

## TECHNICAL NOTES

### 1. SCOPE AND COVERAGE

*This publication comprised registered establishments engaged in the Services sector based on Malaysia Standard Industrial Classification (MSIC) 2008 Ver. 1.0, in accordance with the International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4.*

*Principal statistics published are value of gross output, intermediate input, value added, number of persons engaged, salaries & wages paid and value of fixed assets. The production of these statistics is based on the compilation of data from various sources, including short term statistics released by DOSM and administrative data available from other agencies by adopting the appropriate statistical estimation techniques.*

### 2. SOURCE OF ESTABLISHMENTS

*The main source of updating statistical business frame namely Malaysia Statistical Business Register (MSBR). MSBR is a list of establishments operating in Malaysia which includes the Register of Companies (ROC), Register of Business (ROB) and Limited Liability Partnership (LLP) registered with the Companies Commission of Malaysia (CCM) as well as establishments registered with local authorities and professional bodies. The list in the MSBR is updated regularly based on surveys and censuses conducted by the Department of Statistics Malaysia and administrative data sources from other agencies. The main source of administrative data is from the Companies Commission of Malaysia (CCM). In addition DOSM also works together to obtain the latest information from other agencies such as the Employees' Provident Fund (EPF), the Royal Malaysian Customs Department, the Inland Revenue Board (IRB), local authorities and professional bodies.*

*The frame is updated to take into account new establishments and to record any changes in the status of the establishments such as closed down, not in operation, change in activity and location / correspondence address so as to ensure that the frame is at the most current status.*

### 3. **TYPE OF BUSINESS ACTIVITY**

*Type of business activity refers to both principal and secondary activities. The principal activity refers to the activity to which the establishment devoted most of its resources or activity which derived most of its income. Secondary activities are defined as those incidental or ancillary to the principal activity. The classification of the industry of the establishment is based on the principal activity and is in accordance with the Malaysia Standard Industrial Classification (MSIC), 2008 Version 1.0 in accordance with the International Standard Industrial Classification of All Economic Activities (ISIC) Revision 4, United Nations, with modifications to suit local conditions.*

### 4. **CONCEPTS AND DEFINITIONS**

*Concepts and definitions used are based on the Manual of International Recommendations for Distributive Trade Statistics 2008 (IRDTS 2008) published by the United Nations Statistics Division. This concept adheres to accepted practices, thereby facilitating data comparison at the international level.*

*The definition used is in accordance with the MSIC 2008 Version 1.0 are as follows:*

#### **4.1 Wholesale & Retail Trade**

##### **4.1.1 Wholesale Trade**

*Refer to “the resale (sale without transformation) of new and used goods to retailers, to industrial, commercial, institutional or professional users, or to other wholesalers, or involves acting as an agent or broker in buying merchandise.”*

*Wholesalers frequently physically assemble, sort and grade goods in large lots; break bulk, repack and bottle (except in air-tight containers) and redistribute in smaller lots, store, refrigerate, deliver and install goods as well as engage in sales promotion for their customers and label design.*

*The main types of operations for the Wholesale trade are as follows:*

##### **a) Merchant wholesalers**

*Merchant wholesalers are those who take title to the goods they sell,*

*such as wholesale merchants or jobbers, industrial distributors, exporters, importers, co-operative buying associations and petroleum bulk station / terminals. Assemblers, buyers and co-operative associations engaged in the marketing of farm products, scrap metal, waste and junk dealers are included as well.*

**b) Sales offices and sales branches**

*Refers to sales offices and sales branches other than retail stores, which are maintained by manufacturing or mining enterprises, apart from their plants or mines.*

*For the purpose of marketing their products and which do not merely take orders to be filled by direct shipments from plants or mines. Such establishments are covered if they maintain separate distributive trades' accounts.*

**c) Agents or brokers**

*Include merchandise and commodity brokers, commission merchants and agents which involve in wholesale activities. They do not take title to the goods they sell but instead work on the basis of commissions and fees, through buying and selling on the accounts of others.*

*Activities which are **excluded** from Wholesale trade are as follows:*

- i. renting of industrial, agricultural and business equipment and machinery;*
- ii. manufacturer's / producer's sales office activities do not exist and data cannot be allocated accordingly;*
- iii. hiring of construction equipment;*
- iv. warehousing and storage offered as an independent service;*  
*and*
- v. the bottling of natural mineral water at springs and wells*

#### **4.1.2 Retail Trade**

*Refer to “the resale (sale without transformation) of new and used goods to the general public for personal or household consumption or utilisation.” It includes selling by shops, department stores, stalls, mail-order houses, hawkers and peddlers, consumer co-operatives, online and etc.*

*The main types of operations for the Retail trade are as follows:*

##### **a) Retailer**

*Refers to individual / company engaged in selling good activities to household and personal. Most retailers take title to the goods they sell, but some act as an agent for a principal and sell either on consignment or on a commission basis.*

##### **b) Chain or branches**

*Chain refers to two types or more establishment engaged in same types of business under single ownership and control. Chain consists of branches under the ownership and control of a head office within Malaysia. It does not include establishments within an enterprise but registered separately with the Registrar of Business or Registrar of Companies. Neither are international chains included unless they have two or more branches in Malaysia. For example, Seng Hup, Jaya Jusco, 7-eleven and others.*

*Branch refers to two or more establishments engaged in the same types of business under single ownership and control with its headquarters. It is directly managed by the headquarters for the purpose of marketing and direct shipments of its products after receiving orders from customers.*

##### **c) Agents and brokers**

*Refers to merchandise brokers and commission agents which involve in retail activities. They do not take title to the goods they sell. Their source of income is on the basis of commissions and fees, through*

*buying or selling on the accounts of others.*

*Establishments that **displayed products** such as stationery, petrol or lumber and engaged in selling to the general public are classified under Retail trade. These sales may not be for personal or household consumption. (However, establishments that sell such merchandise to Industrial or institutional users are classified in Wholesale trade).*

*Establishments primarily engaged in renting of goods to the general public for household or personal use are included in Retail trade. It does not cover rental of amusement and recreational goods such as boats, canoes, motorcycles, bicycles, saddle horses and others.*

*Establishments engaged primarily in direct selling through independent distributors are considered as part of Retail trade (for the purpose of this census) even though they might not have direct contact with the final consumers.*

*The kind of business which operate almost similarly to Retail trade but are **excluded** from this census are as follows:*

- i. sales of farmers' products by farmers;*
- ii. bakeries;*
- iii. tailoring; and*
- iv. shops making photo frames.*

#### **4.1.3 Motor Vehicles**

*Refer to activities covering wholesale and retail sale of motor vehicles and motorcycles, either new or used, sale of motor vehicle parts and accessories, maintenance and repair of motor vehicles and motorcycles including washing, polishing and towing as well as commission agents which involve in sales.*

*The main types of operations for the Motor vehicles are as follows:*

**a) Service Centre**

*Refers to establishment which comprise shop or sales office offering motor vehicles maintenance service and repair. Some service centers also sale spare parts.*

**b) Sales office and sales branches**

*Refers to the sales office or branches which display motor vehicles such as car, lorry, motorcycle and others for the purpose of selling new or used vehicles as well as the sale of spare part and maintenance and repair of motor vehicles can be found in certain places.*

**c) Agents or brokers**

*Include vehicle trade brokers and commission agents which engaged in motor vehicles activities. They do not take title to the goods they sell but instead work on the basis of commissions and fees through buying or selling on the accounts of others.*

**5. SURVEY YEAR**

*Survey year refers to the year in which a survey was conducted.*

**6. REFERENCE YEAR**

*The reference year of the survey was the calendar year 2021.*

**7. METHOD OF DATA COLLECTION**

*This survey is generally conducted through three (3) methods, namely:*

- i. Data collection method via Online method through the e-aes portal: This method targets respondents who have used this method for previous routine surveys.*

- ii. Respondents were given a period of one month to complete and return the questionnaire to the Department.
- iii. Face-to-face data collection method: Field work operation is carried out to get feedback from organizations that have not yet given answers from the two methods above and this method also targets organizations that have never been involved in a routine DOSM survey.

## 8. SAMPLING DESIGN

Sampling design of the survey is a one-stage stratified random sampling. Categories of industries at two (2), three (3), four (4) and five (5) digit MSIC at state level have been classified as stratum and the establishment as the sampling unit.

Each stratum (industry) has been set up into four substrata to ensure the distributed sample takes into account the economic characteristics of the industry. The main substratum is heterogeneous and was fully covered. Whereas, other substratum that is homogeneous were sampled.

Main substratum includes large establishments that have significant total revenue in the industry while for the second to fourth substratum are based on Micro, Small and Medium Enterprise (SME) categories.

## 9. SAMPLE SIZE AND ESTIMATION PROCEDURE

The main statistics used to estimate the sample size is the total revenue. The formula used in the estimation of the sample size for a stratum is as follows:

$$n = \frac{(\sum N_i S_i)^2}{V + \sum N_i S_i^2}$$

where,

$n$	=	Sample size
$N_i$	=	Population size for stratum
$S_i^2$	=	Variance for stratum
$V$	=	Desired variance

$$V = RSE^2 \left( \frac{\hat{Y}_i}{Z} \right)^2$$

where,

$\hat{Y}_i$	=	Total revenues for stratum $i$
$RSE$	=	Relative standard error
$Z$	=	Value of confidence level

Sample is distributed to substratum of the industry using Neyman Allocation Method as follows:

$$n_{hi} = \left( \frac{N_h S_h}{\sum N_h S_h} \right) n'_i$$

$h = 2, 3 \text{ and } 4$

$i = 1, 2, \dots, k$

where,

$n_{hi}$	=	Sample size for substratum $h$ of stratum $i$
$N_h$	=	Population size for substratum $h$
$S_h$	=	Standard deviation for substratum $h$
$n_i$	=	Sample size for stratum $i$
$h$	=	Substratum
$i$	=	Stratum

The optimum sample size for this survey is 79,349 establishments. Establishments of the large categories were fully covered while establishments of the second to fourth substratum were randomly selected using systematic random sampling.

## 10. WEIGHTS

Weighted analysis is done using sampling weight to ensure that the selected sample can reflect the population survey. The weights required are the sampling design weight and non-response weight.

The sampling design weight for the establishment at stratum is as follows:

$$W_h = \frac{N_h}{n_h}, n = 1, \dots, 4$$

where,



$$N_h = \text{Total population of substratum } h$$

$$n_h = \text{Total sample of substratum } h$$

Non-response weight at substratum  $h$  as below:

$$NRW_h = \frac{1}{n'_h/n_h}, h = 1, \dots, 4$$

where,

$$n'_h = \text{Number of response sample size for substratum } h$$

$$n_h = \text{Number of sample size for substratum } h$$

The method of calculating the sampling design weight after the survey (adjusted weight) on substratum  $h$  as below:

$$W'_h = W_h \times NRW_h, h = 1, \dots, 4$$

where,

$$W_h = \text{Sampling design weight at substratum } h$$

$$NRW_h = \text{Non-response weight at substratum } h$$

## 11. REPORTING UNIT

The reporting unit used in the survey was **establishment**. An establishment is defined as "an economic unit that engaged in one activity, under a single legal entity and operating in a single physical location". Each establishment was assigned an industry classification based on its principal activity and not to that of its parent company.

Each branch of a multi-branch organisation at a different location was conceptually treated as a different establishment. The establishment was requested to give separate returns for each activity in terms of value. However, in practice, the accounts were centrally kept such that it was not possible to obtain separate data for each individual unit or branch. That entity or enterprise was treated as a single reporting unit and allowed to submit a consolidated questionnaire covering all units or branches.

## **12. VALUE OF GROSS OUTPUT**

*The value of gross output of Wholesale & Retail trade sector includes:*

- Sales of goods*
- + *Sales of motor vehicles*
- *Cost of goods sold (goods purchased for resale without undergoing further processing, e.g. spare parts)*
- + *Commissions and fees received*
- + *Income from repairs, installation and maintenance service*
- + *Income from sales of spare parts and accessories*
- + *Rental income received except land rental*
- + *Others operating income*
- + *Capital expenditure on built / self-produced*

## **13. VALUE OF INTERMEDIATE INPUT**

*Value of intermediate input of Wholesale & Retail trade sector includes:*

- Materials and supplies*
- + *Costs of repair and maintenance*
- + *Utilities used*
- + *Fuels, lubricants and gas*
- + *Telecommunication fees*
- + *Purchase of transport services*
- + *Advertising and promotion*
- + *Cost of printing*
- + *Rental expenditure used except land rental*
- + *Other operating expenditure*
- + *Cost of free wearing apparel provided for employees*
- + *Fees paid to non-working directors for their attendance at Board of Directors' meetings*
- + *Staff training cost*

## **14. VALUE ADDED**

*Value added is the difference between output and intermediate input. It represents the added value of goods and services by economic activity. Hence, it is approximately*

*equivalent to commercial profit, salaries and wages, depreciation and indirect taxes; plus interest paid and less interest received.*

## **15. NUMBER OF PERSONS ENGAGED**

*Employment covers all persons engaged during December or the last pay period of the reference year. The number of persons engaged was classified under the following categories:*

### **a. Working proprietors and active business partners**

*This category refers to all individual proprietors and partners, part-time or full time, who are actively engaged in the work of the establishment. Therefore, it excludes inactive partners.*

### **b. Unpaid family workers**

*This is defined as all persons in the household of any of the owners of the establishment who perform a specified job (full-time or part-time) and work for a minimum of one third of the normal working time for the establishment, but do not receive regular payment either in cash or in kind for the work done. Such workers generally receive food, shelter and other support as part of the household of an owner but this would continue whether they worked in the establishment or not.*

### **c. Paid employees (full-time)**

*This is defined as all paid workers who work for at least 6 hours a day and at least 20 days a month.*

### **d. Paid employees (part-time)**

*This is defined as all paid workers who work for less than 6 hours a day and / or less than 20 days a month.*

## 16. CATEGORY OF SKILLS

### a. **High-skilled Workers**

*Managers, Professionals and Technicians & Associate Professionals;*

### b. **Semi-skilled Workers**

*Clerical Support Workers; Service & Sales Workers; Craft & Related Trades Workers; Plant and Machine Operators & Assemblers; and*

### c. **Low-skilled**

*Elementary occupations*

## 17. VALUE OF FIXED ASSETS

*Fixed assets are produced assets that are used repeatedly or continuously in production processes for more than one year. Fixed assets include structures, machinery and equipment and cultivated assets such as trees or animals that are used repeatedly or continuously to produce other products such as fruit or dairy products. It was also included intellectual property products such as software or artistic originals used in production.*

## 18. ROUNDING

*The sum of the components may not add up to the total in the tables presented due to rounding.*

## 19. ANNUAL GROWTH RATE

*The calculation of annual growth rate ( $r$ ) is based on the following formula:*

$$y_t = y_0 (1 + r)^t$$

where,

$$r = \left[ e^{\frac{1}{t} \ln \left( \frac{y_t}{y_0} \right)} - 1 \right] \times 100$$

where,  $y_t$  = Value at current year  
 $y_0$  = Value at previous year  
 $t$  = Number of years,  $y_t - y_0$   
 $r$  = Compound annual growth rate

## 20. SYMBOLS AND ABBREVIATIONS

& : and  
% : per cent  
} : combine  
- : nil  
i.e : that is  
n.a : Not applicable  
etc. : et cetera  
RM : Ringgit Malaysia  
n.e.c : not elsewhere classified  
W.P. : Wilayah Persekutuan