



CENTRAL STATISTICAL ORGANIZATION



*Empowered lives.
Resilient nations.*



MYANMAR BUSINESS SURVEY 2015

Data report

Acknowledgements

Donor partners:

This survey has been possible because of the generous support of the governments of Australia, Denmark, Finland, Italy, Sweden and the United Kingdom.

Disclaimer:

The views expressed in this publication do not necessarily represent those of UNDP or CSO.

Contacts:

Central Statistical Organization
Office 32
Nay Pyi Taw
Myanmar

United Nations Development Programme Myanmar
6 Natmawk Road, Tamwe Township
Yangon
Myanmar

*Copyright: © UNDP and CSO 2016.
All rights reserved.
Manufactured in Myanmar*

Cover photo by: Stephen Oung (Flickr/SteFou!)



MYANMAR BUSINESS SURVEY 2015

Data report

Foreword from Central Statistical Organization

Good data and statistics are indispensable for informed decision-making by all actors in society. Only if we have reliable, accurate and timely data, then we can take targeted actions to achieve our development goals by developing better policies, evidence based planning, efficient and effective allocation of resources, monitoring and evaluation.

Statistical development is therefore a key priority for the Government of Myanmar. We are undertaking substantial efforts to reform and modernize our National Statistical System, with a vision to establish a strong and coordinated National Statistical System that provides accurate, reliable and timely statistics in line with international standards.



A crucial element of a well-functioning National Statistical System is a strong survey programme. Surveys are important ways for us to listen to what the people across the country would like to tell us. To improve the National Statistical System, we are implementing the National Strategy for Development of Statistics (NSDS) which is a comprehensive planning guideline focusing on improving the statistical infrastructure and the statistical processes.

The Myanmar Business Survey is one of CSO's major survey operations. It covers the entire country and delivers structural business statistics to inform research and evidence-based decision-making by both government and non-government stakeholders. The survey constitutes a core element of the official economic statistics of Myanmar.

Today, Myanmar's economy accounts for nearly 90% of the GDP that are produced from private sector. The statistical data of production and services from the individual households, private businesses and institutions is still weak. So, the promulgation of a new Statistical Law is essential in order to collect and maintain the confidentiality of private statistical data.

Business statistics have traditionally been scarce in Myanmar, with only little reliable data about enterprises and establishments available in the public domain. Noting the importance of the private sector for Myanmar's development, this publication hopes to fill part of the data gap and make a significant contribution to the debates on strengthening private sector development and its contribution to economic growth. It is expected to be the first in a series of regular biennial business surveys.

We really thank UNDP for their kind technical assistance and support received for the implementation of this survey.

I hope that the data delivered through the Myanmar Business Survey will be widely used and that it will make a contribution to our country's development.

Dr. Wah Wah Maung

Director General

Central Statistical Organization, Ministry of Planning and Finance

Foreword from UNDP

Myanmar is at a historic stage in its economic development and has witnessed remarkable and positive changes over the past few years. Private businesses have and will continue to be a key driver of Myanmar's future economic growth.

The Sustainable Development Goals (SDGs) emphasize the importance of the private sector for global development, and four of the seventeen goals relate specifically to private business: achieving decent work and economic growth (goal 8), promoting inclusive and sustainable industrialization and fostering innovation (goal 9), ensuring sustainable production patterns (goal 12), and building partnerships for development (goal 17).



Throughout the Sustainable Development Goals, and through goal 17 in particular, the private sector is recognized as a key partner for achieving sustainable development. As the Outcome Document agreed by Heads of State and Government, when they met at the Third International Conference for Financing for Development Conference in Addis Ababa in July 2015 states, "private business activity, investment and innovation are major drivers of productivity, inclusive economic growth and job creation".

It is therefore with great pleasure that UNDP has supported the Central Statistical Organization, in cooperation with the Planning Department in the Ministry of Planning and Finance, in carrying out the Myanmar Business Survey 2015. The survey provides the most comprehensive data on private sector establishments in Myanmar to date. It allows us to analyse the general characteristics of businesses in Myanmar, to produce statistics on workers, to calculate the value of businesses' operations, and to compute composite economic indicators for the country. It contains data and statistics on, but not limited to, the distribution of businesses per economic sector, size, region/state and age and helps us to better understand the contribution of the private sector to Myanmar's economic development.

The Myanmar Business Survey found that the private sector is dominated by small businesses with less than 10 workers, that it is still characterized by low levels of productivity and concentrated in a few subsectors. The survey findings will help policy makers to understand the constraints that Small and Medium Enterprises (SMEs) are facing, as they seek to implement the new Economic Policy of President Htin Kyaw. Through this policy, the Government has reiterated its commitment to help small and medium enterprises, as a vehicle for both economic growth and employment creation.

UNDP has supported the development of robust statistics in Myanmar for many years. The national statistical system is currently undergoing strategic reforms. Policy-makers are increasingly using statistics to design their plans, policies and programmes. I am therefore delighted to launch this new survey at a time when Myanmar is striving to implement the Sustainable Development Goals.

Peter Batchelor
Country Director
UNDP

Contents

Foreword from Central Statistical Organization	1
Foreword from UNDP	2
List of figures and tables.....	4
List of abbreviations	6
1. Introduction	7
1.1. Background and objective	7
1.2. Methodology and coverage.....	7
1.3. Structure of this report.....	8
2. Characteristics of businesses in Myanmar	10
3. Workers.....	16
4. Value of income, expenses, inventories and assets.....	19
5. Composite economic indicators	23
6. Summary of findings.....	26
Annex A: Data tables	27
Annex B: Survey methodology	51
Annex C: Survey questionnaire.....	57

List of figures and tables

Figure 1: Distribution of businesses (%) by economic sector	11
Figure 2: Distribution of businesses (number) by State/Region and economic sector	12
Figure 3: Distribution of businesses by size class (%) and economic sector	12
Figure 4: Myanmar businesses economic sector (%) and size class, year 2015.	13
Figure 5: Distribution of businesses by age of establishment (%) and economic sector	13
Figure 6: Registration status (%) by economic sector and registration type	14
Figure 7: Businesses owning various types of assets (%) by economic sector.....	15
Figure 8: Average number of hours worked annually per worker, by type of contract and economic sector	16
Figure 9: Average earnings/compensation per hour in MMK, by type of contract and economic sector	17
Figure 10: Top four and bottom four subsectors in terms of average hourly compensation per full-time employee, by economic subsector.....	18
Figure 11: Myanmar business income per worker by economic sector (in million Kyat), year 2015. ...	19
Figure 12: Top three and bottom three subsectors (for each sector) in terms of business income per worker (in million Kyat)	20
Figure 13: Expenditure by type of expenditure (%) and economic sector.....	21
Figure 14: Purchases of local/imported goods (%) by economic sector	21
Figure 18: Asset value by type of asset and economic sector (in million Kyat)	22
Figure 15: Total value added (left pie) and total gross operating surplus (right pie) by economic sector	23
Figure 16: Value added over income, value added per business, value added to personnel cost, value added per worker, by economic sector (in % or million Kyat, as indicated).....	24
Figure 16: Labour productivity (value added per worker) in other Asian countries	25
Figure 17: Manufacturing output by economic subsector (in million Kyat)	25
Table 1: Distribution of businesses across economic sectors (%).....	27
Table 2: Geographical distribution of businesses (%), by main economic activity of business.....	28
Table 3: Distribution of businesses by location in industrial zone (%), by main economic activity of business.....	29
Table 4: Distribution of businesses by type of ownership (%), by main economic activity of business.	30
Table 5: Distribution of businesses by type of establishment (%), by main economic activity of business	31
Table 6: Registration status of businesses (%), by main economic activity of business	32
Table 7: Distribution of businesses by number of economic activities (%), by main economic activity of business.....	33
Table 8: Distribution of businesses by age of businesses (years since establishment) (%), by main economic activity of business.....	34
Table 9: Size distribution of businesses (%), by main economic activity of business.....	35
Table 10: Distribution of businesses by total income/turnover during reference year (%), by main economic activity of business.....	36

Table 11: Businesses owning any asset type (%), by main economic activity of business.....	37
Table 12: Total number of workers, hours worked annually per worker during the reference year, and average hourly compensation, by type of worker and main economic activity of business	38
Table 13: Total value of income/turnover (in million Kyat), by main economic activity of business.....	40
Table 14: Total value of expenses (in million Kyat), by main economic activity of business	41
Table 15: Total value of expenses on goods used for production (%), by source (local/imported) and main economic activity of business.....	42
Table 16: Total value of inventories and change of inventories during reference year (difference between opening and closing balance) – in million Kyat, by main economic activity of business	43
Table 17: Total value of assets (closing balance on March 31, 2015 - in million Kyat), by main economic activity of business	44
Table 18: Change in assets during reference year (acquisitions minus disposals – in million Kyat), by main economic activity of business.....	45
Table 19: Value of assets per person employed (closing balance on March 31, 2015 – in thousand Kyat), by main economic activity of business	46
Table 20: Value added (median and total value – in million Kyat), by main economic activity of business.....	47
Table 21: Gross operating surplus (median and total value – in million Kyat), by main economic activity of business.....	48
Table 22: Labor productivity (in million Kyat), by main economic activity of business.....	49
Table 23: Manufacturing output (median and total value – in million Kyat), by main economic activity of business.....	50
Table 24: Gross margin on goods for resale (median and total value – in million Kyat), by main economic activity of business.....	50

List of abbreviations

CSO	Central Statistical Organization
DoL	Department of Labour
ISIC	International Standard Industrial Classification
ISTAT	Italian National Institute of Statistics
MBS	Myanmar Business Survey
MoPF	Ministry of Planning and Finance
MSIC	Myanmar Standard Industrial Classification
OECD	Organisation for Economic Co-operation and Development
PD	Planning Department
SNA	System of National Accounts
UMFCCI	Union of Myanmar Federation of Chambers of Commerce and Industry
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
WB	World Bank

1. Introduction

1.1. Background and objective

The private sector of Myanmar has received much attention during Myanmar's recent opening and ongoing transition period, and while still being characterized by relatively low levels of diversification and productivity, it has been identified as having large potential for driving Myanmar's economic development and growth. However, little reliable data exists on businesses in Myanmar, which makes it difficult to understand their characteristics, to design evidence-based policies for private sector development, or to make precise statements about the private sector's current contribution to economic growth and development.

The objective of the Myanmar Business Survey 2015 (MBS) is to address these limitations and to provide comprehensive economic statistics on the private sector of Myanmar, to inform both government policy-makers and non-government stakeholders, and to provide a key data source for the calculation of national accounts. The survey is expected to be the first in a series of regular annual or biennial business surveys, and was designed to comply with international standards and best practices for economic statistics / structural business statistics. It constitutes a core element of the official economic statistics of Myanmar. The survey was implemented jointly by the Central Statistical Organization (CSO) and Planning Department (PD) of the Ministry of Planning and Finance (MoPF). UNDP provided capacity building, technical assistance and financial support during the survey.¹ ISTAT also provided capacity building and technical support.

1.2. Methodology and coverage

Earlier surveys of businesses/establishments/enterprises have been conducted in Myanmar during recent years, including an annual survey of industrial zones conducted by CSO with the collaboration of PD,² a "One-Pager Business Census" conducted in 2013 by UNDP and PD, an "Enterprise Survey" conducted in 2014 by the World Bank (WB), and a 2014 "Business Survey" conducted by OECD/UNESCAP/UMFCCI. All of these past surveys struggled with issues of representativeness due to Myanmar's lack of a comprehensive list of businesses (business register) that can be used to draw a representative sample, and they therefore either covered only specific sectors / geographical areas of the private sector or used non-probability sampling methods that cannot produce results that are statistically representative. Hence, none of these approaches in the past were able to achieve a nationwide comprehensive coverage of all sectors of the economy.

While also being affected by the lack of a statistical business register, the MBS improves substantially on the coverage of earlier surveys by using a hitherto unexploited data source as a sampling frame.³ It achieves nationwide coverage of almost all sectors of the economy (excluding only agriculture and

¹ UNDP's democratic governance programme is supported by the governments of Australia, Denmark, Finland, Sweden and the United Kingdom.

² This industrial zone survey was occasionally expanded to also cover manufacturing businesses outside industrial zones, most recently in 2006 and 2003.

³ An on-the-ground listing operation carried out in 2014 by the Department of Labour in all townships of Myanmar, which recorded all formal and informal businesses with at least one hired worker, was used as the sampling frame. See Annex B for further detail.

finance⁴). The MBS surveyed a sample of almost 15,000 businesses across the country, which in turn are statistically representative of more than 126,000 businesses of the manufacturing, trade and services sectors of Myanmar. Public-sector or government-owned enterprises were excluded from the survey. Moreover, the sampling frame covered only businesses with at least one hired worker, so the smallest businesses (own-account and family-run businesses) are also excluded⁵. Finally, while an attempt was made to cover the telecommunications sector, some of the major businesses in this small sector refused to interview, making it impossible to present reliable statistics, and this sector was hence excluded from the analysis.

The reference period for the MBS is the financial year 2014/15, running from April 1, 2014 – March 31, 2015.

A more detailed technical description of the survey methodology of the MBS can be found in Annex B of this report. The survey questionnaire is presented in Annex C.

1.3. Structure of this report

This data report presents the data and key indicators that can be calculated from the MBS. It is a pure statistical publication in that it presents only the data and derives no policy recommendations or other conclusions.

As outlined above, this survey aims to inform a wide variety of data users. It seeks to strike a balance between the very specific data needs of economic statisticians and national accountants on the one side, and a diverse readership of government and non-government stakeholders on the other. The main body of this data report focuses on key findings, presented mostly through graphs, whereas more detailed information is contained in the annex tables. Most of the analysis is structured around the three main sectors of the economy covered by the survey – manufacturing (including mining/quarrying and construction), trade and services. Where more in-depth analysis is useful, the presentation uses “subsectors”, which are constructed on the basis of internationally recommended standards for this type of data reporting⁶.

Chapter 2 of the report presents the general characteristics of businesses in Myanmar. Chapter 3 provides statistics on workers, such as hours worked and compensation paid. Chapter 4 presents economic data on the value of businesses’ income, expenditure, inventories and assets. Finally, chapter 5 discusses composite economic indicators such as value added, gross operating surplus and labour productivity. Annex A provides detailed subsector-level tables and are aimed primarily at national accountants and economic statisticians.⁷ Annex B and Annex C contain further information about the survey design/methodology, as well as the survey questionnaire.

⁴ The sectors of agriculture and finance were consciously excluded, as is common practice in business surveys internationally, because their mode of operation is fundamentally different from other sectors of the economy, and their operations are best captured through different surveying approaches and instruments)

⁵ Due to the time lag between the sampling frame listing operation and the MBS, some businesses in our sample were actually own-account or family-run by the time of the survey, but these are only a small part of the sample.

⁶ The subsectors are based on a modified version of the “A*38” standard aggregation recommended for SNA data reporting, see ISIC Rev. 4 manual, p.274-276

⁷ Data is presented by standard aggregation recommended for SNA data reporting, see footnote above.

Readers should note that the statistics presented in the various chapters differ considerably in their nature – while the characteristics of businesses presented in chapter 2 are calculated at the business level, the statistics presented in chapters 3,4 and 5 are based on aggregate values. The difference in calculation becomes clear through an example: In chapter 1, we may state that “33% of businesses are in the trade sector”. In this statistic, a small 3-person retail trade business counts as much for the trade sector as a large supermarket. However, in chapter 3 we may say that “in the trade sector, 67% of goods traded are local and 33% are imported”. Given that this statistic is based on sector-wide aggregate values, the large supermarket dwarves the small retailer in the size/value of its traded goods, hence the small retailer will “count” much less into the aggregate statistic.

2. Characteristics of businesses in Myanmar

Figure 1 below shows the distribution of covered businesses across economic sectors (as outlined above, this excludes the agriculture, finance and telecommunications sectors, as well as state-owned and family-run businesses). The largest number of businesses are in the manufacturing sector (around 51,000 businesses, or 40% of the total), followed by the resale/trade sector (over 41,000 businesses, or 33%) and the services sector (more than 34,000 businesses, or 27%). Each of these sectors can be further broken down into subsectors, and the analysis (see pie-in-pie in the graph) shows that there is little diversification, and rather a strong dominance of particular subsectors, e.g. in the manufacturing sector the vast majority of businesses manufacture food products, beverages and tobacco products. Likewise, in the services sector, more than half are engaged in food and beverage service activities. For further detail on the full list of subsectors within each sector, see table 1 in Annex A.

Figure 2 then shows the distribution of covered businesses across States/Regions. Unsurprisingly, the highest number of businesses can be found in Yangon (almost 23,000 businesses, or 18% of the total), followed by Mandalay (15%). The smallest numbers of businesses are found in the smaller states Kachin, Chin and Kayah.

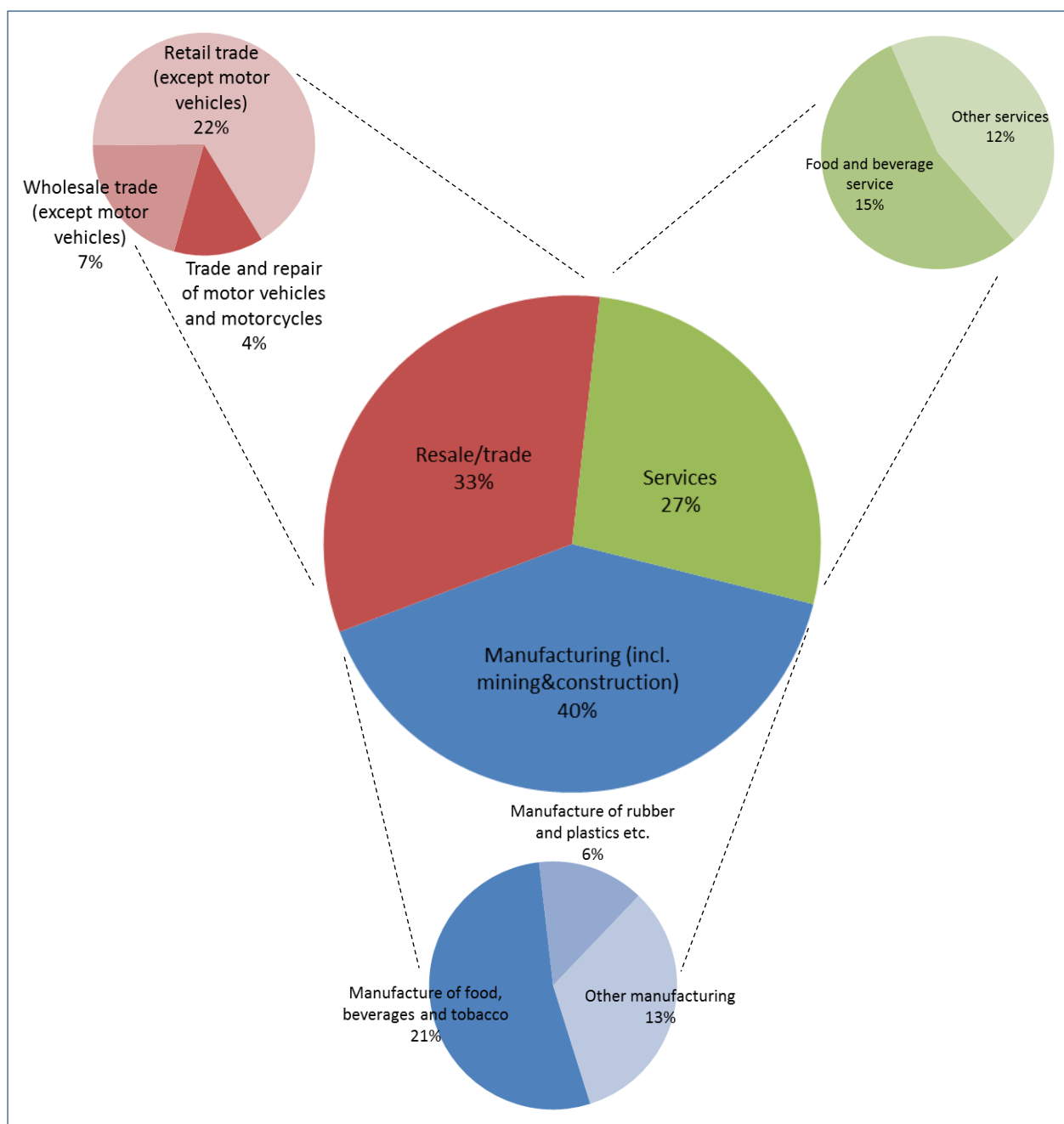
When comparing this against the population of the States/Regions,⁸ a relatively high business-to-population ratio is found in Yangon, Mandalay, Thanintharyi, Mon and Kayah (all above 3 businesses per 1000 inhabitants), whereas small ratios are found in Ayeyarwaddy, Kachin and Rakhine (all below 1.5 businesses per 1000 inhabitants). However, this finding should be interpreted cautiously, as we know that our sampling frame excludes the smallest businesses with no hired workers; hence, no definitive statements about entrepreneurialism etc. should be derived from this data.

Figure 2 also shows the sectoral pattern in every State/Region. As can be seen, there is substantial variation. While in Yangon, there is a fairly even distribution between manufacturing, trade and service businesses, Mandalay, Sagaing, Mon and Ayeyarwaddy are more dominated by manufacturing firms.

In Myanmar less than 8 thousand businesses are located in industrial zones; almost all businesses (98%) are private firms owned by nationals; 96% are single-unit establishments; and 97% have one single economic activity. Given the low variation observed in these four indicators, no graphs are presented on them in the main body of this report; however, readers may refer to tables 3, 4, 5 and 7 of Annex A for further data.

⁸ As measured by the 2014 Population Census

Figure 1: Distribution of businesses (%) by economic sector



Note: The percentages in the smaller pie charts sum up to the percentage of their respective "parent" slice in the large pie chart.

Figure 2: Distribution of businesses (number) by State/Region and economic sector

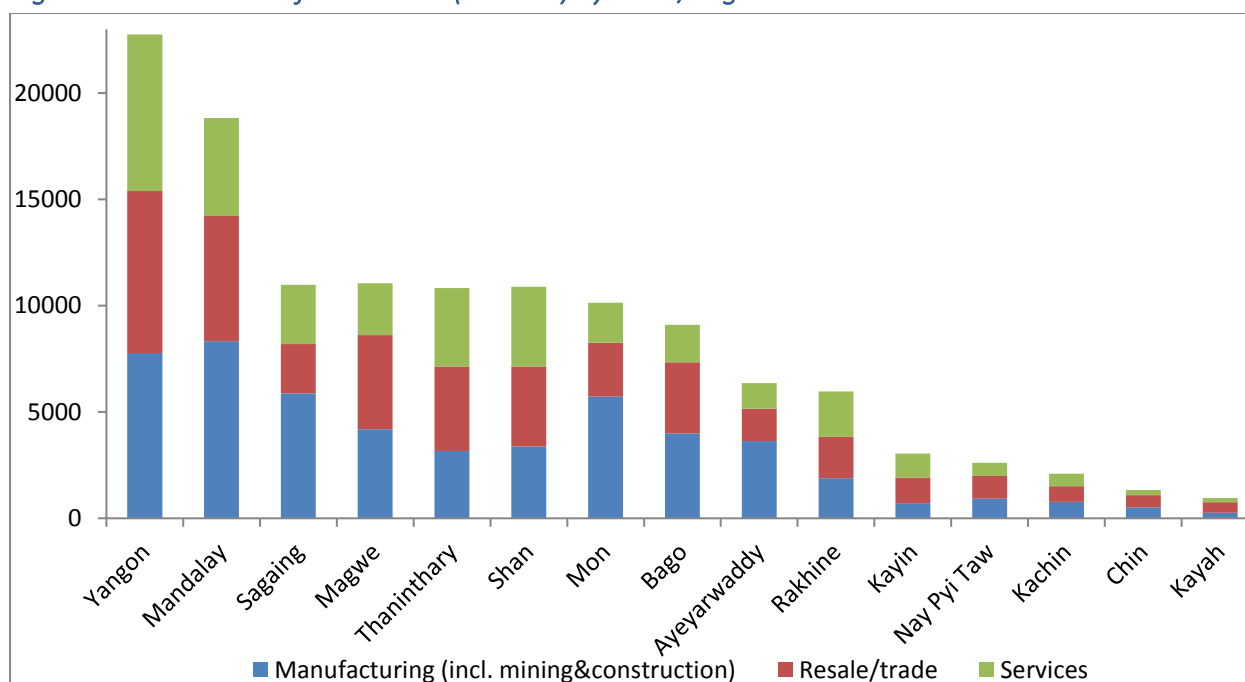
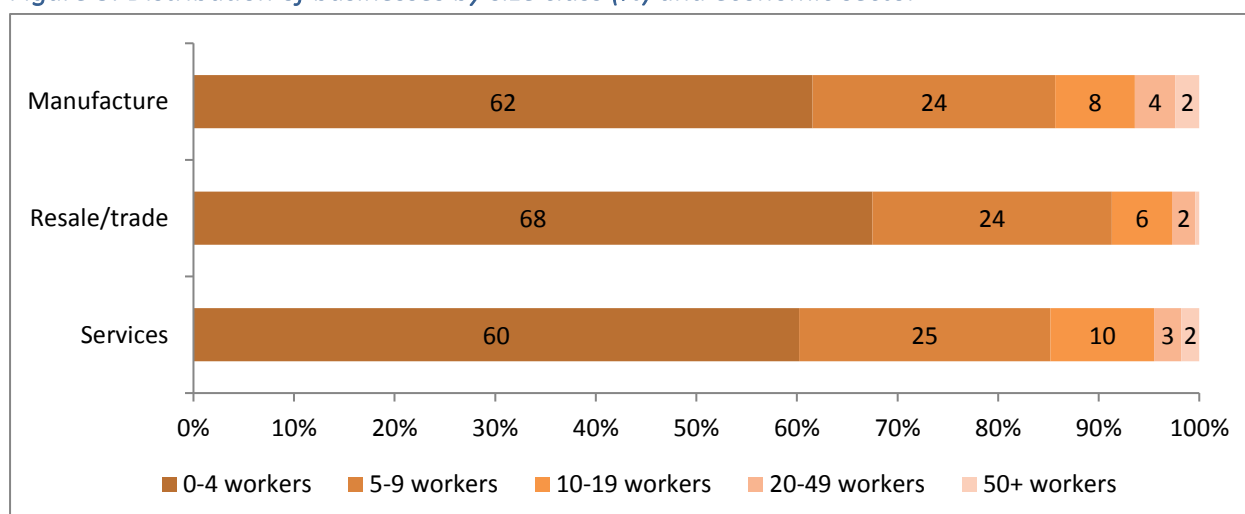


Figure 3 below presents data on the size class (i.e. number of workers⁹) in the three economic sectors. Overall, the economy is dominated by very small and small businesses with less than 10 workers.¹⁰ The services and manufacturing sectors have more or less the same percentage of such small businesses (85-86%), and the businesses with 10-19 workers account for 10% and 8%, the ones with 20-49 workers 3% and 4%, and those with 50 or more workers 2% for both sectors. In the trade sector, 92% of businesses have less than 10 workers, 6% of businesses have 10-19 workers and 2% have 20-49 workers. Larger businesses with 50 or more workers constitute only a tiny fraction of the overall economy. In total numbers, the survey finds 1227 such larger businesses in the manufacturing sector, 619 in the services sector, and only 165 in the trade sector.

Figure 3: Distribution of businesses by size class (%) and economic sector

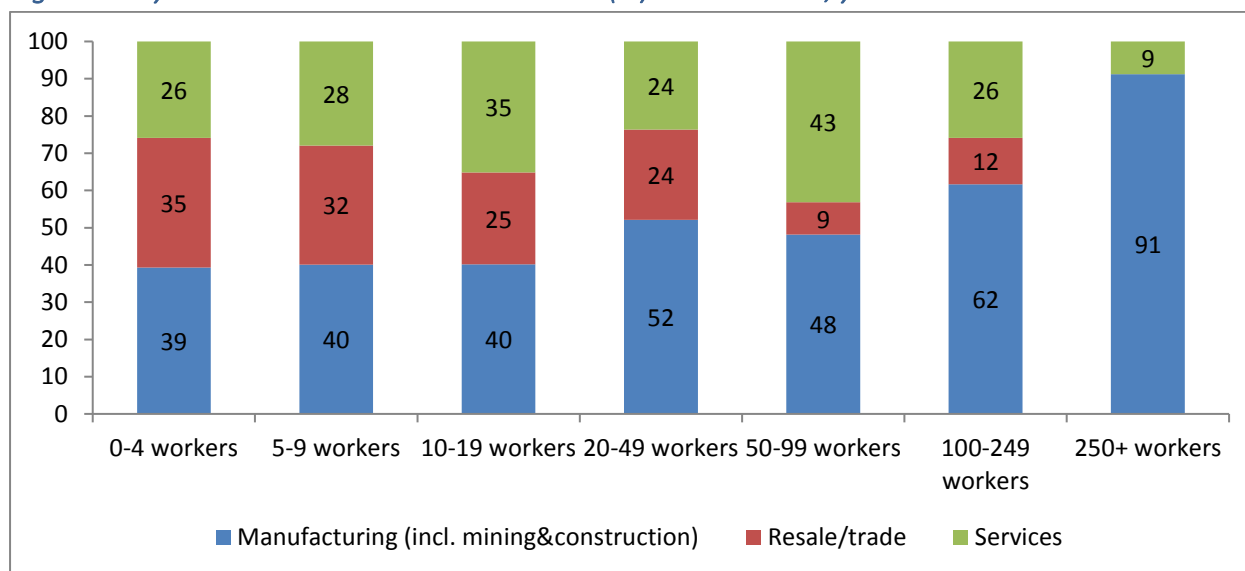


⁹ “Workers” includes full-time employees, part-time employees, family workers and working proprietors.

¹⁰ Note that the terms “small”, “medium” and “large” used in this report are not based on any official national or international definition.

A similar picture emerges when switching around the analysis on size class and economic sector. In contrast to the figure above, Figure 4 below shows the sector distribution within size class. We observe that there is little sector-level variation in the smaller size classes, but then the trade sector slowly disappears from the bars as we move towards the larger businesses in the economy. The size class of 250 and more workers is dominated by manufacturing businesses, although we need to keep in mind that this size class is tiny overall, less than 400 businesses across the country.

Figure 4: Myanmar businesses economic sector (%) and size class, year 2015.



When analysing the age of businesses, i.e. the number of years since establishment, we find considerable variation across sectors (see figure 5 below). The “young” businesses established 0-4 years ago make up 10% in the manufacturing sector, 19% in trade sector and 23% in service sector. Businesses aged 5-9 years make up 18% of the manufacturing sector, 21% of the trade sector and 24% of the services sector. Businesses which have existed for 10-19 years make up 39% of the manufacturing sector, 34% of the trade sector and 32% of the services sector. Businesses which are 20 years and above are 32%, 26% and 21% respectively. These figures appear in line with the economic transition that Myanmar is currently undergoing.

Figure 5: Distribution of businesses by age of establishment (%) and economic sector

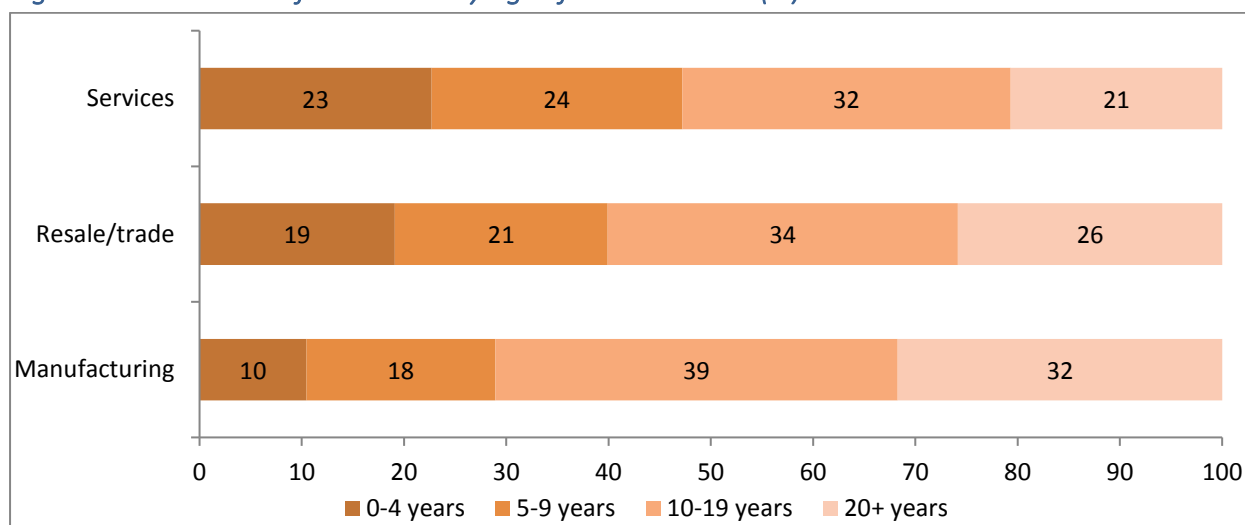
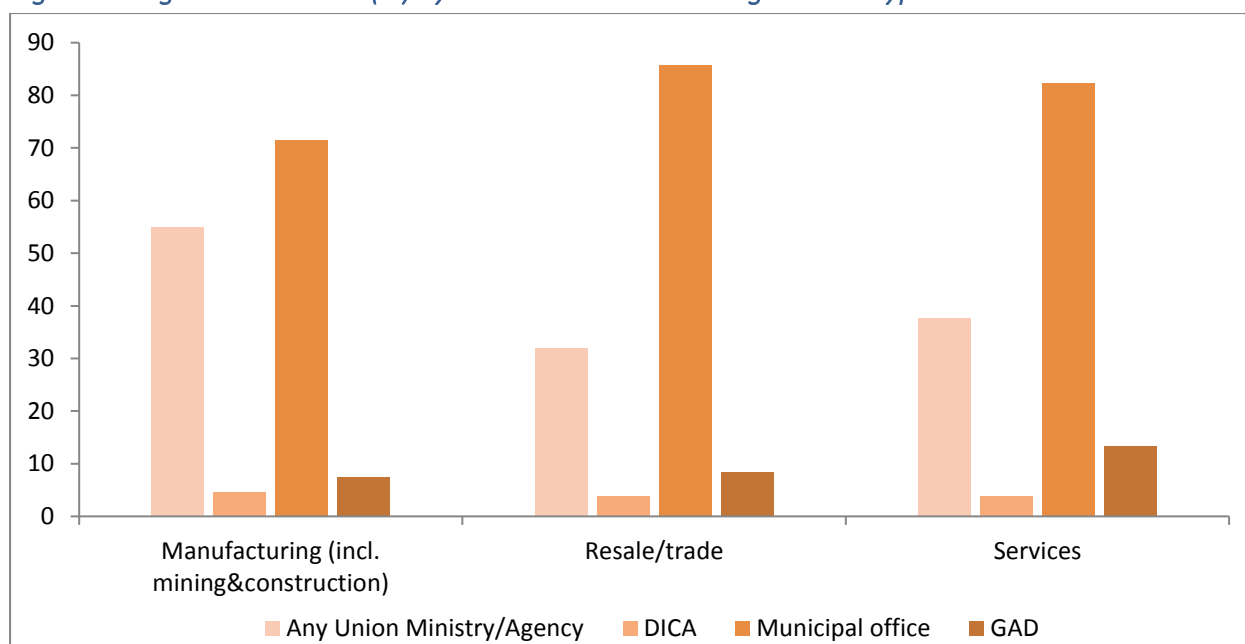


Figure 3 below shows whether businesses are registered with different types of government entities. By far the highest registration coverage is achieved by the municipal offices (or city/township development committees), where 71% of manufacturing businesses, 86% of trade businesses and 82% of service businesses are registered. Overall, 79% of covered businesses are registered at the municipal level. Registration with Union-level ministries or affiliated agencies (excluding DICA) is relatively high in the manufacturing sector (55%), but much lower in the trade (32%) and services (38%) sectors. Finally, registration with DICA and GAD doesn't affect the vast majority of businesses surveyed.

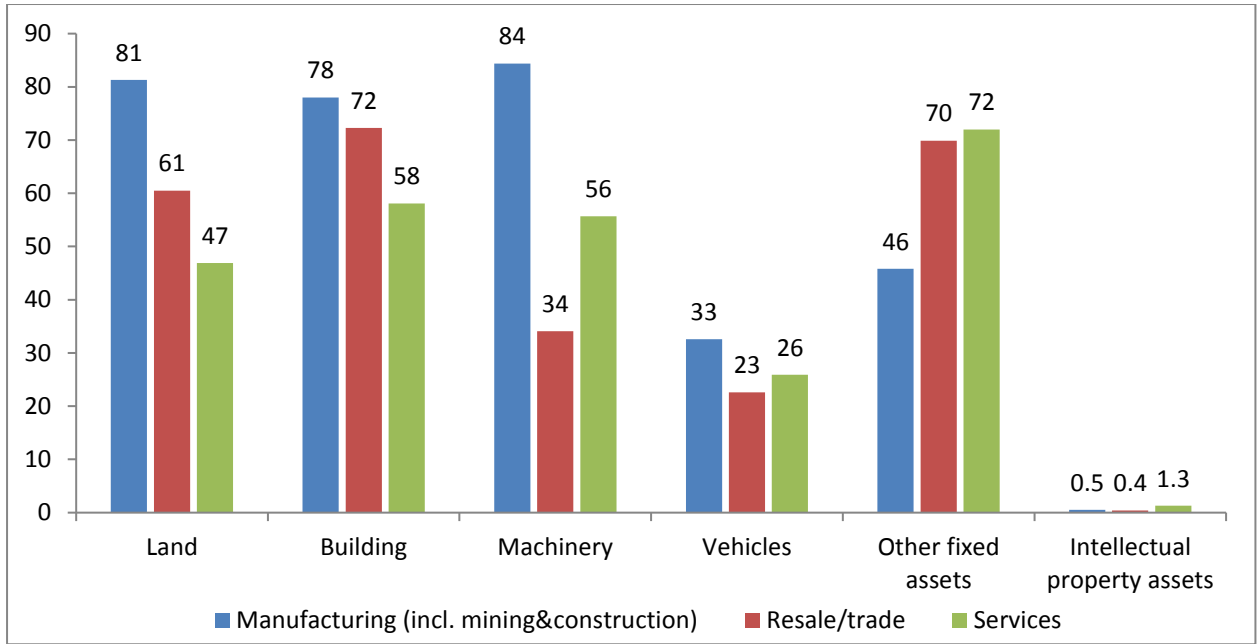
When looking at specific subsectors, there are some which display particularly high registration status. For DICA, the highest percentages are observed in manufacturing of textiles/wearing apparel/leather and accommodation, which have 12% and 9%, respectively. For Union ministries/agencies, the highest percentages are observed in manufacturing of food/beverages/tobacco, manufacturing of paper/printing products and manufacture of metals (60-65%).

Figure 6: Registration status (%) by economic sector and registration type



Finally, Figure 7 below shows whether business in the three sectors own any type of asset. Many businesses appear to own land, building and machinery&equipment (with the exception of the trade sector for machinery&equipment). Unsurprisingly, the manufacturing sector displays the highest percentages for all these three items. Ownership of intellectually property assets (e.g. software licenses, patents, etc.) is very low overall. Ownership of vehicles is similar across sectors, although it should be noted that there are strong variations at the subsector level (e.g. in the services sector, the highest percentages of vehicle ownership are observed in the transportation sector, etc.)

Figure 7: Businesses owning various types of assets (%) by economic sector



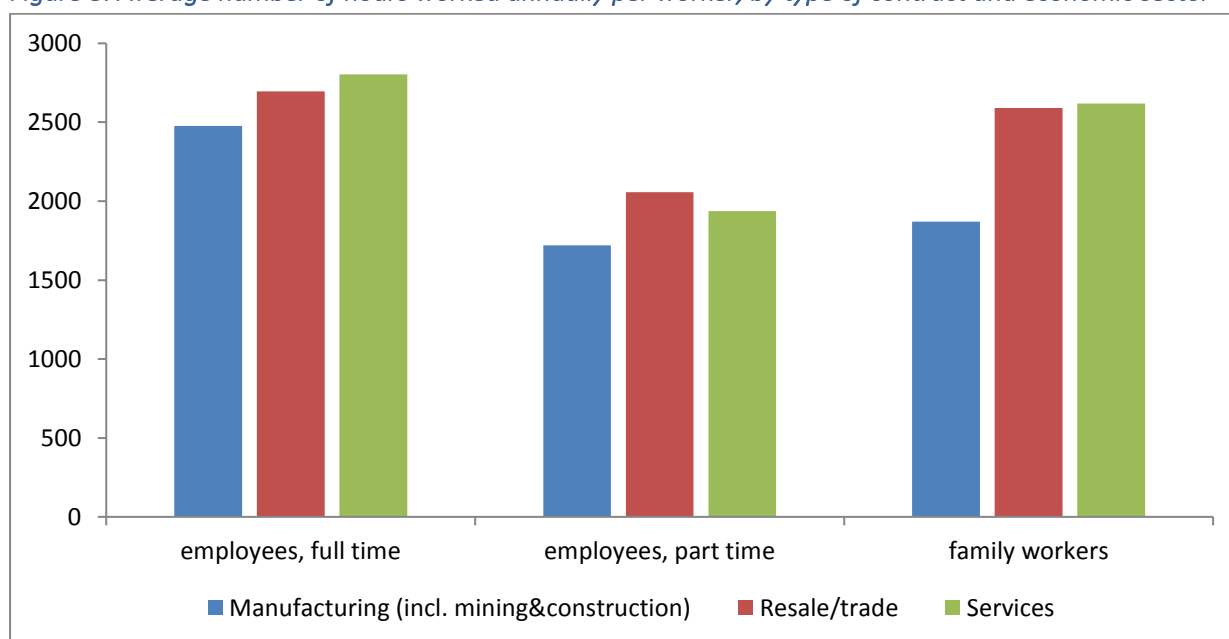
3. Workers

The MBS covered 126,928 businesses which employ 1,104,849 workers (this includes full-time employees, part-time employees, family workers and working proprietors). In manufacturing, the survey found by far the highest number of workers - 644,506 (58%), in trade 204,486 workers (19%), and in services 255,857 workers (23%) – as shown in the table to the right.

Economic sector	Total no. of businesses	Total no. of workers
Manufacturing	51,143	644,506
Resale/trade	41,370	204,486
Services	34,416	255,857
Total	126,928	1,104,849

While the Labour Force Survey – conducted in 2015 by the Department of Labour – should be considered the primary source of information on working conditions and worker compensation, the MBS also asked businesses about the number of hours worked as well as the compensation paid to the different types of workers. As presented in Figure 8 below, there was little variation between the sectors in terms of hours worked annually by full-time and part-time employees (around 2500 and around 1800 hours, respectively), although the manufacturing sector appears to generally have the lowest average working hours. Where family workers were used (and their use is most prevalent in the trade sector¹¹), they worked significantly lower hours in the manufacturing sector than in the other two.

Figure 8: Average number of hours worked annually per worker, by type of contract and economic sector

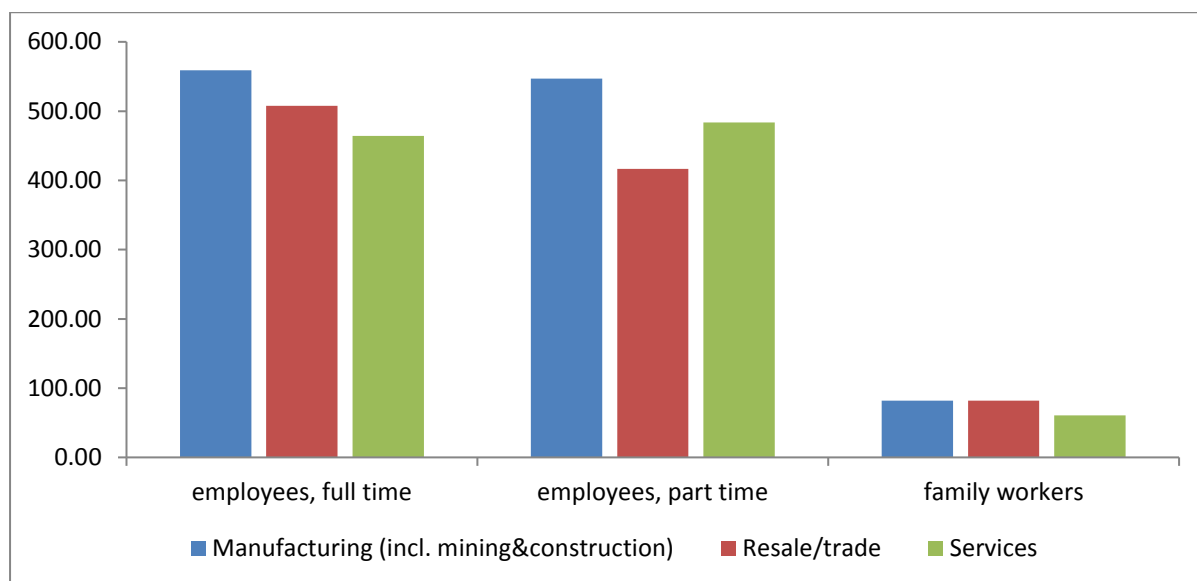


The survey collected data on compensation of workers, including emoluments (including salaries/wages, house rent allowances, transport allowances, bonuses and other benefits paid in cash or in kind), social welfare contributions (e.g. contribution to insurance and other social security schemes) as well as other payments in kind or in cash (e.g. contribution to education, health, etc). When looking at average compensation/earnings of workers in the three sectors (Figure 9 below), we find the highest payments in the manufacturing sector (on average around MMK 550 per hour for both full-time and part-time employees). In the services sector, compensation of full-time and part-

¹¹ 45% of businesses in the trade sector reported family workers, as compared to 38% and 33% in the services and manufacturing sectors, respectively.

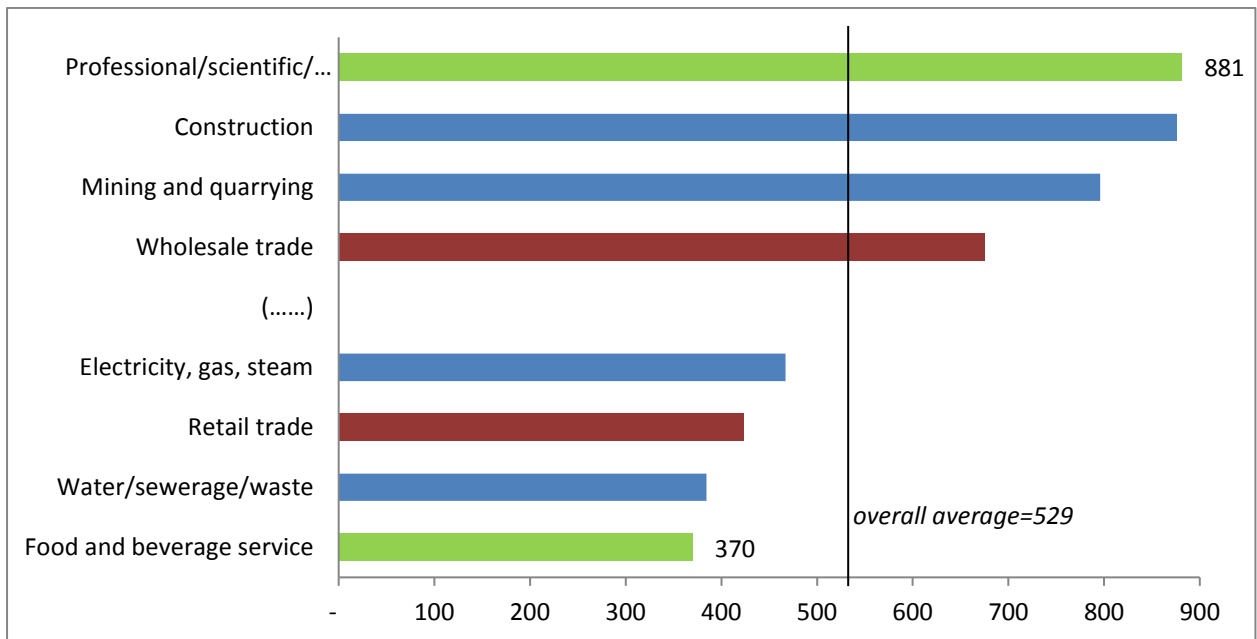
time employees is also similar (around MMK 470 per hour), whereas in the trade sector part-time employees appear to earn substantially less than full-time employees (MMK 420 as opposed to MMK 510 per hour). Across all sectors, family members are paid a very low hourly compensation, below MMK 90 on average across all three sectors. It must be noted that this average for family workers is driven downwards by a high number of unpaid family workers, i.e. those family workers that actually receive a compensation will often receive higher amounts, but the overall average of compensation is low.

Figure 9: Average earnings/compensation per hour in MMK, by type of contract and economic sector



The data on compensation of workers calls for further investigation. The survey does not allow us to differentiate between skilled and unskilled workers, so the averages presented have only limited explanatory power in sectors with a diverse labour force. However, the analysis at the subsector-level shows some interesting findings. Figure 11 presents the top four and bottom four subsectors in terms of average hourly compensation of full-time employees (a full list of all subsectors is presented in Annex A). The lowest average payments are made in the food and beverage service sectors – which also has the highest average number of hours worked. Likewise, working hours are long and average earnings are particularly low in the retail trade sector. On the opposite side of the spectrum, we find professional/scientific/technical activities, which have the highest average compensation at MMK 881. This is followed by mining/quarrying and construction, although this finding might sound counterintuitive and requires some explanation. The MBS is an establishment-level survey, meaning that we sample and interview single-location establishment. In consequence, an enterprise with multiple branches would be interviewed independently at each location. This results in a problem when surveying the mining/quarrying and construction sectors in particular. Given that construction sites and mining sites are usually not identified as actual business premises/establishments, they are often omitted from the sampling frame. Hence, our survey often captured only the head office and management/administration component of enterprises in these two sectors. This may explain the high hourly compensation in these otherwise labour-intensive sectors, and results for these subsectors should be interpreted cautiously.

Figure 10: Top four and bottom four subsectors in terms of average hourly compensation per full-time employee, by economic subsector



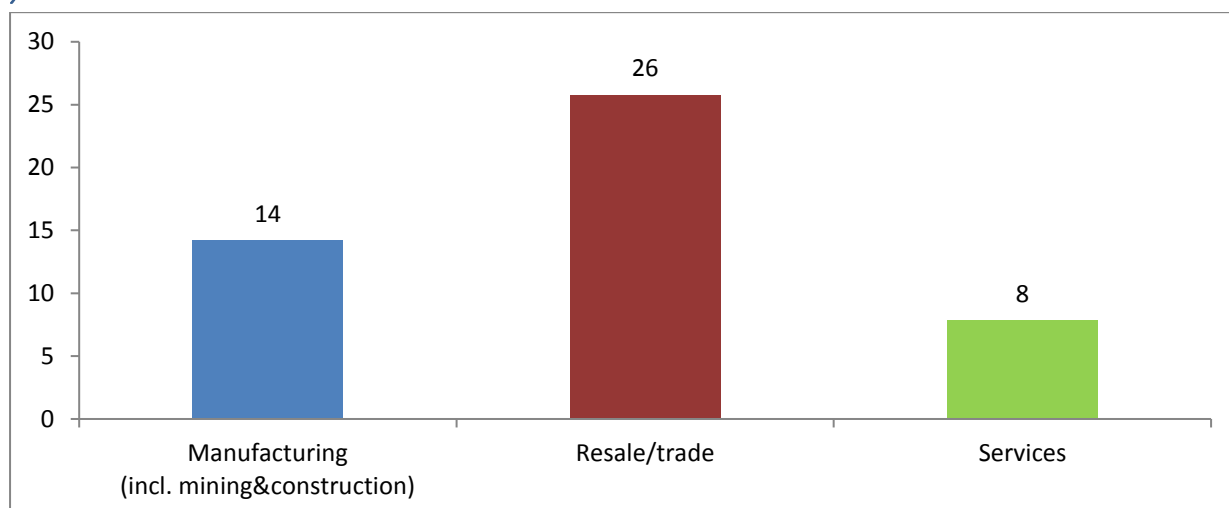
Note: Subsectors from manufacturing (including mining/quarrying and construction) are shown in blue, services in green, trade in red.

4. Value of income, expenses, inventories and assets

The MBS asked about businesses' income, expenses, inventories and assets. The sum of all values reported can be aggregated to the sector-wide or subsector-wide level (and subsequently, as appropriate, be divided by the aggregate number of workers or businesses) to derive the economic statistics presented in this chapter.

When considering total business income/turnover per worker (i.e. income from sales of resale goods, sales of manufactured goods, provision of services, etc.) a typical pattern emerges. The highest per-worker value is found in the trade sector, at MMK 26 million annually. This is unsurprising, as the trade sector generally is characterized by a fast turnaround of goods and therefore higher income/turnover values (which does not necessarily imply a higher profit, once expenses are accounted for). Second is the manufacturing sector, at MMK 14 million per worker. Last is the services sector, with an average annual income/turnover of MMK 8 million per worker – again, this is unsurprising, as the services sector usually has a lower reliance on input/resale goods and raw materials, thus resulting in lower business income/turnover (again, this implies nothing about profits in this sector).

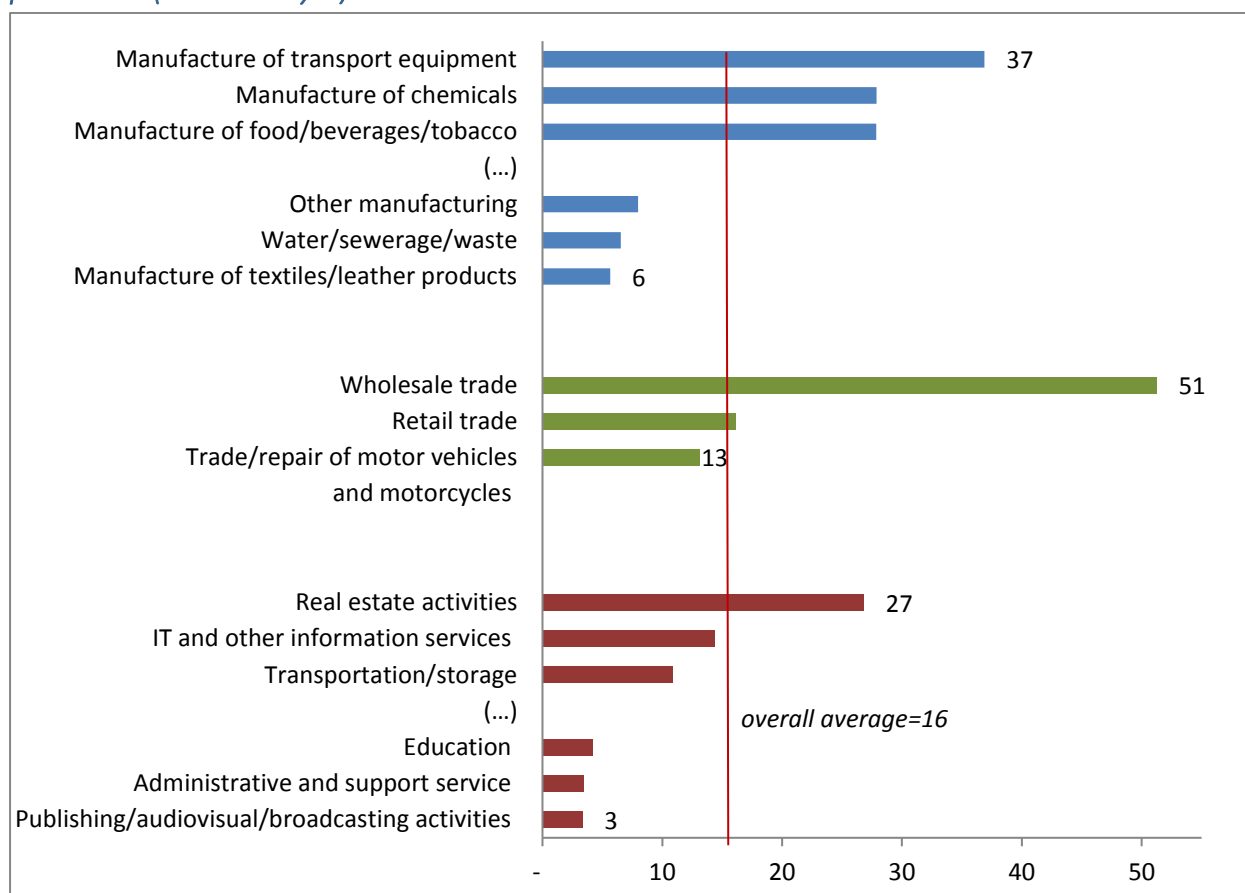
Figure 11: Myanmar business income/turnover per worker by economic sector (in million Kyat), year 2015.



Further analysis of business income/turnover per worker can be conducted at the subsector level. Figure 12 below shows the top three and bottom three subsectors for each sector with regards to average business income/turnover per worker (the trade sector has only three subsectors; therefore, all three are shown).

In manufacturing, the sector with the lowest business income/turnover per worker is textiles manufacturing, with only MMK 6 million per worker. The subsectors with the highest values are manufacturing of transport equipment, manufacturing of chemicals, and manufacture of food/beverages/tobacco. In the trade sector, wholesale has by far the highest business income/turnover per worker, at MMK 51 million per worker. Retail trade has a much lower business income/turnover, at MMK 16 million per worker. In the services sector, the highest business income/turnover per worker is observed for real estate activities, followed by IT services and transportation/storage.

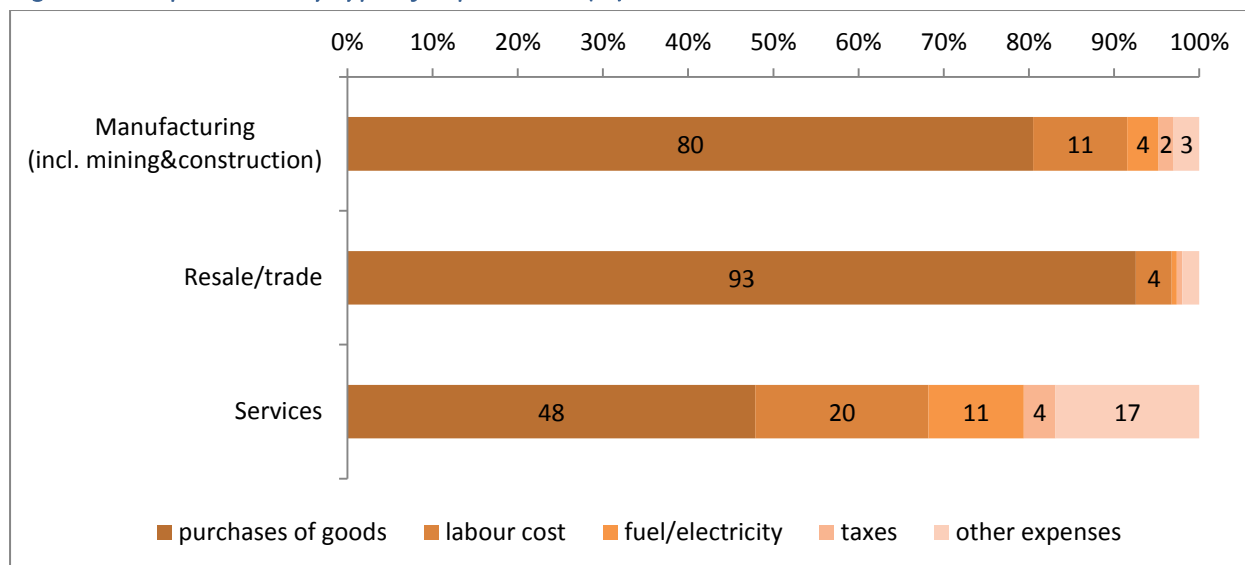
Figure 12: Top three and bottom three subsectors (for each sector) in terms of business income per worker (in million Kyat)



Turning from income to expenditure/costs, an analysis of expenditure per worker closely matches the patterns observed above for income, hence no such data is presented here (for further detail see tables in Annex A). However, the data on costs allows us to shed some light on some key expenditure items of businesses. As can be seen in Figure 13 below, businesses spend by far the highest amounts on goods (i.e. raw materials, resale goods, or input goods for service provision). Expenditure on labour is the second item, and as expected the patterns differ strongly between sectors. While the trade sector's expenditure is dominated by goods (93%, and only 4% on labour), the manufacturing and services sector spend substantially more on labour and less on goods (80%/11% for manufacturing, and 48%/20% for services).

Moreover, the expenditure analysis shows just how little Myanmar Businesses spend on taxes – between 1% and 4%. Other relevant items that businesses incur costs on are fuel and electricity – this is low for the trade sector but relatively high for manufacturing (4%) and even higher for the services sector (11%). Of course, these expenditure patterns vary strongly for the different subsectors, e.g. the high electricity&fuel costs in services are driven mainly by the transportation sector (cost for vehicle fuel) as well as the accommodation and real estate subsectors (electricity required for operating buildings/premises). Other subsectors with high expenditure on electricity&fuel are the electricity-generating subsector as well as the water distribution subsector.

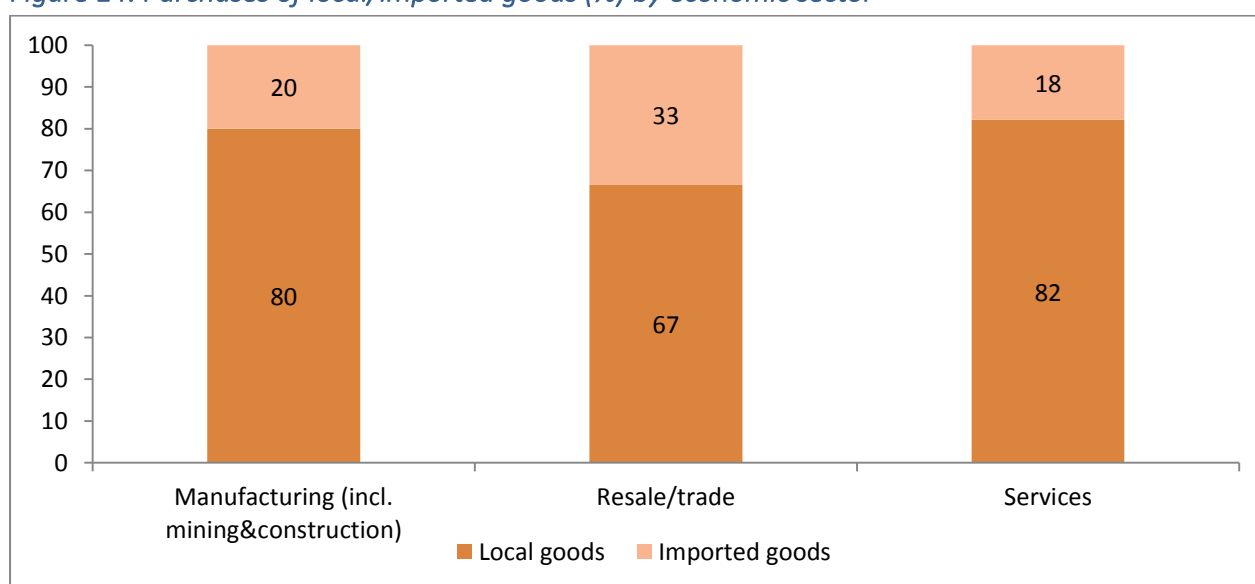
Figure 13: Expenditure by type of expenditure (%) and economic sector



The data on expenditure gathered through the MBS also allows us to investigate the use of local versus imported goods and raw materials across the different sectors. Local goods dominate in all three sectors, although trade stands out in using an elevated level of imported goods, at 33% as compared to 18-20% in the other two sectors (Figure 14). The use of local goods is found to be in 67% in the trade sector, 82% in the services sector and 80% in the manufacturing sector.

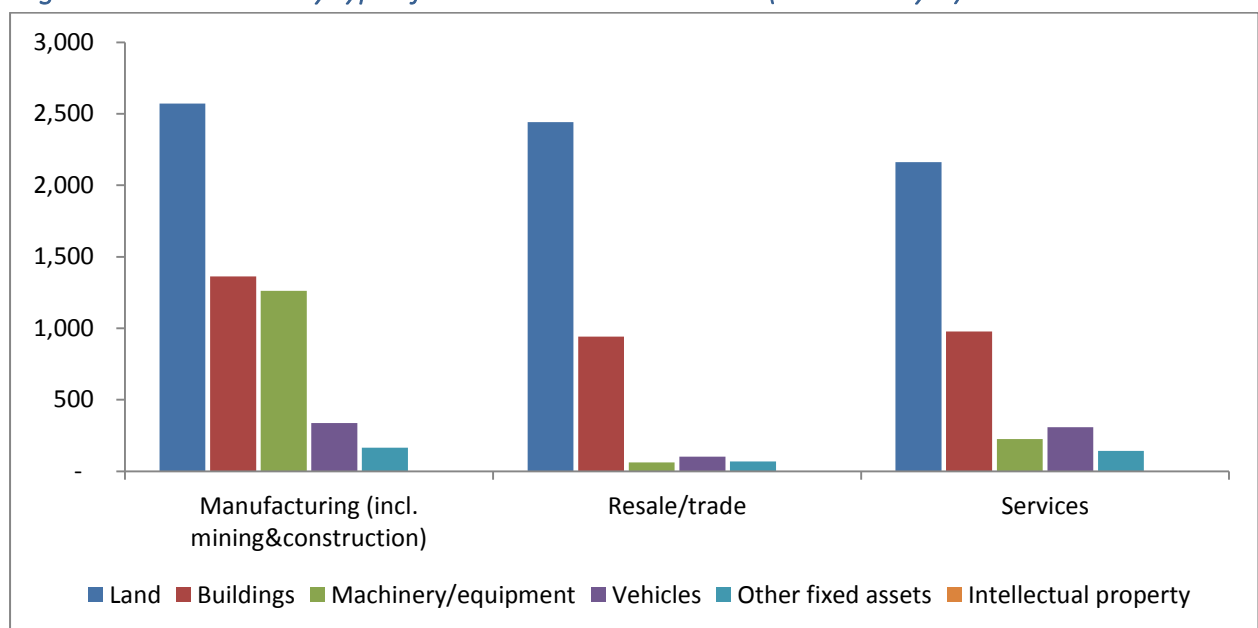
At the subsector level, high percentages of local goods are found in food/beverage/tobacco manufacturing as well as food/beverage service activities (both around 93%). In contrast, predominant use of imported goods is observed in manufacturing of chemicals (94%) and manufacture of transport equipment (96%).

Figure 14: Purchases of local/imported goods (%) by economic sector



Turning to assets, we already presented a graph on asset ownership across businesses in chapter 2 of this report. Figure 15 below provides additional information on the aggregate value of assets held in the economy. The value of land and buildings owned by businesses is high across all sectors, and well beyond MMK 7 billion (for land) and MMK 3 billion (for buildings) overall. Ownership of machinery and equipment is high in manufacturing and low for the other two sectors. Vehicles are observed mostly in the manufacturing and services sector (the latter includes transportation services). Ownership of intellectual property assets (such as software licenses, patents, etc.) is negligible.

Figure 15: Asset value by type of asset and economic sector (in million Kyat)



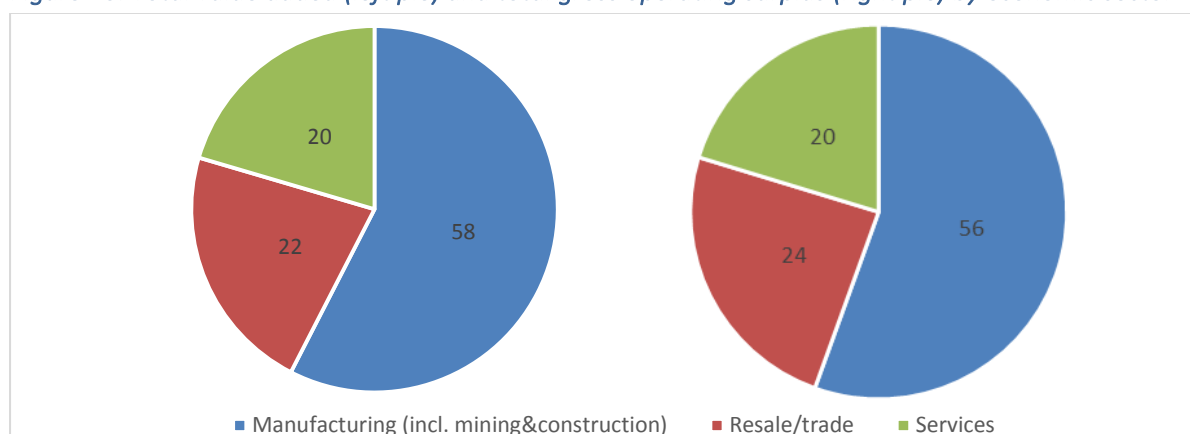
5. Composite economic indicators

This last chapter of the report presents findings on composite economic indicators that can be calculated from the data on income, expenditure and inventories. The most important composite indicators are:

1. **Value added**, which is calculated as income/turnover from productive activities *plus* increases in inventories *minus* expenditure on (intermediate) goods and services.¹² It can thereby roughly be described as the enhancement that a business gives to its product or service before selling it.
2. **Gross operating surplus**, calculated as value added *minus* personnel cost.¹³ It is similar albeit not entirely synonymous with profit, and shows what is left for a business from income/turnover from productive activities once all production-related (intermediate) costs are covered.
3. **Labour productivity**, calculated as value added *divided by* personnel cost or number of workers.¹⁴ It puts value added into perspective.
4. **Manufacturing output**, calculated as income/turnover from manufacturing activities *plus* increases in inventories of goods manufactured by the business. It gives an idea of the productive capacity of the manufacturing sector, and also accounts for possible manufacturing output produced by businesses whose primary activity may not be in the manufacturing sector.

Figure 16 below shows total value added (left chart) as well total gross operating surplus (right chart) across all businesses covered by the survey – the patterns are very similar. It shows that the manufacturing sector accounts by far for the highest percentage of value added and gross operating surplus in the surveyed economy, 56-58%. Trade and services account for another 20-24% each. The trade sector accounts for 22% and 24% of those two indicators and services account for 20% of both. At the subsector level, manufacturing of food/beverages/tobacco as well as manufacturing of textiles account for almost 40% of the total value added. Retail trade adds another 12%.

Figure 16: Total value added (left pie) and total gross operating surplus (right pie) by economic sector



¹² Calculation excludes donations but includes all taxes reported in the MBS (the data does not allow differentiating between production-related and other taxes).

¹³ Payments to working proprietors are excluded from personnel costs.

¹⁴ The calculation of labour productivity varies slightly from country to country - some divide by number of workers, others by personnel cost. The latter appears more appropriate in a context with many unpaid family workers. This report presents both options.

While the value added of the manufacturing sector is substantially higher than in other sectors, we also saw earlier that far more workers are employed in this sector than in the other two. It is therefore useful to put value added into perspective. Various ratios can be calculated, including value added over income, value added per business, value added to personnel cost, and value added per worker. The last two of these ratios are generally referred to as labour productivity.

For the first indicator, value added over income, the data displays the usual pattern - value added commonly constitutes a higher portion of income/turnover for more integrated companies (such as manufacturing and services), and a lower portion of income/turnover for less integrated businesses (such as trade).

The second indicator, value added per business, is in line with what we observed earlier on in this report – the manufacturing sector has by far the highest value added, but the number of firms is not substantially higher than that in other sectors. Hence, the manufacturing sector unsurprisingly has the highest value.

The third and fourth indicators, labour productivity (measured either as value added to personnel cost or as value added per worker), show an interesting pattern. While the values across sectors are not too dissimilar, the trade sector is highest, and the manufacturing sector is not much higher than the services sector (see Figure 17). When comparing this sectoral difference to other Asian countries (see Figure 18), with the exception of India, it shows that the relative labour productivity in manufacturing as compared to the services sector is still rather low in Myanmar.

At the subsector level (using value added to personnel costs), the highest labour productivity is observed in the IT and real estate subsectors, followed by retail and wholesale trade. In terms of the manufacturing sector, manufacture of food/beverages/tobacco has a relatively high labour productivity (which is partly explained by the low wages in this sector, which enter the denominator), as does manufacturing of transport equipment. Other high values in manufacturing include manufacturing of basic pharmaceutical products, manufacturing of chemicals, manufacture of wood products (excluding furniture) and manufacture of paper/printing. Very low labour productivity is observed in manufacturing of textiles/apparel/leather as well as manufacturing of rubber/plastic.

Figure 17: Value added over income, value added per business, value added to personnel cost, value added per worker, by economic sector (in % or million Kyat, as indicated)

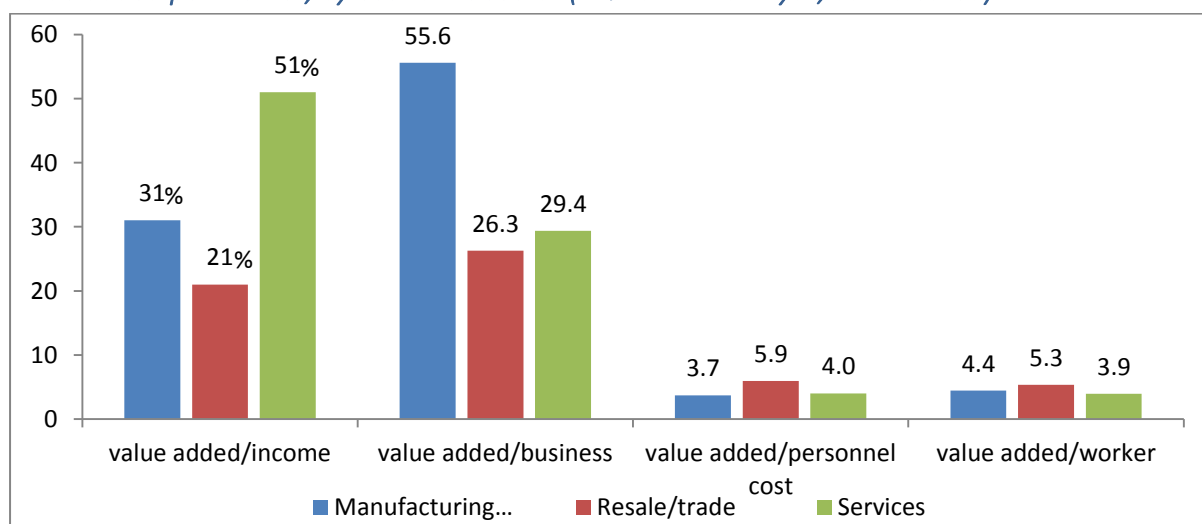
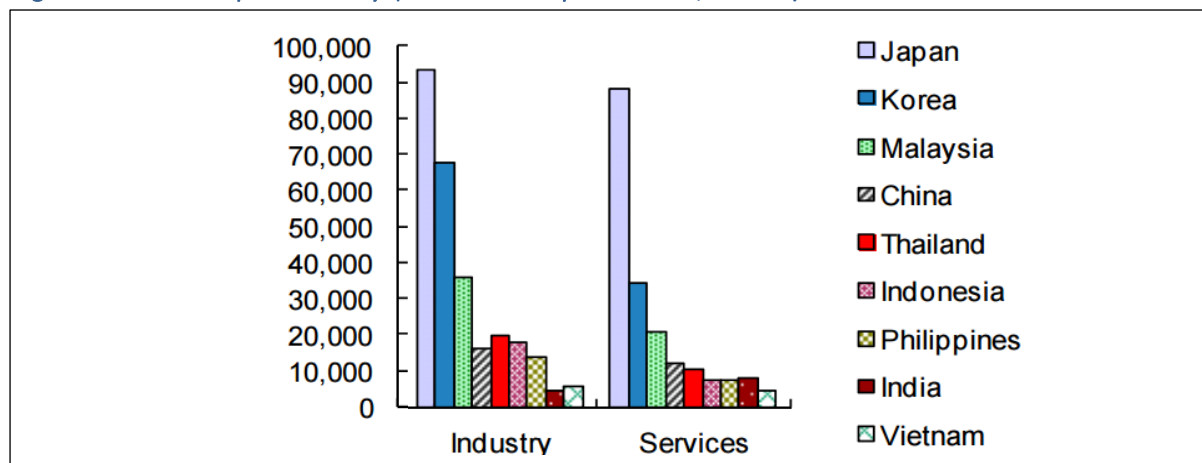


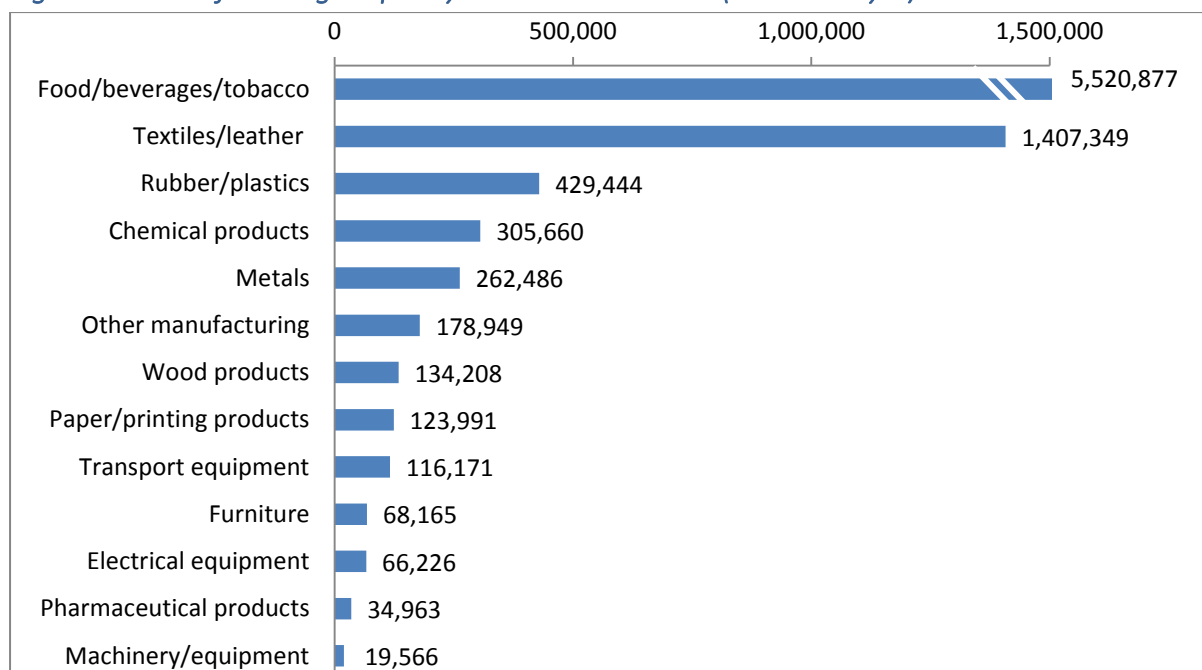
Figure 18: Labour productivity (value added per worker, in US\$) in other Asian countries



Source: Klyuev (2015): Structural Transformation—How Does Thailand Compare?, IMF Working Paper WP/15/51

Finally, the below Figure 19 shows total manufacturing output (in million Kyat). We remember from the first figure of this report that the vast majority of businesses in the manufacturing sector are in the food/beverages/tobacco manufacturing subsector. It is therefore unsurprising that the vast majority of manufacturing output also derives from it, with a total value of more than MMK 5.5 trillion (the first bar in the below figure is truncated because output from this sector outnumbers the second subsector by a factor of almost four).

Figure 19: Manufacturing output by economic subsector (in million Kyat)



6. Summary of findings

The MBS provides the most comprehensive data on private-sector establishments in Myanmar to date. It allows us to analyse general characteristics of businesses, to produce statistics on workers, to calculate the value of businesses' operations, and to compute composite economic indicators such as value added and labour productivity.

The MBS shows that there is little diversification in Myanmar's private sector, and rather a strong dominance of particular subsectors, e.g. in the manufacturing sector the vast majority of businesses manufacture food products, beverages and tobacco products. Likewise, in the services sector, more than half are engaged in food and beverage service activities. Moreover, the economy is dominated by small businesses with less than 10 workers. In the services and manufacturing sectors, 85% and 86% have less than 10 workers, 10% and 9% have 10-19 workers, 3% and 4% have 20-49 workers and only 2% have 50 or more workers. In the trade sector, 92% of businesses have less than 10 workers, 6% have 10-19 workers and 2% have 20-49 workers. While in the manufacturing sector more than 71% of businesses are 10 years or older, this is the case for only 60% of the trade sector and 53% of the services sector.

The survey also collected data on workers. The lowest average payments are made in the food and beverage service sectors – which also has the highest average number of hours worked. Likewise, working hours are long and average earnings are particularly low in the retail trade sector. On the opposite side of the spectrum, we find professional/scientific/technical activities, which have the highest average compensation.

When considering total income/turnover per worker, a typical pattern emerges. The highest per-worker value is found in the trade sector. This is unsurprising, as the trade sector generally is characterized by a fast turnaround of goods and therefore higher income values (which does not necessarily imply a higher profit, once expenses are accounted for). Second is the manufacturing sector, followed by the services sector. Turning from income to expenditure/costs, businesses spend by far the highest amounts on goods (i.e. raw materials, resale goods, or input goods for service provision). Expenditure on labour is the second item, followed by costs of fuel and electricity. Local goods dominate in all three sectors, although trade stands out in using an elevated level of imported goods.

The manufacturing sector accounts by far for the highest percentage of value added and gross operating surplus in the surveyed economy, 56-58%. The trade sector accounts for 22% and 24% of those two indicators, and services account for 20% of both. At the subsector level, manufacturing of food/beverages/tobacco as well as manufacturing of textiles jointly account for almost 40% of the total value added. Retail trade adds another 12%. Labour productivity in Myanmar remains low compared to other Asian countries.

The data from the MBS shows that Myanmar's private sector is still characterized by relatively low levels of diversification and productivity, and that there is substantial potential for development. It is hoped that the new data provided through the MBS can enhance our knowledge about the sector's current contribution to economic growth and development, and help design evidence-based policies for improved private sector development.

Annex A: Data tables

Characteristics of businesses in Myanmar

Table 1: Distribution of businesses across economic sectors (%)

Main economic activity of business	Number	Percentage
Mining and quarrying	504	0.4
Manufacture of food products, beverages and tobacco products	27,127	21.4
Manufacture of textiles, wearing apparel, leather and related products	3,830	3.0
Manufacture of wood products	1,114	0.9
Manufacture of paper products; printing and reproduction of recorded media	1,455	1.1
Manufacture of chemicals and chemical products	299	0.2
Manufacture of basic pharmaceutical products and pharmaceutical preparations	228	0.2
Manufacture of rubber and plastics products, and other non-metallic mineral products	7,137	5.6
Manufacture of basic metals and fabricated metal products, except machinery and equipment	3,077	2.4
Manufacture of electrical equipment	51	0.0
Manufacture of machinery and equipment n.e.c.	187	0.1
Manufacture of transport equipment	486	0.4
Manufacture of furniture	1,229	1.0
Other manufacturing; repair and installation of machinery and equipment	4,109	3.2
Electricity, gas, steam and air conditioning supply	104	0.1
Water supply; sewerage, waste management and remediation	44	0.0
Construction	161	0.1
Trade and repair of motor vehicles and motorcycles	5,397	4.3
Wholesale trade (except motor vehicles and motorcycles)	8,480	6.7
Retail trade (except motor vehicles and motorcycles)	27,492	21.7
Transportation and storage	4,150	3.3
Accommodation	2,348	1.8
Food and beverage service activities	18,890	14.9
Publishing, audiovisual and broadcasting activities	560	0.4
IT and other information services	332	0.3
Real estate activities	29	0.0
Professional, scientific and technical activities	318	0.3
Administrative and support service activities	1,904	1.5
Education	331	0.3
Human health activities	610	0.5
Arts, entertainment and recreation	320	0.3
Other service activities	4,624	3.6
Total	126,928	100.0

Table 2: Geographical distribution of businesses (%), by main economic activity of business

Main economic activity of business	State/region															Total	Total #
	Kachin State	Kayah State	Kayin State	Chin State	Sagaing Region	Thanin-thary Region	Bago Region	Magwe Region	Mandalay Region	Mon State	Rakhine State	Yagon Region	Shan State	Ayeyar-waddy Region	Nay Pyi Taw		
Mining and quarrying	1.4	0.9	0.2	0.0	0.4	56.8	5.8	0.4	26.1	3.4	0.0	2.2	2.4	0.0	0.0	100.0	504
Manufacture of food products, beverages and tobacco products	1.4	0.5	1.3	1.3	16.8	4.9	11.9	10.5	12.6	2.8	5.5	9.2	7.2	11.4	2.7	100.0	27,127
Manufacture of textiles, wearing apparel, leather and related products	3.6	0.4	0.3	1.3	3.7	1.0	2.1	8.5	46.5	0.4	0.0	25.8	5.4	1.0	0.0	100.0	3,830
Manufacture of wood products	0.1	2.0	4.0	0.0	7.3	14.3	4.7	0.5	17.6	6.3	1.2	21.4	13.5	5.5	1.6	100.0	1,114
Manufacture of paper products; printing and reproduction of recorded media	2.0	0.6	0.4	0.0	7.8	5.8	4.0	3.3	18.8	2.3	6.6	41.5	3.1	2.9	0.9	100.0	1,455
Manufacture of chemicals and chemical products	2.3	0.0	0.4	0.0	4.0	0.4	0.3	9.9	45.2	0.4	6.7	22.4	6.6	0.4	1.1	100.0	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	0.9	0.0	1.5	0.0	0.9	2.1	0.8	2.8	2.9	1.6	0.0	76.3	9.5	0.5	0.0	100.0	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	0.5	0.2	0.3	0.0	2.1	13.1	0.1	2.8	5.3	64.0	0.3	9.7	1.0	0.4	0.2	100.0	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	2.5	0.5	3.4	1.0	6.4	2.0	5.8	10.1	28.7	2.8	0.8	26.8	5.6	2.5	0.9	100.0	3,077
Manufacture of electrical equipment	0.0	0.0	0.0	0.0	2.1	0.0	4.5	0.0	7.9	0.0	7.0	76.0	2.5	0.0	0.0	100.0	51
Manufacture of machinery and equipment n.e.c.	2.3	0.0	3.8	0.7	9.4	0.0	10.9	1.0	28.3	3.3	0.0	19.2	4.4	15.5	1.2	100.0	187
Manufacture of transport equipment	0.0	0.0	0.0	0.8	4.8	1.9	0.4	0.0	37.6	0.0	0.0	31.3	20.2	2.9	0.0	100.0	486
Manufacture of furniture	5.5	1.2	7.9	0.0	15.5	4.3	2.1	1.7	7.9	5.1	1.1	32.8	12.5	1.0	1.4	100.0	1,229
Other manufacturing; repair and installation of machinery and equipment	1.2	0.4	1.8	0.8	9.1	4.6	7.3	8.2	19.2	2.3	5.1	22.8	9.9	5.6	1.8	100.0	4,109
Electricity, gas, steam and air conditioning supply	0.0	0.0	3.2	23.4	0.0	11.8	2.7	2.8	0.0	8.9	6.4	38.5	2.2	0.0	0.0	100.0	104
Water supply; sewerage, waste management and remediation	0.0	0.0	0.0	0.0	0.0	8.2	0.0	72.0	0.0	0.0	0.0	19.8	0.0	0.0	0.0	100.0	44
Construction	0.0	1.1	0.0	13.1	9.5	5.3	1.4	0.0	3.2	0.0	1.4	28.4	24.6	0.6	11.4	100.0	161
Trade and repair of motor vehicles and motorcycles	4.4	1.8	2.5	0.2	7.4	6.2	4.2	10.5	26.0	7.3	4.2	8.9	11.6	1.6	3.2	100.0	5,397
Wholesale trade (except motor vehicles and motorcycles)	0.7	1.1	1.6	0.0	7.2	9.7	7.4	22.1	9.6	2.1	5.1	20.0	7.2	3.3	3.0	100.0	8,480
Retail trade (except motor vehicles and motorcycles)	1.6	1.2	3.3	2.1	4.8	10.3	9.1	7.2	13.2	7.1	4.7	19.7	9.1	4.3	2.3	100.0	27,492
Transportation and storage	0.4	0.0	1.4	1.0	15.4	19.6	5.5	7.2	6.1	5.5	16.5	10.6	6.5	2.3	2.0	100.0	4,150
Accommodation	4.3	0.6	2.7	0.3	7.3	4.2	3.7	2.9	18.4	3.6	6.4	12.2	23.0	7.7	2.7	100.0	2,348
Food and beverage service activities	1.6	0.6	4.3	0.6	9.5	8.0	3.9	7.4	15.7	6.5	4.8	22.5	8.1	4.3	2.2	100.0	18,890
Publishing, audiovisual and broadcasting activities	1.5	0.0	2.7	0.2	2.3	6.3	0.5	3.8	25.0	0.5	25.6	8.6	22.3	0.6	0.0	100.0	560
IT and other information services	0.0	1.3	0.3	1.5	3.3	7.7	1.0	2.3	0.3	4.0	3.4	29.8	34.7	7.3	2.9	100.0	332
Real estate activities	0.0	0.0	0.0	0.0	0.0	21.9	24.8	0.0	0.0	0.0	0.0	41.8	11.4	0.0	0.0	100.0	29
Professional, scientific and technical activities	5.0	0.3	0.3	3.7	6.5	9.8	2.3	0.7	9.4	3.2	1.8	30.0	14.1	9.5	3.2	100.0	318
Administrative and support service activities	1.0	1.2	0.7	0.3	5.0	14.8	6.8	7.0	9.3	4.6	4.5	32.2	10.5	1.3	0.8	100.0	1,904
Education	3.2	4.0	0.0	6.3	3.2	24.4	1.5	10.9	9.9	0.0	0.4	33.0	3.3	0.0	0.0	100.0	331
Human health activities	2.1	0.7	0.0	1.3	2.1	6.3	2.9	16.3	8.1	5.9	4.2	45.8	3.1	1.0	0.0	100.0	610
Arts, entertainment and recreation	1.0	5.3	0.3	0.0	0.0	32.9	7.2	0.6	5.0	0.0	0.0	23.3	21.7	2.0	0.7	100.0	320
Other service activities	2.0	0.6	3.3	0.8	1.0	14.1	11.4	8.2	11.2	3.9	2.1	22.5	17.9	0.6	0.4	100.0	4,624
Total	1.7	0.8	2.4	1.1	8.7	8.6	7.2	8.7	14.8	8.0	4.7	17.9	8.6	5.0	2.0	100.0	126,928

Table 3: Distribution of businesses by location in industrial zone (%), by main economic activity of business

Main economic activity of business	Location inside or outside industrial zone				Total # of businesses
	Inside industrial zone	Outside industrial zone	Missing data	Total	
Mining and quarrying	0.5	99.5	0.0	100.0	504
Manufacture of food products, beverages and tobacco products	4.8	95.2	0.0	100.0	27,127
Manufacture of textiles, wearing apparel, leather and related products	14.3	85.7	0.0	100.0	3,830
Manufacture of wood products	13.3	86.7	0.0	100.0	1,114
Manufacture of paper products; printing and reproduction of recorded media	8.0	92.0	0.0	100.0	1,455
Manufacture of chemicals and chemical products	21.0	79.0	0.0	100.0	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	11.8	88.2	0.0	100.0	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	8.0	92.0	0.0	100.0	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	30.3	69.7	0.0	100.0	3,077
Manufacture of electrical equipment	87.7	12.3	0.0	100.0	51
Manufacture of machinery and equipment n.e.c.	34.1	65.9	0.0	100.0	187
Manufacture of transport equipment	59.5	40.5	0.0	100.0	486
Manufacture of furniture	7.0	92.9	0.1	100.0	1,229
Other manufacturing; repair and installation of machinery and equipment	20.2	79.8	0.0	100.0	4,109
Electricity, gas, steam and air conditioning supply	2.3	97.7	0.0	100.0	104
Water supply; sewerage, waste management and remediation	0.0	100.0	0.0	100.0	44
Construction	6.9	93.1	0.0	100.0	161
Trade and repair of motor vehicles and motorcycles	14.1	85.4	0.5	100.0	5,397
Wholesale trade (except motor vehicles and motorcycles)	5.4	94.6	0.0	100.0	8,480
Retail trade (except motor vehicles and motorcycles)	2.2	97.6	0.2	100.0	27,492
Transportation and storage	3.9	96.0	0.1	100.0	4,150
Accommodation	0.6	99.4	0.0	100.0	2,348
Food and beverage service activities	1.4	98.6	0.0	100.0	18,890
Publishing, audiovisual and broadcasting activities	0.2	99.8	0.0	100.0	560
IT and other information services	1.5	97.8	0.7	100.0	332
Real estate activities	7.9	92.1	0.0	100.0	29
Professional, scientific and technical activities	1.6	98.4	0.0	100.0	318
Administrative and support service activities	4.8	95.2	0.0	100.0	1,904
Education	0.7	99.3	0.0	100.0	331
Human health activities	1.4	98.6	0.0	100.0	610
Arts, entertainment and recreation	0.4	99.6	0.0	100.0	320
Other service activities	3.7	96.3	0.0	100.0	4,624
Total	6.0	93.9	0.1	100.0	126,928

Table 4: Distribution of businesses by type of ownership (%), by main economic activity of business

Main economic activity of business	Type of ownership									Total	Total # of businesses
	Private owned by national(s)	Private owned by foreigner(s)	Co-operative	Joint Venture owned by national and foreign company(s)	Joint Venture owned by public and national company(s)	Joint Venture owned by public and foreign company(s)	Other	Missing data			
Mining and quarrying	95.0	0.7	0.0	0.2	0.5	0.0	3.6	0.0	100.0	504	
Manufacture of food products, beverages and tobacco prod.	99.1	0.7	0.0	0.1	0.0	0.0	0.0	0.1	100.0	27,127	
Manufacture of textiles, wearing apparel, leather and related products	95.0	3.7	0.0	0.5	0.1	0.0	0.0	0.6	100.0	3,830	
Manufacture of wood products	99.4	0.5	0.0	0.1	0.0	0.0	0.0	0.1	100.0	1,114	
Manufacture of paper products; printing and reproduction of recorded media	97.5	0.1	0.0	0.0	0.7	0.0	0.1	1.6	100.0	1,455	
Manufacture of chemicals and chemical products	97.5	0.9	0.4	0.8	0.0	0.0	0.0	0.4	100.0	299	
Manufacture of basic pharmaceutical products and pharmaceutical preparations	99.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	100.0	228	
Manufacture of rubber and plastics products, and other non-metallic mineral products	99.5	0.1	0.0	0.0	0.1	0.0	0.0	0.3	100.0	7,137	
Manufacture of basic metals and fabricated metal products, except machinery and equipment	99.3	0.1	0.0	0.2	0.0	0.0	0.1	0.3	100.0	3,077	
Manufacture of electrical equipment	87.7	2.4	0.0	9.9	0.0	0.0	0.0	0.0	100.0	51	
Manufacture of machinery and equipment n.e.c.	97.3	0.0	2.0	0.0	0.7	0.0	0.0	0.0	100.0	187	
Manufacture of transport equipment	99.7	0.0	0.0	0.3	0.0	0.0	0.0	0.0	100.0	486	
Manufacture of furniture	99.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0	100.0	1,229	
Other manufacturing; repair and installation of machinery and equipment	95.9	0.8	1.0	0.0	0.1	0.0	0.0	2.2	100.0	4,109	
Electricity, gas, steam and air conditioning supply	97.9	1.1	0.0	0.0	1.0	0.0	0.0	0.0	100.0	104	
Water supply; sewerage, waste management and remediation	94.3	0.0	5.7	0.0	0.0	0.0	0.0	0.0	100.0	44	
Construction	92.5	0.0	0.0	0.8	6.1	0.0	0.0	0.6	100.0	161	
Trade and repair of motor vehicles and motorcycles	98.6	0.1	0.0	0.2	0.0	0.0	0.0	1.1	100.0	5,397	
Wholesale trade (except motor vehicles and motorcycles)	96.2	0.7	0.0	2.1	0.4	0.0	0.1	0.6	100.0	8,480	
Retail trade (except motor vehicles and motorcycles)	99.2	0.0	0.1	0.0	0.1	0.0	0.0	0.6	100.0	27,492	
Transportation and storage	95.6	0.9	0.0	0.0	2.8	0.0	0.3	0.4	100.0	4,150	
Accommodation	93.6	3.4	1.7	0.1	1.0	0.0	0.0	0.1	100.0	2,348	
Food and beverage service activities	98.1	0.6	0.0	0.9	0.0	0.0	0.0	0.4	100.0	18,890	
Publishing, audiovisual and broadcasting activities	94.5	0.0	0.0	0.0	0.3	0.0	0.3	4.8	100.0	560	
IT and other information services	97.5	1.1	0.0	0.0	0.7	0.0	0.0	0.7	100.0	332	
Real estate activities	77.2	8.6	14.2	0.0	0.0	0.0	0.0	0.0	100.0	29	
Professional, scientific and technical activities	98.4	0.8	0.0	0.8	0.0	0.0	0.0	0.0	100.0	318	
Administrative and support service activities	96.8	0.5	2.2	0.0	0.2	0.0	0.2	0.1	100.0	1,904	
Education	97.3	0.0	0.7	0.0	0.7	0.0	0.9	0.3	100.0	331	
Human health activities	96.1	0.2	0.7	0.0	0.6	0.0	2.4	0.0	100.0	610	
Arts, entertainment and recreation	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	320	
Other service activities	96.8	0.1	1.3	0.0	0.2	0.0	0.5	1.0	100.0	4,624	
Total	98.1	0.6	0.2	0.3	0.2	0.0	0.1	0.5	100.0	126,928	

Table 5: Distribution of businesses by type of establishment (%), by main economic activity of business

Main economic activity of business	Type of establishment					Total # of businesses
	Single unit	Head establishment	Branch	Missing data	Total	
Mining and quarrying	96.7	0.3	3.0	0.0	100.0	504
Manufacture of food products, beverages and tobacco products	97.2	1.6	1.2	0.0	100.0	27,127
Manufacture of textiles, wearing apparel, leather and related products	96.9	1.7	1.4	0.0	100.0	3,830
Manufacture of wood products	98.8	0.5	0.7	0.0	100.0	1,114
Manufacture of paper products; printing and reproduction of recorded media	95.1	3.0	1.7	0.2	100.0	1,455
Manufacture of chemicals and chemical products	96.7	0.0	3.3	0.0	100.0	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	95.8	2.6	1.5	0.0	100.0	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	99.3	0.2	0.5	0.0	100.0	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	98.0	0.2	1.8	0.0	100.0	3,077
Manufacture of electrical equipment	70.8	9.8	19.4	0.0	100.0	51
Manufacture of machinery and equipment n.e.c.	97.4	0.7	1.9	0.0	100.0	187
Manufacture of transport equipment	97.0	0.3	2.7	0.0	100.0	486
Manufacture of furniture	96.2	0.6	3.3	0.0	100.0	1,229
Other manufacturing; repair and installation of machinery and equipment	95.8	1.3	1.7	1.1	100.0	4,109
Electricity, gas, steam and air conditioning supply	94.5	0.0	5.5	0.0	100.0	104
Water supply; sewerage, waste management and remediation	100.0	0.0	0.0	0.0	100.0	44
Construction	59.5	18.8	21.8	0.0	100.0	161
Trade and repair of motor vehicles and motorcycles	97.1	1.4	1.5	0.0	100.0	5,397
Wholesale trade (except motor vehicles and motorcycles)	93.5	2.0	4.4	0.0	100.0	8,480
Retail trade (except motor vehicles and motorcycles)	95.6	0.9	3.4	0.1	100.0	27,492
Transportation and storage	89.9	1.3	8.7	0.0	100.0	4,150
Accommodation	92.4	2.3	5.2	0.1	100.0	2,348
Food and beverage service activities	95.4	0.7	3.8	0.1	100.0	18,890
Publishing, audiovisual and broadcasting activities	98.2	0.8	1.0	0.0	100.0	560
IT and other information services	96.4	0.7	2.9	0.0	100.0	332
Real estate activities	96.4	0.0	3.6	0.0	100.0	29
Professional, scientific and technical activities	96.7	1.2	2.2	0.0	100.0	318
Administrative and support service activities	97.3	0.5	2.2	0.0	100.0	1,904
Education	97.5	0.3	2.1	0.0	100.0	331
Human health activities	93.9	0.3	5.7	0.0	100.0	610
Arts, entertainment and recreation	97.5	0.4	2.1	0.0	100.0	320
Other service activities	96.2	0.4	3.3	0.0	100.0	4,624
Total	95.9	1.2	2.8	0.1	100.0	126,928

Table 6: Registration status of businesses (%), by main economic activity of business

Main economic activity of business	Registration status				Total # of businesses
	DICA	Any Union Ministry or affiliated Union-level agency	Municipal office or township/city development committee	GAD	
Mining and quarrying	19.1	87.1	43.6	41.5	504
Manufacture of food products, beverages and tobacco products	3.1	60.4	71.3	8.4	27,127
Manufacture of textiles, wearing apparel, leather and related products	12.1	46.1	84.6	5.4	3,830
Manufacture of wood products	4.4	59.8	63.6	3.9	1,114
Manufacture of paper products; printing and reproduction of recorded media	5.4	64.4	86.2	7.5	1,455
Manufacture of chemicals and chemical products	17.2	64.0	65.0	1.7	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	6.5	89.2	92.0	9.0	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	2.6	31.7	47.1	5.6	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	2.7	64.5	80.7	3.8	3,077
Manufacture of electrical equipment	56.9	92.8	88.5	7.3	51
Manufacture of machinery and equipment n.e.c.	6.6	75.6	87.6	9.5	187
Manufacture of transport equipment	14.0	72.1	79.4	1.0	486
Manufacture of furniture	2.6	49.0	83.4	4.9	1,229
Other manufacturing; repair and installation of machinery and equipment	6.5	49.0	88.8	6.2	4,109
Electricity, gas, steam and air conditioning supply	2.2	82.7	77.3	47.4	104
Water supply; sewerage, waste management and remediation	0.0	27.0	70.0	8.6	44
Construction	67.8	30.1	73.1	8.9	161
Trade and repair of motor vehicles and motorcycles	3.9	33.3	83.5	4.4	5,397
Wholesale trade (except motor vehicles and motorcycles)	4.7	35.7	82.8	8.5	8,480
Retail trade (except motor vehicles and motorcycles)	3.7	30.5	87.0	9.3	27,492
Transportation and storage	5.5	63.2	61.7	10.4	4,150
Accommodation	9.0	57.6	81.7	14.5	2,348
Food and beverage service activities	2.5	26.4	89.2	17.8	18,890
Publishing, audiovisual and broadcasting activities	1.6	52.3	64.2	5.1	560
IT and other information services	3.8	37.1	94.1	5.2	332
Real estate activities	13.1	59.3	65.7	0.0	29
Professional, scientific and technical activities	4.8	26.8	92.3	11.4	318
Administrative and support service activities	4.0	54.7	71.5	7.2	1,904
Education	2.5	56.4	57.6	6.7	331
Human health activities	7.6	70.6	74.2	4.5	610
Arts, entertainment and recreation	0.8	26.0	62.0	20.0	320
Other service activities	5.7	37.8	81.6	2.9	4,624
Total	4.2	42.8	79.0	9.4	126,928

Notes: Row totals do not sum up to 100% because businesses can be registered with more than one authority. Missing data was excluded for calculation of the above percentages.

Table 7: Distribution of businesses by number of economic activities (%), by main economic activity of business

Main economic activity of business	Number of economic activities			Total # of businesses
	Engaged in only one economic activity	Engaged in more than one economic activity	Total	
Mining and quarrying	99.7	0.3	100.0	504
Manufacture of food products, beverages and tobacco products	97.7	2.3	100.0	27,127
Manufacture of textiles, wearing apparel, leather and related products	99.7	0.3	100.0	3,830
Manufacture of wood products	98.8	1.2	100.0	1,114
Manufacture of paper products; printing and reproduction of recorded media	91.5	8.5	100.0	1,455
Manufacture of chemicals and chemical products	99.6	0.4	100.0	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	99.0	1.0	100.0	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	99.6	0.4	100.0	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	98.4	1.6	100.0	3,077
Manufacture of electrical equipment	95.3	4.7	100.0	51
Manufacture of machinery and equipment n.e.c.	87.5	12.5	100.0	187
Manufacture of transport equipment	96.6	3.4	100.0	486
Manufacture of furniture	97.9	2.1	100.0	1,229
Other manufacturing; repair and installation of machinery and equipment	97.2	2.8	100.0	4,109
Electricity, gas, steam and air conditioning supply	99.1	0.9	100.0	104
Water supply; sewerage, waste management and remediation	100.0	0.0	100.0	44
Construction	81.2	18.8	100.0	161
Trade and repair of motor vehicles and motorcycles	98.5	1.5	100.0	5,397
Wholesale trade (except motor vehicles and motorcycles)	96.6	3.4	100.0	8,480
Retail trade (except motor vehicles and motorcycles)	96.8	3.2	100.0	27,492
Transportation and storage	90.6	9.4	100.0	4,150
Accommodation	97.5	2.5	100.0	2,348
Food and beverage service activities	98.4	1.6	100.0	18,890
Publishing, audiovisual and broadcasting activities	75.8	24.2	100.0	560
IT and other information services	90.1	9.9	100.0	332
Real estate activities	84.5	15.5	100.0	29
Professional, scientific and technical activities	95.4	4.6	100.0	318
Administrative and support service activities	88.6	11.4	100.0	1,904
Education	99.1	0.9	100.0	331
Human health activities	98.4	1.6	100.0	610
Arts, entertainment and recreation	96.4	3.6	100.0	320
Other service activities	99.3	0.7	100.0	4,624
Total	97.2	2.8	100.0	126,928

Notes: A business is considered as having more than one economic activity if it is stated having a secondary economic activity, and only if this secondary activity differs from the business's primary activity in terms of the 2-level MSIC code.

Table 8: Distribution of businesses by age of businesses (years since establishment) (%), by main economic activity of business

Main economic activity of business	Age of business (years since establishment)						Total	Total # of businesses
	0-4 years	5-9 years	10-19 years	20+ years	Missing data			
Mining and quarrying	10.6	42.8	17.3	29.2	0.0	100.0	504	
Manufacture of food products, beverages and tobacco products	9.0	21.3	38.9	30.4	0.5	100.0	27,127	
Manufacture of textiles, wearing apparel, leather and related products	17.1	11.1	41.0	30.7	0.1	100.0	3,830	
Manufacture of wood products	9.7	5.8	40.0	44.4	0.1	100.0	1,114	
Manufacture of paper products; printing and reproduction of recorded media	13.9	21.1	29.1	35.7	0.2	100.0	1,455	
Manufacture of chemicals and chemical products	6.9	13.9	54.3	24.9	0.0	100.0	299	
Manufacture of basic pharmaceutical products and pharmaceutical preparations	1.0	3.7	9.3	86.1	0.0	100.0	228	
Manufacture of rubber and plastics products, and other non-metallic mineral products	9.7	15.9	47.0	27.3	0.1	100.0	7,137	
Manufacture of basic metals and fabricated metal products, except machinery and equipment	10.8	14.1	34.8	39.5	0.7	100.0	3,077	
Manufacture of electrical equipment	19.2	28.8	39.6	12.4	0.0	100.0	51	
Manufacture of machinery and equipment n.e.c.	2.5	18.3	51.6	26.4	1.2	100.0	187	
Manufacture of transport equipment	20.4	6.8	45.9	26.8	0.0	100.0	486	
Manufacture of furniture	21.3	15.3	33.1	30.0	0.4	100.0	1,229	
Other manufacturing; repair and installation of machinery and equipment	8.4	15.7	38.3	37.4	0.1	100.0	4,109	
Electricity, gas, steam and air conditioning supply	20.1	22.9	18.5	38.5	0.0	100.0	104	
Water supply; sewerage, waste management and remediation	21.7	21.7	19.7	36.9	0.0	100.0	44	
Construction	33.4	30.6	14.9	20.2	0.8	100.0	161	
Trade and repair of motor vehicles and motorcycles	21.0	27.1	36.1	14.6	1.2	100.0	5,397	
Wholesale trade (except motor vehicles and motorcycles)	15.9	17.7	32.3	34.0	0.1	100.0	8,480	
Retail trade (except motor vehicles and motorcycles)	19.6	20.3	34.2	25.3	0.6	100.0	27,492	
Transportation and storage	28.5	24.1	27.1	20.2	0.1	100.0	4,150	
Accommodation	22.8	14.9	33.5	28.5	0.3	100.0	2,348	
Food and beverage service activities	21.0	24.8	32.9	21.0	0.3	100.0	18,890	
Publishing, audiovisual and broadcasting activities	13.2	21.5	38.6	14.4	12.4	100.0	560	
IT and other information services	22.3	54.8	13.2	9.8	0.0	100.0	332	
Real estate activities	11.9	23.0	8.8	56.3	0.0	100.0	29	
Professional, scientific and technical activities	12.6	36.4	17.7	32.9	0.4	100.0	318	
Administrative and support service activities	17.0	30.8	37.3	14.7	0.2	100.0	1,904	
Education	30.9	16.7	23.7	28.7	0.0	100.0	331	
Human health activities	18.9	15.0	29.2	36.5	0.6	100.0	610	
Arts, entertainment and recreation	11.3	40.7	44.1	3.9	0.0	100.0	320	
Other service activities	28.6	22.9	31.3	16.3	0.8	100.0	4,624	
Total	16.5	20.8	35.6	26.7	0.5	100.0	126,928	

Table 9: Size distribution of businesses (%), by main economic activity of business

Main economic activity of business	Number of workers (size of business)								Total	Total # of businesses
	0-4	5-9	10-19	20-49	50-99	100-249	250+			
Mining and quarrying	6.6	59.7	12.3	11.4	3.8	4.0	2.2	100.0	504	
Manufacture of food products, beverages and tobacco products	67.0	21.9	6.3	3.3	0.6	0.7	0.2	100.0	27,127	
Manufacture of textiles, wearing apparel, leather and related products	33.1	26.3	21.1	9.4	2.0	2.1	6.1	100.0	3,830	
Manufacture of wood products	42.8	44.8	8.1	2.3	1.0	0.6	0.4	100.0	1,114	
Manufacture of paper products; printing and reproduction of recorded media	62.2	23.2	10.0	2.6	0.8	1.1	0.2	100.0	1,455	
Manufacture of chemicals and chemical products	17.1	47.4	14.4	7.9	4.9	3.2	5.2	100.0	299	
Manufacture of basic pharmaceutical products and pharmaceutical preparations	70.9	11.8	8.9	4.2	2.6	0.5	1.1	100.0	228	
Manufacture of rubber and plastics products, and other non-metallic mineral products	68.1	18.0	6.2	5.5	1.2	0.7	0.3	100.0	7,137	
Manufacture of basic metals and fabricated metal products, except machinery and equipment	48.2	40.0	8.0	2.8	0.4	0.4	0.2	100.0	3,077	
Manufacture of electrical equipment	12.1	2.5	15.1	14.8	16.8	21.7	17.0	100.0	51	
Manufacture of machinery and equipment n.e.c.	46.4	35.4	11.4	2.7	2.7	1.4	0.0	100.0	187	
Manufacture of transport equipment	68.3	19.0	8.5	3.2	0.5	0.3	0.3	100.0	486	
Manufacture of furniture	60.1	33.2	3.4	1.9	0.7	0.6	0.0	100.0	1,229	
Other manufacturing; repair and installation of machinery and equipment	66.3	22.7	8.1	1.4	0.7	0.4	0.3	100.0	4,109	
Electricity, gas, steam and air conditioning supply	44.7	42.0	5.9	4.0	3.4	0.0	0.0	100.0	104	
Water supply; sewerage, waste management and remediation	80.0	8.5	11.5	0.0	0.0	0.0	0.0	100.0	44	
Construction	34.8	5.7	11.8	22.1	10.5	9.2	6.0	100.0	161	
Trade and repair of motor vehicles and motorcycles	76.9	17.7	4.6	0.3	0.4	0.1	0.0	100.0	5,397	
Wholesale trade (except motor vehicles and motorcycles)	49.9	33.7	11.6	4.2	0.4	0.2	0.1	100.0	8,480	
Retail trade (except motor vehicles and motorcycles)	71.1	21.9	4.5	2.1	0.1	0.2	0.0	100.0	27,492	
Transportation and storage	67.4	15.5	8.8	3.9	3.7	0.5	0.2	100.0	4,150	
Accommodation	44.8	22.5	14.3	10.4	4.6	3.0	0.4	100.0	2,348	
Food and beverage service activities	53.1	32.7	12.4	1.4	0.4	0.1	0.0	100.0	18,890	
Publishing, audiovisual and broadcasting activities	84.9	7.7	4.1	2.9	0.2	0.0	0.2	100.0	560	
IT and other information services	84.3	11.8	1.8	0.7	1.1	0.4	0.0	100.0	332	
Real estate activities	78.6	0.0	8.8	4.0	0.0	4.3	4.3	100.0	29	
Professional, scientific and technical activities	68.3	18.7	6.2	4.4	0.4	1.2	0.8	100.0	318	
Administrative and support service activities	74.5	16.8	5.5	1.6	0.5	0.7	0.3	100.0	1,904	
Education	13.9	39.5	30.9	9.9	4.7	1.1	0.0	100.0	331	
Human health activities	64.5	10.2	8.6	6.6	5.2	3.3	1.6	100.0	610	
Arts, entertainment and recreation	90.3	1.2	3.2	2.6	1.2	1.2	0.4	100.0	320	
Other service activities	79.9	13.2	3.6	2.6	0.4	0.2	0.1	100.0	4,624	
Total	63.1	24.3	7.9	3.1	0.8	0.5	0.3	100.0	126,928	

Notes: "Number of workers" includes working proprietors, full-time employees, part-time employees and family workers. For more detail on different types of workers, refer to *section "workers" below*.

Table 10: Distribution of businesses by total income/turnover during reference year (%), by main economic activity of business

Main economic activity of business	Total income/turnover during reference year						Total	Total # of businesses
	MMK 0 – 9,999,999	MMK 10,000,000 – 99,999,999	MMK 100,000,000 – 999,999,999	MMK 1,000,000,000 – 9,999,999,999	More than MMK 10,000,000,000			
Mining and quarrying	21.8	54.1	19.5	4.0	0.7	100.0	504	
Manufacture of food products, beverages and tobacco products	50.2	31.0	17.0	1.3	0.5	100.0	27,127	
Manufacture of textiles, wearing apparel, leather and related products	25.0	44.4	25.3	4.8	0.5	100.0	3,830	
Manufacture of wood products	36.0	52.6	10.1	1.1	0.2	100.0	1,114	
Manufacture of paper products; printing and reproduction of recorded media	50.3	40.8	7.3	1.5	0.0	100.0	1,455	
Manufacture of chemicals and chemical products	8.0	66.8	16.8	4.9	3.5	100.0	299	
Manufacture of basic pharmaceutical products and pharmaceutical preparations	73.1	14.8	10.5	1.0	0.6	100.0	228	
Manufacture of rubber and plastics products, and other non-metallic mineral products	59.1	35.7	4.3	0.8	0.1	100.0	7,137	
Manufacture of basic metals and fabricated metal products, except machinery and equipment	28.3	61.7	9.1	0.7	0.1	100.0	3,077	
Manufacture of electrical equipment	4.7	24.8	41.3	29.2	0.0	100.0	51	
Manufacture of machinery and equipment n.e.c.	21.0	65.9	12.4	0.7	0.0	100.0	187	
Manufacture of transport equipment	45.1	40.5	13.1	0.8	0.5	100.0	486	
Manufacture of furniture	29.9	61.5	8.1	0.4	0.1	100.0	1,229	
Other manufacturing; repair and installation of machinery and equipment	59.5	31.2	8.8	0.5	0.0	100.0	4,109	
Electricity, gas, steam and air conditioning supply	69.0	17.7	10.1	3.2	0.0	100.0	104	
Water supply; sewerage, waste management and remediation	75.9	12.6	11.5	0.0	0.0	100.0	44	
Construction	10.3	29.4	42.9	15.2	2.2	100.0	161	
Trade and repair of motor vehicles and motorcycles	63.8	25.8	9.7	0.6	0.0	100.0	5,397	
Wholesale trade (except motor vehicles and motorcycles)	15.1	50.8	29.2	4.7	0.3	100.0	8,480	
Retail trade (except motor vehicles and motorcycles)	29.1	55.5	14.5	0.9	0.0	100.0	27,492	
Transportation and storage	51.8	32.0	15.6	0.5	0.1	100.0	4,150	
Accommodation	35.7	48.6	13.4	2.2	0.1	100.0	2,348	
Food and beverage service activities	24.4	65.2	10.3	0.1	0.0	100.0	18,890	
Publishing, audiovisual and broadcasting activities	76.5	21.0	2.5	0.0	0.0	100.0	560	
IT and other information services	81.9	14.5	2.6	1.1	0.0	100.0	332	
Real estate activities	53.5	33.9	8.3	0.0	4.3	100.0	29	
Professional, scientific and technical activities	66.2	26.0	6.2	1.5	0.0	100.0	318	
Administrative and support service activities	65.0	31.6	3.1	0.3	0.0	100.0	1,904	
Education	18.5	69.8	11.3	0.4	0.0	100.0	331	
Human health activities	39.6	40.4	16.6	3.0	0.4	100.0	610	
Arts, entertainment and recreation	86.9	8.3	3.6	1.2	0.0	100.0	320	
Other service activities	66.6	27.6	5.6	0.2	0.0	100.0	4,624	
Total	39.7	45.0	13.9	1.2	0.2	100.0	126,928	

Notes: "Total income/turnover during reference year" includes income/turnover from sales of goods purchased for resale in the same condition as received, income/turnover from sales of goods manufactured by the enterprise, income/turnover from provision of services, income/turnover from Provision of construction, repairs and maintenance (through own labour force or through sub-contracting), income/turnover from other productive activities, income/turnover from non-productive activities, and subsidies received from government.

Table 11: Businesses owning any asset type (%), by main economic activity of business

Main economic activity of business	Percentage of businesses owning asset type						Total # of businesses
	Land	Buildings	Machinery and equipment	Vehicles	Other fixed assets	Intellectual property assets	
Mining and quarrying	56.5	68.2	92.3	86.9	45.3	0.0	504
Manufacture of food products, beverages and tobacco products	85.9	92.2	86.7	28.6	45.5	0.4	27,127
Manufacture of textiles, wearing apparel, leather and related products	77.4	78.9	81.8	35.6	48.0	0.2	3,830
Manufacture of wood products	86.7	84.9	72.5	22.3	41.4	0.0	1,114
Manufacture of paper products; printing and reproduction of recorded media	45.1	70.9	84.6	20.8	55.5	1.6	1,455
Manufacture of chemicals and chemical products	90.9	94.2	91.6	76.8	76.4	0.4	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	89.4	35.0	81.4	16.7	84.1	0.0	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	90.6	26.9	84.4	51.2	43.0	0.2	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	75.9	83.0	79.3	34.1	44.9	0.9	3,077
Manufacture of electrical equipment	58.6	63.7	87.9	72.5	70.8	12.1	51
Manufacture of machinery and equipment n.e.c.	93.7	97.2	92.6	18.1	41.2	0.0	187
Manufacture of transport equipment	71.5	81.3	90.7	33.8	32.5	0.5	486
Manufacture of furniture	72.8	75.7	76.2	28.2	41.9	0.3	1,229
Other manufacturing; repair and installation of machinery and equipment	59.8	71.1	78.2	19.6	45.1	1.7	4,109
Electricity, gas, steam and air conditioning supply	78.5	60.0	96.6	70.3	83.7	3.8	104
Water supply; sewerage, waste management and remediation	70.2	86.3	74.2	33.2	56.9	0.0	44
Construction	69.2	79.0	84.4	67.0	67.0	3.8	161
Trade and repair of motor vehicles and motorcycles	53.9	64.1	69.4	27.2	52.0	0.1	5,397
Wholesale trade (except motor vehicles and motorcycles)	64.2	73.1	36.6	28.4	73.0	0.5	8,480
Retail trade (except motor vehicles and motorcycles)	60.6	73.7	26.7	20.0	72.4	0.5	27,492
Transportation and storage	25.0	38.0	42.1	68.4	41.8	0.1	4,150
Accommodation	76.5	81.1	73.1	27.7	79.6	2.6	2,348
Food and beverage service activities	50.2	62.1	48.0	18.8	80.1	1.3	18,890
Publishing, audiovisual and broadcasting activities	52.2	66.5	94.4	27.5	49.6	2.0	560
IT and other information services	30.6	33.8	86.0	22.9	85.4	0.0	332
Real estate activities	44.8	71.3	25.1	25.1	44.8	0.0	29
Professional, scientific and technical activities	69.7	72.3	89.4	35.2	41.3	1.1	318
Administrative and support service activities	41.5	55.2	71.8	19.2	67.9	1.0	1,904
Education	36.1	41.9	60.2	22.2	94.0	2.0	331
Human health activities	48.1	62.3	64.5	32.1	81.7	3.8	610
Arts, entertainment and recreation	29.3	30.5	37.3	6.5	66.2	0.7	320
Other service activities	41.1	51.4	74.6	19.1	65.6	1.8	4,624
Total	65.2	70.7	60.3	27.6	60.7	0.7	126,928

Notes: Row totals do not sum up to 100% because businesses can own more than one asset type. Missing data was excluded for calculation of the above percentages.

Workers

Table 12: Total number of workers, hours worked annually per worker during the reference year, and average hourly compensation, by type of worker and main economic activity of business

Main economic activity of business	Total number of workers, hours worked annually per worker during the reference year, and average hourly compensation											
	Working proprietors			Full-time employees			Part-time employees			Family workers		
	Total number of workers	Average hours worked annually per worker	Average hourly compensation	Total number of workers	Average hours worked annually per worker	Average hourly compensation	Total number of workers	Average hours worked annually per worker	Average hourly compensation	Total number of workers	Average hours worked annually per worker	Average hourly compensation
Mining and quarrying	394	1,855	46	13,349	2,582	796	3,960	1,586	513	214	2,927	47
Manufacture of food products, beverages and tobacco products	20,227	2,040	214	124,916	2,457	518	33,030	1,468	527	20,236	1,787	73
Manufacture of textiles, wearing apparel, leather and related products	2,377	2,322	85	239,398	2,549	548	5,373	2,520	443	2,368	2,274	28
Manufacture of wood products	688	2,295	271	6,758	2,393	591	2,316	1,952	565	516	1,631	69
Manufacture of paper products; printing and reproduction of recorded media	1,180	2,440	114	8,579	2,554	499	1,676	1,798	885	1,169	2,389	97
Manufacture of chemicals and chemical products	150	1,990	263	10,388	2,376	603	1,216	1,808	554	60	2,337	254
Manufacture of basic pharmaceutical products and pharmaceutical preparations	195	2,165	14	1,919	2,369	519	169	1,363	468	390	2,705	41
Manufacture of rubber and plastics products, and other non-metallic mineral products	3,728	1,974	105	42,113	2,121	560	8,375	1,452	441	3,678	1,138	132
Manufacture of basic metals and fabricated metal products, except machinery and equipment	2,123	2,548	163	19,190	2,534	627	2,728	1,985	662	1,202	2,255	194
Manufacture of electrical equipment	33	2,236	701	7,005	2,030	599	231	1,988	594	9	2,479	355
Manufacture of machinery and equipment n.e.c.	115	2,630	701	1,461	2,566	517	183	2,339	600	115	2,634	46
Manufacture of transport equipment	216	2,296	186	2,505	2,557	655	130	2,332	714	280	1,828	66
Manufacture of furniture	911	2,392	172	5,082	2,534	599	1,176	2,111	633	508	2,198	89
Other manufacturing; repair and installation of machinery and equipment	3,399	2,547	149	18,104	2,559	584	2,980	2,066	524	2,749	2,467	94
Electricity, gas, steam and air conditioning supply	56	1,659	293	697	2,494	467	13	1,883	521	24	1,989	138
Water supply; sewerage, waste management and remediation	43	2,849	16	91	2,759	385	0	-	-	8	1,796	487
Construction	107	2,120	995	5,990	2,461	876	3,889	2,646	741	51	1,818	549
Trade and repair of motor vehicles and motorcycles	4,150	2,782	124	12,821	2,697	487	1,153	2,011	320	3,016	2,507	68
Wholesale trade (except motor vehicles and motorcycles)	6,801	2,735	133	37,292	2,619	676	5,826	1,856	383	7,276	2,586	116
Retail trade (except motor vehicles and motorcycles)	22,156	2,940	79	68,723	2,737	424	7,419	2,223	452	26,841	2,602	75
Transportation and storage	3,696	2,578	237	25,649	2,454	599	6,248	1,851	498	642	1,964	115
Accommodation	1,509	2,832	318	35,695	2,688	480	5,147	1,935	395	1,141	2,703	64
Food and beverage service activities	15,604	3,012	111	68,274	3,088	370	3,598	1,963	356	23,505	2,643	49
Publishing, audiovisual and broadcasting activities	509	2,093	99	1,424	2,307	510	242	1,169	438	330	2,503	50
IT and other information services	310	2,965	95	772	2,458	539	31	1,740	224	164	2,754	112
Real estate activities	7	1,425	37	542	2,514	552	41	1,802	130	2	2,846	0

Professional, scientific and technical activities	269	2,538	154	1,785	2,385	881	411	1,855	402	272	2,446	70
Administrative and support service activities	1,493	2,404	55	9,191	2,616	506	1,859	1,986	470	1,317	2,397	113
Education	305	2,454	74	2,909	2,524	648	1,790	1,719	705	185	2,190	135
Human health activities	532	2,420	83	12,717	2,711	604	1,035	2,021	668	125	2,445	108
Arts, entertainment and recreation	191	2,641	117	1,468	2,787	562	404	2,080	513	174	3,755	15
Other service activities	3,904	2,835	56	12,692	2,743	470	3,945	2,154	566	1,804	2,633	155
Total	97,377	2,604	131	799,497	2,580	529	106,592	1,816	511	100,371	2,358	75

Notes: Compensation refers to emoluments paid plus social welfare contributions plus other payments in cash or in kind.

Value of income, expenses, inventories and assets

Table 13: Total value of income/turnover (in million Kyat), by main economic activity of business

Main economic activity of business	Income/turnover (value in MMK '000,000)				Total # of businesses
	Income from productive activities	Income from non-productive activities	Subsidies received from government	Total income	
Mining and quarrying	185,679	271	0	185,950	504
Manufacture of food products, beverages and tobacco products	5,527,936	278	0	5,528,214	27,127
Manufacture of textiles, wearing apparel, leather and related products	1,407,557	5	11	1,407,573	3,830
Manufacture of wood products	136,689	0	40	136,729	1,114
Manufacture of paper products; printing and reproduction of recorded media	127,796	42	0	127,838	1,455
Manufacture of chemicals and chemical products	329,278	16	0	329,294	299
Manufacture of basic pharmaceutical products and pharmaceutical prep.	35,021	1	0	35,022	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	434,447	55	1	434,503	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	261,303	11	0	261,314	3,077
Manufacture of electrical equipment	67,903	0	0	67,903	51
Manufacture of machinery and equipment n.e.c.	19,575	0	0	19,575	187
Manufacture of transport equipment	115,434	0	0	115,434	486
Manufacture of furniture	69,471	9	31	69,510	1,229
Other manufacturing; repair and installation of machinery and equipment	217,101	68	0	217,168	4,109
Electricity, gas, steam and air conditioning supply	12,777	211	0	12,988	104
Water supply; sewerage, waste management and remediation	931	0	0	931	44
Construction	190,102	14	0	190,116	161
Trade and repair of motor vehicles and motorcycles	278,129	84	0	278,213	5,397
Wholesale trade (except motor vehicles and motorcycles)	2,930,445	679	0	2,931,124	8,480
Retail trade (except motor vehicles and motorcycles)	2,023,837	266	262	2,024,364	27,492
Transportation and storage	393,644	401	46	394,091	4,150
Accommodation	298,440	5	0	298,445	2,348
Food and beverage service activities	861,477	51	0	861,528	18,890
Publishing, audiovisual and broadcasting activities	8,362	0	0	8,362	560
IT and other information services	18,340	0	0	18,340	332
Real estate activities	15,848	1	0	15,850	29
Professional, scientific and technical activities	19,023	0	0	19,023	318
Administrative and support service activities	47,980	15	177	48,172	1,904
Education	21,962	0	0	21,962	331
Human health activities	121,024	41	0	121,064	610
Arts, entertainment and recreation	10,240	4	0	10,245	320
Other service activities	177,383	42	0	177,426	4,624
Total	16,365,132	2,570	568	16,368,270	126,928

Notes: "Income from productive activities" includes income/turnover from sales of goods purchased for resale in the same condition as received, income/turnover from sales of goods manufactured by the enterprise, income/turnover from provision of services, income/turnover from provision of construction, repairs and maintenance (through own labour force or through sub-contracting), income/turnover from other productive activities,

Table 14: Total value of expenses (in million Kyat), by main economic activity of business

Main economic activity of business	Expenses (value in MMK '000,000)														Total # of businesses
	Goods used for production	Labour	Sub-contractors	Electricity	Fuel	Water	Taxes	Rental payments	Interest payments on loans	Repairs and maintenance	Training of own staff	Donations	All other expenses	Total expenses	
Mining and quarrying	8,156	30,681	0	6,917	15,008	337	6,330	2,229	667	4,105	151	1,941	25,927	102,448	504
Manufacture of food, beverages and tobacco	4,219,957	187,188	3,365	48,246	51,220	1,021	107,163	10,726	7,456	32,468	830	5,972	41,127	4,716,737	27,127
Manufacture of textiles, wearing apparel, leather and related products	382,869	340,763	4,874	21,247	10,999	657	3,652	26,488	1,170	6,369	180	1,384	20,338	820,990	3,830
Manufacture of wood prod.	66,685	12,168	3	1,520	989	22	523	462	92	1,291	3	196	1,222	85,177	1,114
Manufacture of paper products; printing and reproduction of recorded media	50,203	13,859	3	5,230	2,076	40	851	2,031	254	903	239	238	782	76,710	1,455
Manufacture of chemicals and chemical prod.	233,193	16,123	0	6,885	3,339	112	1,305	289	63	1,680	101	168	9,896	273,153	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	19,615	2,510	1	686	283	46	913	24	186	70	15	95	264	24,706	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	195,938	55,918	143	40,659	14,822	108	2,693	5,849	371	3,559	75	1,812	4,963	326,910	7,137
Manufacture of basic metals and fabricated metal products	132,378	34,617	326	10,330	3,210	105	2,429	1,730	522	1,057	9	912	2,174	189,797	3,077
Manufacture of electrical equipment	37,767	8,796	0	1,214	703	39	301	729	136	352	18	252	2,845	53,152	51
Manufacture of machinery and equip. n.e.c.	12,113	2,209	307	315	109	3	148	80	13	71	0	32	183	15,581	187
Manufacture of transport equipment	91,280	4,447	0	671	219	13	242	408	1	353	9	43	240	97,924	486
Manufacture of furniture	37,482	9,390	72	890	375	53	479	775	428	171	7	206	493	50,818	1,229
Other manufacturing; repair and installation of machinery and equipment	91,531	30,910	163	3,389	4,812	204	1,358	2,295	161	1,507	37	796	1,782	138,945	4,109
Electricity, gas, steam and air cond. supply	4,746	832	0	64	4,262	9	126	12	0	243	0	24	15	10,332	104
Water supply; sewerage, waste management and remediation	54	104	0	21	77	0	12	0	0	4	0	5	1	279	44
Construction	75,936	20,590	7,980	1,297	5,557	68	1,685	6,266	2,177	1,134	29	1,183	7,923	131,823	161
Trade and repair of motor vehicles and -cycles	199,952	18,090	9	1,305	626	133	903	3,336	511	936	5	601	694	227,101	5,397
Wholesale trade (except motor vehicles and motorcycles)	2,461,748	72,315	4,971	3,139	3,349	2,374	7,186	7,196	3,336	1,677	540	2,674	17,917	2,588,423	8,480
Retail trade (except motor vehicles and -cycle)	1,372,635	92,387	681	11,025	6,552	904	19,751	14,330	2,050	3,382	123	6,567	12,234	1,542,619	27,492
Transportation and storage	59,653	43,597	5	3,799	63,729	430	15,726	23,861	8,435	15,265	451	1,140	26,114	262,205	4,150
Accommodation	26,306	50,150	924	17,617	8,904	3,556	16,582	7,857	1,718	11,347	553	2,223	27,076	174,813	2,348
Food and beverage service activities	364,205	83,579	66	9,482	16,893	1,605	8,361	18,561	1,301	4,760	89	3,743	5,384	518,029	18,890
Publishing, audiovisual and broadcasting act.	3,689	1,839	5	408	157	14	84	455	52	144	14	77	109	7,047	560
IT and other information services	4,311	1,085	0	147	68	10	588	654	4	76	2	43	699	7,687	332
Real estate activities	14	761	0	1,414	177	73	761	540	0	746	5	3	4,315	8,808	29
Professional, scientific and technical activities	1,148	4,106	0	316	104	13	171	1,366	205	398	68	362	671	8,928	318
Administrative and support service activities	12,112	14,261	689	2,300	2,243	93	1,334	1,912	184	1,329	42	430	2,304	39,232	1,904
Education	2,028	6,979	0	380	183	122	182	706	28	243	59	193	1,287	12,390	331
Human health activities	33,531	22,252	203	3,839	1,138	62	1,436	1,092	523	1,912	77	479	5,050	71,592	610
Arts, entertainment and recreation	137	2,739	0	364	33	6	311	1,062	63	366	1	38	802	5,922	320
Other service activities	89,646	21,924	123	2,122	3,420	330	1,080	7,832	102	675	24	609	1,600	129,486	4,624
Total	10,291,015	1,207,169	24,912	207,236	225,635	12,560	204,664	151,153	32,206	98,590	3,757	34,438	226,429	12,719,762	126,928

Notes: "Goods for production" includes goods purchased for resale in the same condition as received as well as raw materials and semi-finished/input products.

Table 15: Total value of expenses on goods used for production (in million Kyat), by source (local/imported) and main economic activity of business

Main economic activity of business	Expenses on goods used for production (value in MMK '000,000)			
	Local	Imported	Total	Total # of businesses
Mining and quarrying	7,316	840	8,156	504
Manufacture of food products, beverages and tobacco products	3,949,187	270,770	4,219,957	27,127
Manufacture of textiles, wearing apparel, leather and related products	85,000	297,869	382,869	3,830
Manufacture of wood products	57,600	9,085	66,685	1,114
Manufacture of paper products; printing and reproduction of recorded media	30,423	19,781	50,203	1,455
Manufacture of chemicals and chemical products	14,229	218,964	233,193	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	4,045	15,570	19,615	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	133,440	62,497	195,938	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	63,379	68,999	132,378	3,077
Manufacture of electrical equipment	6,189	31,578	37,767	51
Manufacture of machinery and equipment n.e.c.	6,884	5,229	12,113	187
Manufacture of transport equipment	4,061	87,218	91,280	486
Manufacture of furniture	34,180	3,302	37,482	1,229
Other manufacturing; repair and installation of machinery and equipment	74,820	16,711	91,531	4,109
Electricity, gas, steam and air conditioning supply	3,015	1,731	4,746	104
Water supply; sewerage, waste management and remediation	54	0	54	44
Construction	54,294	21,642	75,936	161
Trade and repair of motor vehicles and motorcycles	21,996	177,956	199,952	5,397
Wholesale trade (except motor vehicles and motorcycles)	1,790,518	671,230	2,461,748	8,480
Retail trade (except motor vehicles and motorcycles)	876,171	496,464	1,372,635	27,492
Transportation and storage	48,307	11,346	59,653	4,150
Accommodation	20,445	5,862	26,306	2,348
Food and beverage service activities	339,147	25,057	364,205	18,890
Publishing, audiovisual and broadcasting activities	2,008	1,682	3,689	560
IT and other information services	822	3,489	4,311	332
Real estate activities	6	8	14	29
Professional, scientific and technical activities	710	438	1,148	318
Administrative and support service activities	5,079	7,033	12,112	1,904
Education	1,473	555	2,028	331
Human health activities	6,494	27,038	33,531	610
Arts, entertainment and recreation	107	30	137	320
Other service activities	65,281	24,365	89,646	4,624
Total	7,706,677	2,584,338	10,291,015	126,928

Notes: "Goods for production" includes goods purchased for resale in the same condition as received as well as raw materials and semi-finished/input products.

Table 16: Total value of inventories and change of inventories during reference year (difference between opening and closing balance) – in million Kyat, by main economic activity of business

Main economic activity of business	Total value of inventories (in MMK '000,000)			Change in inventories (in MMK '000,000)			Total # of businesses
	Inventories of goods used for production	Inventories of products manufactured by business	Total inventories	Inventories of goods used for production	Inventories of products manufactured by business	Total inventories	
Mining and quarrying	17,326	323	17,649	-1,467	-7	-1,473	504
Manufacture of food products, beverages and tobacco products	80,928	28,584	109,512	1,990	12,408	14,397	27,127
Manufacture of textiles, wearing apparel, leather and related products	11,767	11,041	22,808	3,043	502	3,545	3,830
Manufacture of wood products	2,244	3,605	5,849	-3,936	-221	-4,157	1,114
Manufacture of paper products; printing and reproduction of recorded media	2,638	862	3,500	330	-466	-136	1,455
Manufacture of chemicals and chemical products	6,021	20,504	26,525	-580	4,922	4,342	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	87	227	314	-1	33	33	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	14,525	21,136	35,661	83	-483	-401	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	7,902	10,500	18,403	4,000	3,727	7,727	3,077
Manufacture of electrical equipment	15,486	906	16,392	1,407	-1,469	-62	51
Manufacture of machinery and equipment n.e.c.	560	3,768	4,328	99	83	182	187
Manufacture of transport equipment	3,131	1,450	4,581	2,360	739	3,099	486
Manufacture of furniture	2,346	2,380	4,727	-550	907	357	1,229
Other manufacturing; repair and installation of machinery and equipment	3,715	5,356	9,071	683	1,000	1,682	4,109
Electricity, gas, steam and air conditioning supply	3	0	3	0	0	0	104
Water supply; sewerage, waste management and remediation	5	0	5	2	0	2	44
Construction	3,825	2,993	6,818	2,224	2,610	4,834	161
Trade and repair of motor vehicles and motorcycles	18,591	0	18,591	3,487	0	3,487	5,397
Wholesale trade (except motor vehicles and motorcycles)	60,662	348	61,010	12,766	124	12,890	8,480
Retail trade (except motor vehicles and motorcycles)	79,138	24	79,162	3,789	10	3,799	27,492
Transportation and storage	8,792	0	8,792	47	0	47	4,150
Accommodation	411	0	411	-1	0	-1	2,348
Food and beverage service activities	1,804	0	1,804	149	0	149	18,890
Publishing, audiovisual and broadcasting activities	78	20	98	9	0	9	560
IT and other information services	152	0	152	-36	0	-36	332
Real estate activities	5	0	5	0	0	0	29
Professional, scientific and technical activities	3	0	3	1	0	1	318
Administrative and support service activities	348	0	348	45	0	45	1,904
Education	4	0	4	0	0	0	331
Human health activities	2,876	1	2,877	192	0	192	610
Arts, entertainment and recreation	3	0	3	-1	0	-1	320
Other service activities	2,562	0	2,562	-47	0	-47	4,624
Total	347,939	114,026	461,966	30,087	24,418	54,505	126,928

Notes: "Goods for production" includes goods purchased for resale in the same condition as received as well as raw materials and semi-finished/input products. A non-manufacturing businesses may have inventories of products manufactured by the business if its secondary activity is manufacturing.

Table 17: Total value of assets (closing balance on March 31, 2015 - in million Kyat), by main economic activity of business

Main economic activity of business	Total value of assets (closing balance – value in MMK '000,000)							Total # of businesses
	Land	Buildings	Machinery and equipment	Vehicles	Other fixed assets	Intellectual property assets	Total assets	
Mining and quarrying	11,337	77,179	68,993	41,621	1,446	0	200,154	504
Manufacture of food products, beverages and tobacco products	1,125,575	542,712	587,954	108,235	84,990	609	2,415,279	27,127
Manufacture of textiles, wearing apparel, leather and related products	276,775	132,540	218,074	13,067	14,816	58	654,328	3,830
Manufacture of wood products	72,242	19,089	15,742	3,297	827	0	111,197	1,114
Manufacture of paper products; printing and reproduction of recorded media	77,619	76,924	48,477	18,468	4,140	167	211,888	1,455
Manufacture of chemicals and chemical products	36,939	17,236	15,662	4,201	1,297	4	75,339	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	17,884	12,049	3,831	1,231	1,601	0	36,593	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	342,644	248,254	176,505	77,977	42,696	80	884,808	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	244,378	77,526	46,437	11,013	2,416	115	380,924	3,077
Manufacture of electrical equipment	13,464	14,587	9,478	1,901	1,231	13	40,674	51
Manufacture of machinery and equipment n.e.c.	16,783	4,289	2,947	417	364	0	24,800	187
Manufacture of transport equipment	19,227	18,637	8,717	1,615	2,203	13	50,412	486
Manufacture of furniture	71,410	22,621	3,973	2,502	379	0	100,660	1,229
Other manufacturing; repair and installation of machinery and equipment	144,153	67,166	28,488	21,337	2,297	6	261,572	4,109
Electricity, gas, steam and air conditioning supply	5,649	2,017	3,751	970	394	14	12,648	104
Water supply; sewerage, waste management and remediation	156	184	27	367	33	0	766	44
Construction	94,970	30,272	23,364	28,032	2,805	2	173,767	161
Trade and repair of motor vehicles and motorcycles	173,666	62,574	11,219	12,706	8,996	10	263,382	5,397
Wholesale trade (except motor vehicles and motorcycles)	560,342	247,328	18,673	38,496	22,832	17	885,318	8,480
Retail trade (except motor vehicles and motorcycles)	1,707,976	632,697	32,492	51,466	37,521	832	2,437,478	27,492
Transportation and storage	63,164	43,562	15,706	256,102	3,207	73	364,465	4,150
Accommodation	585,516	457,552	127,135	10,689	92,421	275	1,258,383	2,348
Food and beverage service activities	1,176,333	295,078	15,734	11,196	25,573	168	1,522,853	18,890
Publishing, audiovisual and broadcasting activities	11,783	7,557	3,297	1,128	1,601	1	25,176	560
IT and other information services	4,764	2,205	1,325	739	271	0	9,059	332
Real estate activities	1,559	4,211	780	557	19	0	7,019	29
Professional, scientific and technical activities	23,917	15,396	2,975	1,744	558	5	44,540	318
Administrative and support service activities	38,234	30,677	19,644	8,561	1,572	38	98,353	1,904
Education	39,559	13,984	688	1,083	1,623	17	56,953	331
Human health activities	80,159	51,321	25,516	4,530	6,298	27	167,633	610
Arts, entertainment and recreation	6,662	11,593	5,112	359	1,220	2	24,935	320
Other service activities	130,028	43,843	8,456	11,160	8,423	15	200,592	4,624
Total	7,174,865	3,282,857	1,551,168	746,765	376,069	2,560	13,001,946	126,928

Table 18: Change in assets during reference year (acquisitions minus disposals – in million Kyat), by main economic activity of business

Main economic activity of business	Change in assets during reference year (in MMK '000,000)							Total # of businesses
	Land	Buildings	Machinery and equipment	Vehicles	Other fixed assets	Intellectual property assets	Total assets	
Mining and quarrying	8	7	530	185	54	0	786	504
Manufacture of food products, beverages and tobacco products	232	3,501	39,457	4,174	16,695	118	64,163	27,127
Manufacture of textiles, wearing apparel, leather and related products	0	525	6,634	51	443	1	7,653	3,830
Manufacture of wood products	2	0	1	-1	0	0	2	1,114
Manufacture of paper products; printing and reproduction of recorded media	0	460	824	40	5	63	1,392	1,455
Manufacture of chemicals and chemical products	0	0	24	15	7	0	45	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	0	0	154	0	221	0	376	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	0	412	7,740	5,553	1,902	25	15,631	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	0	9	4,472	191	3	127	4,802	3,077
Manufacture of electrical equipment	0	0	4	10	2	0	16	51
Manufacture of machinery and equipment n.e.c.	0	1	0	12	0	0	13	187
Manufacture of transport equipment	0	0	45	9	0	0	54	486
Manufacture of furniture	0	0	15	12	6	0	32	1,229
Other manufacturing; repair and installation of machinery and equipment	0	20	712	70	4	0	806	4,109
Electricity, gas, steam and air conditioning supply	0	0	4	0	0	0	0	104
Water supply; sewerage, waste management and remediation	0	0	0	0	0	0	0	44
Construction	42	14	102	190	35	0	383	161
Trade and repair of motor vehicles and motorcycles	0	4	74	147	6	0	231	5,397
Wholesale trade (except motor vehicles and motorcycles)	398	565	1,562	854	351	1	3,730	8,480
Retail trade (except motor vehicles and motorcycles)	93	3,008	198	1,086	324	1	4,521	27,492
Transportation and storage	0	71	21	822	66	7	986	4,150
Accommodation	0	2,923	1,045	72	343	24	4,405	2,348
Food and beverage service activities	0	-120	1	0	0	0	-121	18,890
Publishing, audiovisual and broadcasting activities	-6	0	32	10	8	0	45	560
IT and other information services	0	3	2	0	0	0	4	332
Real estate activities	0	0	0	0	0	0	0	29
Professional, scientific and technical activities	1	16	18	-2	5	0	39	318
Administrative and support service activities	0	422	1,312	-10	487	18	2,229	1,904
Education	6	291	1	8	10	0	317	331
Human health activities	0	344	211	37	183	0	775	610
Arts, entertainment and recreation	0	0	16	0	2	0	18	320
Other service activities	0	0	36	4	43	0	83	4,624
Total	777	12,473	65,246	13,537	21,204	384	113,413	126,928

Table 19: Value of assets per person employed (closing balance on March 31, 2015 – in thousand Kyat), by main economic activity of business

Main economic activity of business	Value of assets per person employed (closing balance – in MMK '000)							Total # of businesses
	Land	Buildings	Machinery and equipment	Vehicles	Other fixed assets	Intellectual property assets	Total assets	
Mining and quarrying	633	4,308	3,851	2,323	81	0	11,171	504
Manufacture of food products, beverages and tobacco products	5,673	2,735	2,963	546	428	3	12,173	27,127
Manufacture of textiles, wearing apparel, leather and related products	1,109	531	874	52	59	0	2,622	3,830
Manufacture of wood products	7,028	1,857	1,531	321	80	0	10,818	1,114
Manufacture of paper products; printing and reproduction of recorded media	6,159	6,104	3,846	1,465	328	13	16,812	1,455
Manufacture of chemicals and chemical products	3,127	1,459	1,326	356	110	0	6,377	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	6,691	4,508	1,433	460	599	0	13,691	228
Manufacture of rubber and plastics products, and other non-metallic mineral prod.	5,918	4,288	3,049	1,347	737	1	15,283	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	9,681	3,071	1,840	436	96	5	15,091	3,077
Manufacture of electrical equipment	1,850	2,004	1,302	261	169	2	5,588	51
Manufacture of machinery and equipment n.e.c.	8,961	2,290	1,573	223	194	0	13,242	187
Manufacture of transport equipment	6,143	5,954	2,785	516	704	4	16,106	486
Manufacture of furniture	9,304	2,947	518	326	49	0	13,115	1,229
Other manufacturing; repair and installation of machinery and equipment	5,294	2,466	1,046	784	84	0	9,605	4,109
Electricity, gas, steam and air conditioning supply	7,145	2,551	4,745	1,227	499	18	16,000	104
Water supply; sewerage, waste management and remediation	1,093	1,288	187	2,574	232	0	5,373	44
Construction	9,462	3,016	2,328	2,793	279	0	17,313	161
Trade and repair of motor vehicles and motorcycles	8,215	2,960	531	601	426	0	12,459	5,397
Wholesale trade (except motor vehicles and motorcycles)	9,797	4,324	326	673	399	0	15,479	8,480
Retail trade (except motor vehicles and motorcycles)	13,649	5,056	260	411	300	7	19,478	27,492
Transportation and storage	1,743	1,202	433	7,068	89	2	10,058	4,150
Accommodation	13,463	10,520	2,923	246	2,125	6	28,934	2,348
Food and beverage service activities	10,599	2,659	142	101	230	2	13,722	18,890
Publishing, audiovisual and broadcasting activities	4,705	3,018	1,316	450	639	0	10,053	560
IT and other information services	3,733	1,728	1,038	579	213	0	7,099	332
Real estate activities	2,636	7,120	1,319	942	32	0	11,868	29
Professional, scientific and technical activities	8,739	5,625	1,087	637	204	2	16,274	318
Administrative and support service activities	2,759	2,213	1,417	618	113	3	7,096	1,904
Education	7,625	2,695	133	209	313	3	10,977	331
Human health activities	5,563	3,562	1,771	314	437	2	11,634	610
Arts, entertainment and recreation	2,977	5,181	2,284	160	545	1	11,144	320
Other service activities	5,819	1,962	378	499	377	1	8,977	4,624
Total	6,500	2,974	1,405	677	341	2	11,779	126,928

Composite indicators

Table 20: Value added (median and total value – in million Kyat), by main economic activity of business

Main economic activity of business	Value added (median value)	Value added (total value)	Total # of businesses
Mining and quarrying	33.3	114,380	504
Manufacture of food products, beverages and tobacco products	3.8	1,018,756	27,127
Manufacture of textiles, wearing apparel, leather and related products	15.8	932,259	3,830
Manufacture of wood products	7.4	59,719	1,114
Manufacture of paper products; printing and reproduction of recorded media	4.0	65,048	1,455
Manufacture of chemicals and chemical products	21.8	76,758	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	3.5	12,952	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	1.1	164,867	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	11.0	114,761	3,077
Manufacture of electrical equipment	198.0	23,738	51
Manufacture of machinery and equipment n.e.c.	15.1	6,416	187
Manufacture of transport equipment	6.3	25,098	486
Manufacture of furniture	7.8	28,605	1,229
Other manufacturing; repair and installation of machinery and equipment	4.4	111,544	4,109
Electricity, gas, steam and air conditioning supply	4.3	3,301	104
Water supply; sewerage, waste management and remediation	1.5	764	44
Construction	52.6	84,885	161
Trade and repair of motor vehicles and motorcycles	3.6	73,206	5,397
Wholesale trade (except motor vehicles and motorcycles)	9.2	429,901	8,480
Retail trade (except motor vehicles and motorcycles)	4.7	583,970	27,492
Transportation and storage	6.1	176,224	4,150
Accommodation	10.0	175,999	2,348
Food and beverage service activities	7.5	430,919	18,890
Publishing, audiovisual and broadcasting activities	1.1	3,240	560
IT and other information services	2.7	11,744	332
Real estate activities	5.0	7,805	29
Professional, scientific and technical activities	1.9	14,563	318
Administrative and support service activities	3.0	23,484	1,904
Education	14.9	16,744	331
Human health activities	8.1	72,355	610
Arts, entertainment and recreation	1.5	7,095	320
Other service activities	3.1	70,384	4,624
Total	5.2	4,941,482	126,928

Notes: Value added is calculated as income/turnover + increases of inventories – purchases of goods and services – taxes.

Table 21: Gross operating surplus (median and total value – in million Kyat), by main economic activity of business

Main economic activity of business	Gross operating surplus (median value)	Gross operating surplus (total value)	Total # of businesses
Mining and quarrying	13.5	83,698	504
Manufacture of food products, beverages and tobacco products	2.1	831,568	27,127
Manufacture of textiles, wearing apparel, leather and related products	7.2	591,495	3,830
Manufacture of wood products	3.4	47,551	1,114
Manufacture of paper products; printing and reproduction of recorded media	2.8	51,189	1,455
Manufacture of chemicals and chemical products	7.9	60,635	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	3.5	10,442	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	0.4	108,949	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	4.2	80,144	3,077
Manufacture of electrical equipment	45.6	14,941	51
Manufacture of machinery and equipment n.e.c.	6.7	4,207	187
Manufacture of transport equipment	3.5	20,651	486
Manufacture of furniture	2.8	19,215	1,229
Other manufacturing; repair and installation of machinery and equipment	2.4	80,633	4,109
Electricity, gas, steam and air conditioning supply	2.7	2,469	104
Water supply; sewerage, waste management and remediation	1.1	660	44
Construction	13.6	64,295	161
Trade and repair of motor vehicles and motorcycles	2.4	55,116	5,397
Wholesale trade (except motor vehicles and motorcycles)	6.0	357,586	8,480
Retail trade (except motor vehicles and motorcycles)	3.2	491,583	27,492
Transportation and storage	3.4	132,627	4,150
Accommodation	4.5	125,849	2,348
Food and beverage service activities	5.9	347,340	18,890
Publishing, audiovisual and broadcasting activities	0.4	1,400	560
IT and other information services	2.2	10,659	332
Real estate activities	0.4	7,044	29
Professional, scientific and technical activities	1.4	10,458	318
Administrative and support service activities	1.8	9,223	1,904
Education	6.0	9,765	331
Human health activities	4.5	50,103	610
Arts, entertainment and recreation	1.5	4,357	320
Other service activities	1.9	48,459	4,624
Total	3.1	3,734,313	126,928

Notes: Gross operating surplus is calculated as value added (see table above) minus personnel costs.

Table 22: Labor productivity (in million Kyat), by main economic activity of business

Main economic activity of business	Labor productivity	Total # of businesses
Mining and quarrying	3.7	504
Manufacture of food products, beverages and tobacco products	5.4	27,127
Manufacture of textiles, wearing apparel, leather and related products	2.7	3,830
Manufacture of wood products	4.9	1,114
Manufacture of paper products; printing and reproduction of recorded media	4.7	1,455
Manufacture of chemicals and chemical products	4.8	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	5.2	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	2.9	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	3.3	3,077
Manufacture of electrical equipment	2.7	51
Manufacture of machinery and equipment n.e.c.	2.9	187
Manufacture of transport equipment	5.6	486
Manufacture of furniture	3.0	1,229
Other manufacturing; repair and installation of machinery and equipment	3.6	4,109
Electricity, gas, steam and air conditioning supply	4.0	104
Water supply; sewerage, waste management and remediation	7.4	44
Construction	4.1	161
Trade and repair of motor vehicles and motorcycles	4.0	5,397
Wholesale trade (except motor vehicles and motorcycles)	5.9	8,480
Retail trade (except motor vehicles and motorcycles)	6.3	27,492
Transportation and storage	4.0	4,150
Accommodation	3.5	2,348
Food and beverage service activities	5.2	18,890
Publishing, audiovisual and broadcasting activities	1.8	560
IT and other information services	10.8	332
Real estate activities	10.3	29
Professional, scientific and technical activities	3.5	318
Administrative and support service activities	1.6	1,904
Education	2.4	331
Human health activities	3.3	610
Arts, entertainment and recreation	2.6	320
Other service activities	3.2	4,624
Total	4.1	126,928

Notes: Labor productivity is calculated as value added (see table above) divided by personnel costs.

Table 23: Manufacturing output (median and total value – in million Kyat), by main economic activity of business

Main economic activity of business	Manufacturing output (median value)	Manufacturing output (total value)	Total # of businesses
Manufacture of food products, beverages and tobacco products	9.9	5,520,877	27,127
Manufacture of textiles, wearing apparel, leather and related products	44.0	1,407,349	3,830
Manufacture of wood products	20.0	134,208	1,114
Manufacture of paper products; printing and reproduction of recorded media	7.2	123,991	1,455
Manufacture of chemicals and chemical products	44.0	305,660	299
Manufacture of basic pharmaceutical products and pharmaceutical preparations	5.0	34,963	228
Manufacture of rubber and plastics products, and other non-metallic mineral products	7.2	429,444	7,137
Manufacture of basic metals and fabricated metal products, except machinery and equipment	24.0	262,486	3,077
Manufacture of electrical equipment	493.2	66,226	51
Manufacture of machinery and equipment n.e.c.	31.0	19,566	187
Manufacture of transport equipment	10.8	116,171	486
Manufacture of furniture	21.6	68,165	1,229
Other manufacturing; repair and installation of machinery and equipment	0.0	178,949	4,109
All other businesses (primary activity not manufacturing)	0.0	33,317	76,599
Total	0.0	8,701,371	126,928

Notes: Manufacturing output is calculated as income/turnover from manufacturing + increases in inventories of finished products manufactured by the business. If a business whose main economic activity is manufacturing but also engages in another non-manufacturing activity, the above refers only to the manufacturing activity.

Table 24: Gross margin on goods for resale (median and total value – in million Kyat), by main economic activity of business

Main economic activity of business	Gross margin on goods for resale (median value)	Gross margin on goods for resale (total value)	Total # of businesses
Trade and repair of motor vehicles and motorcycles	0.0	46,913	5,397
Wholesale trade (except motor vehicles and motorcycles)	11.4	453,353	8,480
Retail trade (except motor vehicles and motorcycles)	5.7	644,737	27,492
All other businesses (primary activity not trade)	0.0	30,174	85,558
Total	0.0	1,175,177	126,928

Notes: Gross margin on goods for resale is calculated as income/turnover from goods for resale – purchases of goods for resale + increases in inventories of goods for resale. If a business whose main economic activity is resale/trade but also engages in another non-resale/trade activity, the above refers only to the resale/trade activity.

Annex B: Survey methodology

General design considerations and review of existing business statistics

Before designing the MBS 2015, a review of existing surveys of businesses/establishments/enterprises in Myanmar was carried out. In terms of official (government-produced) statistics, the main existing economic survey on the private sector was a CSO-implemented annual survey of industrial zones (which in 2003 and 2006 was expanded to also cover manufacturing firms outside of industrial zones). Further recent surveys of businesses include a 2013 “One-Pager Business Census” conducted by UNDP and the Planning Department of MoPF, a 2014 “Enterprise Survey” conducted by the World Bank, and a 2014 “Myanmar Business Survey” conducted by OECD/UNESCAP/UMFCCI. All above-mentioned surveys struggled with issues of sampling (discussed further in the sampling section below), and except for the industrial zone survey with its limited scope, neither of them provided information on business income, expenses, etc. which are required to calculate key economic indicators like value added etc. and to inform the calculation of national accounts.

Historically, many national statistical organizations have organized their production processes for economic statistics according to a “stovepipe” model. In that model, different units within a statistical agency are responsible for producing statistics related to a specific segment of the economy, such as manufacturing or trade – and which usually involves separate surveys for each sector. While the “stovepipe model” has some merits, it often falls short in addressing the real needs of data users, which often prefer comprehensive data on the overall economy.¹⁵ Moreover, launching a multitude of new surveys for individual sectors of the economy was not an option in Myanmar at this point given the pressing data needs. In consequence, a decision was made to design a single survey that is nationally representative and covers all sectors of the economy,¹⁶ with the exception of agriculture and finance (the exclusion of these sectors is common practice in structural business surveys internationally, because their mode of operation is fundamentally different from other sectors of the economy, and their operations are best captured through different surveying approaches and instruments). Moreover, a decision was made to exclude public-sector or government-owned enterprises from the survey.

Sample design

A common problem of all past surveys of businesses in Myanmar is the lack of reliable lists of businesses (e.g. from company registration or tax authorities) or a statistical business register that can serve as a comprehensive sampling frame. Establishment/enterprise surveys heavily rely on such list frames for their coverage and representativeness. Earlier surveys in Myanmar chose different ways to address this challenge, e.g. by limiting the survey population to a small but manageable subset of the economy (CSO industrial zone survey) by using non-probability sampling methods which result in a complete lack of representativeness in a statistical sense (OECD/UNESCAP/UMFCCI Myanmar Business Survey 2014), by applying area-frame sampling methods which ensure excellent coverage but are usually too costly to

¹⁵ UN (2013): Guidelines on Integrated Economic Statistics (ST/ESA/STAT/SER.F/108)

¹⁶ Given that the MBS covers businesses both inside and outside industrial zones, and covers essentially the same areas as the CSO industrial zone survey, the industrial zone survey should no longer be necessary in the future.

implement on a large scale and in this case resulted in low geographical representativeness (WB Enterprise Survey 2014), or by attempting to compile/merge a multitude of existing business registration lists from various ministries and their affiliated agencies which in Myanmar unfortunately cover only a small part of the economy, and differ strongly in their coverage from sector to sector (UNDP/PD One-Page Business Census 2013). Unfortunately, none of these approaches in the past were able to achieve a robust and comprehensive nationwide coverage of all sectors of the economy.

The MBS 2015 decided to opt for a different approach than the ones used previously. It uses an annual establishment listing of the Department of Labour (DoL) as a sampling frame. Once a year, the DoL sends a request to all its township-level offices to conduct a listing/survey of all establishments in the respective township. A short one-page questionnaire is administered which records the number, gender and contract modality of a business's workers, as well as some additional information. This survey is to include all establishments with at least one hired worker (i.e. it excludes own-account and family-run businesses). Selected township-office staff are assigned to carry out this survey as enumerators full-time for approximately 2 months. In principle, these enumerators are advised to physically go to all areas in the respective townships containing establishments and administer the questionnaire. Finally, the data from the questionnaires is transferred into summary books and submitted to the DoL in Nay Pyi Taw, where the booklets are stored and for 2014 were also computerized.

As a result, the listing should in principle contain a full record of all formal and informal establishments in the country with at least one hired worker, making it an ideal sampling frame for a business survey. Unfortunately, the quality control of the listing operation was rather weak, resulting in some undercoverage, cases where listings are simply "copied" from earlier years, and address information that is sometimes insufficiently detailed to locate the listed businesses (overall, around 10% of sampled businesses were found to be not operational/closed, and another 13% could not be found due to insufficient address information provided in the frame). In spite of these caveats, this listing can be considered at current the most comprehensive single list of businesses in Myanmar, and this was confirmed by the coverage assessment carried out after the survey and summarized below.

Using the DoL listing as a sampling frame, the first step was to remove all businesses from the agriculture and finance sector, as well as public or state-owned entities. Moreover, a small number of businesses were excluded from the frame because their location was considered unsafe or inaccessible due to political conflict or natural disasters (but this affected less than 4% of the sampling frame). The result was a list of 135,324 eligible establishments, which formed the survey population. This population was stratified by economic domain¹⁷, state/region and size class¹⁸. As is usually the case in this type of survey, all strata containing larger businesses (size class 3) were considered self-representing, resulting in a complete enumeration of larger businesses in the frame. Moreover, small domains and undersized strata¹⁹ were considered self-representing. The remaining sample was allocated evenly across the

¹⁷ See section below for further detail on the definition of domains

¹⁸ Three size classes: 0-3 workers, 4-19 workers, 20+ workers

¹⁹ Undersized strata from size class 1 and 2 were collapsed/combined with the neighboring stratum of the respective other size class (1 or 2) within the same domain and state/region, and only considered undersized strata if still insufficiently sized after the collapsing.

remaining, non-self-representing strata, and establishments drawn through simple random sampling. For non-self-representing strata, a random selection of replacements was also drawn. No clustering was used in the sample design, making this a stratified random sample.

In order to allow inference from the sample to the population, base weights were calculated as the inverse of the probability of selection within each stratum. Following the data collection, the base weights were adjusted for non-response (using the standard weight adjustment cell approach²⁰) and the removal of ineligible sampling units.²¹ As a result, the survey sample of 14,331 businesses²² now represents 126,928 businesses.²³

Timeline and staffing

Given the urgent data needs in Myanmar, in particular for the compilation of national accounts, the MBS 2015 was implemented under an ambitious timeline. Preparations for the survey started in July/August 2015, and were carried out by a small survey coordination team in CSO, supported by technical experts from UNDP and ISTAT. Data collection in the field was carried out nationwide from November 23 to December 18, 2015. The fieldwork was carried out by 250 enumerators and 60 supervisors, all of which were staff of CSO and PD. In addition, a quality assurance team of 20 persons conducted spotchecks/revisits of around 9% of businesses successfully interviewed. Data entry started in parallel to the fieldwork activities and was completed by mid-January 2016 by 69 CSO&PD staff members. Data analysis and report production involved 8 staff members of CSO and was completed at the end of February 2016.

Analysis domains

As already mentioned in the section on sampling above, all quantitative surveys need to consider during their design phase the disaggregations/analysis domains that will be used for later analysis, to ensure that a sufficiently large sample is allocated to each domain. The domains are thereby a structuring element both of the sampling and the analysis of a survey. The domains (or “subsectors of the economy” as we call them in the main body of the report) used in the MBS are based on the “A*38” standard aggregation recommended for SNA data reporting²⁴, with minor modifications. Five of the A*38 groups don’t apply to the MBS (A, K, O, T, U). Moreover, the A*38 groups MA/MB/MC were grouped together to simply M, given the very small number of businesses conducting such activities in Myanmar. Finally, groups G, I, CC and CM were further split up into their respective sub-groups given their dominance and importance in the Myanmar economy.

²⁰ Weight adjustment cells were formed by state/region and original (frame-based) size class.

²¹ Moreover, single-unit strata were collapsed/grouped with neighbouring strata in the final data to facilitate variance estimation.

²² The resulting sample is distributed as follows across states/regions: Kachin State: 641; Kayah State: 373; Kayin State: 605; Chin State: 260; Sagaing Region: 1092; Thaninthary Region: 1288; Bago Region: 958; Magwe Region: 951; Mandalay Region: 1539; Mon State: 875; Rakhine State: 743; Yangon Region: 2433; Shan State: 1157; Ayeyarwaddy Region: 896; Nay Pyi Taw: 520.

²³ The total found throughout the tables of this report is 126,928 – a result of the removal of the telecommunications sector at the analysis stage, as described earlier.

²⁴ See p.274-276 of ISIC Rev. 4 manual

Questionnaire design

The design of the questionnaire and its accompanying interviewer manual were based on existing experience from the CSO industrial zone survey as well as international best practice for structural business statistics and economic surveys. The survey questionnaire can be found in annex C to this report. It contains the following core sections:

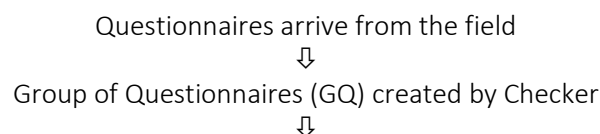
- Basic information on business (e.g. age, registration status, location in industrial zone, type of ownership, etc.)
- Income (differentiated by type of productive and non-productive activity)
- Expenses (including detailed information on workers, goods used for production, and various other types of expenses)
- Inventories (differentiated by type of goods)
- Assets

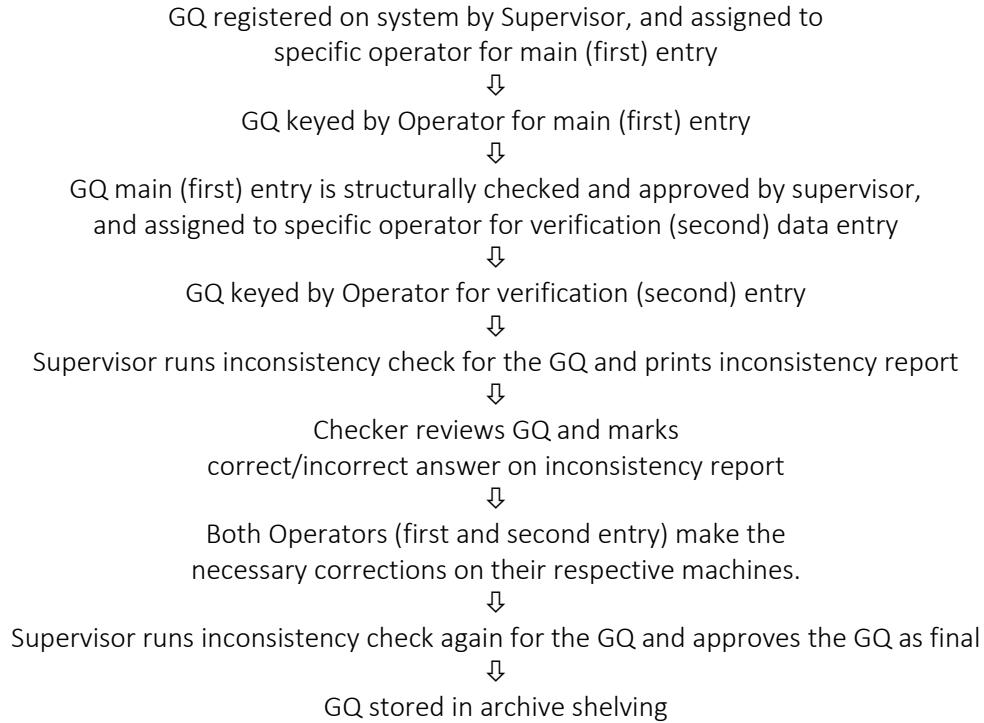
There are different approaches internationally as to whether data collection in this type of survey is conducted at the product level (i.e. do we record business income only as total values, or do we list the specific products sold?). Needless to say, the collection of data at the product level requires substantially higher data collection effort, as all product items need to be coded using standard product classifications, and the resulting data entry effort is also significantly higher. Moreover, the results from product-level data have been shown to be rather unreliable in many countries, not least because the sampling methodology of a business-level survey insufficiently accommodates the prerequisites for product-level aggregate statistics. Many countries have therefore switched to either a separate product-level survey for generating product statistics, or to applying standard product factors to business-level totals, which appears to deliver acceptable results. In consequence, the MBS did not collect data at the product level. While the questionnaire may suggest otherwise, it should be noted that the questionnaire fields for listing product items were only an optional tool to help the enumerator calculate the totals, and only total values recorded in the boxed fields were further processed.

Data entry

The data entry system was developed and managed by CSO's IT section with technical assistance from UNDP. It comprised a closely controlled and tracked environment ranging from the receipt of questionnaires from the field to the eventual export of the dataset to Stata. The core data entry application was developed using CSPro6.1, and was based on a double-entry system with all the usual checks and controls in a fully networked environment for automated file transfers.

Data entry staff was divided into supervisors, checkers and operators, all of which had distinct and clearly defined roles and responsibilities. The core data entry process can be outlined as follows:





A detailed report on the data entry process is available upon request.

Data cleaning and analysis

Data cleaning and analysis were conducted in Stata. Data cleaning involved structural checks (e.g. for overall completeness and duplicate identifiers), basic checks of all variables (range checks, etc.), wider consistency checks (in particular related to consistency in the questionnaire path), and outlier checks. In addition to the cleaning routines developed in Stata, some manual checks (in particular of identifiers, MSIC codes, and select outliers) were carried out. A detailed data cleaning report documenting all edits applied to the data is available upon request.

The descriptive statistics produced during the data analysis phase were based on a data analysis plan (tabulation plan) that was circulated for review and comments among key stakeholders before the start of the analysis phase. Tables were produced using Stata's `tabout` command, and further processed in Excel. Graphs were produced in Excel.

Evaluation of coverage

Given the above-mentioned lack of reliable benchmarks for the completeness/coverage of the MBS, it is not possible to conduct a comprehensive assessment of coverage of the MBS 2015. Due to the specifics of the sampling frame described in the sampling section above, we know that the survey is only representative of businesses with at least one hired worker, thereby excluding own-account and family-

run businesses. For the remaining businesses, we can make at least a partial assessment of coverage against two other surveys and the Population Census:²⁵

- Benchmark 1: The latest CSO industrial zone survey in 2014, which covers only manufacturing businesses in industrial zones: We can compare this against the businesses located in industrial zones in the MBS 2015. The industrial zone survey found a total of 6,930 businesses. This compares to an estimate of 7,593 in the MBS. However, this also includes non-manufacturing businesses that are located in industrial zones. Manufacturing businesses in industrial zones are estimated by the MBS as only 5,036. However, it remains unclear whether the lower count in the MBS is due to sampling frame undercoverage, or due to differences in classifying businesses with mixed economic activity (e.g. manufacturing and services).
- Benchmark 2: The UNDP/PD “One-Pager Business Census” (OPBC) which covers only registered businesses. Given that the OPBC appears to suffer from obvious undercoverage in the areas of trade and services, it was used as a benchmark only against registered manufacturing firms (excluding construction and mining/quarrying). The OPBC found a total of 25,682 registered manufacturing business in Myanmar. This compares to a total in the MBS of 27,204 manufacturing firms registered at the Union level (ministry/agency).
- Benchmark 3: While the Census does not provide any information at the business level, it does ask respondents to report on their economic activity. Own-account workers and family workers cannot be compared to the MBS, given that its sampling frame deliberately excluded businesses without at least one hired worker. However, the comparison of persons self-classifying as “employees (private, org)” in the Census (after excluding those in agriculture, finance, etc.) was substantially higher than the 0.9 million found in the MBS. Comparing across sectors, coverage of the MBS against the census appears highest in the manufacturing sector (73%) but significantly lower in the trade and services sectors. Unfortunately, given the lack of further information on business types in the Census, there is no way of further investigating what is causing this mismatch in employee numbers.

In view of only the limited benchmarks we have available, the coverage of the MBS appears decent against other establishment surveys, but low against the census, which points to room for improvement on the sampling frame in future rounds of the MBS. When further disaggregating to the state/region level, there appear to be some regional variations in terms of coverage against benchmarks. Somewhat similar patterns can be observed against the two benchmarks, with signs of some possible undercoverage in the MBS found for Sagaing, Mandalay and Ayeyarwaddy.

²⁵ Given that a unique identifier for enterprises is not available between different surveys, typical methodologies such as capture-recapture models cannot be used and the comparison could be carried out only at the macro/aggregate level.

Annex C: Survey questionnaire

Myanmar Business Survey 2015

(Reference period: April 1, 2014 – March 31, 2015)

This survey is conducted under the Central Statistical Authority Act 34, 1952. The information obtained from the survey is strictly confidential and will be used only for statistical purposes.

Identification of business (to be filled by supervisor from sample sheet)

1) Business ID	<input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
2) State/region code	<input type="text"/> <input type="text"/>
3) Township code	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
4) ISIC code from sample sheet	<input type="text"/> <input type="text"/>
5) Name of business	<input type="text"/>
6) Address of business	<input type="text"/>
6b) Product of business	<input type="text"/>

Interview start

7) Supervisor ID

8) Enumerator ID

9) Number of attempted visits

10) Interview start status

1 – Interview initiated
 2 – Not found ➔ end of questionnaire
 3 – Not operational/closed ➔ end of questionnaire
 4 – Temporarily closed ➔ end of questionnaire
 5 – Refused interview (unwilling or unable) ➔ end of questionnaire
 6 – Area inaccessible / unsafe ➔ end of questionnaire
 7 – Government entity or non-profit institution/NGO (not private business) ➔ end of questionnaire
 8 – Other reason why interview not possible ➔ end of questionnaire

11) Interview start date (DD/MM/YY) / /

12) Interview start time (HH:MM) :

Contact information

13) Updated name of business

14) Updated address of business

15) Name(s) of owner(s)

16) Phone number(s) of owner(s)

17) Main interviewee name

18) Main interviewee phone number

Basic information on business

19) Describe primary activity.....

20) Describe secondary activity.....

21) Month and year of establishment (MM/YYYY)..... /

22) Type of ownership.....

- 1 – Private owned by national(s)
- 2 – Private owned by foreigner(s)
- 3 – Cooperative
- 4 – Joint venture owned by national and foreign company(s)
- 5 – Joint venture owned by public and national company(s)
- 6 – Joint venture owned by public and foreign company(s)
- 7 – Other

23) Type of establishment.....

- 1 – Single unit
- 2 – Head establishment
- 3 – Branch

24) Registered with...

- 1 – Yes
- 2 – No

a. DICA.....

b. Any Union Ministry or affiliated Union-level agency.....

c. Municipal office or township/city development committee.....

d. GAD.....

25) Located in industrial zone?.....

- 1 – Yes
- 2 – No

Sales of goods manufactured by the enterprise												
Product	Space for calculations	Total value (Kyats in thousand)										
27) Total value of sales of goods manufactured by the enterprise (Kyats in thousand)		<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>										

Provision of services												
Service	Space for calculations	Total value (Kyats in thousand)										
28) Total value of provision of services (Kyats in thousand)		<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>										

Provision of construction, repairs and maintenance (through own labour force or through sub-contracting)		
Activity	Space for calculations	Total value (Kyats in thousand)
29) Construction of new residential buildings		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
30) Construction of new non-residential buildings		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
31) Civil engineering works ²⁶		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
32) Repairs and maintenance		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

Income from other productive activities ²⁷		
Activity	Space for calculations	Total value (Kyats in thousand)
33) Total value of income from other productive activities (Kyats in thousand)		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

²⁶ May include: Highways/streets/roads, railways, airfield runways, bridges, tunnels and subways, harbours, waterways and other waterworks, dams and irrigation, pipelines, communication and power lines, mines and industrial plants, sport and recreation facilities.

²⁷ May include: mining/quarrying, electricity providers, water supply, sewerage, waste management, etc.

Income from non-productive activities ²⁸		
Activity	Space for calculations	Total value (Kyats in thousand)
34) Total value of income from non-productive activities (Kyats in thousand)		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

Subsidies received from government		
Subsidy	Space for calculations	Total value (Kyats in thousand)
35) Total value of subsidies received from government (Kyats in thousand)		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

²⁸ May include: interest income from deposits, income from dividends, tax refunds, compensation from insurance companies, gains in exchange, grants/remittances/gifts received

Total expenses

Workers						
Type	Number	Emoluments paid ²⁹	Social welfare contributions ³⁰	Other payments in cash or kind ³¹	Total number of hours worked by all workers in the reference year	
		(Paid to all workers for the entire reference year - Kyats in thousand)				
36) Working proprietors	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
37) Employees, full time	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
38) Employees, part time	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
39) Family workers ³²	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

²⁹ Includes, salaries/wages, house rent allowance, transport allowance, bonus and other benefits paid or payable in cash or in kind.

³⁰ Contribution to insurance, provident fund and other social security schemes.

³¹ Employer's contribution to education, health, day care centres, canteen, etc.

³² A family member working for more than 1/3rd of natural working hours is classified as family worker.

Raw materials and semi-finished/input products ³³ (local and imported)		
Local raw material or semi-finished/ input product purchased	Space for calculations	Total value (Kyats in thousand)
42) Total value of local raw materials and semi-finished/input products (Kyats in thousand)		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Imported raw material or semi-finished/ input product purchased	Space for calculations	Total value (Kyats in thousand)
43) Total value of imported raw materials and semi-finished/input products (Kyats in thousand)		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

³³ If purchased for resale in same condition as received, record in table above.

Other expenses		
Item purchased	Space for calculations	Total value (Kyats in thousand)
44) Sub-contractors		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
45) Electricity		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
46) Fuel		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
47) Water		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
48) Taxes		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
49) Rental payments ³⁴		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
50) Interest payments on loans		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
51) Repairs and maintenance		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
52) Cost for training of own staff		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
53) Donations		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
54) All other expenses ³⁵ (excluding on assets ³⁶)		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

³⁴ May include: rental payments on land, buildings, fixed assets etc.

³⁵ May include: IT and telephone charges, bank charges, insurance costs, transportation charges, advertisement, etc.

³⁶ Assets are all tangible and intangible items that serve the business for several years (e.g. buildings, machinery and equipment, vehicles, software licenses etc.). They should be recorded separately in the “assets” section below.

Inventory of raw materials and semi-finished/input products ³⁷		
Raw material or semi-finished/input product	Opening balance on April 1, 2014 (Total value, Kyats in thousand)	Closing balance on March 31, 2015 (Total value, Kyats in thousand)
	58) Total value of opening balance (Kyats in thousand) <div style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; margin-top: 5px;"></div>	59) Total value of closing balance (Kyats in thousand) <div style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; margin-top: 5px;"></div>

³⁷ Only if these are then further processed. If purchased for resale in same condition as received, record in table above.

Assets

Value of assets (Total value, all in Kyats in thousand) ³⁸					
Type of asset	Opening balance on April 1, 2014	Acquisitions in reference year	Disposals in reference year	Depreciation in reference year	Closing balance on March 31, 2015 ³⁹
62) Land	<input type="text"/>	<input type="text"/>	<input type="text"/>	<i>n/a</i>	<input type="text"/>
63) Buildings	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
64) Machinery and equipment	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
65) Vehicles	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
66) Other fixed assets ⁴⁰	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
67) Intellectual property assets ⁴¹	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

³⁸ Assets are all tangible and intangible items that serve the business for several years.

³⁹

⁴⁰ May include furniture etc.

⁴¹ May include software licenses, rights etc.

Interview end

68) Interview end date (DD/MM/YY)..... / /

69) Interview end time (HH:MM)..... :

Central Statistical Organization
Office 32
Nay Pyi Taw
Myanmar
<http://www.csostatat.gov.mm>

United Nations Development Programme Myanmar
6 Natmauk Road, Tamwe Township
Yangon
Myanmar
<http://www.mm.undp.org>