than 200 firms (7 per cent) are in the hotel and restaurant sector. In order to simplify the analysis, the remaining service-related sectors have been grouped together in the “other services” category. More than 700 firms (24 per cent) fall within this category.

Figure 3.1. Number of respondents, by sector



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

1. Nearly 97 per cent of firms in the sample are SMEs⁴

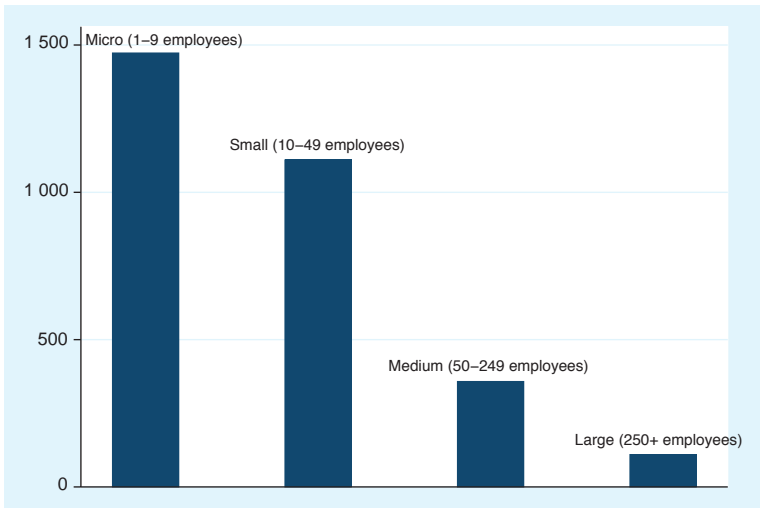
The sampled firms have a range of 1 to 4 000 employees, with an average of 45 employees. Nearly half of the sample firms belong to the micro firm category with less than 10 employees (figure 3.2). One-third of firms are small-sized businesses with 10 to 49 employees, while 10 per cent are medium-sized with 50-249 employees. More than 3 per cent of the firms surveyed have 250 or more employees. While fewer in number, the larger enterprises make a more significant contribution to employment – 53 per cent of total employment among the respondents is in firms with 250 or more employees. Among the sampled firms, more than 14 per cent (and, typically,

smaller by size) operate informally.⁵ Three per cent are foreign firms. Annex 3 provides a detailed sample profile by size.

2. Most firms have been well-established for more than 15 years

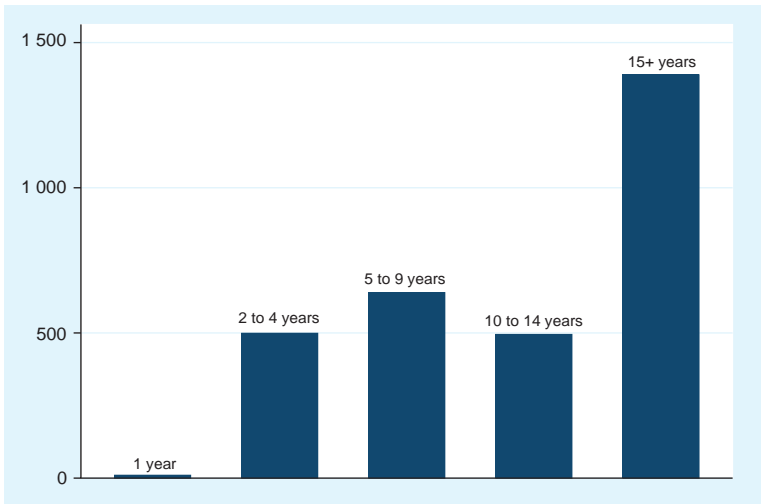
Nearly half of the surveyed firms have been established for more than 15 years, while only one-sixth have been operating for less than five years (figure 3.3). The small number of young firms may reflect the poor business environment that makes it unnecessarily difficult to start up and run new enterprises. Streamlined regulations and institutional framework for startup procedures and incubator programmes could be beneficial in helping entrepreneurs overcome initial obstacles.

Figure 3.2. Number of respondents, by size



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.3. Number of respondents, by firm age



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

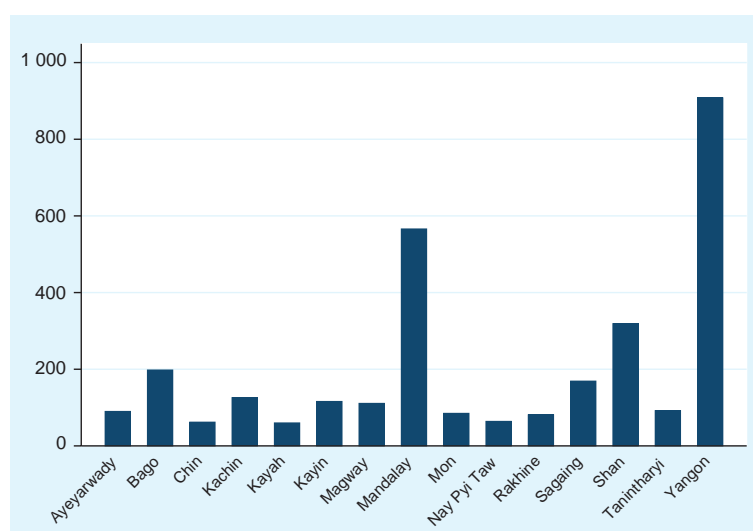
3. The survey is well-represented geographically

Responses were obtained from every region in Myanmar, allowing a comprehensive overview of the situation on the ground. Thirty per cent of the sampled firms (figure 3.4) are headquartered in Yangon while almost 20 per cent are in Mandalay, as most economic activity is concentrated in those two areas (Kudo and Kumagai, 2012). It should be noted, however, that almost 25 per cent and 13 per cent, respectively, of the sample firms headquartered in Yangon and in Mandalay have at least one plant located outside their respective regions. Table 2.1 in the previous chapter details the exact distribution of surveyed firms by region.

4. Firms with foreign ownership tend to be large

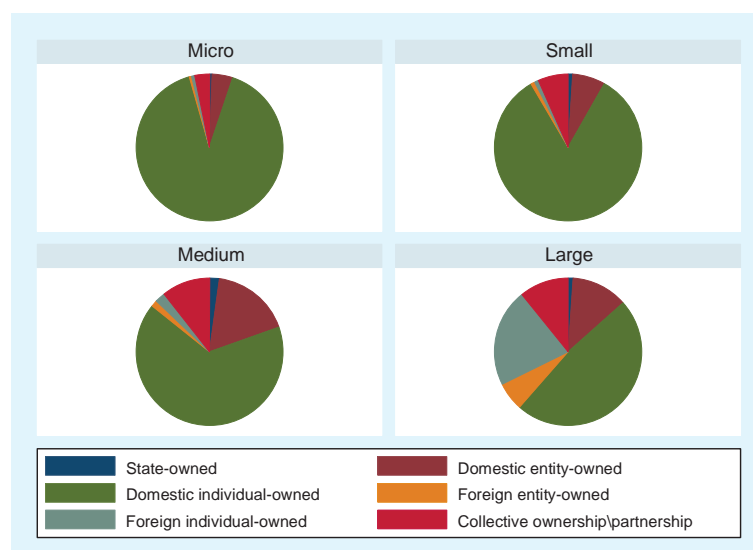
Micro firms (1-9 employees) and small-sized firms (10-49 employees) are, for the most part, owned by individuals domestically. On average, 90 per cent of a typical micro firm is owned by domestic individuals while the share is 85 per cent for a small-sized firm. Medium-sized firms (50-249 employees) show greater ownership by domestic entities that, on average, own 20 per cent. Large firms (250+ employees) are able to attract greater foreign ownership, with the average large firm having a 21 per cent stake held by foreign individuals and a 6 per cent stake by foreign entities (figure 3.5). Almost 25 per cent of the sampled large firms are 100 per cent foreign-owned. It appears

Figure 3.4. Number of respondents, by region



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.5. Ownership, by size of firm



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

that access to capital, together with technology and management practices, from overseas enables firms to grow larger than their domestically-owned peers. This highlights the significant impact that FDI can have on Myanmar's economy. Collectively-owned or partnership firms, including foreign investors, are more common among medium- and large-sized firms, with more than a 10 per cent share each, indicating that those ownership structures are popular for joint venture and partnership projects between larger firms. Joint ownership may also be a useful source of funds, particularly when credit access is weak.

An interesting pattern of foreign ownership also emerges from the data (figure 3.5). Of the 118 firms that reported having a majority stake held by foreigners, 22 are from China, 13 from Singapore and 12 each from Japan and the Republic of Korea. The Chinese-controlled firms are mostly micro and small-sized operations in manufacturing and services while the Republic of Korea-controlled firms are mostly large manufacturing facilities in the garment and apparel sector. Singaporean-controlled firms are mostly SMEs in services while Japanese-controlled firms are SMEs that operate in manufacturing as well as services.⁶

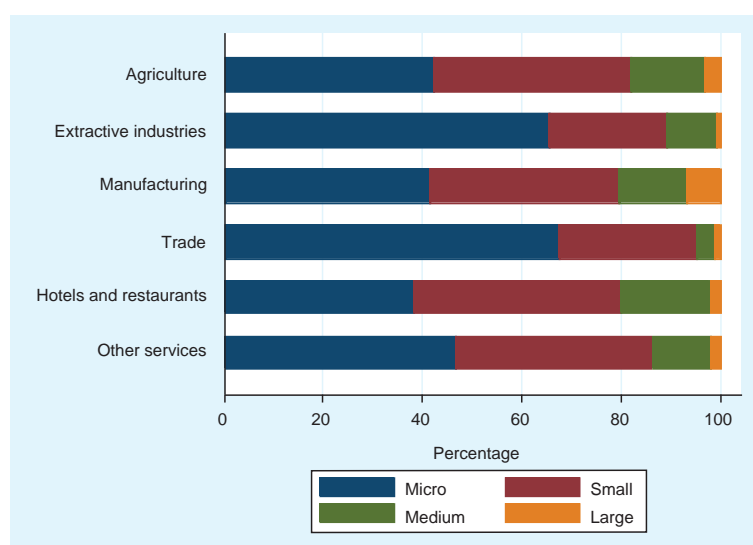
The sample included only 42 firms that have some state ownership, almost half of which are 100 per cent state-owned. These state-owned (or controlled)

firms comprise all sizes and are found in all sectors that support the common understanding that SOEs in Myanmar operate in all areas and industries (OECD, 2013 and 2015). It should be noted that far more SOEs may exist in Myanmar; however, many remain inaccessible to international surveys such as the present survey (refer to annex 2 concerning the difficulty in collecting data on SOEs).

5. Large firms are more common in the manufacturing sector

While micro firms (1-9 employees) are common across all sectors they are found to be more prevalent in the extractive industries and trade sectors (figure 3.6). More than 65 per cent of the firms sampled from each of these sectors were reportedly micro-sized. Firms in sectors such as agriculture, manufacturing, hotels and restaurants and other services mostly fall within the small and medium-sized categories. Large firms (250+ employees) are quite rare as they account for only 3 per cent of all firms in the sample. However, they are more common in the manufacturing sector, where they account for 7 per cent of samples in that sector. The low number of large and even medium-sized firms in the mining and extractive industries sector may reflect the excessive regulation, licensing requirements, corruption and foreign capital restrictions that are prevalent in the sector. Further investigation of this aspect is therefore required.

Figure 3.6. Size of firm, by sector



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

OVERALL BUSINESS ENVIRONMENT

To capture the broad and multifaceted environment of business operations adequately, 34 indicators were chosen, based on an intensive literature review and consultation with a number of industrial experts (as described in chapter II). Those indicators can be broadly categorized as (a) policy and regulatory framework; (b) quality of infrastructure and utilities; (c) conditions of market, supply, innovation and labour; (d) access to financing; (e) conditions for international business; and (f) corruption. Each of these individual indicators was reviewed to identify their relative significance, associations and relationships with different types of business.

1. Corruption, lack of skilled labour and technology are major obstacles to business

Among the major obstacles to the current operations of the firms (ranging from infrastructure issues to human and institutional capital), corruption was identified most frequently as a very severe obstacle. Other serious bottlenecks cited included a shortage of skilled labour, lack of technology, access to office space and political instability, in that order. Some 20 per cent of firms found each of these aspects to be a very severe obstacle.

This is more or less in line with other international surveys conducted in Myanmar, such as the World Economic Forum's Executive Opinion Survey that found access to finance, corruption, inefficient bureaucracy and an inadequately skilled workforce to be the most problematic factors (WEF, 2014). The World Bank Enterprise Survey (2014) also found access to finance, land, electricity and skilled workers to be the top priorities; however, this survey did not find corruption to be a major obstacle but did find that many firms had experienced corruption. The fear of political instability also remained an important concern

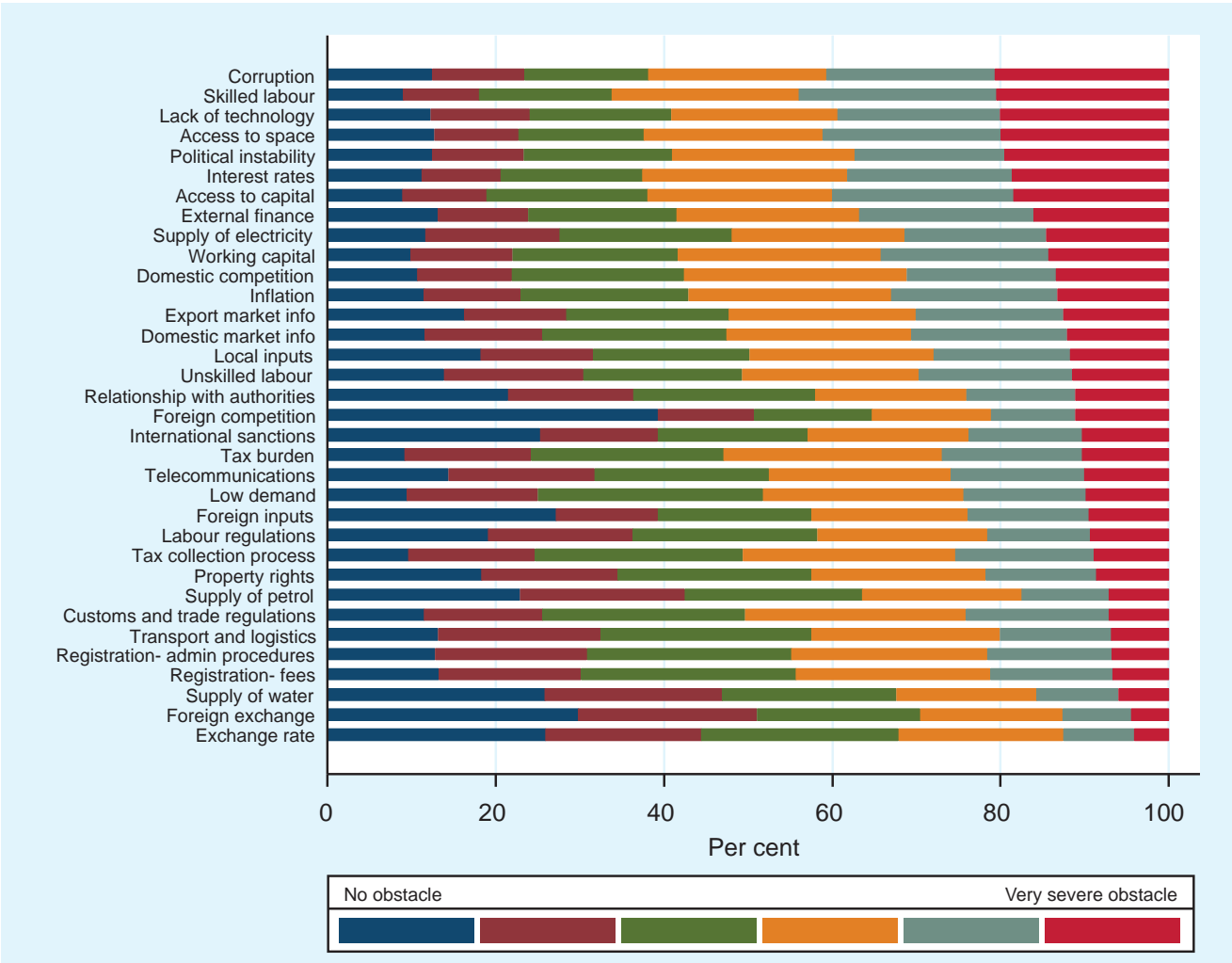
with both the Executive Opinion Survey and the Enterprise Survey, in which it was ranked as fifth and sixth most important obstacle, respectively (WEF, 2014; World Bank, 2014a).

The next group of issues reported to be obstacles in the present survey are related to financing, such as interest rates, access to capital and external finance. The impact of these issues on firms varied, depending on their size. The financial sector has long been overly regulated and tightly controlled, resulting in poor access for firms. As mentioned above, both the Executive Opinion Survey and Enterprise Survey rate this as the number one concern among firms (WEF, 2014; World Bank, 2014a).

Electricity supply – which is often cited as a bottleneck to economic activity, particularly manufacturing, in developing countries – ranked below corruption, skills shortages and financing issues. Almost 15 per cent of firms found access to electricity supply to be a very severe obstacle, while water access was ranked quite low with only 6 per cent of firms finding it a very severe obstacle. This overall average masks important differences between regions, which are reviewed later in this chapter.

Some aspects of institutional capital, including the protection of intellectual property rights, taxation, business and labour regulations and administrative procedures all appear at the bottom of the ranking of major obstacles to business operations. In addition, certain international characteristics, such as foreign competition, foreign exchange, foreign inputs and international sanctions, were largely rated as “no obstacle” to business operations. This suggests that many firms have localized concerns and consider themselves insulated from the international economy. Figure 3.7 provides the overall picture of business obstacles in Myanmar.

Figure 3.7. Major obstacles to business operations



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

2. Severity of obstacles appears to vary by sector

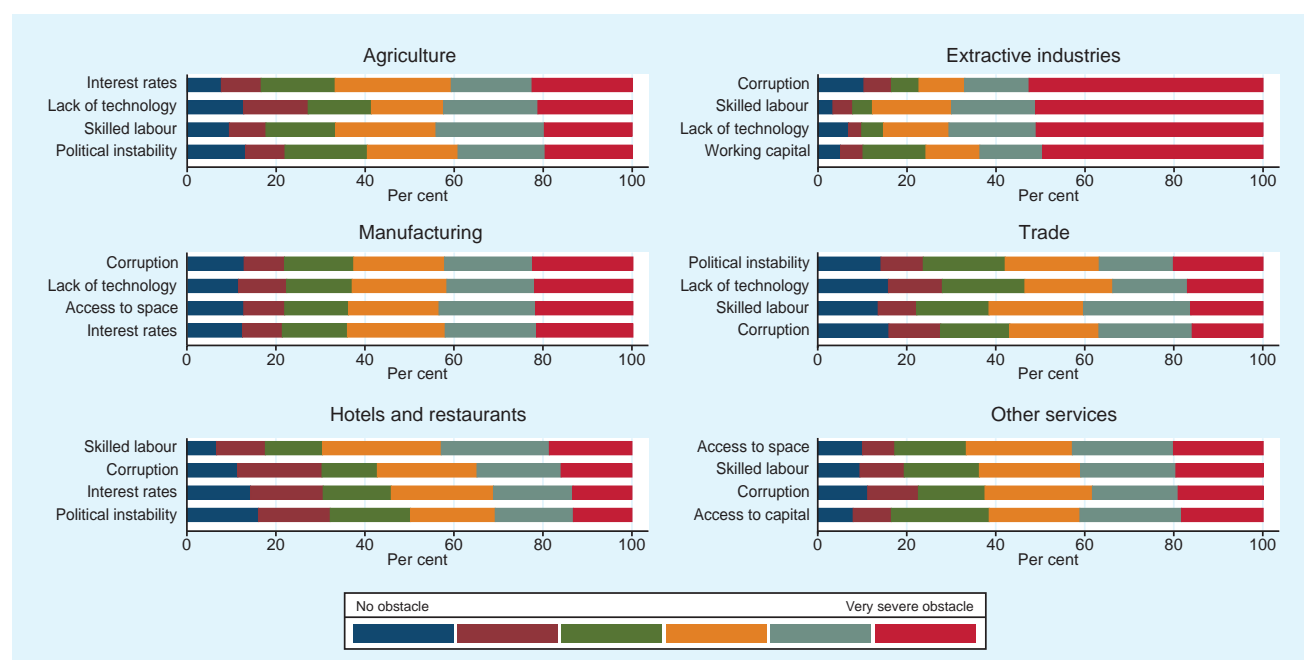
While corruption was found to be the most severe obstacle for all firms in the sample (figure 3.7), firms in agriculture were most concerned about interest rates. Some 20 per cent of the sampled firms in the sector cited interest rates together with the lack of technology, skilled labour and political instability as very severe obstacles.

Firms in extractive industries were most concerned with corruption. Fifty per cent of the 121 sampled firms operating in those industries (e.g., mining and quarrying) rated corruption as a very severe obstacle. Other issues of concern included skilled labour, lack of technology and working capital. Note that the majority of firms in this industrial category are smaller firms.

Firms in manufacturing were also very concerned about corruption. More than 20 per cent of the sampled firms in this sector listed corruption, technology, access to office space and high interest rates as very severe obstacles in that order.

Firms in the trade sector (wholesale and retail trading), were most concerned about political instability, while firms operating hotels and restaurants were most concerned about access to skilled labour. Firms in other services frequently rate access to space as a very severe obstacle.

These results suggest that addressing these obstacles requires a nuanced approach as firms in different sectors have different concerns (figure 3.8). A simple one-size-fits-all approach will not be sufficient.

Figure 3.8. Top four obstacles in each sector

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

3. Small firms find lack of financing to be a very severe obstacle

While more than 20 per cent of large firms (250+ employees) identified interest rates as a very severe obstacle, smaller firms appeared to have more trouble getting access to finance (figure 3.9). Small-sized firms (10-49 employees) are the most affected with close to

20 per cent of them reporting that the lack of access to capital, external finance and working capital were very severe obstacles. This result can be expected, given the excessive regulations that constrain the underdeveloped banking sector in Myanmar. Further liberalization with institutional capacity-building in the banking sector will no doubt expand access to much-needed credit for smaller firms.

Figure 3.9. Access to financing, by size of firm

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

4. Electricity and water shortages are concentrated in some areas

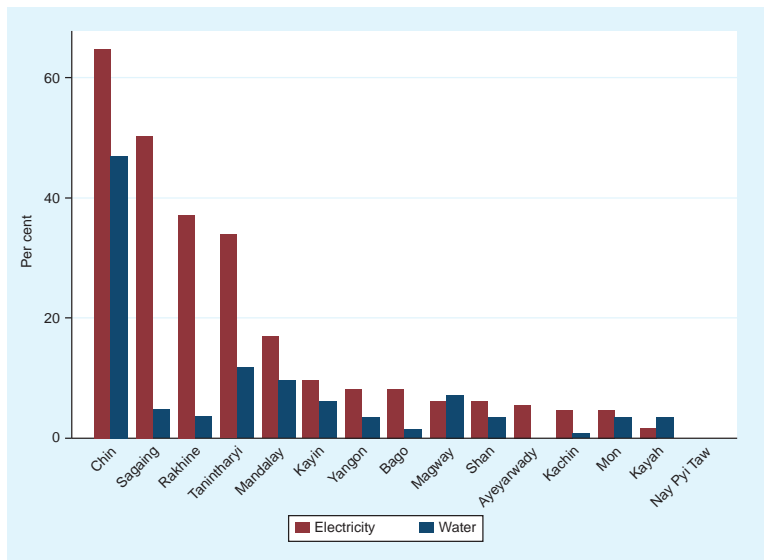
While the supply of electricity is ranked among the top 10 most severe obstacles and the supply of water is among the bottom three obstacles, these rankings mask important differences between regions. Figure 3.10 shows that 65 per cent of respondents from Chin State cited the supply of electricity to be a very severe obstacle compared with 50 per cent from Sagaing Region, 37 per cent from Rakhine State and zero per cent from Nay Pyi Taw Union Territory. The severity of water shortages was cited by 47 per

cent of respondents from Chin State, 12 per cent from Tanintharyi Region, 10 per cent from Mandalay Region and zero per cent each from Nay Pyi Taw Union Territory and Ayeyarwady Region. These results suggest that the Government needs to not only increase expenditure on basic infrastructure but to also ensure that access is equitably distributed across the nation.

5. Some regions have better infrastructure ratings than others

An index was constructed in order to assess the state of infrastructure services reported in each region (figure 3.11). This index is a composite score

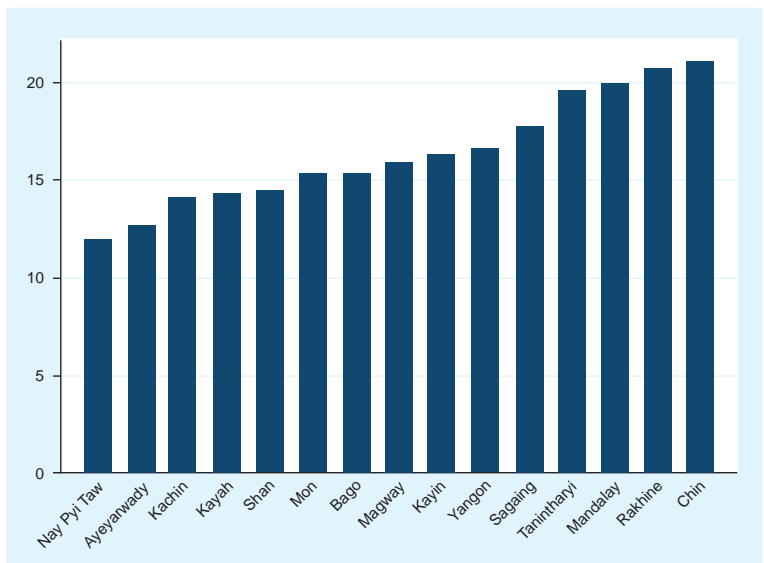
Figure 3.10. Share of respondents cited access to electricity and water as very severe obstacles



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: The higher the percentage, the greater the concentration of firms reporting a very severe obstacle.

Figure 3.11. Infrastructure Quality Index



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: Higher index rating reflects poorer infrastructure ratings.

of ratings by firms of: (a) access to land, factory or office space; (b) telecommunications; (c) supply of electricity; (d) supply of water; and (e) transport and logistics. Higher scores indicate that obstacles are more severe. Chin State and Rakhine State are in most need of infrastructure improvement while Nay Pyi Taw Union Territory and Ayeyarwady Region perform comparatively well. One worrisome finding is that Yangon Region and Mandalay Region, two of the major commercial centres of Myanmar, perform relatively poorly with rankings of 10 and 13, out of 15 regions, respectively.

6. Larger firms appear to be more accustomed to administrative bureaucracy

Large firms (250+ employees) appear to be less concerned about fees and administrative procedures related to business registration, licensing and permits. Fewer large firms rated these as very severe obstacles compared to firms of a smaller size. It is of particular concern that micro and small-sized firms found these procedures to be very severe obstacles, as new entrepreneurs will also likely face these same issues. As fees and administrative procedures are completely under the control of the Government this issue should

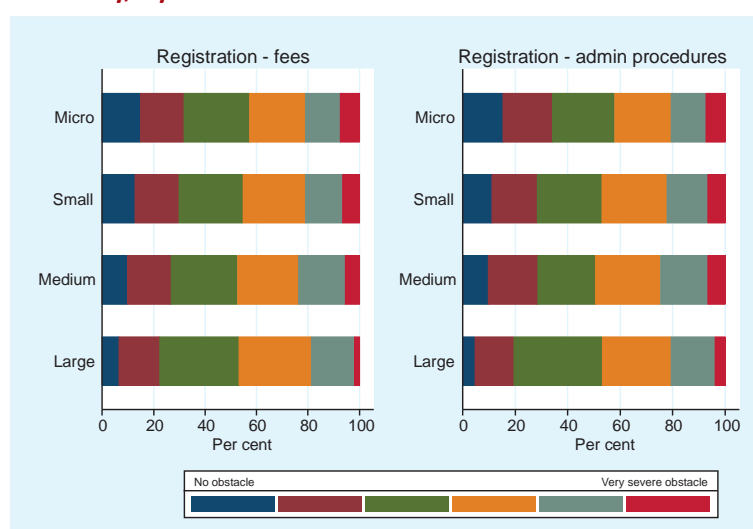
be addressed as soon as possible. A “single-window” service to streamline administrative procedures would be beneficial. Figure 3.12 provides an overview of the bureaucratic hurdles.

Finally, an explanatory factor analysis – which is a statistical technique applied to discover coherent subsets that are relatively independent of one another – was conducted.⁷ The results indicate that the obstacles to business can be broadly categorized into six groups:

- (a) Corruption;
- (b) Access to financing;
- (c) Access to markets, labour, supplies and technology;
- (d) Regulations and taxation;
- (e) Infrastructures and utilities;
- (f) Conditions for international business.

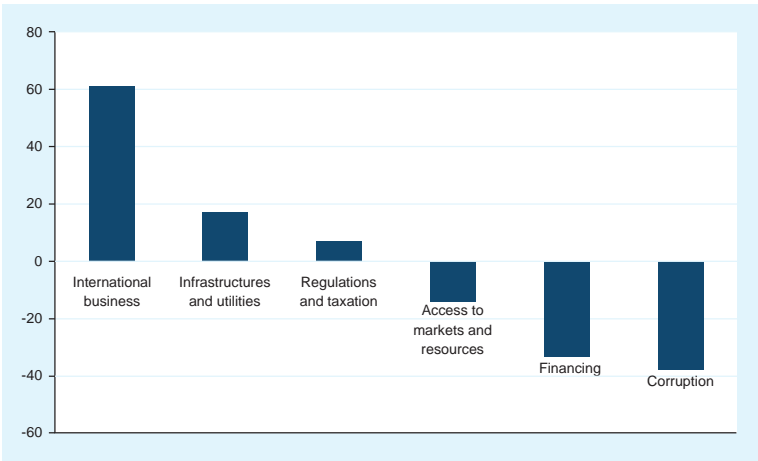
While conditions for international business are less crucial for the sampled firms, corruption appears to be the most crucial issue for business in Myanmar. Figure 3.13 presents the indexes of the six obstacle categories listed above as well as their relative seriousness. Policymakers may develop relevant interventions that focus specifically on one of the six categories or in combination.

Figure 3.12. Perceived bureaucracy, by size of firm



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.13. Indexes of business obstacles



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: The negative indexes – corruption, access to financing and access to markets and resources – indicate more serious obstacles to the sampled firms.

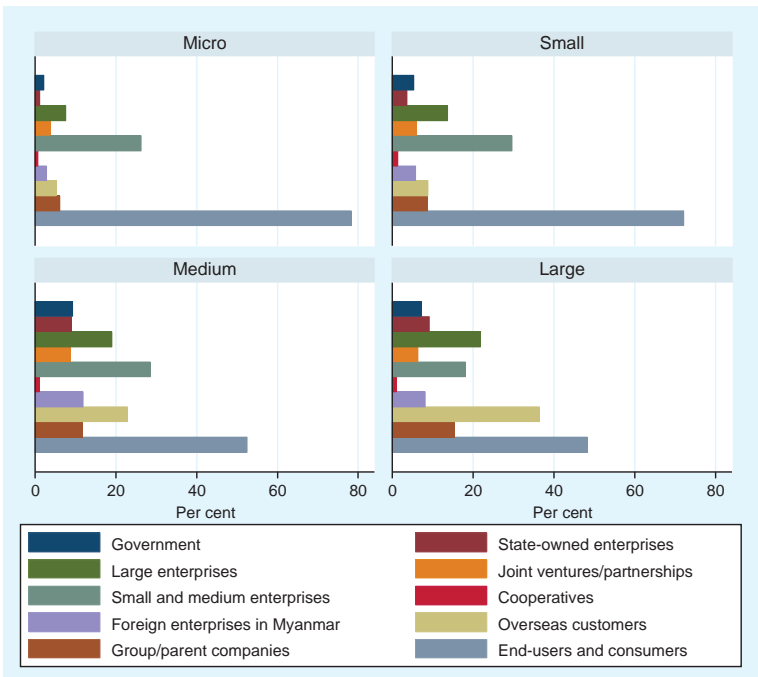
MARKET CONDITIONS

This section addresses the issues of access to market and resources as well as their general conditions, with specific focus on the participating firms’ engagement and relationships with customers and suppliers. The section also touches on the firms’ perceptions of the forthcoming AEC (which will include Myanmar), which is scheduled to be established by the end of 2015.

1. Larger firms have an increasingly diversified customer base

Almost 80 per cent of micro firms (1-9 employees) sell a large part of their output directly to domestic end-users and consumers, while only 48 per cent of large firms (250+ employees) do so (figure 3.14). Small-sized firms (10-49 employees) are less likely to sell overseas with only 8 per cent of firms reporting substantial sales to foreign customers while 23 per cent

Figure 3.14. Major customers



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

cent of medium-sized firms (50-249 employees) and 36 per cent of large firms reported having major overseas customers. The Government and SOEs appear to prefer purchasing material from medium and large-sized firms, perhaps due to the scale required. While less than 5 per cent of micro and small-sized firms reported selling to state entities, for medium and large-sized firms the figure is closer to 10 per cent. Fifteen per cent of large firms have dealings with their parent or group company; however, this is true for only 6 per cent and 8 per cent of micro and small sized firms, respectively.

2. Revenue sources of smaller firms are more localized

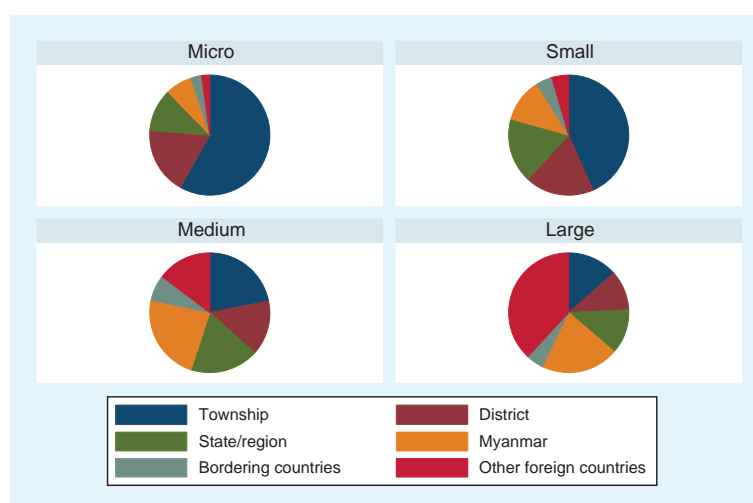
Figure 3.15 shows the main markets by size of firm. The average micro firm (1-9 employees) receives 58 per cent of its revenue from the township in which the firm is located, with 18 per cent and 11 per cent coming from the rest of the district and State, respectively. Other sources contribute less than 10 per cent. Small-sized firms (10-49 employees) obtain a comparatively lower share of revenue from the immediate township as they are able to reach out to the wider areas of the State/Region as well as nationwide, which provide 17 per cent and 12 per cent of revenue respectively, on average.

A similar trend exists among medium-sized firms (50-249 employees) and large firms (250+ employees), which obtain comparatively larger shares of revenue from distant sources. Medium and large-sized firms earn slightly more than 20 per cent of their revenue, on average, from nationwide markets. Medium-sized firms receive 21 per cent of their revenue from foreign markets, with almost 7 per cent coming from bordering countries, i.e., Bangladesh, China, India, the Lao PDR and Thailand, and 14 per cent from other foreign countries. Large firms receive almost 5 per cent and more than 38 per cent of their revenue from bordering countries and from other countries, respectively, on average.⁸

3. Some regions earn more revenue from overseas than others

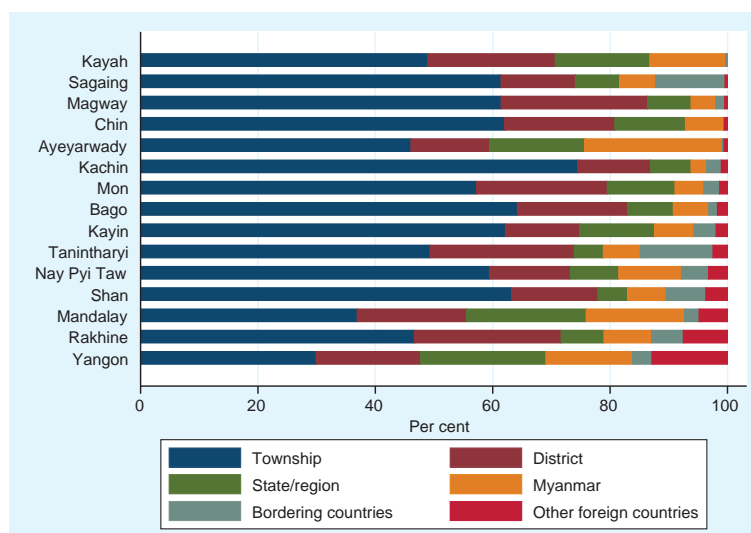
Firms in Yangon Region receive 16 per cent of their revenue from foreign markets while firms in Rakhine State receive 13 per cent from such markets, on average, with most of it coming from non-bordering countries. Firms in Sagaing and Tanintharyi Regions are found to trade more with bordering countries, India and Thailand, respectively. Firms in Ayeyarwady Region and Kayah State stand out for having very little trade with other countries, yet nonetheless are able to diversify their revenue source domestically with more than half coming from outside the townships (figure 3.16).

Figure 3.15. Main markets, by size of firm



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: Bordering countries include Bangladesh, China, India, Lao PDR and Thailand.

Figure 3.16. Sources of revenue, by State/Region

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: Bordering countries include Bangladesh, China, India, Lao PDR and Thailand.

4. Large firms rely heavily on inputs from overseas

Micro and small-sized firms appear to have a similar input structure to their sales markets. Some 40 per cent of them obtain supplies from other SMEs. Approximately 30 per cent receive supplies from a group or parent company and 20 per cent source supplies from large enterprises.

Medium-sized firms are similar to micro and small-sized firms, except that a lower percentage of firms receive inputs from a group or parent company. They also procure a larger share of supplies from overseas suppliers and foreign enterprises in Myanmar.

Almost 45 per cent of large firms receive supplies from overseas suppliers while 20 per cent receive them from overseas buyers (who provide inputs and purchase final products) and 11 per cent from foreign enterprises in Myanmar. This shows that larger firms are more reliant on trade for acquiring inputs to their production processes.

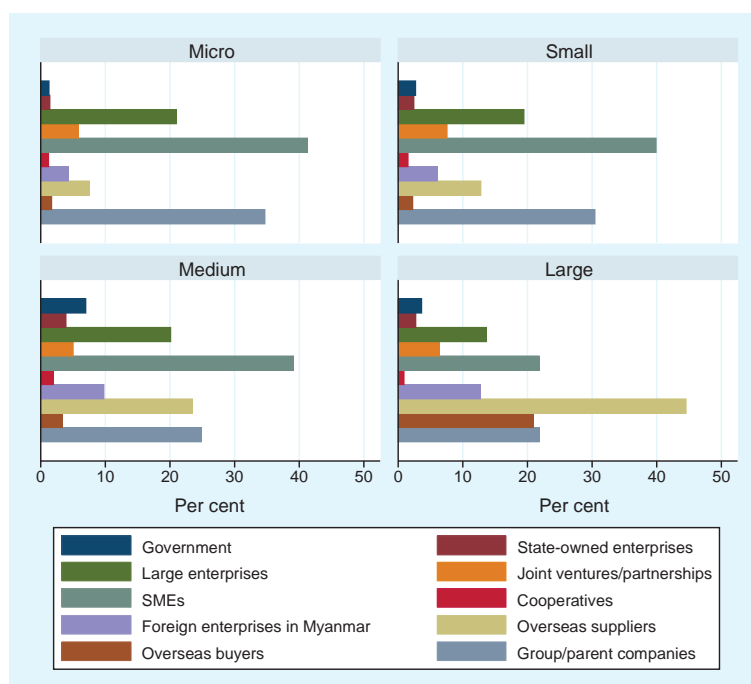
It is noteworthy that a particularly large percentage of firms receive inputs from a group/parent company. Surprisingly, this share is larger for micro firms (more than 30 per cent) compared with large firms (more than 20 per cent) (figure 3.17). However, it is unclear why this is the case. Sometimes transfers between controlled (or related) legal entities are used to minimize/avoid paying tax. Myanmar does not currently have a policy on transfer pricing (Herman, 2013), which

potentially opens this mechanism to abuse. Another explanation could be Myanmar's social or business norms at the grass-root level, which are influenced by its relationship- or family-oriented national culture.

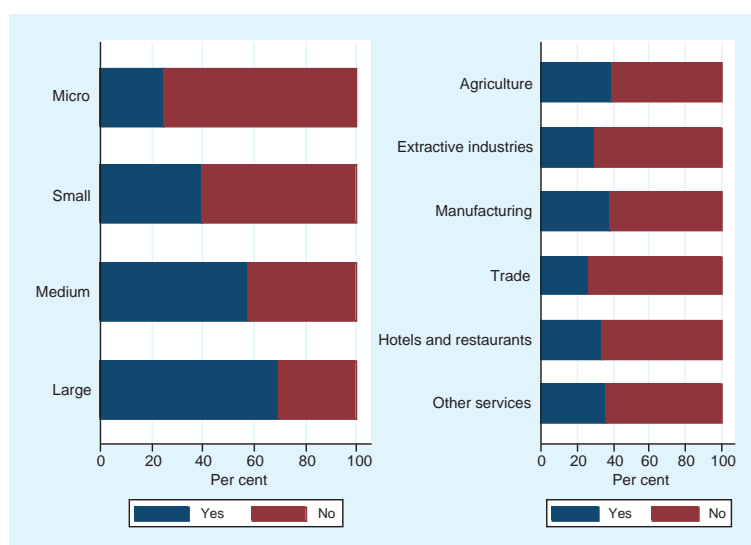
5. ASEAN Economic Community

All 10 ASEAN members aim to establish a single market and production base by the end of 2015 through the ASEAN Economic Community (AEC), an intensive form of economic integration characterized by the free flow of goods, services, people and capital.⁹ The main objective of such a transformation is to become a highly competitive and a fully-integrated region in the global economy. Thus, the AEC is expected to have a major economic and social impact on Myanmar as an ASEAN member.

Only 35 per cent of the firms in the overall sample, however, had heard about the AEC. However, this figure varied by size and sector, as shown in figure 3.18. As expected, larger firms are more likely to be aware of the AEC. Seventy per cent of large firms and almost 60 per cent of medium-sized firms were aware of the AEC while for micro and small-sized firms it was only 24 per cent and 40 per cent, respectively. Firms in some sectors, such as agriculture, manufacturing and other services, are more likely than average to have heard about the AEC with 40 per cent, 38 per cent and 36 per cent, respectively, of those sampled reporting in the affirmative. Firms in extractive industries

Figure 3.17. Major suppliers

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.18. Awareness of the ASEAN Economic Community

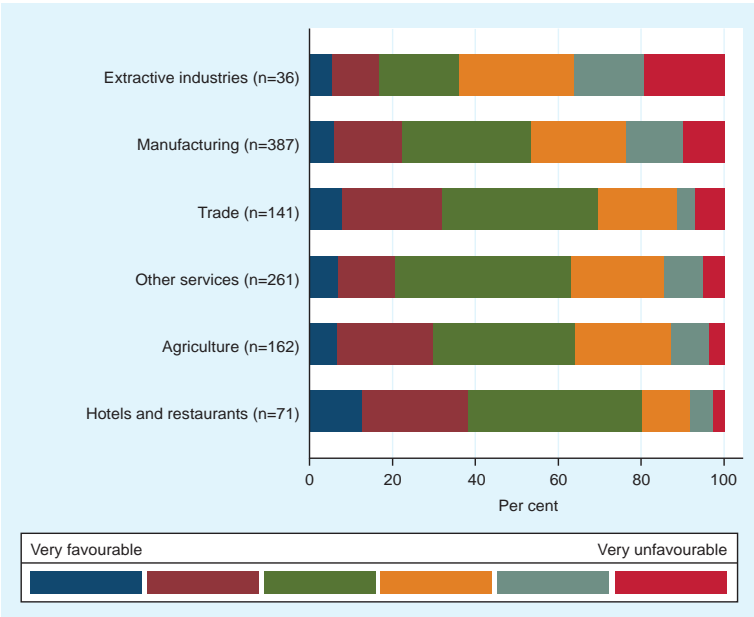
Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

and trade are less likely to be aware of the AEC, with only 30 per cent and 26 per cent, respectively, reporting affirmatively. These results highlight the need for the Government to spread awareness about the upcoming integration programme, especially among micro, and small-sized firms and trading firms, to help them prepare for the opportunities and challenges that the AEC is expected to create.

6. Not all firms have a favourable perception of the AEC

Although the majority of firms in the extractive industries sector have never heard of the AEC, many of them appear to be concerned about the prospects of joining the AEC. As mentioned above, only 36 firms (30 per cent) of the 121 in the extractive industries sector have heard of the AEC. Of those 36 firms, seven foresee the AEC having a very unfavourable impact on their business. Due to the small sample size, the seven firms constitute 20 per cent of the firms in the extractive industries sector that are aware of the AEC (figure 3.19).

Figure 3.19. Perception of the ASEAN Economic Community



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

As expected, firms operating hotels and restaurants have a more favourable outlook of the AEC. Only two of the sampled firms felt that it would have an unfavourable impact on their business while nine firms (slightly more than 12 per cent) expected it to be very favourable. On average, firms in the other sectors appear to be ambivalent or unsure of what the impact will be. It is crucial that, perhaps with the Government's support, firms prepare for the upcoming regional economic integration by increasing productivity and competitiveness, otherwise they risk losing out on the opportunities that such integration will provide.

INNOVATION

Innovation is an essential process of necessary change in order to maintain the development and growth of an entity (Drucker, 2008). Innovation is defined as a firm's ability to "manage knowledge creatively in response to market-articulated demand and/or other social needs" (OECD, 1999). This section reviews the relationship between the innovation capabilities, technology development and adoption, and R&D investment of firms as well as their perceptions, strategies and managerial practices to innovate in Myanmar. Policy priorities to enhance innovation are also discussed, taking into consideration the common obstacles to greater innovation among firms in Myanmar.

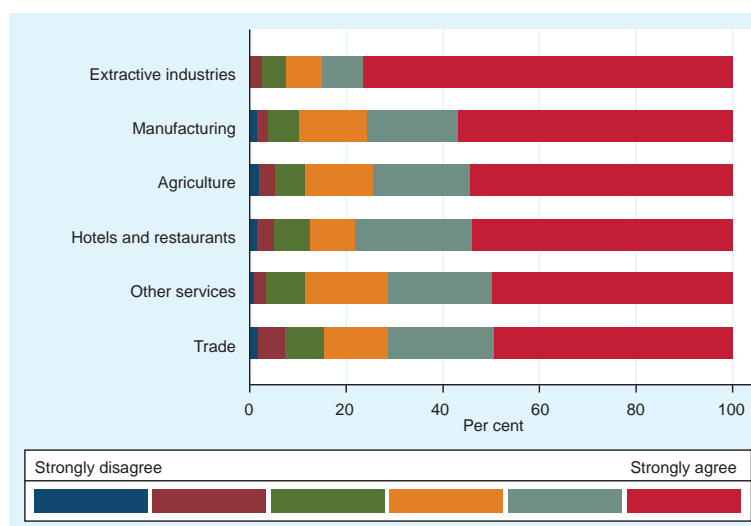
1. Innovation is considered important...

More than half of all the respondents considered innovation to be critical to the success of their business. Figure 3.20 summarizes the perception among firms of innovation management, by sector. Firms in extractive industries are most likely to hold this view, with 75 per cent reporting strong agreement with the opinion that innovation is crucial. Almost 40 per cent of all sampled firms had introduced new products or services in the past. However, only 25-30 per cent of the firms reported significantly improving their production or distribution processes, sales and marketing practices, or management systems.

Four per cent of the respondents (124 firms) have obtained an international quality certification such as that from the International Organization for Standardization (ISO) or Hazard Analysis and Critical Control Points (HACCP). Most of those firms are large-sized and in the manufacturing sector. More than 16 per cent of large firms (250+ employees) have such certification compared with only 4 per cent of small-sized firms (10-49 employees).

2. ...to increasing revenue and addressing customer needs...

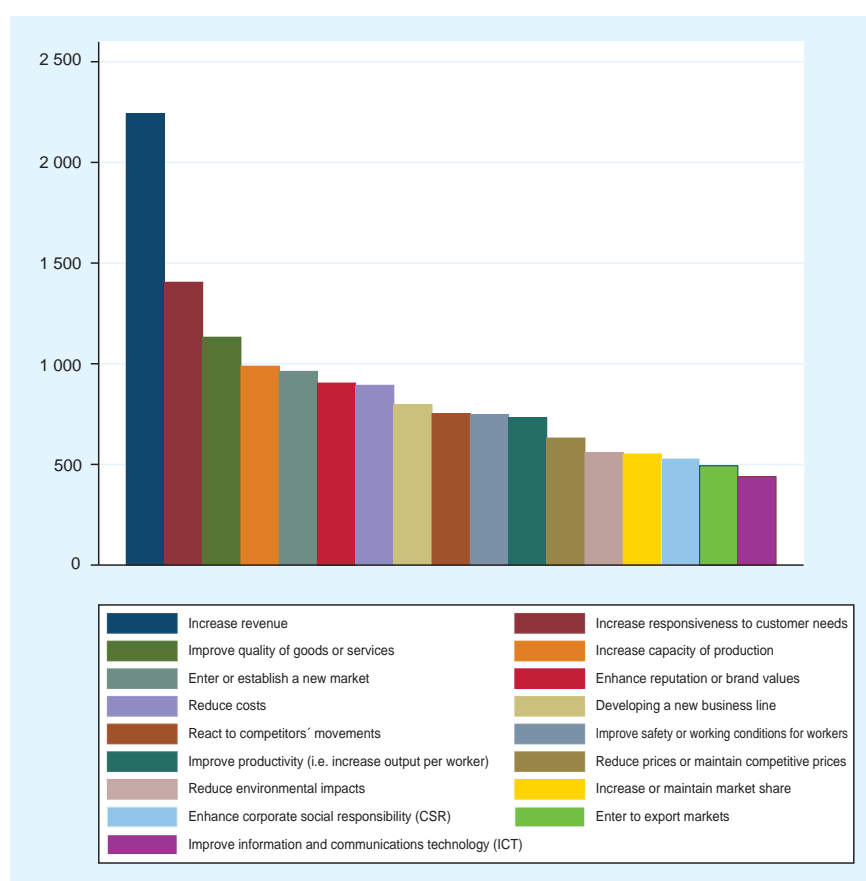
Almost three-quarters of the sampled firms that had adopted innovative products or processes did so to increase revenue, while nearly half did so to

Figure 3.20. Innovation is crucial to success

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

increase responsiveness to customer needs or to improve quality of goods or services (figure 3.21). Less than one quarter of the firms implemented innovations to increase their competitive positions, enhance productivity or gain market share in foreign

markets. Similarly, the reduction of environmental impact, corporate social responsibility or improvement of safety and working conditions featured much less frequently as the motivation for innovating.

Figure 3.21. Objectives of innovation by respondents

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

3. ...but firms do not invest much in it

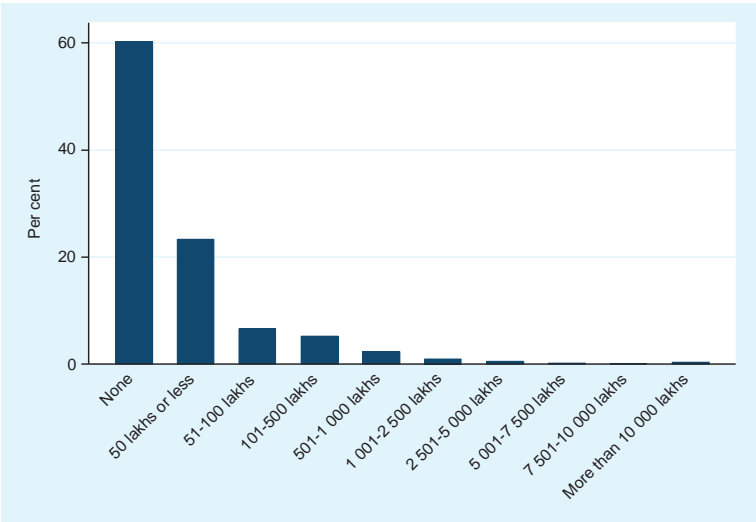
Despite the importance that respondents attached to innovation, more than 60 per cent of all firms surveyed had made zero investment in it (figure 3.22). However, spending on R&D appears to vary by size of firm (figure 3.23). Sixty-seven per cent of the large and medium-sized firms reported at least some expenditure on R&D, while only 44 per cent of small-sized firms and 28 per cent of micro firms reported doing so. The top 100 firms, by size, spend the equivalent of \$100,000 or more annually on R&D.

The low rates of expenditure by micro and small-sized firms may be due to the fact that they find the fixed costs of innovation to be prohibitive and are unable to benefit from economies of scale. To overcome these barriers they may require special incentives from the Government in the form of tax breaks, subsidies etc.

4. Trademarks and patents are the most popular intellectual property protection measures

Only one-third of respondents (1 094 firms) reported protecting their intellectual property (IP). Of those, 53

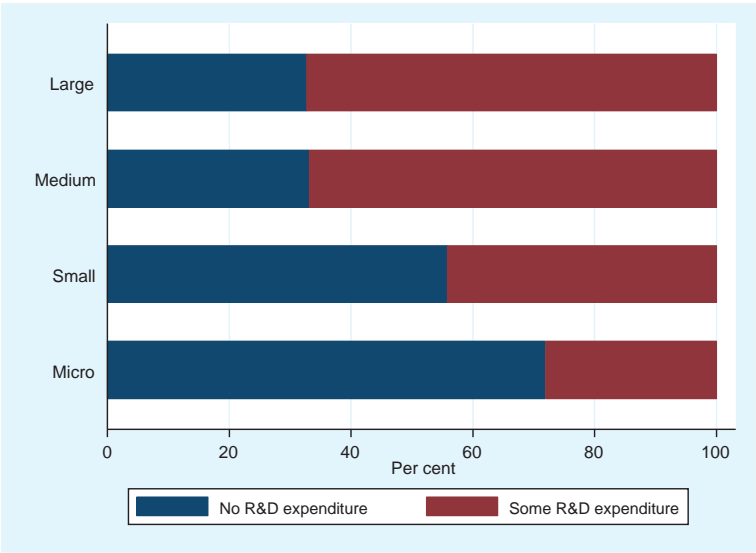
Figure 3.22. Share in R&D spending by respondents



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: 1 lakh = 100 000 kyat.

Figure 3.23. Expenditure on R&D, by size of firm

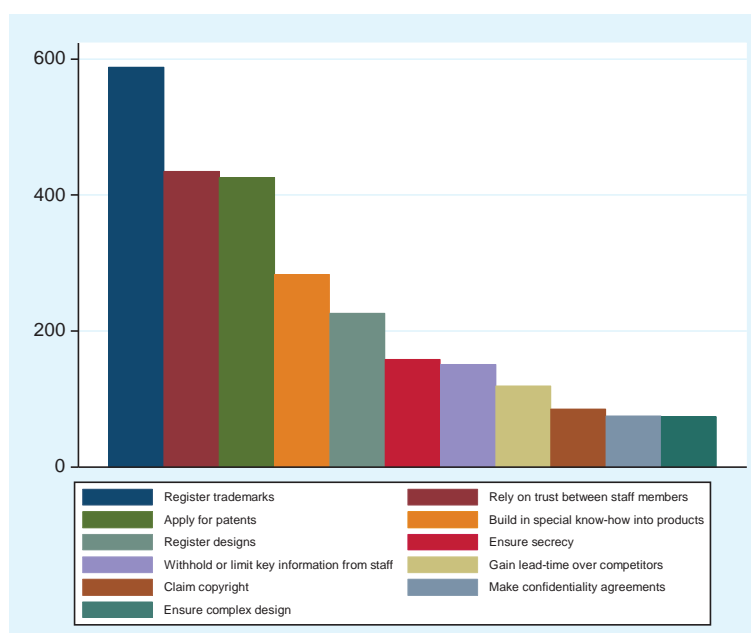


Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

per cent (588 firms) use trademarks while 40 per cent (426 firms) use patents (figure 3.24). Only 8 per cent (85 firms) claim copyright protection. A large number of respondents, almost 40 per cent (435 firms) rely on trust between staff members for IP protection.

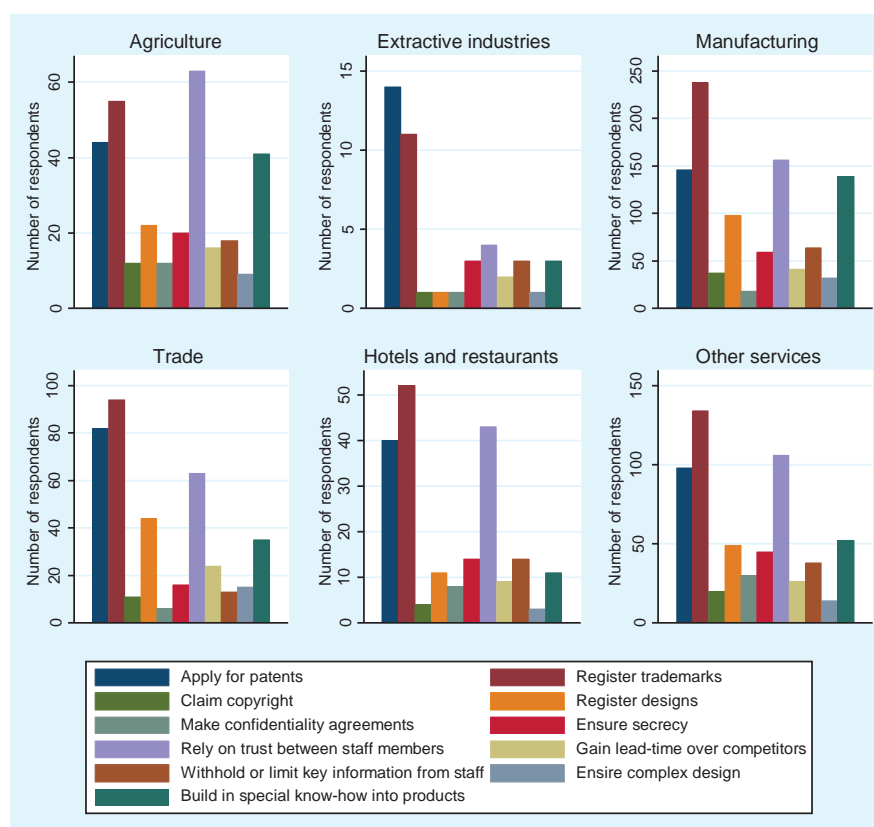
Figure 3.25 shows some important differences, by sector, between the popularity of IP measures. Firms in manufacturing, hotels and restaurants, and other services follow the general pattern of citing trademarks, trust and patents as the most frequently

Figure 3.24. Most popular intellectual property protection measures



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.25. Most popular intellectual property protection measures, by sector



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

used IP measures, in that order. Firms in agriculture rely most frequently on trust while those in extractive industries rely mostly on patents. Building in special know-how is used relatively more often in agriculture, manufacturing and other services.

These results highlight the need to increase awareness about the importance of IP protection, especially with the onset of globalization. The Government will therefore need to work towards streamlining the IP application process as well as strengthening enforcement through the legal system.

HUMAN RESOURCES

There is little doubt that human resources and their management are one of the most important factors or inputs to the success of a business (Drucker, 2008). This section reviews the present trends of the labour market as well as business strategies and practices of human resources management in Myanmar. Various topics are discussed, ranging from job creation, required skills and work conditions to gender issues in the workplace.

1. Increases in demand are driving firm expansion and job creation

Close to two-thirds of the sample firms had not changed the size of their workforce in the 12 months prior to the survey (figure 3.26). In those that had done so, the number of workers increased in 26 per cent of firms and decreased in 13 per cent. The most common reasons for increasing the size of the workforce were: (a) changes in domestic demand; (b)

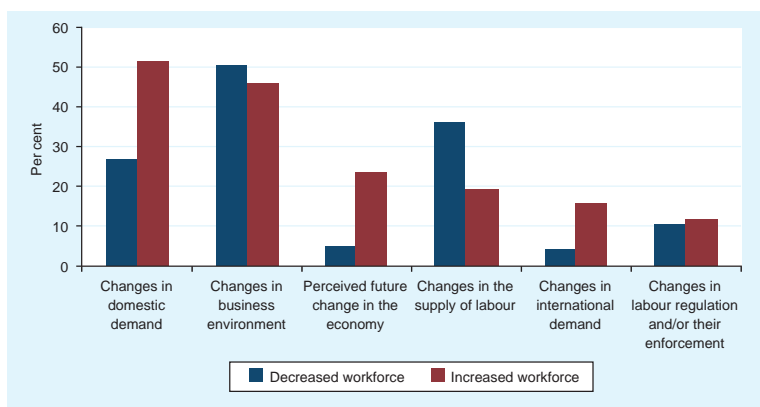
changes in the business environment; and (c) perceived future economic conditions. The most common reasons for decreasing the size of the workforce were: (a) changes in the business environment; (b) labour supply; and (c) domestic demand. Changes in domestic and international demand and expectations about the future were considered to be relatively more important among firms that had increased their number of employees, while changes in the business environment and labour supply were seen as relatively more important where employment had declined.

2. Job creation is more common in the services sector and in large firms

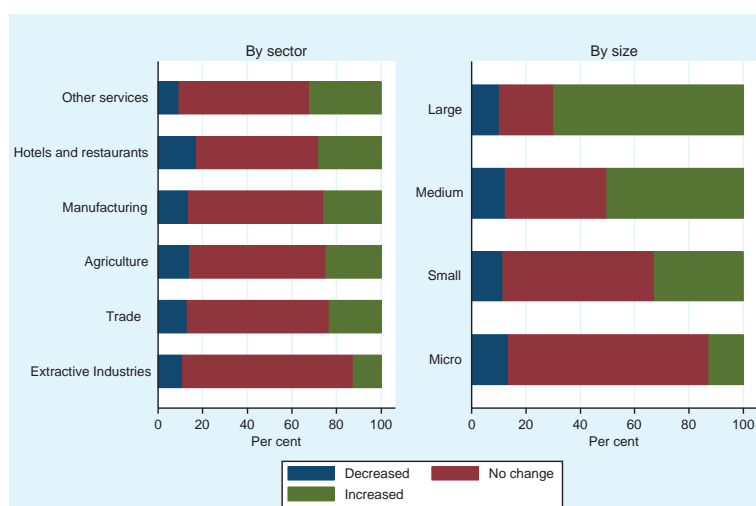
As shown in figure 3.27, many firms in all industrial sectors in Myanmar have recently experienced an increase in the number of jobs, which promotes economic growth. Some 30 per cent of firms providing other services or operating hotels and restaurants had increased their workforce during the previous 12 months. However, the hotel and restaurant sector had also experienced a large attrition rate, with 17 per cent of firms reporting a reduction in employees. This volatility reflects the seasonal nature of demand for hotels and restaurants as well as the high entry and exit rates of this sector.¹⁰

The agricultural and manufacturing sectors are relatively stable. Although 25 per cent of firms in these sectors reported increases their workforce, almost 60 per cent reported no change during the previous 12 months. Employment in extractive industries was the most stable, with 77 per cent of respondents reporting no change during the previous 12 months.

Figure 3.26. Reasons given by respondents for changes in the workforce



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.27. Changes in the workforce

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Many new jobs were created by large firms, with 70 per cent of the respondents reporting an increase in their workforce. While 50 per cent of the medium-sized sample firms also increased the number of their employees, micro and small-sized firms lagged behind in terms of job creation, with only 17 per cent and 32 per cent of these firms increasing their workforce, respectively. However, their contribution to the labour market is substantial as they comprise by far the majority of business establishments in Myanmar.

The lower intake of labour by micro and small-sized firms can be explained by economic theory. Smaller firms have complained about the lack of financing as a severe obstacle to their business operations (figure 3.9). According to the law of diminishing returns, increasing labour without commensurate increases in capital and technology means that each additional worker will create less output than was previously the case; in other words, a firm will experience diminishing marginal productivity of labour (Gans, King and Mankiw, 2011). If such a firm were to continue increasing its workforce while holding capital at a fixed level, it would see total output increase but at a decreasing rate up until the point when it would no longer be profitable to employ an additional worker (Gans, King and Mankiw, 2011).

In this area, public interventions may be considered in order to enhance access by smaller firms to finance while also focusing on their capacity-building through training. Public-private partnerships with the banking sector and business associations are perhaps

necessary in order to reach out effectively to the numerous micro and small-sized firms in Myanmar.

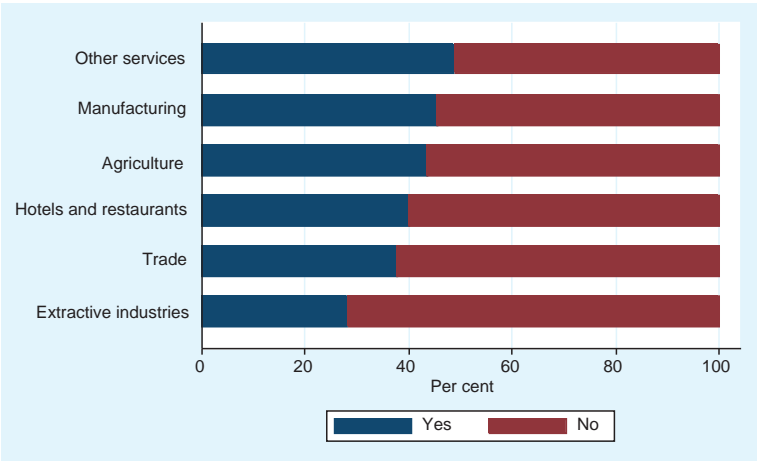
3. Technical/professional skills are lacking

More than 1 300 firms (43 per cent of the sample) reported having experienced technical or professional skills problems in the workforce. These skills problems are more prevalent in some sectors (figure 3.28). More than 40 per cent of the sample firms in the other services, manufacturing and agricultural sectors had experienced problems in hiring workers with technical or professional skills. Hiring skilled workers is crucial to increasing productivity and competitiveness as well as promoting innovation. The lack of an adequately skilled workforce is a serious obstacle to the development of Myanmar into an industrialized economy.

Among the most frequently cited skills problems faced by firms are the lack of adequate skills in the labour market and the movement of skilled employees to other firms (figure 3.29). In the aggregate, the movement of skilled employees to other entities (i.e., other firms, larger firms, other sectors, work abroad) accounts for more than half of the skilled workforce shortage in Myanmar. In response to an open-ended query, some firms said other reasons for the movement of skilled workers included establishing their own business and further higher education. This portrays a dynamic labour market in Myanmar.

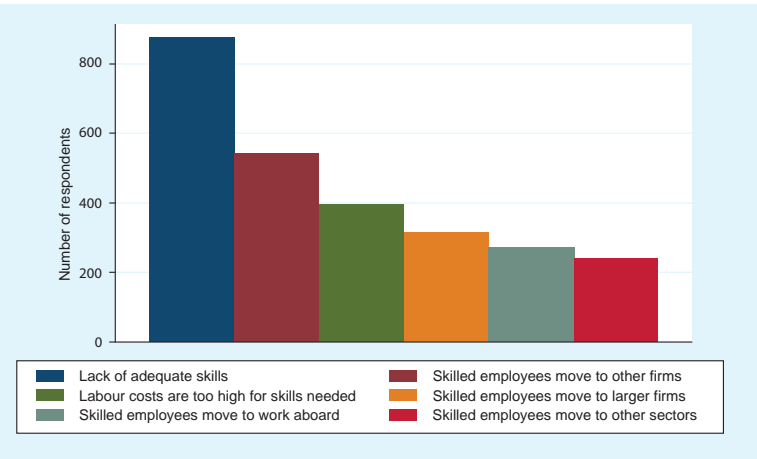
These results highlight the need for placing greater emphasis on science, engineering and vocational

Figure 3.28. Is technical or professional skill an issue?



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.29. Most frequent skills problems



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

education as part of the overall reforms of the education system. Businesses can also contribute by forming partnerships with the Government in developing vocational training and research institutes.

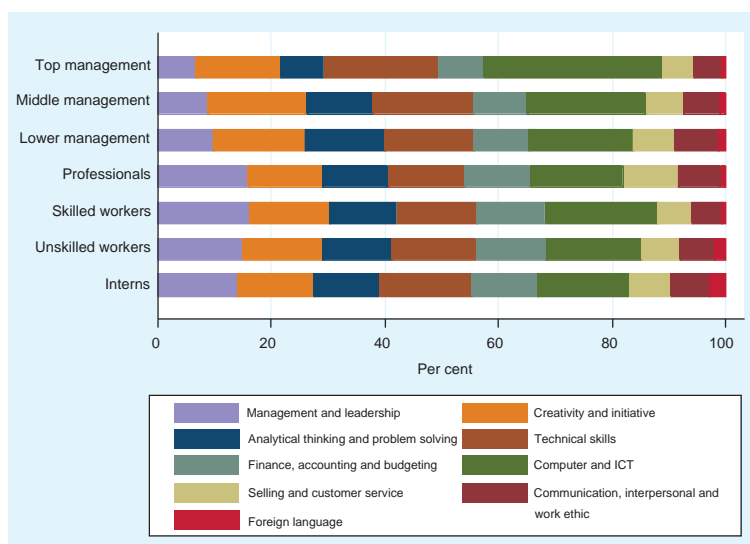
4. Computer and ICT skills are lacking at all levels

Figure 3.30 shows that more than 25 per cent of the respondents indicated that their top management lacked adequate skills in the use of computers as well as information and communications technology (ICT). This result is mainly due to the large number of micro and small-sized firms in the sample who disproportionately have trouble hiring top management with these skills or, more likely, because the owners of those smaller entities lack such skills. Larger firms are more concerned about communications, interpersonal skills, work ethic, analytical thinking, finance and foreign language skills (figure 3.31).

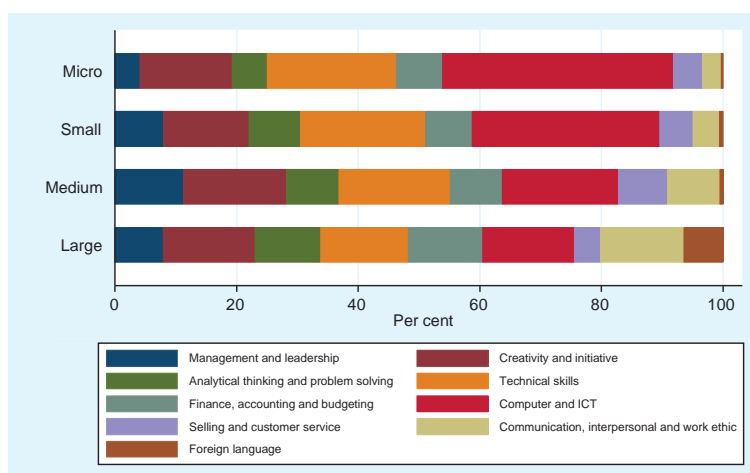
Lower down the corporate hierarchy, professionals and skilled workers are the most lacking in management and leadership skills. Addressing this deficiency requires the formation of additional higher education schools in related fields, such as business administration, legal and engineering (OECD, 2013). Greater cooperation between the dozen or so ministries responsible for education will be necessary for identifying future skills demands in Myanmar and for developing policies accordingly.

5. Skilled worker shortages are mostly addressed through in-house training

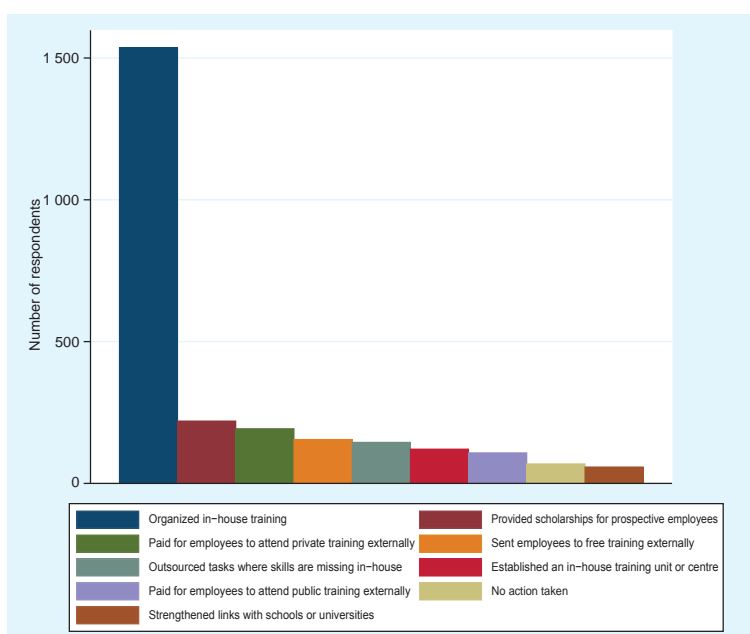
Most firms that had experienced a skills shortage chose to organize in-house training to upgrade the skills of their employees (figure 3.32). Very few firms reported relying on external training by public or private centres. In fact most firms do not cooperate with any

Figure 3.30. Lack of business skills, by hierarchy

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.31. Lack of skills in top management

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.32. Measures for overcoming skills shortage

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

external institutions in providing training. A few firms preferred to cooperate with private vocational institutes and business/industry associations rather than public institutes (figure 3.33).

6. Most firms do not spend income on training

Although many firms reported facing difficulty in hiring skilled workers, more than half of the respondents spend nothing on training their employees (figure 3.34). Nearly one-third of the firms spend between 1 000 kyat (\$1) and 500 000 kyat (\$500) annually per employee.¹¹

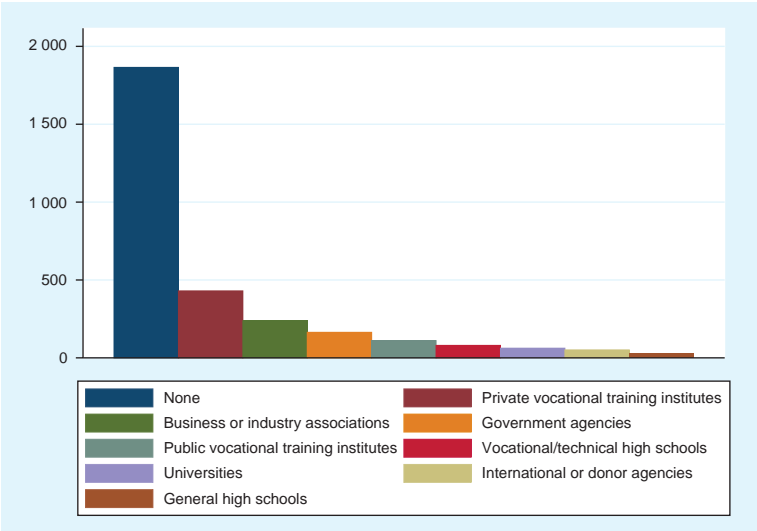
Expenditure on training varies by size of firm (figure 3.35). Almost 70 per cent of micro firms spend nothing on training while it is 25 per cent and 20 per cent in the case of medium-sized and large firms, respectively. Almost 50 per cent of the large and medium-sized

firms spend between 10 000 kyat (\$10) and 500 000 kyat (\$500) annually per employee. Firms may be reluctant to spend on training for employees as they are afraid that employees will move to other firms (figure 3.29).

7. Non-wage benefits are relatively generous

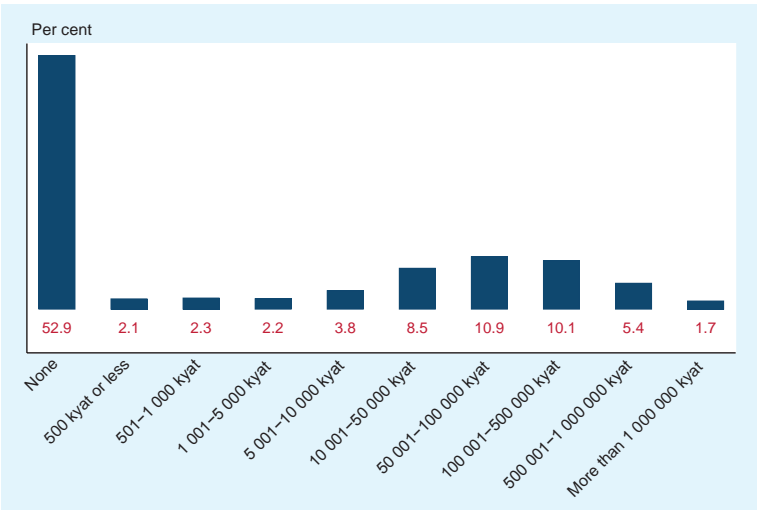
Approximately 15 per cent of firms do not provide paid leave at all apart from national holidays, while 25 per cent provide more than 20 days in line with practices in advanced economies (figure 3.36). Nearly 10 per cent of the sample firms do not provide paid sick leave, while 25 per cent provide seven to 10 days and 20 per cent provide more than 20 days annually. Approximately 80 per cent of the responding firms cover medical expenses of employees, which is a very high share compared with other developing countries

Figure 3.33. Cooperating agencies in skills development

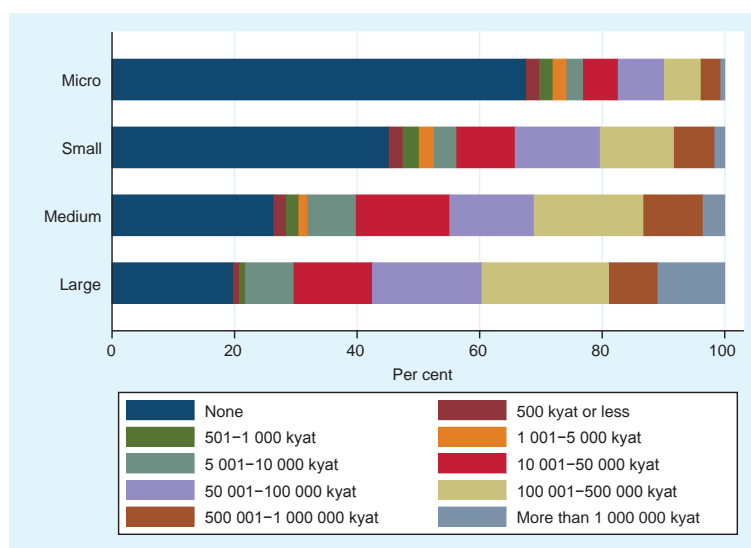


Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

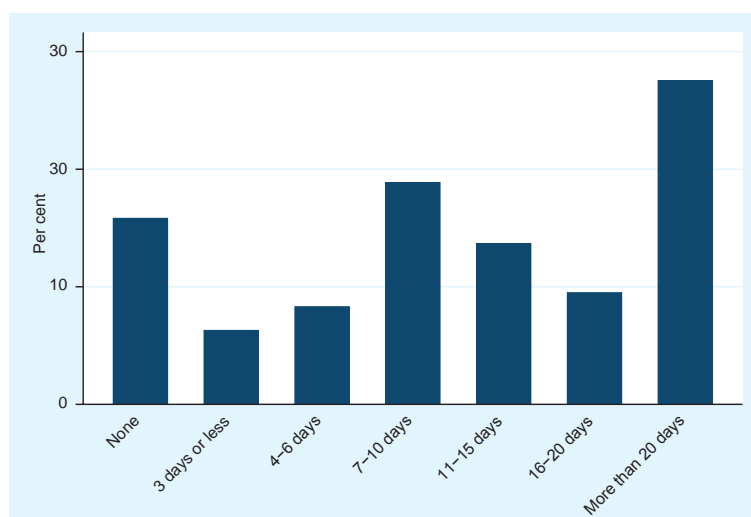
Figure 3.34. Annual training expenditures per employee



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.35. Distribution of expenditure, by size of firm

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.36. Days of paid leave per employee

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

with a firm size distribution like that in Myanmar.¹² In contrast, only 2 per cent of the respondents reported that they provide pension schemes for their employees.

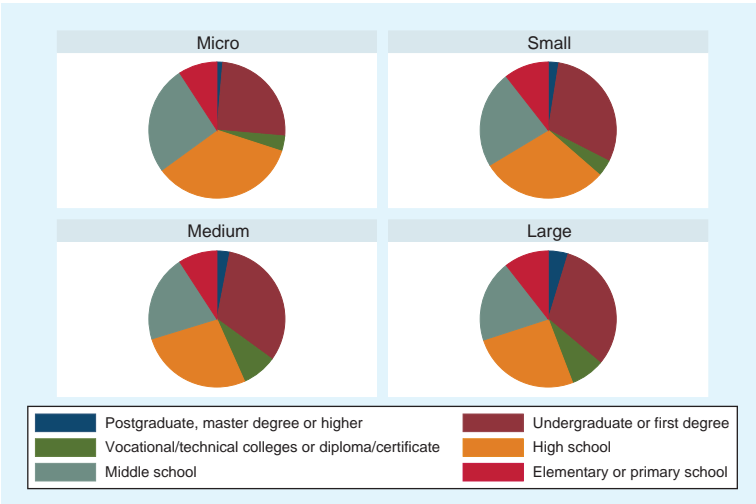
8. Smaller firms have fewer educated employees

Micro and small-sized firms tend to have more employees with lower levels of education (figure 3.37). Micro firms reported that, on average, 35 per cent of their employees had completed high school and 25 per cent had completed undergraduate studies. Small-sized firms reported employing a slightly higher number of undergraduates. Medium-sized and large firms reported employing more postgraduates and more employees with vocational and technical training, compared with smaller firms.

9. Women are under-represented at all levels of management

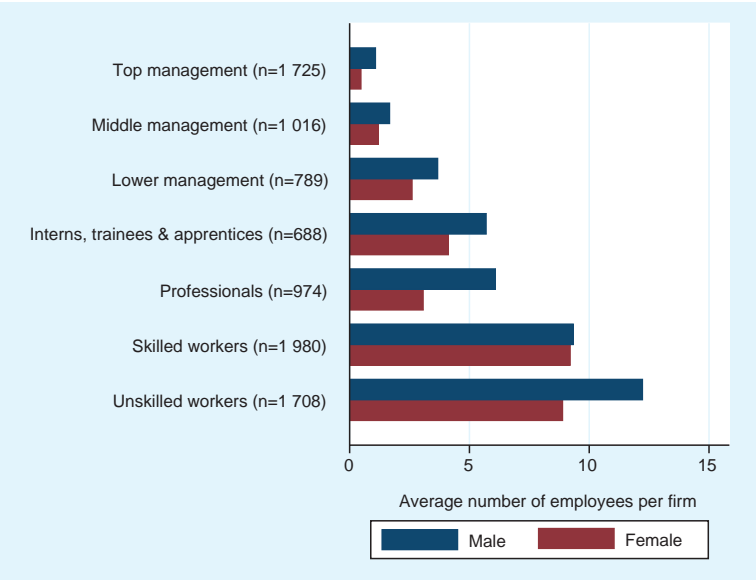
Although figure 3.38 indicates a relative high female-male ratio at the worker level, fewer women are employed at all management levels compared with men, on average. In top management (e.g., CEO and managing director) there are half as many women as men, on average, although this ratio improves slightly for women in middle and lower management. There are almost as many women as men in the skilled worker category, but at the professional level women are once again under-represented. However, care must be taken when interpreting these results as a large proportion of the sample firms did not respond to these questions. Figure 3.38 also lists the sample size for each occupation group.

Figure 3.37. Education level of employees



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.38. Average number of employees per firm

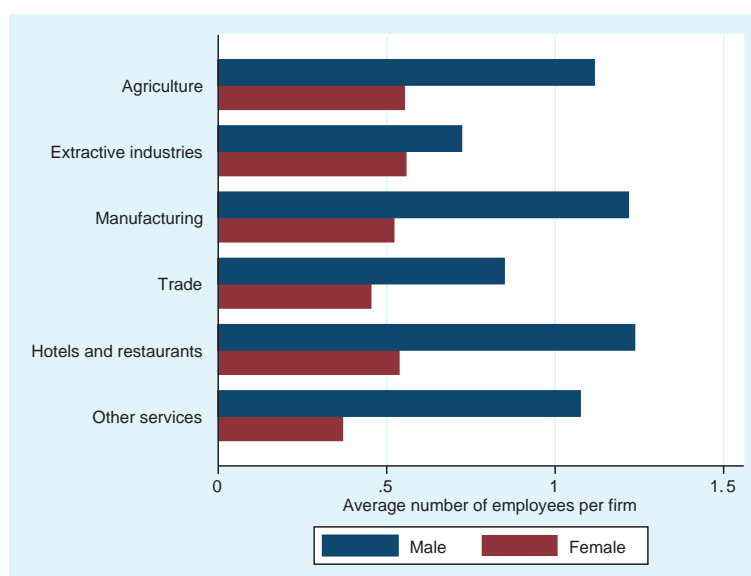


Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

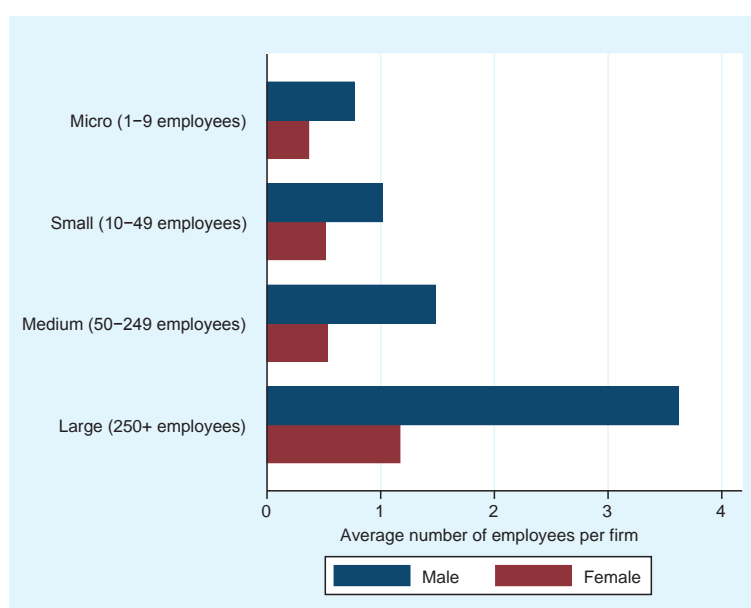
Focusing on top management, almost 80 per cent of the sample firms reported employing at least one male, while only 35 per cent of firms report employing at least one female at this level.¹³ Figure 3.39 shows that there are fewer women than men at the top management level in all industrial sectors. The other services sector employs the fewest women on average.

Women are also under-represented at top management levels in firms of all sizes (figure 3.40). As expected, large firms employ both more women and more men in top management compared with smaller firms. However, large firms employ almost three times as many men as women.

These results are in line with the fact that, in many developing countries in Asia and the Pacific, women remain far behind men in participating in economic activities (ESCAP, 2006). Women are typically more prone to not having enough free time to develop their skills and gain experience due to many domestic chores and raising children. Women also tend to work for smaller firms as both managers and workers. Overcoming these barriers will allow greater socio-economic development in Myanmar, by empowering women and hence give them equal opportunities to support their families. Although the Government of Myanmar has recognized the importance of female contributions to national GDP, further intervention

Figure 3.39. Gender distribution in top management, by sector

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.40. Gender distribution in top management, by firm size

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

is needed to facilitate the involvement of women in economic activities, particularly at the higher professional level. Women's success could also be attributed to family support, educational attainment, supportive working environments, motivation to succeed or the need to sustain themselves and their families (Abe and others, 2012).

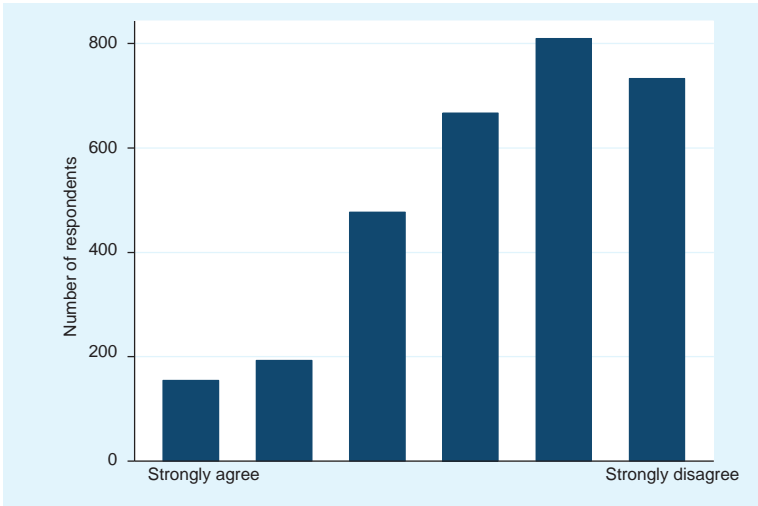
10. Women are, in some ways, treated equitably in businesses in Myanmar

More than half of the respondents disagreed that it was more difficult for a woman than a man in Myanmar to

run a business. (figure 3.41). In fact, 733 respondents strongly disagree with this statement. There appears to be no significant difference between male and female respondents to this question; i.e., the responses do not appear to be biased by male respondents to the survey.

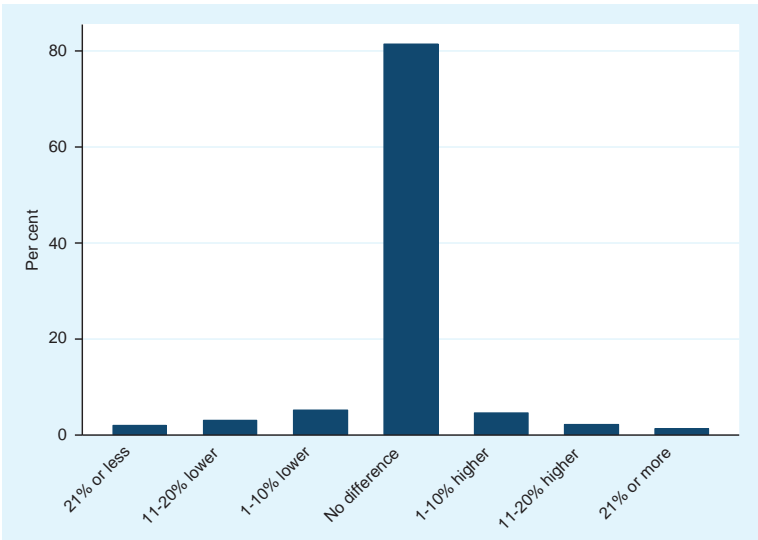
Moreover, there appears to be no substantial salary gap between male and female employees, which is uncommon in the majority of the developing countries in Asia and the Pacific (ILO, 2008). More than 80 per cent of the respondents reported that there was no difference between the average salary for women and men in the same position in their firm (figure 3.42),

Figure 3.41. Is it more difficult for women to run businesses in Myanmar?



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.42. Wage differential, by gender

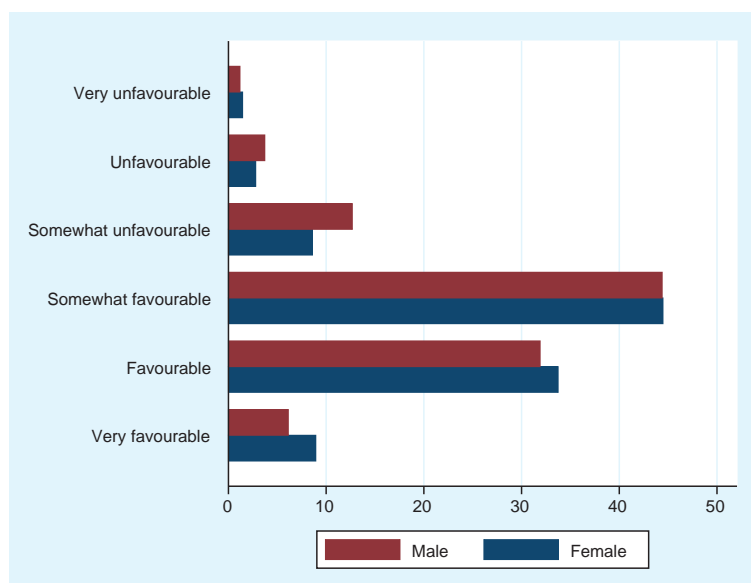


Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

while less than 10 per cent of the sample firms reported that women were paid less than men.

Employment opportunities for women were mostly perceived as ranging from somewhat favourable to very favourable by all respondents. In order to address concerns that these results might be biased by the

large number of male respondents to the survey, figure 3.43 shows the responses by both male and female respondents. It appears that female respondents are slightly more likely to rate opportunities as favourable to women and less likely to rate them as somewhat unfavourable compared with men, on average.

Figure 3.43. Perceived employment opportunities for women

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

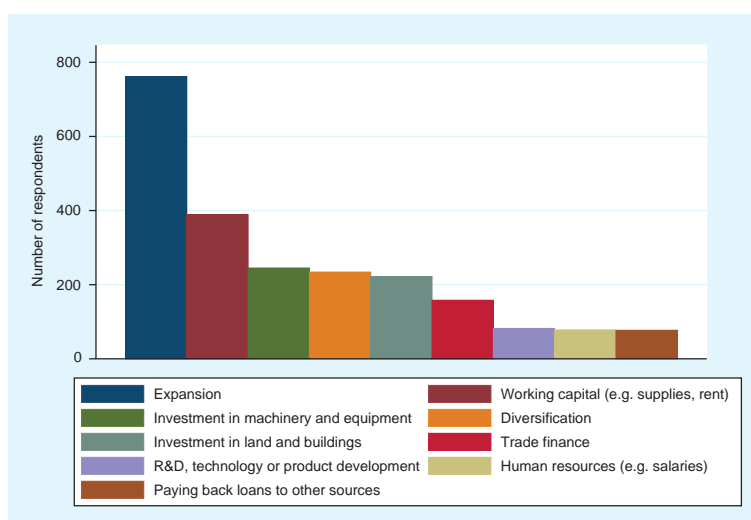
ACCESS TO FINANCE

Raising capital is one of the most critical issues for the growth and survival of firms globally. While not every firm turns into a large enterprise, they all face a similar issue in their early days – finding the right type of finance at an affordable cost to start and grow the business (Abe and others, 2012). The ability of firms to develop, grow, sustain and strengthen themselves is heavily determined by their capacity to access and manage finance. Unfortunately, firms in Myanmar consistently cite the lack of access to finance as a serious obstacle to their development (Kyaw, 2008; World Bank, 2014a). Therefore, this section addresses some of the key issues concerning access to financing based on the survey data.

1. Financing shortfall inhibits firm expansion

Finance related issues have been rated within the top ten most severe obstacles faced by businesses in Myanmar (see Figure 3.7 again). Although over half of surveyed firms report that the presently available financing options are not adequate for their firm, only 35 per cent of firms report having borrowed from external sources either formally or informally. The most frequently cited reasons for borrowing are to fund expansion activities followed by everyday working capital required to pay for supplies and rent. See Figure 3.44 for more detailed reasons.

More firms borrow to meet working capital needs rather than investing in machinery, equipment or R&D,

Figure 3.44. Reasons for borrowing

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

which reflects the scarcity of long-term financing in Myanmar. Heavy regulation of the financial sector severely restricts loans with a duration of more than one year (OECD, 2013). Investments in machinery, land or R&D usually require periods of several years until the project is capable of repaying the loan. Therefore, firms investing in long-term projects face the burden of having to regularly refinance their loans to meet this funding gap. As a result, fewer firms take up long-term investments (figure 3.44).

2. Collateral is the biggest obstacle in accessing external financing

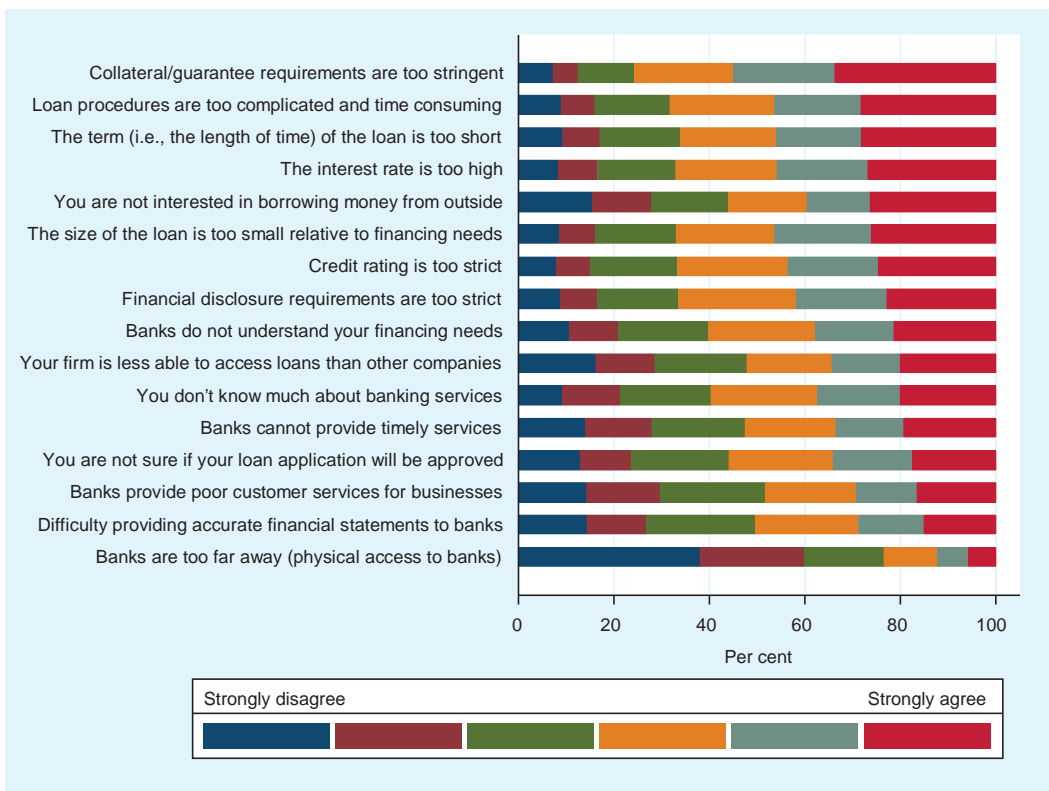
Several international surveys have also cited access to finance as a major obstacle to business operations in Myanmar (WEF, 2014; World Bank, 2014a). However, few surveys have provided details of which aspects of financing firms find most problematic. However, in the present survey, the respondents most frequently expressed their strong dissatisfaction with the stringent collateral requirements. Almost 34 per cent of firms surveyed strongly agreed that the collateral requirements for acquiring a loan were too stringent (cf. Kyaw, 2008). Since 2003 all lending has been collateral-based by law, which stipulates that

only 40 per cent of the sale value of assets can be used as a basis for providing loans (OECD, 2013).¹⁴ Furthermore, the Government restricts the type of assets that can be used as collateral; for example, movable assets cannot be used (OECD, 2013). This excessively strict regulation has contributed, at least partially, to the financing woes faced by many firms.

Loan procedures were the next most frequently cited issue, with 28 per cent of the surveyed firms strongly agreeing that they are too complicated and time-consuming. This is again a result of the excessive regulation that persists throughout the financial sector. As part of its reform agenda the Government must also look towards streamlining these administrative processes in order to enable firms to access finance more easily.

Interest rates and loan terms were also reported to be an important concern. Almost 28 per cent of the sampled firms strongly agreed that the interest rate was too high or the loan-term is too short. Both the interest rate and the loan term are also fixed by the Government, preventing banks from competing with each other as well as offering more favourable terms to borrowers (OECD, 2013). Figure 3.45 provides

Figure 3.45. Major obstacles to external financing



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

an overview and detailed information of the major obstacles to loans.

Similar to general business obstacles, which are reviewed in section B of this chapter (figure 3.13), an explanatory factor analysis of the obstacles of external loans was carried out.¹⁵ The result indicates that 16 specific issues (figure 3.45) for external financing can be categorized into the following three broad groups: (a) loan terms and conditions; (b) capacity of borrowers; and (c) bank services.

Figure 3.46 presents the indexes of three groups of obstacles for external financing and their relative significance. It is suggested that while the terms and conditions for loans (e.g., size, duration and cost) are the most severe obstacles to promoting external financing, borrower-side capacity-building (e.g., accurate financial statements) is also needed together with the upgrading of banks' customer services (e.g. timely services). Policymakers should look into those details in order to develop relevant interventions for upgrading the banking sector.

3. Formal and informal loans require different types of collateral

Cumbersome regulation has given rise to an informal financial sector. Reforms are all the more necessary in the transition to a formal economy as the shadow-banking sector is largely unregulated and lacks necessary safeguards. Borrowers only have protection under civil law in the informal markets (OECD, 2013).

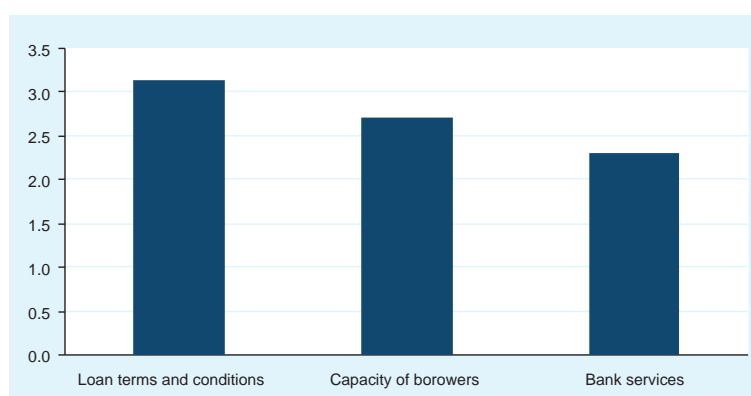
Slightly more than 70 per cent of the sample firms that borrowed formally were required to submit buildings or land as collateral.¹⁶ Firms also reporting using personal assets, vehicles and third-party guarantors, although to a lesser degree, for obtaining formal loans.

Informal lenders also rely on buildings and land as forms of collateral, although less frequently than for formal loans, as only 40 per cent of the firms that borrowed informally listed using such lenders. Informal lenders are relatively more willing to accept other forms of collateral – e.g., third-party guarantors, vehicles, personal assets and machinery – than are formal lenders. In response to an open-ended query on other types of collateral required, some firms cited gold and trust as alternate forms of collateral used. Figure 3.47 provides the overview of collateral required.

4. Firms that have access to loans tend to select short-term borrowing

Reflecting the lack of financing for medium- to long-term projects, most firms that borrow do so with short-term horizons (figure 3.48). Only 320 firms, or approximately 10 per cent of the sample, indicated that they had access to mid- or long-term loans for relatively large amounts. The lack of financing for longer-term projects is a serious obstacle to the growth of firms. The Government envisages allowing long-term lending in the near future; however, excessive regulation and restrictions placed on financial activities remain to this day (OECD, 2015).

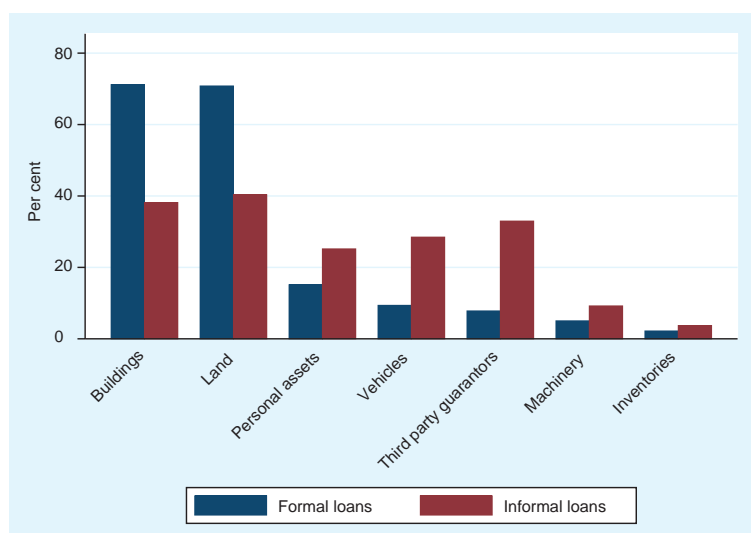
Figure 3.46. Indexes of the obstacles to external financing



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

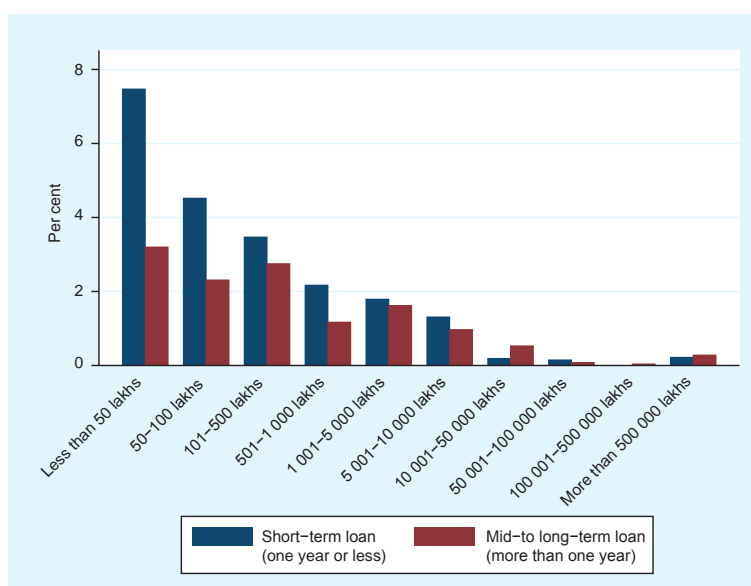
Note: The larger the index the more severe the obstacle.

Figure 3.47. Types of required collateral



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.48. Share of outstanding external debts, by loan duration



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

5. Firms report variability in interest rates even though official rates are fixed

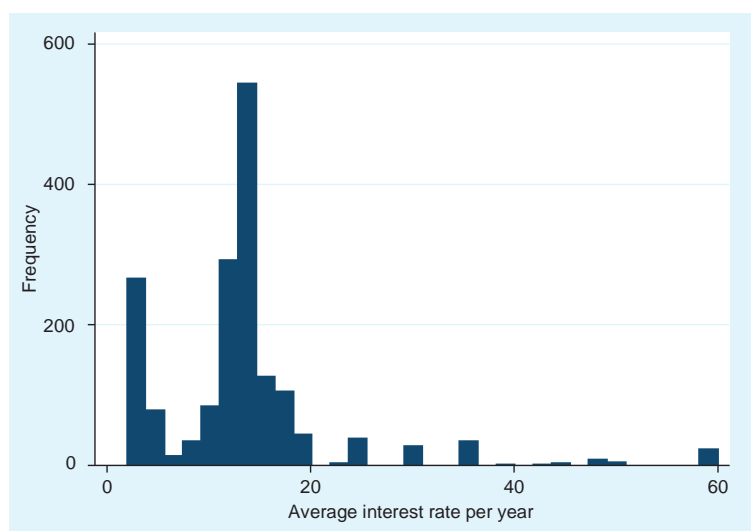
Most firms that take out formal loans pay an average of 13 per cent on annual interest, which is the official lending rate for banks (OECD, 2013). However, some firms in all sectors pay much more in interest. Some of these loans may be from microfinance institutions where interest rates are capped at 30 per cent (OECD, 2013). However, 74 sample firms reported paying an interest rate higher than 30 per cent while as many as 23 firms reported paying 60 per cent (figure 3.49).

On average, the borrowing period for formal loans is 14 months, although almost 77 per cent of

firms that borrow do so for 12 months. The OECD (2013) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (2013) report that the lack of availability of long-term loans exceeding 12 months is one of the main financing obstacles facing firms in Myanmar (GIZ, 2013; OECD, 2013). The present survey shows that the short-term period for most loans is the third-most severe obstacle to external financing faced by firms (figure 3.45).

6. Informal loans are common despite the very high interest rates

On average, informal loans (e.g., personal loans and money lenders) require interest payments of 8.6 per

Figure 3.49. Average annual interest rates for formal loans

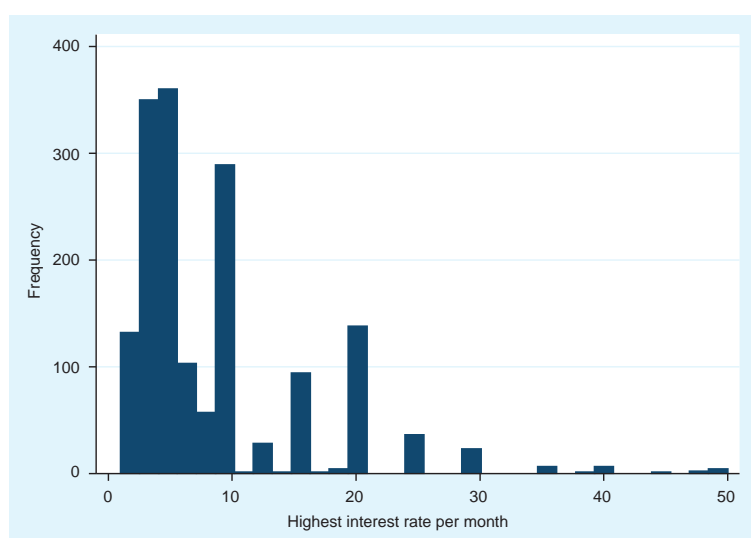
Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

cent per month,¹⁷ compounded monthly this amounts to an annual interest rate of 169 per cent. Significant variability in interest rates on offer exists, with almost 200 firms reporting interest payments of more than 20 per cent per month (figure 3.50). This is significantly higher than that reported by other international studies, which found informal interest rates to be between 2.5 per cent and 3 per cent per month (OECD, 2013) or between 36-96 per cent per annum (GIZ, 2013).¹⁸

Informal loans have a shorter borrowing period than formal loans, with an average term of eight months. The most frequently cited loan term was six months (35 per cent of the sample firms that borrowed informally) followed by a loan term of 12 months (30 per cent of firms that borrowed informally).

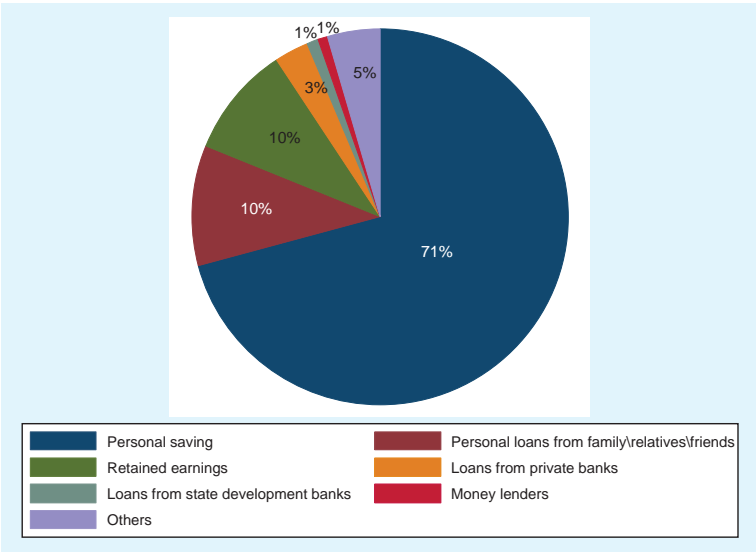
7. Firms tend to personalise financial management

On average, the respondents reported mobilizing more than 80 per cent of financial resources from informal financing sources, such as personal savings and loans (figure 3.51). Approximately 10 per cent of their financial needs are supported by internal financing (i.e., retained earnings). The share of institutional loans is low with only 4 per cent provided by private banks and state development banks combined. Funding from money lenders accounts for less than 1 per cent of total financing for the average firm.¹⁹ As expected, sophisticated financial instruments such as equity financing (e.g., corporate stocks), asset-based financing (e.g., factoring) and leasing are uncommon in Myanmar. Indeed, only a few firms are customers of

Figure 3.50. Highest monthly interest rate for informal loans

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.51. Share of financing, for the average firm



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

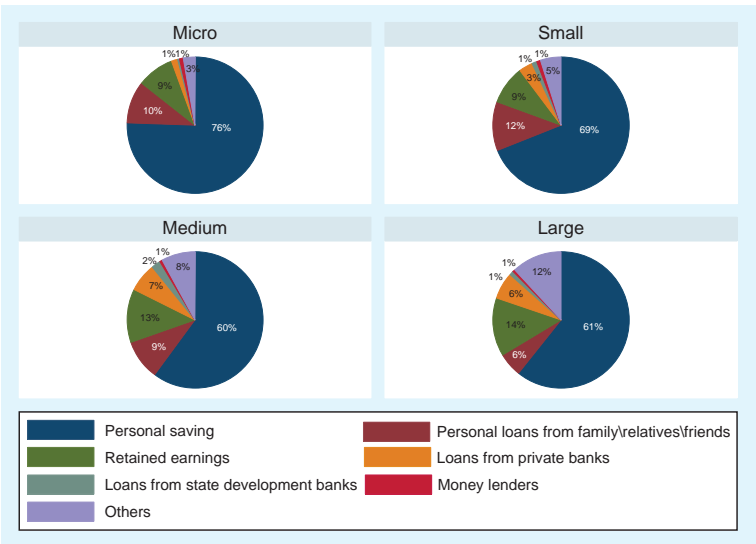
banks in Myanmar, with 27 per cent not using banking services at all, although 50 per cent reported having a current account. This figure is much higher than that shown by the World Bank Enterprise Survey, which found that only 30 per cent of firms had a current or cheque account (World Bank, 2014a).

Micro and small-sized firms appear to rely much more on informal sources, such as personal savings and loans from family/friends, in their financing mix compared with medium and large- sized firms (figure 3.52). Firms of all sizes utilize retained earnings to the same degree, as they make up 9 per cent to 14 per cent of financing. Loans from private banks account to medium and large-sized firms account for

6 per cent and 7 per cent of financing, respectively, compared with 3 per cent for small-sized firms and less than 1 per cent for micro firms. This may be due to the prevailing stringent collateral requirements, which micro and small sized firms are unable to meet. Medium and large-sized firms also have access to other sources of finance such as stocks/equity and corporate bonds, thus showing more diversified financial structures.

The results of the present survey clearly suggest that immediate and massive interventions by the Government will be necessary to upgrade the banking sector in order to meet the funding needs of firms in Myanmar. The commercial banks, often collaborating

Figure 3.52. Share of financing, by size of firm



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

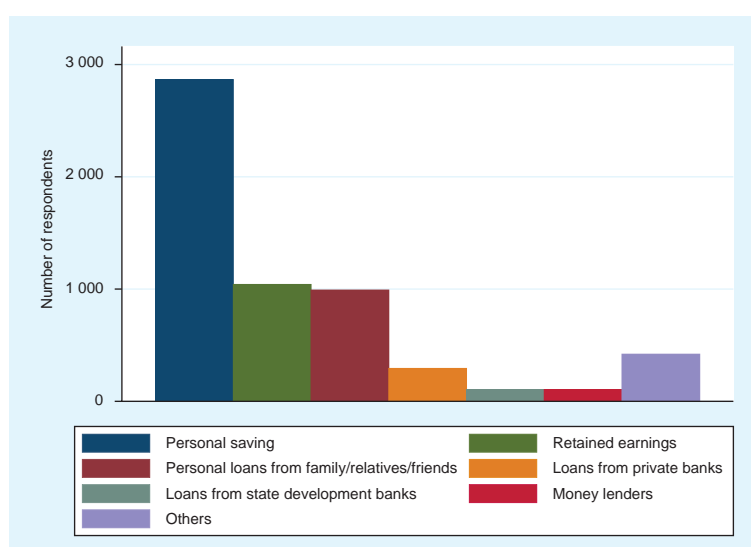
with state development banks or credit guarantee agencies, typically finance more than half of private funding in advanced economies (Abe and others, 2012).

8. Many firms have no need for institutional loans, while firms that use money lenders do so largely based on trust

As shown in the previous subsection, personal savings are by far the most popular source of financing with more than 90 per cent of firms (more than 2 800)

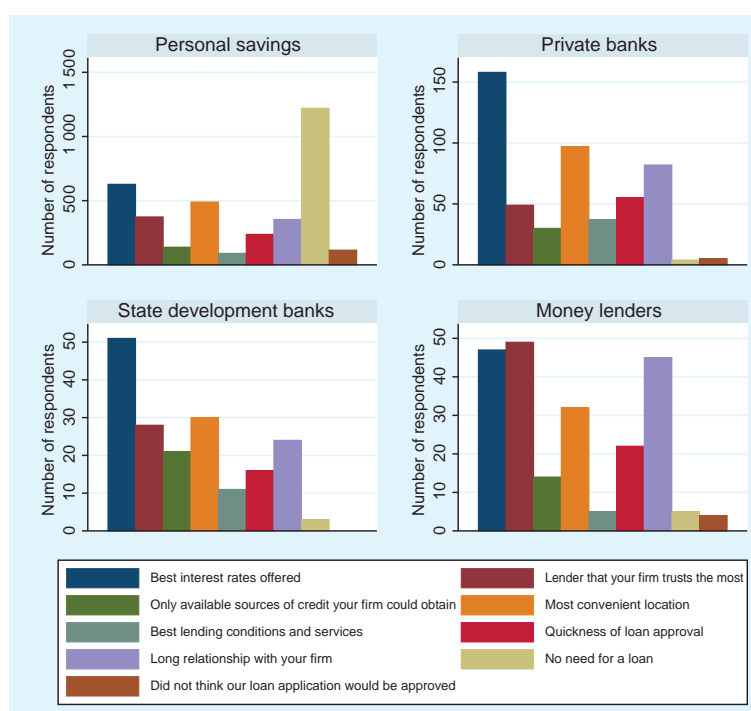
using at least some savings in their financing mix (figure 3.53). Firms that used at least some personal savings, largely felt that they had no need for a loan; more than 1 000 firms cited this reason while more than 100 firms reportedly used savings as they did not believe that their loan applications would be approved (figure 3.54)²⁰ Only 10 per cent of surveyed firms (almost 300) obtained a loan from a private bank, with the most frequently cited reason for doing being that they offered the best interest rates. Less than 4 per cent of the surveyed firms (105) obtained loans from either state development banks or money

Figure 3.53. Number of firms, by source of financing



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.54. Reasons for the selection of financing source



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

lenders. The reasons for borrowing from a state bank were largely similar to those given for private banks. However, firms that borrowed from money lenders more frequently cited trust in their lender as a reason for borrowing. A long-term relationship with money lenders appears to be more frequent for firms that use their services compared with firms that borrow from private or state banks. A relatively large number of firms that used money lenders cited quickness of the approval process, while just a few respondents felt that a formal loan application would not be approved.

PRODUCTIVITY

Productivity measures the efficiency of how a firm transfers inputs into outputs. Therefore, the productivity of a firm is a reflection of both labour ability and technology. The main determinants of productivity therefore include access to materials, quality and size of workforce, the capabilities of management, the organizational structure, the use of technology, the level of capital sufficiency and so on (Abe and others, 2012). In general, it is understood that smaller firms find it difficult to achieve the same productivity levels as those of larger firms due to constraints such as scale restrictions, the high cost of capital, few capital resources; lack of new technology and low managerial capacity (ADB, 2009). Smaller firms generally tend to pay lower wages than large firms, preventing them from acquiring and keeping highly-skilled labour. All

of these elements are thought to add barriers to achieving high productivity in smaller firms. However the present survey finds results that contradict this expectation based on standard economic theory.

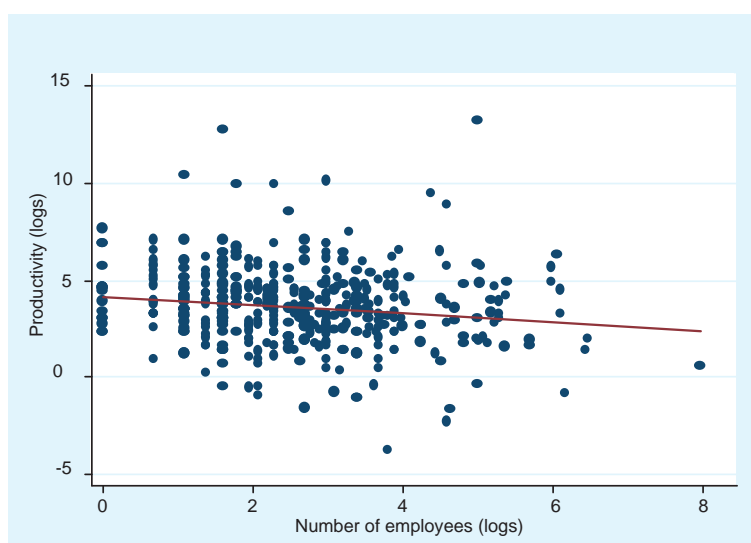
1. Productivity is low in Myanmar

The present survey found that the median productivity of the surveyed firms in Myanmar is 37.5 lakh kyat (\$3 750), measured as gross revenue per worker. Previous studies (e.g., Conference Board, 2015; OECD, 2013; World Bank, 2015) that measured labour productivity as GDP per person employed or worker, found productivity to be relatively high in Myanmar, as a least developed country, compared with some neighbouring countries such as Bangladesh, Cambodia and Viet Nam. The result of the present survey, however, indicates Myanmar still has low labour productivity at the company level, which is very much in line with the present level of Myanmar's economic development.

2. Smaller firms appear to be more productive, but larger firms earn more revenue

The survey presents results that are the complete opposite of commonly understood notions of productivity and firm size. The survey dataset indicates that labour productivity, measured as gross revenue per worker, tends to be higher in smaller firms and lower in medium-sized and large firms (figure 3.55).²¹ However,

Figure 3.55. Relationship between productivity and size of firm



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: Log productivity = $4.2 - 0.22$ (log number of employees). $P=0.002$.

this effect does not appear to be very large – a 1 per cent increase in the number of employees is estimated to reduce productivity by only 0.22 per cent. The apparent higher productivity of micro firms appears to have more to do with their small workforce rather than their superior revenue earning capacity. More than 40 per cent of micro firms (1-9 employees) earn less than 100 lakhs (\$10 000) per year, while 50 per cent of large firms (250+ employees) earn more than 10 000 lakhs (\$1 million) per year (figure 3.56).

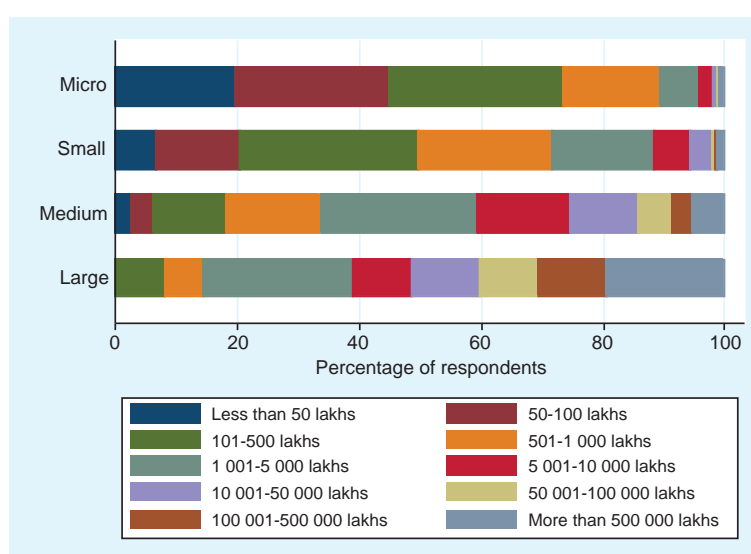
The lower labour productivity of larger firms may be related to financing constraints that restrict capital expenditure on machinery and equipment that complement labour in the production process. In other words, given the relative scarcity of capital in Myanmar, larger firms achieve lower labour productivity than smaller firms – possibly because larger firms are over-utilizing their fixed stock of capital. Another possible theory is that some of larger enterprises, which comprise various firms with different types of ownership – such as domestic enterprises, state-owned enterprises (SOEs), state-controlled enterprises and military enterprises as well as joint ventures and foreign companies – may aim to maintain or create employment beyond the profit maximizing level for political reasons through political interventions instead of seeking revenue or profit maximization. This issue is further investigated below.

3. Higher revenue does not necessarily mean higher profits

The respondents reported that, on average, almost 20 per cent of sales revenue was retained as profit. This high profit margin may be due to low levels of competition in the heavily regulated markets or because respondents may misunderstand their cost structure when reporting this figure.

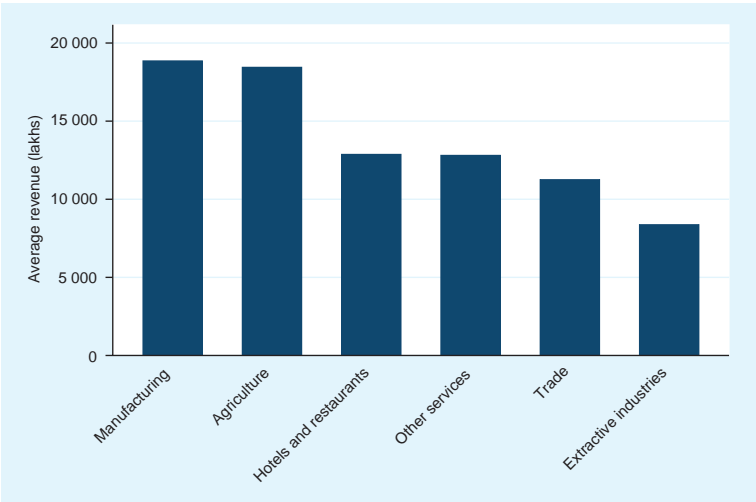
There also appear to be important differences across sectors. Although firms in manufacturing and agriculture earn the highest revenue (figure 3.57), their reported profit margin (figure 3.58) is less than the average of the sample as a whole. Hotels and restaurants earn less revenue, on average, but they have the highest profit margin at almost 30 per cent. Firms in extractive industries earn the least revenue, on average, as well as the lowest profit margin at just 10 per cent. These results are contrary to the common understanding that the extractive and manufacturing sectors generally have a higher profit structure than other industries (cf. Abe and others, 2012). This requires further investigation by the Government in order to determine whether the lower profits are a result of corruption or other structural factors.

Figure 3.56. Annual revenue, by size of firm



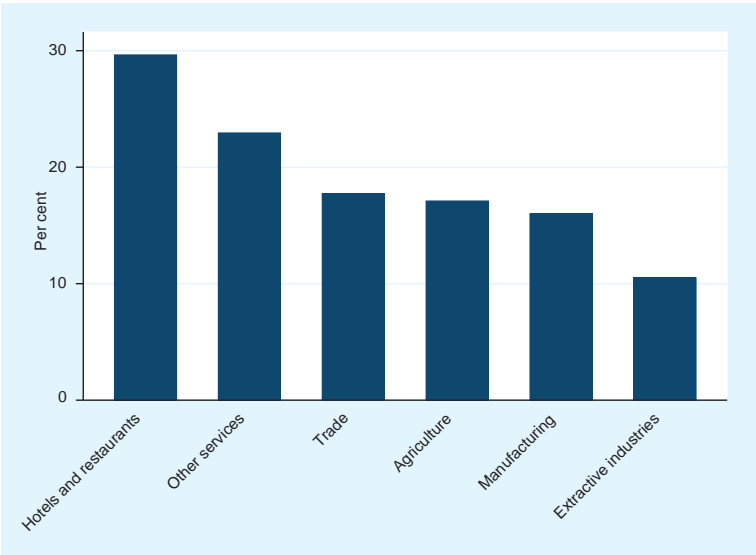
Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.57. Average revenue, by sector



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.58. Average profit margin, by sector²²



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: Profit margins were reported as profit or gross income as a percentage of sales revenue.

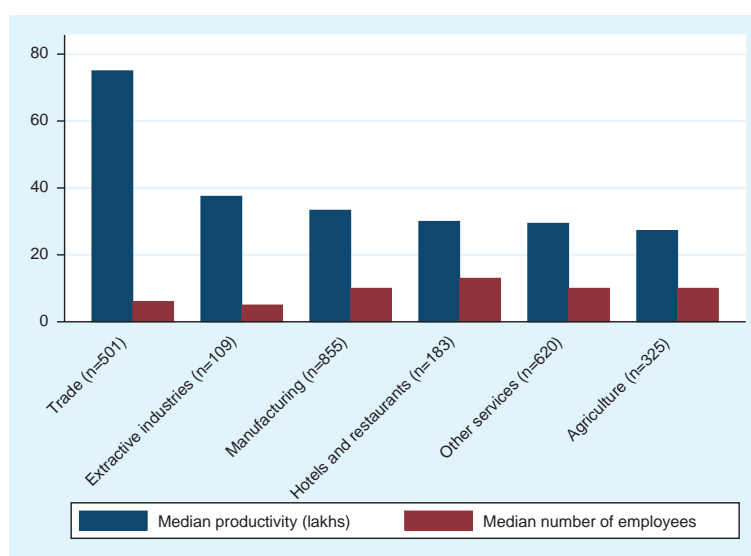
4. Firms in the trade sector appear to be more productive

The trade sector, which comprises both wholesale and retail trading, appears to have higher labour productivity than the other sectors. The median productivity value for this sector is 75 lakh kyat (\$7 500) per worker (figure 3.59). The higher productivity, measured as gross revenue per worker, is largely driven by the lower number of workers hired by each firm as the average revenue earned by firms in the trade sector is not substantially more than that earned by firms in other sectors. Manufacturing firms typically earn the highest revenue but also hire the most workers on average to do so, which brings their productivity to third place, just after the extractive industries. Firms

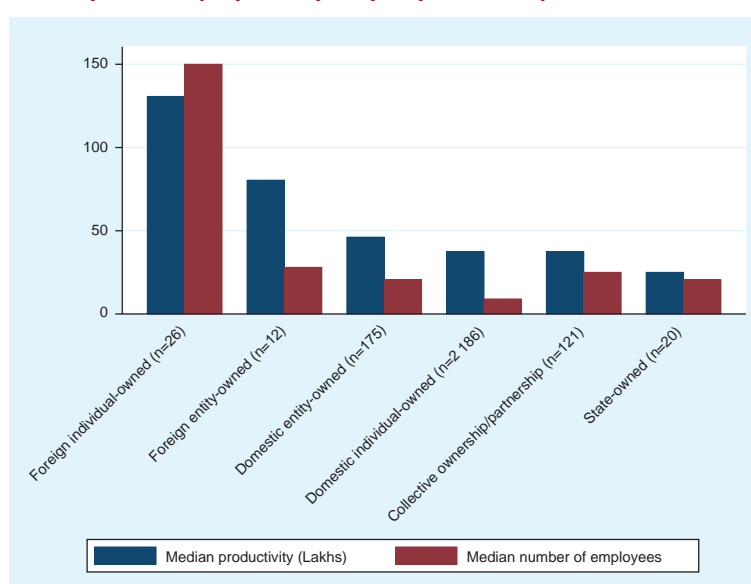
in the extractive industries earn the lowest average revenue, but like the trade sector also hire fewer workers, thus contributing to their higher productivity. Firms in agriculture are the least productive, which is consistent with expectations of the sector in many developing countries (MGI, 2013).

5. Foreign-owned firms have the highest productivity

The ownership of firms appears to be an important factor in explaining differences in productivity levels. Firms with more than 50 per cent ownership by foreign individuals appear to be the most productive (figure 3.60). This high level of productivity is driven by their high revenue, even though they also hire

Figure 3.59. Median productivity, by sector²³

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.60. Median productivity and employees, by majority ownership

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

more workers than domestic enterprises and SOEs, on average. Large capital flows from overseas together with advanced technology and managerial practices could be attributed to the high productivity. However, care must be taken not to generalize too broadly, as productivity data are only available for 26 out of 47 foreign individual-owned firms and 12 out of 26 foreign entity-owned firms. This low response rate may be due to the reluctance of foreign firms to reveal sensitive information.

After firms owned by foreign entities, firms those owned domestically by either individuals or entities have the next highest productivity levels. These latter

firms comprised more than 85 per cent of the sample. Their productivity levels are less than half that of foreign-owned firms, a matter of grave concern given the expected growth of global competition.

SOEs are the least productive, which is not surprising given the legacy of the former socialist regime, patronage and political interference in Myanmar. Although they earn more revenue than domestic firms on average, they require more workers to do so which lowers their labour productivity. Thus, immediate interventions must be made to upgrade the institutional capacities of those government-controlled entities.

CORRUPTION

While the private sector and their businesses are an engine of growth in all countries of the world, they can also fail to live up to their potential if corruption goes unchecked. The lack of transparency, accountability and oversight in government and business interactions undermines fair competition and stifles economic growth (Transparency International, 2014a). This section focuses on public corruption in Myanmar, with specific reviews of the public sector's irregular payment requests for business registration, licences and permits.

1. Corruption and bribery are more common in the extractive industries

Corruption is cited most frequently by the respondents as a very severe obstacle to business operations in Myanmar. Overall, 60 per cent of the sampled firms report that unofficial payments are required in order to obtain a business registration, licence or permit. The vast majority of those firms paid 5 lakhs (\$500) or less.

Further analysis reveals that firms in extractive industries are far more likely to find corruption to be an obstacle compared to firms in other sectors (figure 3.61). Eighty-five per cent of these firms reported having to pay unofficial charges. The extractive industries are heavily regulated in most countries around the world due to their economic importance, environmental impact, labour standards and other social issues. In countries with low

institutional capacity, however, excessive regulation could be used as a pretext to extract bribes (Kaufman and Wei, 2000). This appears to be the case in Myanmar, a country abundant in natural resources (Soans and Abe, forthcoming). This may also explain the low profit margin for the extractive industries sector seen in figure 3.58 if economic rents from natural resources are being extracted by public officials.

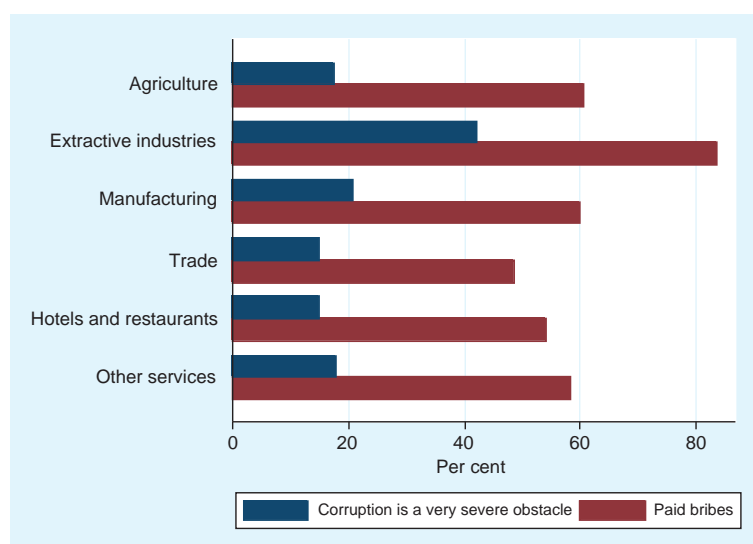
The prevalence of corruption in Myanmar has also been confirmed by other international surveys. As indicated above, the World Bank Enterprise Survey (2014a) found that nearly 50 per cent of firms in Myanmar reported paying a bribe to obtain an import licence. Transparency International (2014a) also ranked Myanmar at the bottom of its Corruption Perceptions Index, although it indicated some recent improvement.

2. Large firms are more likely to pay bribes

Firms of all sizes reported corruption to a very severe obstacle; however, some firms are more likely to pay bribes compared to others. The size of a firm appears to be an important factor in determining whether it pays a bribe or not.

Several studies have found that smaller firms are more likely to pay bribes as they lack the power to refuse predatory officials. This was found to be the case in an econometric study of 12 Asian countries²⁴ by Wu (2009). Gaviria (2002) also found that smaller firms in several Latin American countries were more

Figure 3.61. Corruption and bribery, by sector



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

likely to perceive corruption to be an obstacle. Yet, Svensson (2003) did not find a statistical relationship between the size of firms and bribe payments in Uganda. Thus, the relationship between the size of a firm and bribery is ultimately an empirical issue.

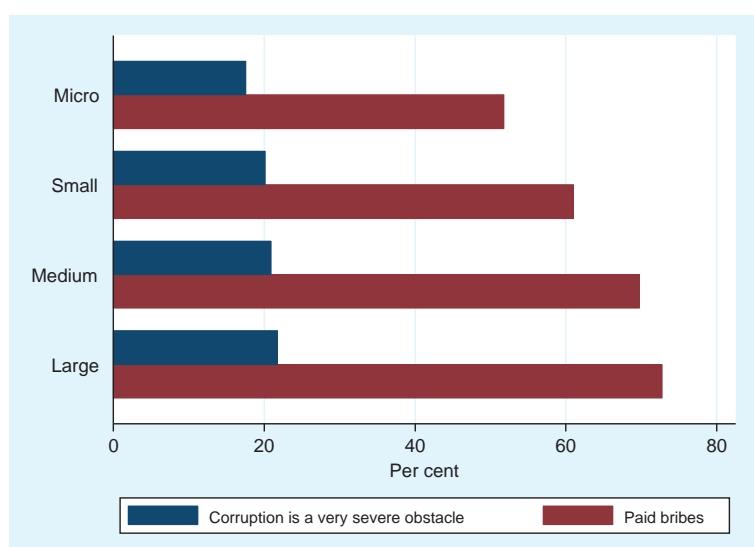
In contrast to the existing literature, this study found that larger firms were more likely to pay a bribe in Myanmar (figure 3.62).²⁵ More than 70 per cent of the large firms surveyed reported that unofficial charges were required to obtain a business registration, licence

or permit while this was the case with only 50 per cent of micro firms. Subsequently, econometric evidence that confirms this result is discussed below.

3. Corruption affects some regions more than others

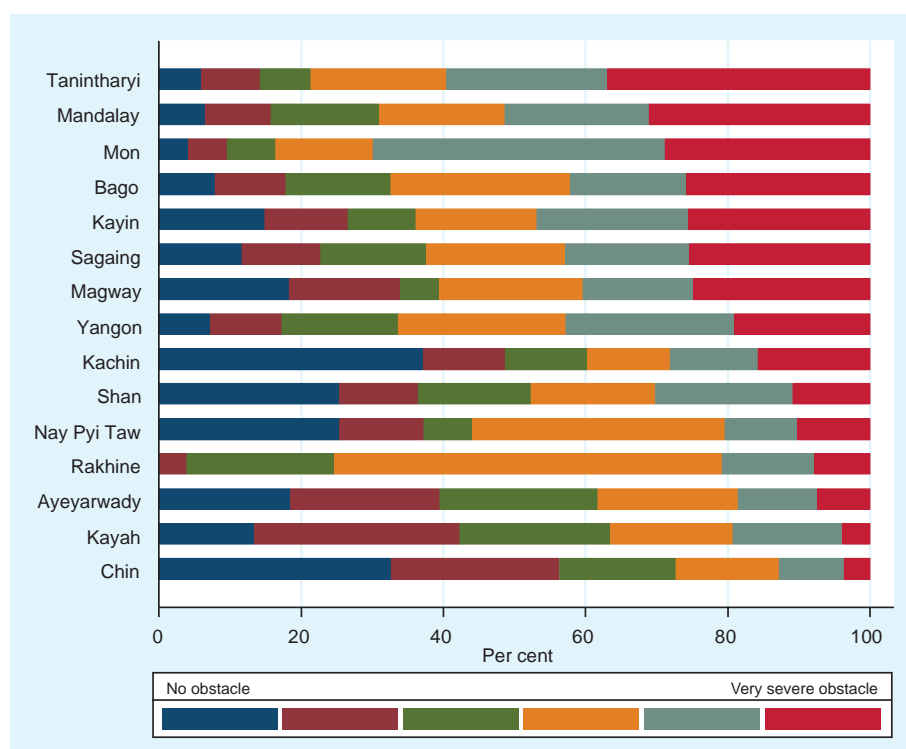
The extent of corruption as an obstacle also varies across regions. Almost 40 per cent of the surveyed firms in Tanintharyi Region and 30 per cent in Mandalay Region and Mon State perceived corruption to be a very severe obstacle (figure 3.63). However, this is only

Figure 3.62. Corruption and bribery, by size of firm



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Figure 3.63. Corruption as an obstacle, by region



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

true for less than 4 per cent of firms in Kayah State and Chin State. About 35 per cent of the sample firms in Kachin State and Chin State are more likely to find corruption to be no obstacle to business operations. These differences may either be because some regions have more pressing concerns, such as basic infrastructure or public services, and the firms therefore rated those as higher, or because administrative departments in some areas are better managed than others.

Information on the distribution of corruption within Myanmar is virtually non-existent. This survey could therefore prove useful as the first step in developing a more detailed study of the variation across regions and in determining its causes.²⁶

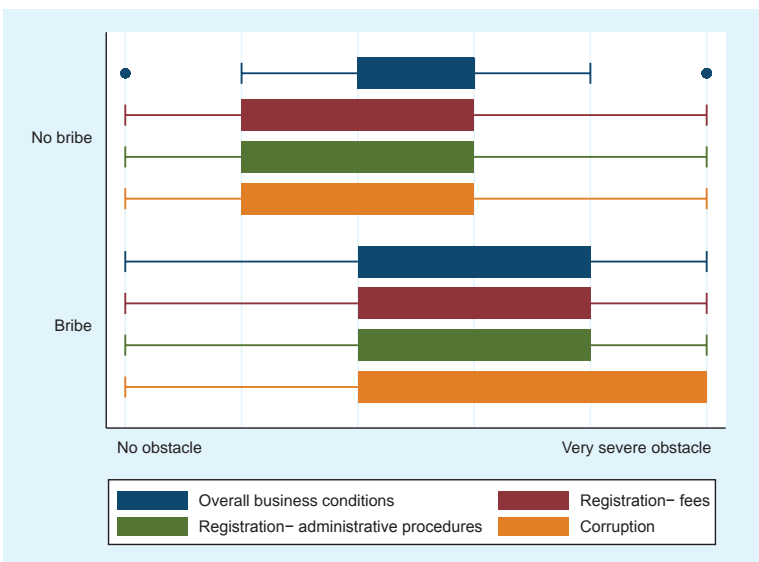
4. Econometric study of corruption

An econometric investigation was conducted to determine the type of firms that were more likely to pay a bribe or find corruption to be an obstacle (Soans and Abe, forthcoming). According to the literature, two main processes drive the results: (a) ability to pay; and (b) the power to refuse (Shleifer and Vishny, 1994; and Svensson, 2003). The ability to pay can be evaluated from indicators of success, such as sales revenue and employee growth. Refusal power depends on the extent of interaction a firm has with government officials. Firms that sell to the Government, receive inputs from the Government, export and import goods, and have some foreign or state ownership are all more likely to require government permission, thus exposing them to a higher likelihood of facing corruption.

Using probit type models,²⁷ the results reveal that firms with a higher ability to pay (i.e., those with higher revenue and employee growth) are more likely to pay a bribe while firms with lower refusal power (i.e., require government permission) are more likely to find corruption to be an obstacle (Soans and Abe, forthcoming). SMEs are statistically more likely to pay bribes compared with micro firms. Corruption appears to affect firms regardless of size (Soans and Abe, forthcoming). This finding for Myanmar stands in contrast to that by Gaviria (2002), who found that corruption affected smaller firms disproportionately in Latin America.

Additional tests were also conducted to determine whether bribes could reduce bureaucratic red tape. Supporters of the affirmative view argued that bribes could be efficiency enhancing as they made red tape less “real” (Huntington, 1968). This is the “efficiency-grease” hypothesis. Opponents of this view said that it depended on whether red tape was being used intentionally to extract bribes (Kaufman and Wei, 2000), i.e., “the grabbing-hands” hypothesis. Figure 3.64 shows that firms that pay bribes tend to rate their business environment more negatively. This is confirmed by econometric evidence, which shows firms that pay bribes find red tape to be more of an obstacle compared with firms that do not, after controlling for other firm specific characteristics. Also, older firms have less trouble with red tape compared with younger ones (Soans and Abe, forthcoming). This evidence supports the “grabbing-hands” hypothesis.

Figure 3.64. Bribery and obstacle ratings



Source: Soans and Abe, forthcoming.

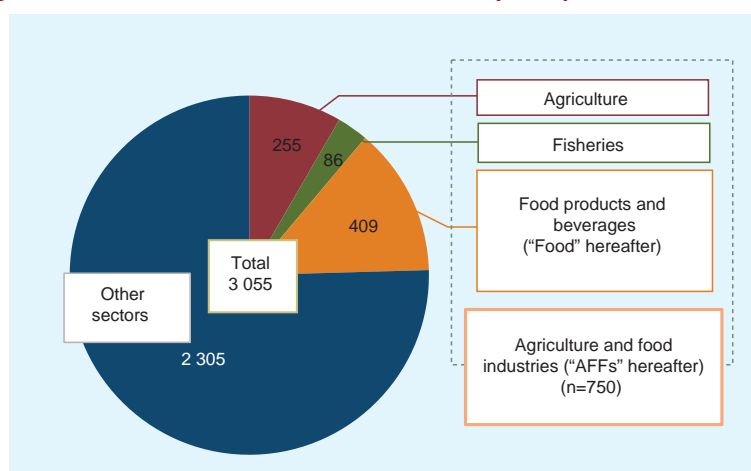
AGRIBUSINESS AND FOOD INDUSTRIES²⁸

As part of the ongoing economic reforms, the Government of Myanmar has emphasized the rapid modernization and upgrading of the agribusiness and food industries (AFFs), having taken into consideration the sector's immediate role in job creation as well as income generation (OECD, 2015). They also form a dominant sector in rural areas while contributing to the economy through food security and exports of agro-products. The sector plays a key role in the equitable and inclusive development of Myanmar. This sector is, therefore, highlighted here as a key strategic industry for Myanmar's socio-economic development.

1. Agribusiness, fisheries and food industries share an important position in Myanmar's economy

In the present survey, AFFs comprised approximately one quarter of the total sample. The sector can be sub-grouped into: (a) agriculture, including hunting and related service activities (255 firms); (b) fisheries, including aquaculture and service activities incidental to fishing (86 firms); and (c) food products and beverages (409 firms). The large sample size of the food products and beverage industry is in line with its dominant role in Myanmar's manufacturing sector (OECD, 2013). A total of 750 observations from the three subgroups are available for further analysis (figure 3.65).

Figure 3.65. Share of agribusiness and food industries in the survey sample



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: "Other sectors" in this figure include all cases sampled by the survey, only excluding those of the agribusiness and food industries.

The ages of firms in this sector are shown in figure 3.66. The average firm age (15.8 years) is significantly older ($P < 0.05$) than that of firms in other sectors (13 years), which reflects the fact that this is a traditional sector in Myanmar.

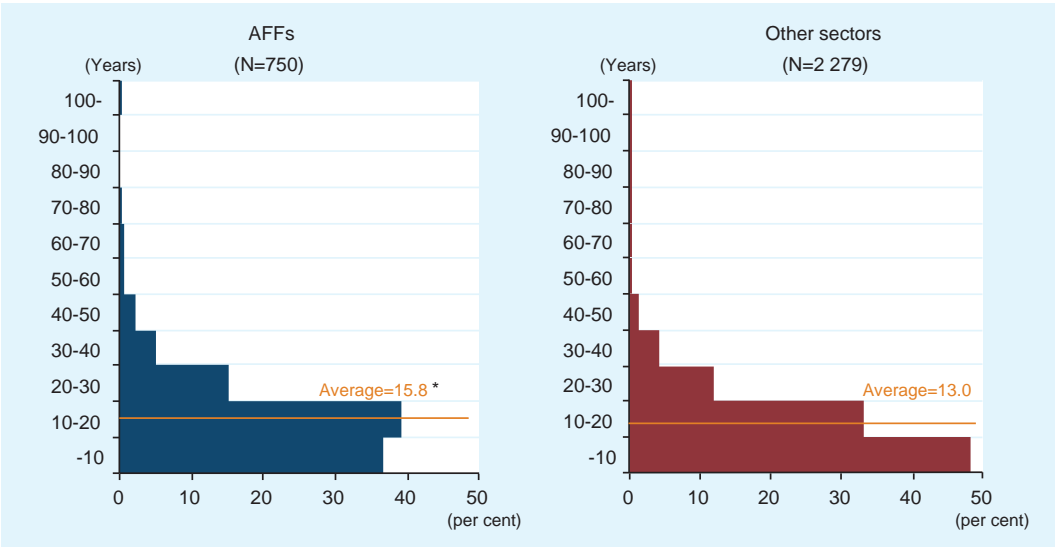
2. Sizes of firms in agribusiness and food industries are relatively larger than those in other sectors

Figure 3.67 shows the relative size distribution of firms in the AFFs sector as well as other sectors. The ratio of micro firms (1-9 employees) in AFFs is relatively smaller than that in other sectors, whereas the ratios of small-sized firms (10-49 employees) and medium-sized firms (50-249 employees) in AFFs are relatively bigger than that in other sectors.

3. Major customers are end-users or consumers

Figure 3.68 shows the major customers of AFFs and other sectors (i.e., customers who account for more than 10 per cent of a firm's sales). Whereas major customers both of AFFs and other sectors are end-users or consumers, the ratio of overseas customers of AFFs is almost double that of other sectors, confirming Myanmar's present status as an agricultural country (cf. OECD, 2015) as well as the sector's relative competitiveness. On the other hand, the ratio of transactions of large entities and SMEs with AFFs is relatively lower than that of other sectors.

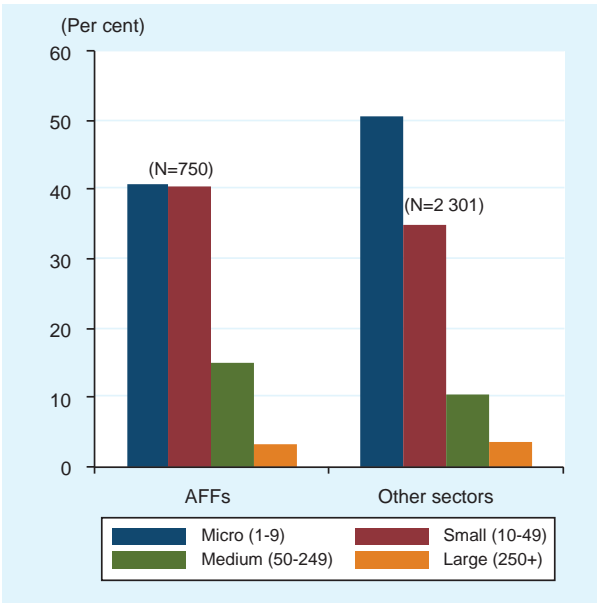
Figure 3.66. Ages of AFF sector firms compared with firms in other sectors



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Notes: “AFFs” in this figure comprise an aggregate group of agriculture, fisheries and food products and beverages. “Other sectors” in this figure include all cases sampled by the survey, excluding only those of agriculture, fisheries and food products, and beverages related businesses. The asterisk (*) indicates a statistically significant result at $P < 0.05$.

Figure 3.67. Size distribution of firms in the agribusiness and food industries



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: “AFFs” in this figure is an aggregate group of agriculture, fisheries and food products and beverages. “Other sectors” in this figure include all cases sampled by the survey, excluding those of agriculture, fisheries and food products and beverages, and related businesses.

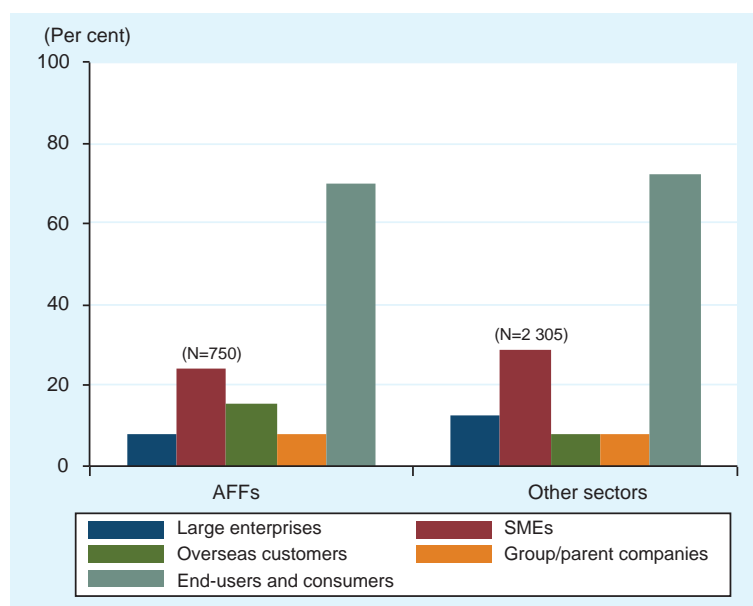
4. Agribusiness sector firms tend to hire seasonal workers

Figure 3.69 summarizes the distribution of different job categories, i.e., full-time, part-time and seasonal employees, in AFFs as well as other sectors. The share of full-time employees in AFFs is smaller than that of other sectors, whereas the share of seasonal employees is larger than that of other sectors. Both findings are statistically supported ($P < 0.05$).²⁹ Although figure 3.70 indicates that full-time employment is

common practice both in AFFs and in other sectors, it is apparent that AFF labour demand fluctuates considerably more than in other sectors, possibly due to the seasonal nature of AFF activities.

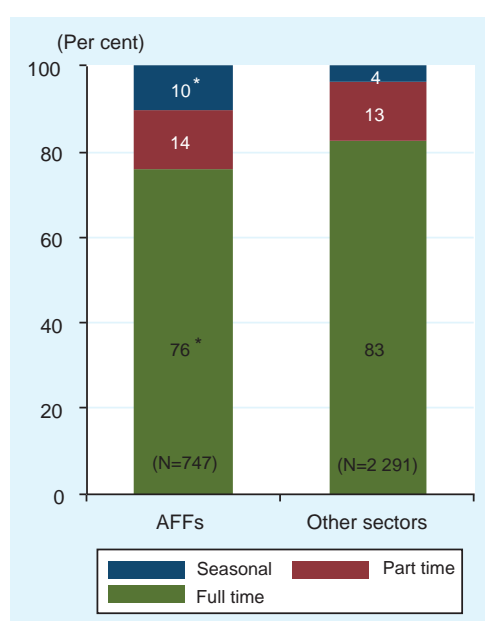
5. The workforce in AFFs earns less

Overall, including all workers, professionals and managers, the average salary in AFFs is lower than that in other sectors (figure 3.71). The blue circles in figure 3.71 indicate the ratios of professionals’

Figure 3.68. Major customers of agribusiness and food industries

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: "AFFs" in this figure is an aggregate group of agriculture, fisheries and food products and beverages. "Other sectors" in this figure include all cases sampled by the survey, excluding only those of agriculture, fisheries, food products and beverages, and related businesses.

Figure 3.69. Distribution of different job categories, by subsector

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

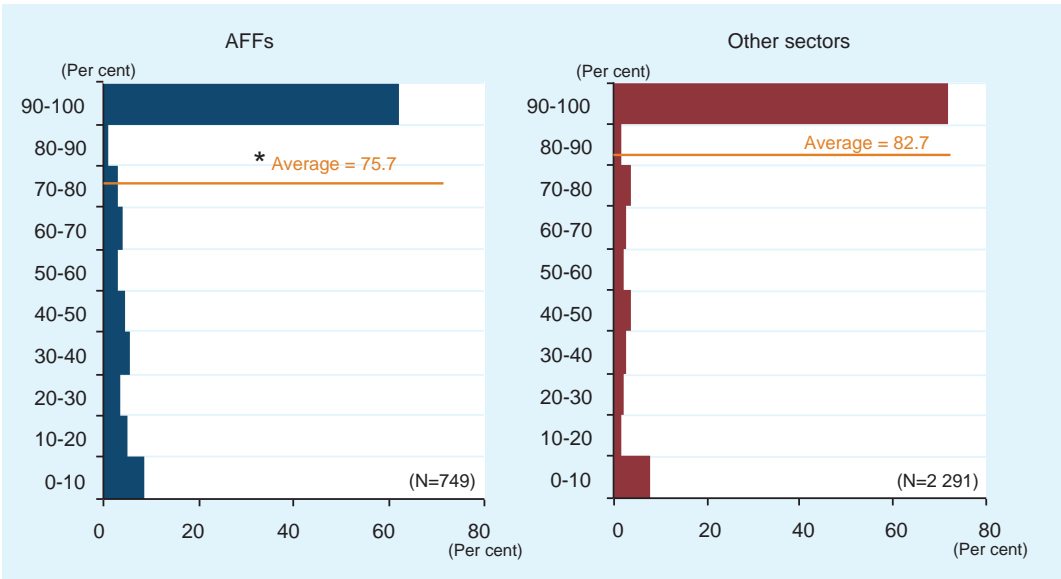
Notes: "AFFs" in this figure is an aggregate group of agriculture, fisheries, food products and beverages. "Other sectors" in this figure include all cases sampled by the survey, excluding only those of agriculture, fisheries, food products and beverages, and related businesses. The asterisk (*) indicates a statistically significant result at $P < 0.05$.

salaries to workers' salaries. As some firms only employ workers and no professionals, these ratios are drawn from those firms hiring both professionals and workers. In the case of AFFs, the number of entities not hiring professional employees is 253 (53 per cent) while in the case of entities hiring both professional employees and workers the number is 223 (47 per cent). The disparity between the salaries of professional employees and workers is slightly smaller in AFFs.

6. Food products and beverages make low profit

The profit margins (measured as a percentage of sales revenue) of AFFs and other sectors are summarized in figure 3.72. The average profitability of AFFs (18.7 per cent) is smaller than that of other sectors (21.2 per cent) with statistical significance ($P < 0.05$). In particular, the share of entities with low profitability (zero to 10 per cent) in AFFs is substantially larger

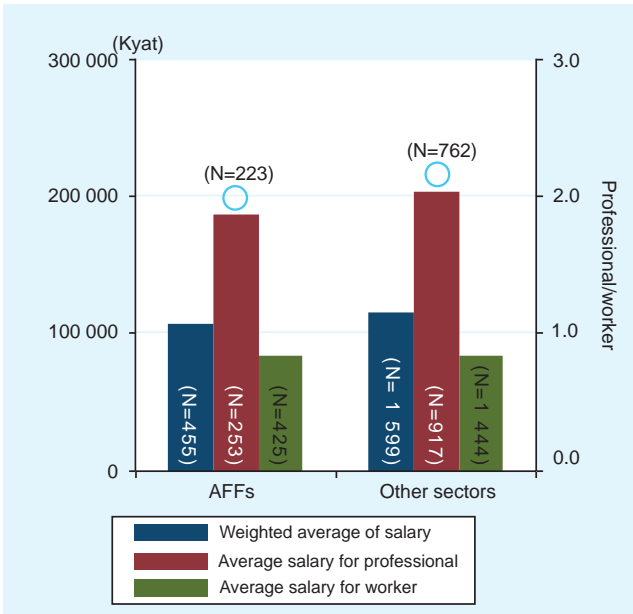
Figure 3.70. Distribution of full-time employees, by sector



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Notes: “AFFs” in this figure is an aggregate group of agriculture, fisheries and food products and beverages. “Other sectors” in this figure include all cases sampled by the survey, excluding only those of agriculture, fisheries, food products and beverages, and related businesses. The asterisk (*) indicates a statistically significant result at $P < 0.05$.

Figure 3.71. Salaries of professionals and workers



Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

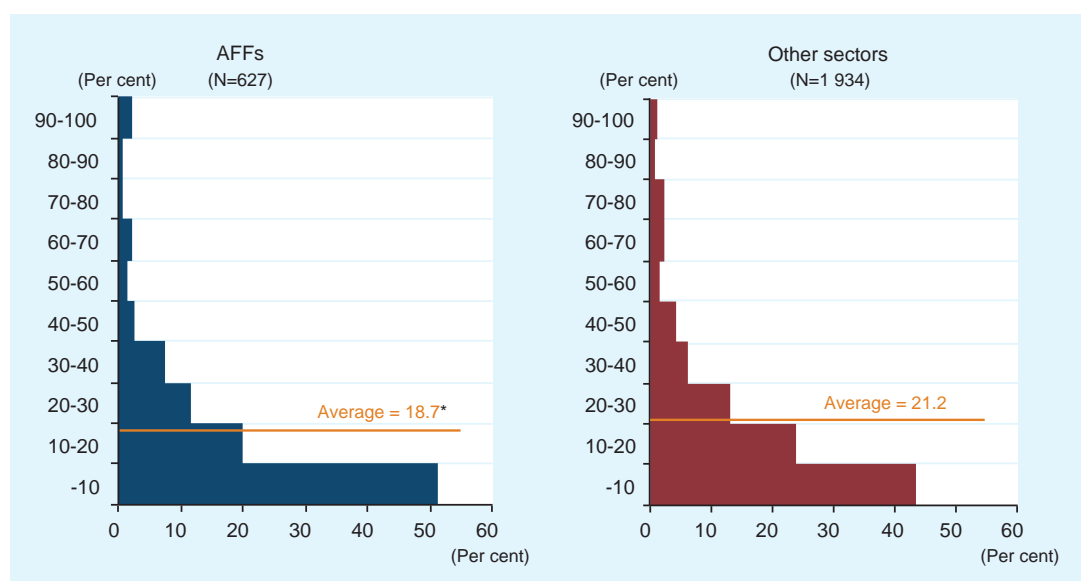
Note: “AFFs” in this figure is an aggregate group of agriculture, fisheries and food products and beverages. “Other sectors” in this figure include all cases sampled by the survey, excluding only those of agriculture, fisheries, food products and beverages, and related businesses.

than that in other sectors. This finding supports the commonly-shared understanding of the low productivity in the agriculture sector (cf. OECD, 2015).

7. Low-interest informal lenders are available to agribusiness

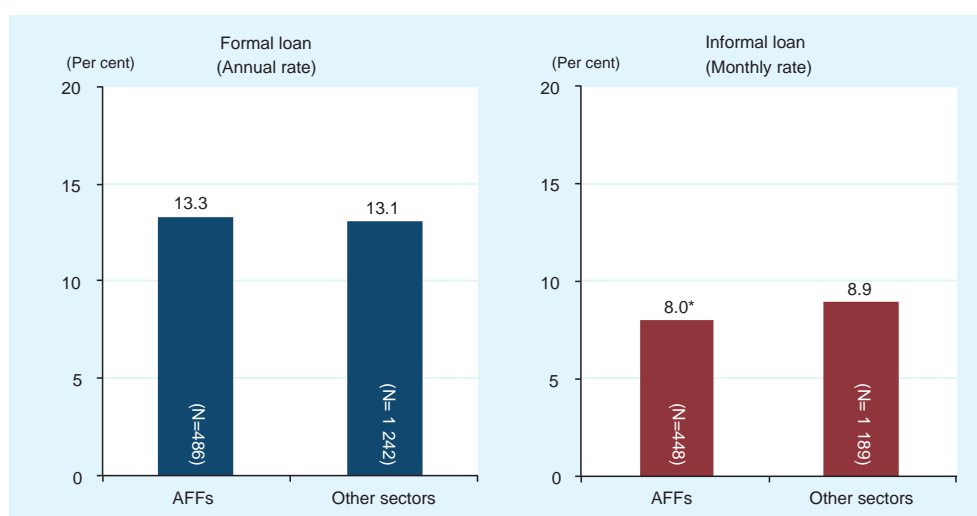
Average interest rates for formal loans (annual rate) and informal loans (monthly rate) in each sector are summarized in figure 3.73. In the case of formal loans,

there is no statistically significant difference between the interest rates for AFFs and other sectors. For informal loans, the interest rate for AFFs is lower than the rates for other sectors, with statistical significance ($P < 0.05$). This may mean there are informal institutes that offer relatively low-interest loans in rural areas either where AFFs are dominant as a major sector or where agribusinesses can borrow needed capital from their acquaintances or neighbours who offer lower interest rates with credibility and trust nurtured during a long relationship.

Figure 3.72. Profitability in agribusiness and food industries

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: "AFFs" in this figure is an aggregate group of agriculture, fisheries and food products and beverages. "Other sectors" in this figure include all cases sampled by the survey, excluding only those of agriculture, fisheries, food products and beverages, and related businesses. The asterisk (*) indicates a statistically significant result at $P < 0.05$.

Figure 3.73. Average interest rates for formal and informal loans

Source: ESCAP-OECD-UMFCCI Myanmar Business Survey Database.

Note: "AFFs" in this figure is an aggregate group of agriculture, fisheries and food products and beverages. "Other sectors" in this figure include all cases sampled by the survey, excluding those of agriculture, fisheries, food products and beverages, and related businesses. The asterisk (*) indicates a statistically significant result at $P < 0.05$.

Endnotes

¹ For more details see <https://unstats.un.org/unsd/cr/registry/isic-4.asp>.

² This is in line with the results of earlier business surveys in Myanmar (e.g., the Industrial Zone Survey, 2005-2010 of the Central Statistical Organization, 2014).

³ For the full list of the 22 subsectors, see question 58 of the survey questionnaire in annex 1.

⁴ The definition of SMEs varies from country to country. The definition used for the present survey is based on Abe and others, 2012.

⁵ Interestingly, 16 medium-sized and two large enterprises in the survey have never registered with any public authorities.

⁶ It should be noted that as the number of firms involved in this survey was small, broad generalizations should be avoided.

⁷ The principal components method was used together with Varimax rotation.

⁸ Larger companies' business with their counterparts in bordering countries is relatively, and surprisingly, small, although China and Thailand have been recognized as two of the main trading partners with Myanmar. This issue

may be further studied with emphasis on the role of trade intermediaries and illegal border trade practices, which may not be adequately covered by the present survey.

⁹ Having said so, it is not easily accomplished for the member States as many obstacles and unfulfilled actions still exist, coupled with wide development gaps among them. See related discussions in Abonyi and Abe (forthcoming).

¹⁰ The hotels and restaurants sector is typically characterized by a low entry barrier and intensive competition (cf. Abe and others, 2012).

¹¹ Although the exchange rate fluctuates, this report uses a fixed rate of \$1 to 1 000 kyat, the rate that is often used by Myanmar citizens in daily transactions.

¹² These conditions could be attributed to the heritage of the country's former socialist policies.

¹³ An important caveat in this analysis is that slightly more than 1 700 firms responded to these questions out of a total sample of 3 055. Although there is a high degree of missing observations, due to the lack of alternate data sources, this remains the best available information on gender distribution in Myanmar.

¹⁴ The survey data indicate that, on average, the price of collateral is appraised as 47 per cent of its market price (50 per cent on both mode and median) with a range from 10 per cent to 100 per cent.

¹⁵ The principal components method was used together with Varimax rotation.

¹⁶ These figures are based on approximately 1 700 respondents with formal loans and 1 600 firms with informal loans. The remaining firms did not respond to this question, possibly because they had not borrowed externally or because they were unfamiliar with collateral requirements. Among those firms who borrowed, 1 400 had taken out both formal and informal loans, supporting the notion that informal lenders are often used.

¹⁷ Both median and mode values are 5 per cent per month.

¹⁸ The survey design may partly explain this discrepancy as it sought the highest informal interest rate per month rather than the average rate. If the median value of 5 per cent is taken, however, the compounded annual rate is approximately 80 per cent, which is more or less in line with the results produced by earlier studies (cf. GIZ, 2013).

¹⁹ The survey data revealed that informal loans from non-formal financial institutions, such as money lenders, were not commonly used by firms in Myanmar, perhaps due to very high interest rates, limited amounts offered and the short loan periods; hence, they account for only a small share of total financing.

²⁰ Other reasons to using personal savings could be the large costs associated with other financing sources, such as high interest rates for formal and informal loans.

²¹ The survey collected three different types of data on firms' gross revenue, using: (a) a ratio scale in local currency (422 cases); (b) a ratio scale in United States dollars (62 cases); and (c) a class interval scale in local currency (2 607 cases) (see the survey questionnaire in annex 1). The analyses on all three datasets resulted in the same finding that smaller firms are more productive than larger firms. Figure 3.55 is based on the ratio scale in local currency as it is more accurate than the class interval scale, and it has more observations than the ratio scale in United States dollars.

²² These results should be interpreted with caution as over 800 firms – approximately 30 per cent of the sample – did not report their profit margins, possibly due to the sensitive nature of the data.

²³ Here, productivity is based on revenue figures collected on an interval scale. This was done to maximize the number of observations in the analysis.

²⁴ Azerbaijan, Bangladesh, Cambodia, China, India, Indonesia, Kazakhstan, Malaysia, Pakistan, the Philippines, Singapore and Thailand.

²⁵ Larger firms may be more likely to pay bribes as they are more successful with deeper pockets while the former socialistic regime developed a system of unofficial charges with a number of established businesses in Myanmar.

²⁶ In this regard, the authors attempted to establish a link between corruption and some political and socio-economic issues, such as ethnic conflicts or regional development, among others. However, a clear linkage has yet to be identified.

²⁷ Probit analysis is a close cousin of logistics regression. The model here estimates the probability of paying a bribe based on various firm characteristics using maximum likelihood techniques.

²⁸ This section was written by Toru Adachi with substantive contributions by Masato Abe.

²⁹ T-tests were conducted.



CHAPTER 4. POLICY IMPLICATIONS

The survey described above provides a wealth of information on the business environment for firms in Myanmar, the challenges they face and the issues of most concern to them together with aggregate information about participating firms. This information is of high value to policymakers looking to implement reforms that promote the private sector, create jobs, facilitate growth and enable broad-based economic development. The Government, the private sector and the international donor community must each play their part in developing and implementing the reform agenda. Some key policy implications emerging from the survey are discussed below.

BUSINESS ENVIRONMENT

The importance of the business environment in promoting growth, productivity, employment and well-being has been well established (Abe and others, 2012). The poor regulatory environment that plagues Myanmar has been discussed above. The survey results reveal dissatisfaction with several aspects of the business environment, with corruption and access to skilled labour, technology and land heading the list, although the importance of each of these obstacles appears to vary by sector. Furthermore, smaller firms reported having more trouble accessing finance while younger firms reported greater problems with the administrative bureaucracy. Infrastructure constraints are even more severe in some geographic regions. To address these issues the following recommendations are proposed:

- Streamline procedures for business registration, licences and permits. This requires enhanced coordination between the various line ministries concerned. This would enhance the entry of new firms and reduce administrative transaction costs for SMEs. In this regard, a centralized database of business registrations and reliable industry directories could be developed;
- Improve access to basic infrastructure such as electricity and water supplies. Ensure that access

is equitably distributed across all geographic regions with specific industrial zone development plans;

- Provide assistance to entrepreneurs and SMEs in overcoming specific challenges faced by them, such as access to finance and dealing with bureaucracy. This could take the form of an incubation programme and/or a full-fledged SME Development Centre;
- Establish “single-window” SME service centres throughout the country to handle all applications for registration, licences and permits as well as to disseminate regulatory, financial, technical and market information. These centres could provide consultancy services and act as business incubators by providing financing, tax-related and other technical assistance to startups and entrepreneurs;
- Create a regular consultation mechanism between the Government and businesses, through which concerns can be aired and then addressed for all sectors and all sizes of firms through a nuanced policy approach.

MARKET AND SUPPLY CONDITIONS

Regional integration and exposure to global competition will provide opportunities as well as challenges for firms in Myanmar. Having been sheltered for decades, firms in Myanmar now face the daunting task of competing with foreign firms locally as well as attempting to gain market share overseas. The survey results reveal that most firms still have localized concerns, as smaller firms tend to obtain their revenue from local sources; issues such as foreign competition, foreign exchange and international sanctions were not reported to be obstacles to business activities. Most firms also report ambivalence to the launch of the AEC. Key requirements in this area are proposed below:

- Enhance awareness and spread information on the upcoming challenges and opportunities. This could also take the proactive form of seminars, workshops, trade promotion activities, exhibitions, fairs, trade missions etc.;
- Improve the productivity, product quality and management practices in order to compete both locally and globally;
- Review the business implications of the AEC and disseminate the findings among policymakers and businesses;
- Encourage linkages between foreign investors and local enterprises in order to attract capital and expertise. This could take place through traditional business matching services as well as Internet platforms such as the Myanmar SME Link, which is a project sponsored by the ESCAP Business Advisory Council;
- Improve access to trade finance especially for SMEs. This will enable them to obtain a more diversified customer base;
- Create a policy on transfer pricing to ensure the State does not lose out on valuable tax revenue.

INNOVATION

Developing innovative products and services and utilizing transformative technologies are crucial for Myanmar's development especially with regard to global competition. The survey revealed that while innovation was considered important by many firms, few in fact spent much on it. Only one-third of the respondents protect their intellectual property while a large number of respondents reported relying on trust between staff members to safeguard their innovations. The following policies are proposed for action in this area:

- Subsidize expenditure on R&D, technology transfers and technology commercialization;
- Subsidize patent, design and trademark applications made by local firms to encourage innovation. This could take place through SME service centres;
- Disseminate information and run training programmes on innovation and IP protection;
- Streamline the application process for patent, design and trademark applications. Special assistance may be required for SMEs;
- Improve enforcement of intellectual property rights through the legal system;
- Encourage cooperation between academic institu-

tions and private firms in creating and marketing new products and technology.

HUMAN RESOURCES

Developing a workforce with the skills set required in a modern economy is a significant development challenge facing Myanmar. At present, the country spends less on education compared with its international peers and has fewer tertiary and vocational graduates. Quality of education remains an ongoing concern. The survey revealed that skilled labour is in short supply across the board, particularly in the hotel, restaurant and services sectors. Technical and professional skills are lacking in manufacturing and services. The lack of computer and ICT skills are of particular concern among micro and small-sized firms while larger firms are concerned about communication and interpersonal skills. Although Myanmar seems to offer fewer disadvantage to women entrepreneurs and workforce, it also became apparent that women's involvement in higher job categories, such as managers, technicians and professionals, must be further promoted. The following policies are proposed to help address these challenges:

- Increase funding for public education, especially the tertiary sector, including science and engineering and professional schools. Greater accountability and quality assessments must accompany the new funding;
- Enhance cooperation between the various ministries concerned with education in identifying skills gaps in the economy and developing policies accordingly;
- Facilitate the creation of vocational training institutes through public-private partnerships. Input from the business community would be useful in ensuring that the institutes produce graduates with skills that are in demand. This would also lower the burden of in-house training currently provided by firms;
- Encourage the creation of public administration and management schools to provide training in advance management practices;
- Explore the possibility of using ICT to spread knowledge in a more cost-effective manner through E-education programmes;
- Identify gender imbalances in business and make suitable provisions for encouraging female entrepreneurship;
- Encourage the inclusion of women at all levels of the corporate hierarchy, such as through mentoring

and skills development programmes. This would not only address equity concerns but also help to alleviate the skills shortage and to foster female entrepreneurship.

ACCESS TO FINANCE

The financial sector in Myanmar has long been characterized by strict regulation and undeveloped capacity in terms of both access and managerial practices (OECD, 2015). The reform process is now underway with the introduction of some flexibility for local banks, in terms of collateral requirements and loan terms. Foreign banks have recently been permitted to establish branches in the country; however, their activities are restricted to serving foreign companies only. The survey highlights the importance of introducing further reforms as more than half of the firms surveyed reported that currently available financing options are inadequate. The biggest financing obstacles facing firms are stringent collateral requirements, complicated application procedures, small size of loans, lack of long-term loans and high interest rates.

The excessive regulation and ensuing problems have resulted in the proliferation of a large informal banking system (GIZ, 2013). Informal lenders reportedly provide loans at high interest rates but accept a wider range of collateral compared to that required by formal lenders. However, borrowing from informal money lenders requires a long-term relationship and a high degree of relationship based on trust. The following recommendations are proposed:

- Complete the reform process by cutting down on excessive regulation and allowing banks greater flexibility to expand commercial lending, distribute long-term loans, set affordable rates for loans etc.;
- Encourage competition in the banking sector, which will lead to lower interest rates and better services for firms. Reforms should be phased in to allow local banks time to upgrade their skills base and service provision before foreign banks are allowed to lend domestically;
- Provide training to state development banks as well as commercial banks to build institutional capacity in risk appraisals, loan modifications and business consultations;
- Encourage smaller businesses to maintain and report reliable financial information to ease the

administrative burden on financial institutions, while developing and disseminating guidelines for simplified SME accounting;

- Establish a credit bureau to record the credit history of firms for the banking sector's risk evaluation and loan appraisals;
- Develop a transition programme for informal money lenders to enter the formal banking system. The informal financial sector already addresses many of the shortcomings of the overly regulated formal sector. This would provide a much-needed boost to domestic competition while also ensuring that informal borrowers are protected;
- Extend support for SMEs to gain access to short- and long-term funds, possibly through a subsidized loan programme and/or a credit guarantee scheme;
- Promote the formation of venture capital/angel investors to fund and provide consulting and other services to entrepreneurs and startups.

PRODUCTIVITY

Productivity growth in Myanmar remains low, severely hampering its development prospects. The economy must move away from its reliance on agriculture, which is a low productivity sector internationally, towards manufacturing and services. Furthermore, productivity within each sector is also low by international standards. The survey results show that smaller firms tend to have a higher level of productivity (measured as gross revenue per worker) compared to that of larger firms. This may be related to capital constraints that diminish the marginal productivity of labour, lack of healthy market competition under strict regulations or inefficient management practices, possibly including those at large (former) SOEs. Hotels and restaurants reported a profit margin (measured as gross income as a percentage of revenue) of 30 per cent, on average, compared with only 10 per cent for firms in extractive industries. Many of the policies recommended above would, if implemented, have a positive impact on productivity. Those recommendations are summarized below:

- Develop and incorporate new technologies and innovations for enhancing the productivity of firms;
- Reform the education system to enable great numbers of skilled individuals, technicians and professionals to be trained;
- Subsidize R&D, technology transfer and technology commercialization through various measures;

- Enhance access to finance for purchasing machinery and equipment that will increase the productivity of workers;
- Foster business and technology incubators and develop tools for technology-based development;
- Encourage partnerships between academic institutes and the private sector. Academic institutions can access to funds while firms can access talented innovators;
- Partner with firms overseas in order to gain much-needed capital, technology and management practices, all of which would improve productivity of local firms.

CORRUPTION

Although reforms such as an Anti-Corruption Law and an Anti-Corruption Commission have been attempted, the problem of corruption remains widespread (Transparency International, 2014a). This survey shows that corruption still tops the list of the most severe obstacles faced by firms in Myanmar. The survey specifically reveals that bribery is more common among larger firms as well as firms in extractive industries and firms in certain geographic locations. Although the legal and administrative enforcement is a necessary part of the anti-corruption effort, it is unlikely to be sufficient. Policies that target the root causes are more likely to be effective. A few examples are suggested below:

- Reduce excessive regulation across the board as part of creating a business enabling environment. Empirical evidence from this survey suggests that red tape is being used to extract bribes from more successful firms;
- Streamline the administrative procedures for business permits, licences and registration. This includes simplifying the process, codifying requirements and keeping discretionary powers of public officials to the necessary minimum;
- Improve training and incentives for public officials and inspectors to make them less susceptible to bribery;
- Enhance accountability of public officials by introducing modern management practices in the bureaucracy;
- Create a transparent process for licences in the extractive industries sector. Inspections to ensure adherence to environmental laws should not be ignored.

AGRIBUSINESS AND FOOD INDUSTRIES

The Government has recognized the fact that the agribusiness and food industries a key strategic sector in the equitable and inclusive development of Myanmar. The survey revealed several characteristics in the sector. They are dominant industries in rural areas while contributing to the national economy through exports of agro-products. The average age of firms in this sector is older than that of firms in other sectors, confirming its status as a traditional industry of Myanmar. Whereas the firm sizes in this sector are relatively larger than in other sectors, agribusiness and food industries appear to be less profitable. The sector relies on relatively low-cost informal lenders who are available in rural areas. Some special interventions in this sector may be appropriate for enhancing its exporting contribution as well as rural development. The following policy options are proposed:

- Enhance productivity through the adoption of advanced agricultural technologies and knowhow while investing in rural infrastructure;
- Encourage agribusiness and food industries to obtain international quality certificates or to meet such standards for enhancing market access;
- Foster export-oriented agribusinesses through conducting trade promotion measures, such as trade fairs, exhibitions or foreign missions (for detailed measures, see Abe and others, 2012, p. 161);
- Introduce formal lending schemes among rural agribusinesses to provide low-cost loans.



CHAPTER 5. LIMITATIONS AND FUTURE RESEARCH

While this survey does provide a great deal of useful information, it is not without its limitations. As discussed previously, the survey is not strictly speaking representative in the statistical sense. That would require a great deal more information on the population of firms and various sampling frames, a centralized database on business registrations and reliable industry directories, which are simply unavailable in Myanmar. However, the survey does cover more than 3 000 firms in all sectors and geographic regions.

This survey was designed to provide valuable information on business conditions in Myanmar that could be used to design appropriate policies. The assembled dataset is comprehensive with a relatively low missing data rate, and particularly so for a business survey in a developing country. The dataset allows the use of advanced statistical methodologies such as multivariate data analysis in order to investigate important relationships between crucial issues in

the business environment. Due to limited resources, however, the present report was unable to employ all possible methods for exploring the data completely. Therefore, further analysis is recommended.

This survey is necessarily limited to the business sector in Myanmar. However, several other stakeholders exist whose opinions must also be sought when developing policies in the public interest. These include public sector employees, non-governmental organizations, academia and concerned citizens. Future studies should seek information from bureaucrats on their interactions with, and perspective of the private sector. This would provide a comprehensive view as the opinion of firms might be skewed to their own interests. A follow-up survey of the firms interviewed here would also be useful in studying the impact of changes in policy and the business environment on business conditions overtime, although the cost involved could be a challenge.

CHAPTER 6. CONCLUSION



As Myanmar implements its most significant economic and political reforms in decades, it faces the challenge of determining appropriate policies to promote private sector development, which must be the engine of growth. However, the lack of information on prevailing conditions was found to be a serious impediment to this process; this resulted in the present business survey being conducted throughout Myanmar from October 2013 to April 2014.

This ESCAP-OECD-UMFCCI business survey provides much-needed information on the characteristics of firms in Myanmar, the conditions they experience and the obstacles they face. This information has proved to be very useful in determining appropriate policies to address the obstacles highlighted in the survey.

Several aspects of the business environment were considered, including the business climate, regulations, external market and supply conditions, innovation and technology management, human resources

management, access to financing, firm productivity and the degree of corruption. A sectoral case study of the agribusiness and food industries, which form a key strategic sector for Myanmar, was also reviewed. Each of these aspects was first discussed briefly to provide relevant context. The analyses of the survey data followed and provided in-depth information on each of the key aspects of business. This information was then used to develop policy suggestions for addressing the issues and concerns raised in the survey. In addition, the limitations of the survey and possible future research were presented.

The Government of Myanmar has to recognize the challenges faced by firms as highlighted in this publication. The Government will therefore need to develop a plan to address these issues and create a more favourable business environment. Several policies are suggested in this report with the aim of assisting the Government in determining its response.



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ANNEXES

ANNEX 1.

Survey Questionnaire in English

Area ID: Team ID: Interviewer ID:

ALL INFORMATION WILL REMAIN STRICTLY CONFIDENTIAL.
YOU AND YOUR FIRM'S IDENTITY WILL NOT BE RELEASED.

A Your business environment

1. How would you rate the overall business conditions in Myanmar? Circle the most appropriate.

Very unfavourable			Very favourable		
1	2	3	4	5	6

2. To what degree does each of the following issues present an obstacle to the current operations of your firm? Circle the most appropriate.

	Very severe obstacle					No obstacle
a. Access to land, factory or office space	1	2	3	4	5	6
b. Supply of petrol	1	2	3	4	5	6
c. Telecommunications	1	2	3	4	5	6
d. Supply of electricity	1	2	3	4	5	6
e. Supply of water	1	2	3	4	5	6
f. Business registration, licensing & permits – fees	1	2	3	4	5	6
g. Business registration, licensing and permits – administrative procedures	1	2	3	4	5	6
h. Customs and trade regulations	1	2	3	4	5	6
i. Transport and logistics	1	2	3	4	5	6
j. Tax collection process	1	2	3	4	5	6
k. Tax burden	1	2	3	4	5	6
l. Exchange rate	1	2	3	4	5	6
m. Availability of foreign exchange	1	2	3	4	5	6

n.	Inflation	1	2	3	4	5	6
o.	Access to capital	1	2	3	4	5	6
p.	Interest rates	1	2	3	4	5	6
q.	Property rights	1	2	3	4	5	6
r.	Corruption	1	2	3	4	5	6
s.	Domestic competition	1	2	3	4	5	6
t.	Foreign competition	1	2	3	4	5	6
u.	Insufficient local supply of inputs	1	2	3	4	5	6
v.	Insufficient foreign supply of inputs	1	2	3	4	5	6
w.	Insufficient working capital	1	2	3	4	5	6
x.	Inadequate access to external finance	1	2	3	4	5	6
y.	Low demand for your company's goods or services	1	2	3	4	5	6
z.	Lack of technology	1	2	3	4	5	6
aa.	Insufficient domestic market information	1	2	3	4	5	6
bb.	Insufficient export market information	1	2	3	4	5	6
cc.	International sanctions	1	2	3	4	5	6
dd.	Political instability	1	2	3	4	5	6
ee.	Labour regulations	1	2	3	4	5	6
ff.	Shortage of skilled labour	1	2	3	4	5	6
gg.	Shortage of unskilled labour	1	2	3	4	5	6
hh.	Relationship with public authorities	1	2	3	4	5	6

3. Are there any particular laws or regulations you find hard to comply with in your daily operations?

Yes	No
1	2

If yes, please provide examples:

4. How much would a firm like yours have to offer, in addition to official charges to the authorities, to obtain a business registration, licence or permit? Circle the most appropriate range (1 lakh = 100,000 kyats).

None	5 lakhs or less	6-10 lakhs	11-25 lakhs	26-50 lakhs	51-100 lakhs	101-250 lakhs	251-500 lakhs	501-1,000 lakhs	More than 1,000 lakhs
1	2	3	4	5	6	7	8	9	10

5. To what extent do you agree that it is more difficult for women to run businesses in Myanmar? Circle the most appropriate.

Strongly agree			Strongly disagree		
1	2	3	4	5	6

If you agree, please explain why women face such difficulties:

B Your customers and markets

6. The major customers of your business are mostly (i.e. they make up **more than 10% of total sales**). Circle all that apply.

a. Government	1	g. Foreign enterprises in Myanmar	7
b. State owned enterprises	2	h. Overseas customers	8
c. Large enterprises	3	i. Group/parent companies	9
d. Joint ventures/partnerships	4	j. End users and consumers	10
e. Small and medium enterprises	5	Others, please specify:	
f. Cooperatives	6		

7. How many major customers do you have (i.e. they each make up **over 10% of total revenue**)? Circle the most appropriate range.

None	1 or 2 customers	3-4 customers	5-6 customers	7-8 customers	9-10 customers
1	2	3	4	5	6

8. What percentage of total revenue comes from the following markets? Provide your best estimates.

a. Your township	%
b. Rest of your district	%
c. Rest of your state/province	%
d. Rest of Myanmar	%
e. Bordering countries (Bangladesh, China, India, Lao PDR and Thailand)	%
f. Other foreign countries	%
Total	100%

9. What percentage of your firm's sales of its goods or services was sold on credit in the last year? Circle the most appropriate range

None	10% or less	11- 25%	26- 50%	51-75%	76-90%	More than 90%
1	2	3	4	5	6	7

10. Which currency do you mainly use for settling domestic receipts?

Kyat	US dollars	Others, please specify:
1	2	

11. Which currency do you mainly use for settling foreign receipts?

Do not export	Kyat	US dollars	Others, please specify:
1	2	3	

12. Have you heard about the ASEAN Economic Community (AEC) 2015?

Yes	No
1	2

If yes, do you foresee how the AEC 2015 will impact on your business?

Very unfavourable			Very favourable		
1	2	3	4	5	6

C Your suppliers

13. The major suppliers of inputs to your business are mostly (i.e. they make up **over 10% of total supply** by value). Circle all that apply.

a. Government	1	g. Foreign enterprises in Myanmar	7
b. State-owned enterprises	2	h. Overseas suppliers	8
c. Large enterprises	3	i. Overseas buyers (who provide inputs and purchase final products)	9
d. Joint ventures/partnerships	4	j. Group/parent companies	10
e. Small and medium enterprises	5	Others, please specify:	
f. Cooperatives	6		

14. How many major suppliers do you work with (i.e. they individually provide **over 10% of total supply** by value)? Circle the most appropriate range.

None	1 or 2 suppliers	3-4 suppliers	5-6 suppliers	7-8 suppliers	9-10 suppliers
1	2	3	4	5	6

15. What percentage of your firm's supplies was purchased on credit in the last year? Circle the most appropriate range.

None	10% or less	11-25%	26-50%	51-75%	76-90%	More than 90%
1	2	3	4	5	6	7

16. Which currency do you mainly use for settling your domestic purchases?

Kyat	US dollars	Others, please specify:
1	2	

17. Which currency do you mainly use for settling purchases of products or services from abroad?

Do not import	Kyat	US dollars	Others, please specify:
1	2	3	

D Innovation

18. Innovation is crucial to the success of your business.

Strongly agree			Strongly disagree		
1	2	3	4	5	6

19. Has your firm implemented any of the following innovations? (Answer all questions):

	Strongly agree						Strongly disagree
a. New or significantly improved products or services	1	2	3	4	5	6	
b. New or significantly improved supply, production or distribution processes or methods	1	2	3	4	5	6	
c. New or significantly improved R&D, marketing and sales practices for your goods or services	1	2	3	4	5	6	
d. New or significantly improved management practices or systems (e.g., accounting, ICT and human resources management)	1	2	3	4	5	6	

20. Has your firm obtained any international quality certification (e.g. ISO and HACCP) so far?

Yes	No
1	2

If yes, please specify which ones:

21. What are the major reasons your business has developed or introduced new or significantly improved goods, services, processes, methods or business plans? Circle all that apply.

a. Developing a new business line	1	j. React to competitors' movements	10
b. Enter or establish a new market	2	k. Enhance reputation or brand values	11
c. Enter to export markets	3	l. Increase capacity of production or service provision	12
d. Increase or maintain market share	4	m. Improve quality of goods or services	13
e. Increase revenue	5	n. Improve Information and Communications Technology (ICT) capabilities or better utilize ICT applications	14

f. Improve productivity (i.e. increase output per worker)	6	o. Reduce environmental impacts	15
g. Reduce costs	7	p. Improve safety or working conditions for workers	16
h. Reduce prices or maintain competitive prices	8	q. Enhance corporate social responsibility (CSR)	17
i. Increase responsiveness to customer needs	9	Others reasons, please specify:	

22. How much has your firm invested in Research and Development (R&D) activities in the past year? Circle your best estimates (1 lakh = 100,000 kyat).

None	50 lakhs or less	51-100 lakhs	101-500 lakhs	501-1,000 lakhs	1,001-2,500 lakhs	2,501-5,000 lakhs	5,001-7,500 lakhs	7,501-10,000 lakhs	More than 10,000 Lakhs
1	2	3	4	5	6	7	8	9	10

23. Has your firm protected its intellectual property?

Yes	No
1	2

If yes, which protective measures below have your firm applied? Circle all that apply.

a. Apply for patents	1	g. Rely on trust between staff/team members	7
b. Register trademarks	2	h. Gain lead-time over competitors	8
c. Claim copyright	3	i. Withhold or limit key information from staff	9
d. Register designs	4	j. Ensure complex design	10
e. Make confidentiality agreements	5	k. Build in special know-how into products	11
f. Ensure secrecy	6	Others, please specify:	

E Your human resources

24. Did your firm change the size of its workforce in the past 12 months?

Decreased	No change	Increased
1	2	3

Which of the following best describes the reasons why your firm changed the size of its workforce in the past 12 months? Circle all that apply.

a. Changes in domestic demands	1	e. Changes in labour regulations and/or their enforcement	5
b. Changes in international demands	2	f. Perceived future change in the economy	6
c. Changes in business environment	3	Others, please specify:	7
d. Changes in the supply of labour	4		

25. In the past 3 years, compared with competitors, the increases in your employees' wages were:

Much lower			Much higher		
1	2	3	4	5	6

26. Has your firm experienced any technical or professional skills problems with the workforce?

Yes	No
1	2

If yes, the main reason why there are technical or professional skills problems is (circle all that apply):

a. Lack of adequate skills in the labour market	1	e. Skilled employees move to larger firms	5
b. Labour costs are too high to afford the skills needed	2	f. Skilled employees move to work abroad	6
c. Skilled employees move to other firms	3	Others, please specify:	7
d. Skilled employees move to other sectors	4		

27. Did you experience a shortage of skilled workers?

Yes	No
1	2

If yes, what measures have you taken to overcome shortage of skilled workers? Circle all that apply.

a. Organized in-house training	1	f. Strengthened links with schools or universities to secure people with the right skills	6
b. Established an in-house training unit or centre	2	g. Provided scholarships for prospective employees	7
c. Sent employees to free (e.g. government-provided) training externally	3	h. Outsourced tasks where skills are missing in-house	8
d. Paid for employees to attend public training externally	4	No action taken	9
e. Paid for employees to attend private training externally	5	Others, please specify:	

28. Which institutions has your firm cooperated with to provide training? Circle all that apply.

a. Government agencies	1	g. Private vocational training institutes	7
b. Universities	2	h. Business or industry associations such as UMFCCI	8
c. Technical colleges	3	i. International or donor agencies	9
d. Vocational/technical high schools	4	None	10
e. General high schools	5	Others, please specify:	
f. Public vocational training institutes	6		

29. How much on average does your firm spend for training per employee per year? Circle the most appropriate range.

None	500 kyat or less	501- 1,000 kyat	1,001- 5,000 kyat	5,001- 10,000 kyat	10,001- 50,000 kyat	50,001- 100,000 kyat	100,001 - 500,000 kyat	500,001 - 1,000,000 kyat	More than 1,000,000 kyat
1	2	3	4	5	6	7	8	9	10

30. In addition to public holidays, how many leave days does your firm grant to employees annually? Circle the most appropriate range.

None	3 days or less	4- 6 days	7- 10 days	11-15 days	16-20 days	More than 20 days
1	2	3	4	5	6	7

31. How many sick leave days does your firm annually grant to employees? Circle the most appropriate range.

None	3 days or less	4-6 days	7-10 days	11-15 days	16-20 days	More than 20 days
1	2	3	4	5	6	7

32. Does your firm cover any medical expenses of employees?

Yes	No
1	2

33. Does your firm provide any pension schemes to retirees?

Yes	No
1	2

34. Does your firm have apprentices, interns or trainees working for your business?

Yes	No
1	2

If yes, answer Questions 35 and 36 below. If no, move directly to Question 37:

35. Are apprentices (or interns or trainees) paid?

Yes	No
1	2

If yes, how much per month per person? Circle the most appropriate range.

10,000 kyat or less	10,001- 25,000 kyat	25,001- 50,000 kyat	50,001- 100,000 kyat	100,001- 250,000 kyat	More than 250,000 kyat
1	2	3	4	5	6

Who pays the apprentices (or interns or trainees)? Circle all that apply.

a. Your firm	1	d. International donor	4
b. Government/public agency	2	Others, please specify:	
c. NGO	3		

36. On average, what percentage of apprentices do you hire after their apprenticeship is completed? Circle the most appropriate range.

None	10% or less	11-25%	26-50%	51-75%	76-90%	More than 90%
1	2	3	4	5	6	7

37. How many employees does your firm presently employ?

Total:

Among them, how many are full-time, part-time or seasonal employees?

Full-time:

Part-time:

Seasonal or casual:

38. Can you estimate what percentages of your employees have completed the following levels of education?

a. Postgraduate, master degree or higher	%
b. Undergraduate or first degree	%
c. Vocational/technical colleges or diploma/certificate	%
d. High school	%
e. Middle school	%
f. Elementary or primary school	%
No formal education	%
Total	100%

39. Please describe your firm's human resources by filling the table below. Include part-time, seasonal or casual workers.

Occupation groups	Number of present staff		Number of present vacancies	Average monthly salary per person (in kyat)
	Male	Female		
a. Top management (CEO, managing director)				
b. Middle management (department/division heads)				
c. Lower management (section/unit chiefs, team leaders, project managers)				
d. Professionals				
e. Skilled workers				
f. Unskilled workers				
g. Interns, trainees and apprentices				

40. Can you estimate the level of difficulty in finding qualified workers by occupation group for your firm (circle the most appropriate)?

Occupation groups	Very difficult			Not difficult at all		
a. Top management (CEO, managing director)	1	2	3	4	5	6
b. Middle management (department/division heads)	1	2	3	4	5	6
c. Lower management (section/unit chiefs, team leaders)	1	2	3	4	5	6
d. Professionals	1	2	3	4	5	6
e. Skilled workers	1	2	3	4	5	6
f. Unskilled workers	1	2	3	4	5	6
g. Interns, trainees and apprentices	1	2	3	4	5	6

41. Please specify where there is a lack of skills and competencies in the various occupation groups (circle all that apply).

Occupation groups	Management and leadership	Creativity and initiative	Analytical thinking and problem solving	Technical skills	Finance, accounting and budgeting	Computer and ICT	Selling and customer service	Communication interpersonal and work ethics, teamwork	Foreign language
a. Top management	1	2	3	4	5	6	7	8	9
b. Middle management	1	2	3	4	5	6	7	8	9
c. Lower management	1	2	3	4	5	6	7	8	9
d. Professionals	1	2	3	4	5	6	7	8	9
e. Skilled workers	1	2	3	4	5	6	7	8	9
f. Unskilled workers	1	2	3	4	5	6	7	8	9
g. Interns, trainees and apprentices	1	2	3	4	5	6	7	8	9

42. How much does the average salary for women differ from the average salary for men in the same position in your firm? Circle the most appropriate.

21% or less	11-20% lower	1-10% lower	No difference	1-10% higher	11-20% higher	21% or more
1	2	3	4	5	6	7

43. How would you rate the overall opportunities for employment available to women in Myanmar? Circle the most appropriate.

Very unfavourable	Unfavourable	Somewhat unfavourable	Somewhat favourable	Favourable	Very Favourable
1	2	3	4	5	6

F Financing your business

44. Are the presently available financing sources adequate for your firm?

Yes	No
1	2

45. Has your firm borrowed from external source(s) either formally or informally?

Yes	No
1	2

If yes, please explain why. Circle suitable options below.

a. Expansion	1	f. Investment in land and buildings	6
b. Diversification	2	g. Investment in machinery, vehicles, equipment	7
c. R&D, technology or product/service development	3	h. Trade finance	8
d. Working capital (e.g., payment for supply, rent)	4	i. Paying back loans to other sources	9
e. Human resources (e.g., salaries, recruitment and training)	5	Others, please specify:	

46. To what extent do you think each of the following statements describes the present situation to obtain loans from external source(s)?

	Strongly agree						Strongly disagree
a. Collateral/guarantee requirements are too stringent	1	2	3	4	5	6	
b. Financial disclosure requirements are too strict	1	2	3	4	5	6	
c. Credit rating is too strict	1	2	3	4	5	6	
d. The interest rate is too high	1	2	3	4	5	6	
e. The term (i.e., the length of time) of the loan is too short	1	2	3	4	5	6	
f. The size of the loan is too small relative to financing needs	1	2	3	4	5	6	
g. The procedures for the loan applications are too complicated and time consuming	1	2	3	4	5	6	
h. Banks provide poor customer services for businesses	1	2	3	4	5	6	
i. Banks do not understand your financing needs	1	2	3	4	5	6	
j. Banks cannot provide timely services	1	2	3	4	5	6	
k. Banks are too far away (physical access to banks)	1	2	3	4	5	6	

l. It is difficult for you to provide accurate financial statements to banks	1	2	3	4	5	6
m. You don't know much about banking services	1	2	3	4	5	6
n. You are not interested in borrowing money from outside	1	2	3	4	5	6
o. You are not sure if your loan application will be approved	1	2	3	4	5	6
p. Your firm is less able to access loans than other companies	1	2	3	4	5	6

47. What are the major sources of financing for your company? Provide your best estimates.

a. Personal savings	%
b. Personal loans from family/relatives/friends	%
c. Retained earnings (i.e., profits kept by the firm)	%
d. Loans from state development banks	%
e. Loans from private banks	%
f. Loans from financial cooperatives	%
g. Micro-finance	%
h. Money lenders	%
i. Loan from other firms (e.g. group/parent companies)	%
j. Loan or advance money from customers	%
k. Stock/equity	%
l. Corporate bonds	%
m. Leasing	%
n. Accounts receivable (factoring)	%
o. Public grants, subsidies or loans	%
Others	%
Total	100%

48. Based on your answer in question 47, please specify why your firm has chosen these particular lending sources? Circle all that apply.

a. Best interest rates offered	1	f. Quickness of loan approval	6
b. Lender that your firm trusts the most	2	g. Long relationship with your firm	7
c. Only available sources of credit your firm could obtain	3	h. No need for a loan	8
d. Most convenient location	4	i. Did not think our loan application would be approved	9
e. Best lending conditions and services	5	Others, please specify:	

49. How large are the outstanding loans from external sources? Do not include your own funds, borrowing from family/relatives/friends and saved profits (1 lakh = 100,000 kyats). Circle the most appropriate range.

Type	None	Less than 50 lakhs	50-100 lakhs	101-500 lakhs	501-1,000 lakhs	1,001-5,000 lakhs	5,001-10,000 lakhs	10,001-50,000 lakhs	50,001-100,000 lakhs	100,001-500,000 lakhs	More than 500,000 lakhs
a. Short-term loan (1 year or less)	0	1	2	3	4	5	6	7	8	9	10
b. Mid- to long-term loan (more than 1 year)	0	1	2	3	4	5	6	7	8	9	10

50. If you borrow any formal loan, what is the average interest rate **per year**? %

In this case, the longest borrowing period is months.

51. If you borrowed informally, what is the highest interest rate **per month**? %

In this case, the longest borrowing term is months.

52. What kinds of collateral or guarantees are required to get formal or informal loans? Circle all that apply.

	Formal loan	Informal loan
a. Land	1	1
b. Building	2	2
c. Vehicles	3	3
d. Machinery or equipment	4	4
e. Accounts receivable or inventories	5	5
f. Personal assets	6	6
g. Third-party guarantors	7	7
Others, please specify		
None	8	8

53. To the best of your knowledge, at what percentage of the market price would your collateral be valued? %

54. What kinds of banking services do you use other than loans? Circle all that apply.

a. Current account	1	f. Leasing	6
b. Short term savings account	2	g. Factoring	7
c. Fixed term savings account	3	h. Trade finance (e.g. L/C)	8
d. Line of credit	4	None	9
e. Mortgages	5	Others, please specify:	

55. Do you use an external accountant to prepare your financial statements?

Yes	No	Do not prepare financial statements
1	2	3

G Your business

56. In what year was your business started? Year

57. In what year was your firm registered with any government office? Year

Which government office did your firm register with? Please specify

How long did it take for your firm to complete the whole process of company registration with the government office?

Months	Not yet registered
	a

58. In which sector does your firm primarily operate? For the primary sector, circle one only. For the additional sectors, circle as many of them that apply.

	Primary sector (one only)	Additional sector (as many as apply)
A - Agriculture, hunting and forestry		
01 - Agriculture, hunting and related service activities	1	1
02 - Forestry, logging and related service activities	2	2
B - Fishing		
05 - Fishing, aquaculture and service activities incidental to fishing	3	3
C - Mining and quarrying		
10 - Mining of coal and lignite; extraction of peat	4	4
11 - Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying	5	5
12 - Mining of uranium and thorium ores	6	6
13 - Mining of metal ores	7	7
14 - Other mining and quarrying	8	8
D - Manufacturing		
15 - Manufacture of food products and beverages	9	9
16 - Manufacture of tobacco products	10	10
17 - Manufacture of textiles	11	11
18 - Manufacture of wearing apparel; dressing and dyeing of fur	12	12
19 - Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear	13	13

<u>20</u> - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	14	14
<u>21</u> - Manufacture of paper and paper products	15	15
<u>22</u> - Publishing, printing and reproduction of recorded media	16	16
<u>23</u> - Manufacture of coke, refined petroleum products and nuclear fuel	17	17
<u>24</u> - Manufacture of chemicals and chemical products	18	18
<u>25</u> - Manufacture of rubber and plastics products	19	19
<u>26</u> - Manufacture of other non-metallic mineral products	20	20
<u>27</u> - Manufacture of basic metals	21	21
<u>28</u> - Manufacture of fabricated metal products, except machinery and equipment	22	22
<u>29</u> - Manufacture of machinery and equipment n.e.c.	23	23
<u>30</u> - Manufacture of office, accounting and computing machinery	24	24
<u>31</u> - Manufacture of electrical machinery and apparatus n.e.c.	25	25
<u>32</u> - Manufacture of radio, television and communication equipment and apparatus	26	26
<u>33</u> - Manufacture of medical, precision and optical instruments, watches and clocks	27	27
<u>34</u> - Manufacture of motor vehicles, trailers and semi-trailers	28	28
<u>35</u> - Manufacture of other transport equipment	29	29
<u>36</u> - Manufacture of furniture; manufacturing n.e.c.	30	30
<u>37</u> – Recycling	31	31
E - Electricity, gas and water supply		
<u>40</u> - Electricity, gas, steam and hot water supply	32	32
<u>41</u> - Collection, purification and distribution of water	33	33
F – Construction		
<u>45</u> - Construction	34	34
G - Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods		
<u>50</u> - Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	35	35
<u>51</u> - Wholesale trade and commission trade, except of motor vehicles and motorcycles	36	36
<u>52</u> - Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	37	37
H - Hotels and restaurants		
<u>55</u> - Hotels and restaurants	38	38
I - Transport, storage and communications		
<u>60</u> - Land transport; transport via pipelines	39	39

<u>61</u> - Water transport	40	40
<u>62</u> - Air transport	41	41
<u>63</u> - Supporting and auxiliary transport activities; activities of travel agencies	42	42
<u>64</u> - Post and telecommunications	43	43
J - Financial intermediation		
<u>65</u> - Financial intermediation, except insurance and pension funding	44	44
<u>66</u> - Insurance and pension funding, except compulsory social security	45	45
<u>67</u> - Activities auxiliary to financial intermediation	46	46
K - Real estate, renting and business activities		
<u>70</u> - Real estate activities	47	47
<u>71</u> - Renting of machinery and equipment without operator and of personal and household goods	48	48
<u>72</u> - Computer and related activities	49	49
<u>73</u> - Research and development	50	50
<u>74</u> - Other business activities	51	51
L - Public administration and defence; compulsory social security		
<u>75</u> - Public administration and defence; compulsory social security	52	52
M – Education		
<u>80</u> – Education	53	53
N - Health and social work		
<u>85</u> - Health and social work	54	54
O - Other community, social and personal service activities		
<u>90</u> - Sewage and refuse disposal, sanitation and similar activities	55	55
<u>91</u> - Activities of membership organizations n.e.c.	56	56
<u>92</u> - Recreational, cultural and sporting activities	57	57
<u>93</u> - Other service activities	58	58
P - Activities of private households as employers and undifferentiated production activities of private households		
<u>95</u> - Activities of private households as employers of domestic staff	59	59
<u>96</u> - Undifferentiated goods-producing activities of private households for own use	60	60
<u>97</u> - Undifferentiated service-producing activities of private households for own use	61	61
Q - Extraterritorial organizations and bodies		
<u>99</u> - Extraterritorial organizations and bodies	62	62

59. What share of total sales is in your firm's primary sector? Circle the most appropriate range.

10 % or less	11-25 %	26-50 %	51-75 %	76-90 %	More than 90%
1	2	3	4	5	6

60. What is the legal structure of your firm? Circle the most appropriate.

Sole proprietorship (i.e. non-incorporated, owned by an individual)	1	State-owned enterprise	6
Private limited liability company	2	Cooperative	7
Public limited liability company	3	Registered branch/representative office	8
Partnership	4	Others, please specify:	
Joint venture	5		

61. What is the ownership structure of your firm?

a. State-owned	%
b. Domestic entity owned	%
c. Domestic individual-owned	%
d. Foreign entity-owned	%
e. Foreign individual-owned	%
f. Collective ownership/partnership	%
Total	100%

62. What is the nationality of your firm's major ownership? Circle an appropriate nationality below:

American	1	Indonesian	11
Australian	2	Japanese	12
British	3	Korean	13
Bangladeshi	4	Malay	14
Canadian	5	Myanmar	15
Chinese	6	Singaporean	16
Hong Kong Chinese	7	Taiwanese	17
French	8	Thai	18
German	9	Vietnamese	19
Indian	10	Others, please specify:	

63. Where is the headquarters of your firm? Circle the location.

Ayeyarwady Region	1	Mon State	9
Bago Region	2	Rakhine State	10
Chin State	3	Shan State	11
Kachin State	4	Sagaing Region	12
Kayah State	5	Tanintharyi Region	13
Kayin State	6	Yangon Region	14
Magway Region	7	Nay Pyi Taw Union Territory	15
Mandalay Region	8	Others, please specify:	

District: Township: City/Town:

64. Where are your major plants or branches? Circle up to 5 locations.

Ayeyarwady Region	1	Mon State	9
City/Town(s):		City/Town(s):	
Bago Region	2	Rakhine State	10
City/Town(s):		City/Town(s):	
Chin State	3	Shan State	11
City/Town(s):		City/Town(s):	
Kachin State	4	Sagaing Region	12
City/Town(s):		City/Town(s):	
Kayah State	5	Tanintharyi Region	13
City/Town(s):		City/Town(s):	
Kayin State	6	Yangon Region	14
City/Town(s):		City/Town(s):	
Magway Region	7	Nay Pyi Taw Union Territory	15
City/Town(s):		City/Town(s):	
Mandalay Region	8		
City/Town(s):			

65. What was the sales revenue of your firm in the most recent fiscal year (1 lakh = 100,000 kyats)?

lakh (or USD)

If you are not sure about the exact amount, circle the most appropriate range in the below table.

Less than 50 lakhs	50-100 lakhs	101-500 lakhs	501-1,000 lakhs	1,001-5,000 lakhs	5,001-10,000 lakhs	10,001-50,000 lakhs	50,001-100,000 lakhs	100,001-500,000 lakhs	More than 500,000 lakhs
1	2	3	4	5	6	7	8	9	10

66. What was the profit/gross income (before tax) of your firm in the most recent fiscal year (1 lakh = 100,000 kyats)?

lakh (or USD)

If you are not sure about the exact amount, please provide the profit/gross income (before tax) as the percentage of the sales revenue. % of sales revenue

67. In which business or industry associations is your firm a member?

UMFCCI	Other please specify:	Not a member of any association
1		2

68. The top manager of your firm is (circle all that apply and the most appropriate):

a. Male	1
b. Female	2

c. The owner of the firm	1
d. A former government official	2
e. Myanmar national with overseas experience	3
f. Foreign national	4

g. Age	
25 or less	1
26-35	2
36-45	3
46-55	4
56-65	5
Over 65	6

h. Years of business experience	
No experience	1
1 or 2	2
3-5	3
6-10	4
11-15	5
Over 15	6

69. What is the education of the top manager of this firm (circle the most appropriate)?

PhD or equivalent	1	High school	5
Postgraduate or Master's degree	2	Middle school	6
Undergraduate or first degree	3	Elementary school	7
Vocational/technical diploma/certificate	4	No formal education	8

70. What is your role within the business? Circle all that apply:

a. Owner of the business	1	d. Person in charge of marketing or sales	4
b. Top Manager	2	e. Person in charge of operations	5
c. Person in charge of finance or planning	3	Others (please specify):	

71. What is your job title? Title:

72. What is your gender?

Female	Male
1	2

73. Circle the answer below that best indicates how confident you were in your ability to answer the questions in this questionnaire

Not at all confident	Not very confident	Somewhat confident	Very confident
1	2	3	4

Please use the space below for any additional comments.

THE INFORMATION YOU PROVIDED IN THIS QUESTIONNAIRE
WILL REMAIN STRICTLY CONFIDENTIAL.

Time for completion: minutes

Date: / /

ANNEX 2.

Difficulties and challenges in data collection

Difficulties/challenges	Reasons	Solutions
Unwilling to participate in the survey	<ul style="list-style-type: none"> - Lack of confidence in the usefulness of the survey. - Time consuming to answer the questionnaire. - Lack of trust in maintaining confidentiality. - Repercussion to their business by participating in the survey. - Leak to the tax office. - Unsatisfied with UMFCCI. - Lack of trust in interviewers. - Lack of general interest in the survey. 	<p>Convince businesses by highlighting the importance of the survey for upcoming political and economic changes.</p> <p>Explain about future opportunities such as applying for loans from banks.</p> <p>Mention cooperating agencies (e.g., United Nations, OECD).</p> <p>Explain the policy of confidentiality.</p> <p>Recruit local volunteers who could easily gain trust from local businesses.</p>
Unwilling to answer some specific or sensitive questions	<ul style="list-style-type: none"> - Leak to the tax office. <ul style="list-style-type: none"> o e.g. Q65 and Q66 - Irrelevant questions to those that have no modern management. <ul style="list-style-type: none"> o e.g. section E - Difficult to understand. <ul style="list-style-type: none"> o e.g. Q23 	<p>Train interviewers on technical knowledge relating to the questionnaire.</p> <p>Explain about future opportunities such as applying for loans from banks.</p> <p>Mention cooperating agencies (e.g., United Nations, OECD).</p> <p>Explain the policy of confidentiality.</p> <p>Recruit local volunteers who could easily gain trust from local businesses.</p>
Lack of experienced or skilled volunteers	<ul style="list-style-type: none"> - Lack of qualified people in some areas (e.g., Bago, Taunggyi). - Difficult to find and recruit experienced volunteers. - Not interested to be volunteers for a short-term project. - More challenging than volunteers expected to conduct interviews (e.g., Mandalay). - Difficult to manage the volunteers due to short preparation time. - Large skill gap among volunteers. 	<p>Transfer experienced and skill volunteers from one town to another where needed.</p> <p>Provide more on-site training for volunteers.</p> <p>Conduct interviews by area managers.</p>

Difficulty in reaching out to SOEs and military enterprises	<ul style="list-style-type: none"> - Have to go through different ministries or government departments to conduct interviews or request them to cooperate. - Difficult in making appointment or approaching military enterprises. 	<ul style="list-style-type: none"> - Approach higher authorities such as senior government officials by survey managers in Yangon and request cooperation and permissions to interview managers of SOEs. - Approach concerned or influential members of military for their introduction to the military enterprises.
Difficult to reach out to better-off or large businesses	<ul style="list-style-type: none"> - The bigger the business the harder to arrange appointment. - The better-off businesses do not care whether there should be policy change or changes in the business environment and they do not need help from anyone. - Senior managers, directors or owners of large firms are busy with their business. 	<ul style="list-style-type: none"> - Mention the increasingly competitive business environment in Myanmar, especially after the establishment of AEC. - Leave the questionnaire at the offices and collect them back later as/if required.
Little cooperation from local CCIs or business associations	<ul style="list-style-type: none"> - Local CCI or business associations in some areas (e.g., Bhamo, Bago and Taunggyi) are not happy with UMFCCI. 	<ul style="list-style-type: none"> - Approach civil society organizations such as community organizations to seek cooperation (e.g., approaching a church in Bhamo). - Executive Director or Project Manager makes phone calls directly to the senior members of local CCIs to seek cooperation.
Questionnaire is too sophisticated for some businesses.	<ul style="list-style-type: none"> - Due to language barrier (e.g., informants' major/native language is Chinese), found it difficult to answer questions. - First experience participating in a sophisticated survey. - Many questions (e.g. sections D and E) are not relevant to the nature of samples' businesses, especially for micro, small or family-owned businesses. 	<ul style="list-style-type: none"> - Spend more time explaining difficult questions. - Use local/native languages to explain to those who found it difficult to understand in Burmese. - Provide more time for informants to figure out estimations.
International organizations (e.g. United Nations) are unwelcome.	<ul style="list-style-type: none"> - People in some areas (i.e. Kyaukphyu, Sittwe) lack trust with international organizations such as the United Nations. 	<ul style="list-style-type: none"> - Send Rakhine (Arakanese) native(s) who can speak Rakhine language to gain trust from the community to conduct interviews.

ANNEX 3.

Profile of respondents

Characteristics	Number of respondents	Percentage of respondents
Total respondents	3 055	100.0
Sector		
Agriculture	416	13.6
Extractive Industries	121	4.0
Manufacturing	1 016	33.3
Trade	544	17.8
Hotels and restaurants	215	7.0
Other services	727	23.8
<i>Missing</i>	16	0.5
Size		
Micro (1-9 employees)	1 473	48.2
Small (10-49 employees)	1 110	36.3
Medium (50-249 employees)	358	11.7
Large (250+ employees)	110	3.6
<i>Missing</i>	4	0.1
Age		
1 year	10	0.3
2 to 4 years	499	16.3
5 to 9 years	639	20.9
10 to 14 years	495	16.2
15+ years	1 389	45.5
<i>Missing</i>	23	0.8
Location of the Headquarters		
Ayeyarwady	90	2.9
Bago	198	6.5
Chin	62	2.0
Kachin	126	4.1
Kayah	60	2.0
Kayin	116	3.8
Magway	111	3.6
Mandalay	566	18.5
Mon	85	2.8
Nay Pyi Taw	64	2.1
Rakhine	81	2.7
Sagaing	169	5.5
Shan	319	10.4
Tanintharyi	92	3.0
Yangon	908	29.7
<i>missing</i>	8	0.3
Majority ownership		
Domestic individual owned	2 493	81.6
Domestic entity owned	209	6.8

Foreign individual owned	47	1.5
Foreign entity owned	26	0.9
Collective ownership/partnership	152	5.0
State owned	22	0.7
<i>Missing</i>	106	3.5
Legal structure		
Sole proprietorship	2 461	83.8
Private limited liability	290	9.9
Public limited liability	52	1.8
Partnership	36	1.2
Joint venture	56	1.9
State owned enterprise	8	0.3
Cooperative	23	0.8
Registered branch	10	0.3
<i>Missing</i>	119	3.9
Within an industrial zone		
Yes	154	5.0
No	2 901	95.0
<i>Missing</i>	0	0.0
Informal firms		
Registered	2 609	85.4
Not yet registered	437	14.3
<i>Missing</i>	9	0.3
Nationality of major ownership		
American	3	0.1
Australian	2	0.1
British	1	0.0
Canadian	9	0.3
Chinese	27	0.9
Hong Kong Chinese	2	0.1
French	2	0.1
German	2	0.1
Indian	9	0.3
Indonesian	3	0.1
Japanese	12	0.4
Korean	12	0.4
Malay	2	0.1
Burmese	2 914	95.4
Singaporean	13	0.4
Taiwanese	3	0.1
Thai	7	0.2
Vietnamese	2	0.1
Others	7	0.2
<i>Missing</i>	23	0.8

Subsector

Sectors	Number of firms	Percentage of firms
Agriculture	416	13.6
Agriculture, hunting and related service activities	255	8.3
Forestry, logging and related service activities	75	2.5
Fishing, aquaculture and service activities incidental to fishing	86	2.8
Extractive Industries	121	4.0
Mining of coal and lignite; extraction of peat	10	0.3
Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying	13	0.4
Mining of uranium and thorium ores	16	0.5
Mining of metal ores	22	0.7
Other mining and quarrying	60	2.0
Manufacturing	1 016	33.3
Manufacture of food products and beverages	409	13.4
Manufacture of tobacco products	21	0.7
Manufacture of textiles	78	2.6
Manufacture of wearing apparel; dressing and dyeing of fur	78	2.6
Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear	23	0.8
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	25	0.8
Manufacture of paper and paper products	30	1.0
Publishing, printing and reproduction of recorded media	45	1.5
Manufacture of coke, refined petroleum products and nuclear fuel	3	0.1
Manufacture of chemicals and chemical products	15	0.5
Manufacture of rubber and plastics products	40	1.3
Manufacture of other non	17	0.6
Manufacture of basic metals	0	0.0
Manufacture of fabricated metal products, except machinery and equipment	11	0.4
Manufacture of machinery and equipment n.e.c.	31	1.0
Manufacture of office, accounting and computing machinery	6	0.2
Manufacture of electrical machinery and apparatus n.e.c.	48	1.6
Manufacture of radio, television and communication equipment and apparatus	12	0.4
Manufacture of medical, precision and optical instruments, watches and clocks	33	1.1
Manufacture of motor vehicles, trailers and semi	28	0.9
Manufacture of other transport equipment	18	0.6
Manufacture of furniture; manufacturing n.e.c.	38	1.2
Recycling	7	0.2
Trade	544	17.8
Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	95	3.1
Wholesale trade and commission trade, except of motor vehicles and motorcycles	190	6.2
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	259	8.5
Hotels and restaurants	215	7.0
Hotels and restaurants	215	7.0

Other services	727	23.8
Electricity, gas, steam and hot water supply	13	0.4
Collection, purification and distribution of water	30	1.0
Construction	141	4.6
Land transport; transport via pipelines	60	2.0
Water transport	22	0.7
Air transport	9	0.3
Supporting and auxiliary transport activities; activities of travel agencies	46	1.5
Post and telecommunications	6	0.2
Financial intermediation, except insurance and pension funding	6	0.2
Insurance and pension funding, except compulsory social security	0	0.0
Activities auxiliary to financial intermediation	5	0.2
Real estate activities	18	0.6
Renting of machinery and equipment without operator and of personal and household goods	4	0.1%
Computer and related activities	60	2.0
Research and development	2	0.1
Other business activities	53	1.7
Public administration and defence; compulsory social security	3	0.1
Education	69	2.3
Health and social work	56	1.8
Sewage and refuse disposal, sanitation and similar activities	1	0.0
Activities of membership organizations n.e.c.	2	0.1
Recreational, cultural and sporting activities	17	0.6
Other service activities	67	2.2
Activities of private households as employers of domestic staff	1	0.0
Undifferentiated goods	10	0.3
Undifferentiated service	11	0.4
Extraterritorial organizations and bodies	15	0.5
<i>Missing</i>	16	0.5
Total	3 055	100.0

Sector by size of firm

Sectors	Micro	Small	Medium	Large	Total
Agriculture	175	166	61	14	416
Extractive Industries	78	28	12	1	119
Manufacturing	422	385	138	70	1 015
Trade	367	151	20	6	544
Hotels and restaurants	82	90	38	5	215
Other services	340	285	87	14	726
Total	1 464	1 105	356	110	3 035

Note: The table excludes 20 cases with missing data.

Majority ownership by size

Majority ownership	Micro	Small	Medium	Large	Total
American	0	1	2	0	3
Australian	1	0	1	0	2
British	0	0	0	1	1
Canadian	4	4	1	0	9
Chinese	10	9	3	5	27
Hong Kong Chinese	0	0	0	2	2
French	1	0	0	1	2
German	2	0	0	0	2
Indian	4	4	1	0	9
Indonesian	1	1	0	1	3
Japanese	1	6	3	2	12
Korean	1	1	0	10	12
Malay	1	0	1	0	2
Burmese	1 424	1 065	340	82	2 911
Singaporean	5	4	3	1	13
Taiwanese	0	0	0	3	3
Thai	2	4	0	1	7
Vietnamese	1	1	0	0	2
Others	0	4	2	1	7
Total	1 458	1 104	357	110	3 029

Note: The table excludes 26 cases with missing data.

Majority ownership by sector

Majority ownership	Agriculture	Extractive industries	Manufacturing	Trade	Hotels and restaurants	Other services	Total
American	1	0	0	0	0	2	3
Australian	0	0	0	0	0	2	2
British	0	0	0	0	0	1	1
Canadian	3	0	4	0	1	1	9
Chinese	0	0	13	2	0	12	27
Hong Kong Chinese	0	0	2	0	0	0	2
French	0	1	1	0	0	0	2
German	0	0	0	0	0	2	2
Indian	0	1	5	0	0	3	9
Indonesian	0	0	2	1	0	0	3
Japanese	2	0	4	2	1	3	12
Korean	1	0	9	1	0	1	12
Malay	0	0	2	0	0	0	2
Burmese	399	119	958	533	210	682	2 901
Singaporean	3	0	2	1	0	7	13
Taiwanese	0	0	3	0	0	0	3
Thai	1	0	3	1	1	1	7
Vietnamese	0	0	1	0	1	0	2
Others	2	0	1	0	1	3	7
Total	412	121	1 010	541	215	720	3 019

Note: The table excludes 36 cases with missing data.

Location of headquarters by size

Headquarters	Micro	Small	Medium	Large	Total
Ayeyarwady	44	33	13	0	90
Bago	129	63	5	1	198
Chin	34	23	4	1	62
Kachin	83	37	6	0	126
Kayah	44	14	2	0	60
Kayin	59	48	8	1	116
Magway	69	41	1	0	111
Mandalay	264	237	52	11	564
Mon	45	31	8	0	84
Nay Pyi Taw	22	30	12	0	64
Rakhine	31	40	9	1	81
Sagaing	85	67	13	4	169
Shan	212	84	22	1	319
Tanintharyi	56	27	8	1	92
Yangon	292	333	194	88	907
Missing	4	2	1	1	8
Total	1 473	1 110	358	110	3 051

Note: The table excludes four cases with missing data on firm size.

Profiles of the top manager

	Number of respondents	Percentage of respondents
Gender		
Male	2 322	76.0
Female	723	23.7
Missing	10	0.3
Background		
The owner of the firm	2 779	91.8
A former government official	120	4.0
Myanmar national with overseas experience	168	5.6
Foreign national	23	0.8
Age		
25 or less	68	2.2
26-35	496	16.2
36-45	877	28.7
46-55	834	27.3
56- 65	520	17.0
Over 65	250	8.2
Missing	10	0.3
Years of business experience		
No experience	21	0.7
1 or 2	166	5.4
3-5	417	13.6
6-10	626	20.5
11- 15	520	17.0
Over 15	1 287	42.1
Missing	18	0.6

Profiles of the survey respondents

	Number of respondents	Percentage of respondents
Gender		
Male	2 137	70.0
Female	900	29.5
<i>Missing</i>	18	0.6
Functional role		
Owner of the business	2 187	71.6
Top manager	1 322	43.3
Person in charge of finance or planning	445	14.6
Person in charge of marketing or sales	415	13.6
Person in charge of operations	614	20.1
Others	13	0.4

Note: Respondents may perform more than one role in the firm.

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