TECHNICAL NOTES

1. INTRODUCTION

The data for this publication was collected through the Quarterly Survey of Services and Monthly Survey of Wholesale & Retail which comprise of the following sub-sectors:

- *Wholesale & Retail Trade from the 2005;*
- *Information & Communication; Transportation & Storage; Food & Beverages and Accommodation from 2009;*
- *Private Education and Private Health from 2010;*
- *Professional from 2011;*
- *Arts, Entertainment & Recreation and Real Estate Agent from 2012; and*
- *Administrative & Support Services; Personal Services & Other Activities; Real Estate Developer and Other Professionals starting in 2019.*

However, for this publication, the data presented commenced from 2020.

2. OBJECTIVES

This publication presents information on revenue/ sales value, number of persons engaged and salaries & wages in Services sector. The main objectives of this survey are to:

- *Provide short term indicators of Services sector;*
- *Provide input towards the compilation of Quarterly Index of Services;*
- *Provide information for the compilation of Quarterly Gross Domestic Product; and*
- *Assist the government and other organisation as well as business community in planning and decision making.*

3. SCOPE AND COVERAGE

The surveys cover all registered establishments of the relevant regulatory bodies engaged in the Wholesale & Retail Trade; Information & Communication; Transportation & Storage; Food & Beverages; Professional; Private Health; Private Education; Accommodation; Arts, Entertainment & Recreation; and Real Estate Agent Services; Administrative & Support Services; and Other Services subsectors. Meanwhile, Finance & Insurance Services is not covered in this survey.

Short term indicator for e-commerce income is to measure the current performance of e-commerce in Malaysia on quarterly basis. The source of data is from DOSM's short-term surveys.

4. CONCEPTS AND DEFINITIONS

The classification of the industry is based on the Malaysia Standard Industrial Classification 2008 Ver. 1.0. The classification conforms to the International Standard Industrial Classification of All Economic Activities, Revision 4, United Nations Statistics Division. Meanwhile, the concepts of wholesale and retail trade adopted in this publication is based on recommendation in the Manual of International Recommendations for Distributive Trade Statistics 2008 (IRDTS 2008) published by the United Nations Statistics Division. The definition of industries are as follows:

4.1 Wholesale & Retail Trade

4.1.1 Wholesale Trade

Refers to the resale (sale without transformation) of new and used goods to retailers; industrial, commercial, institutional or professional users; or to other wholesalers; or selling merchandise to, such persons or companies.

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 customers and label design.

4.1.2 Retail Trade

Refers to the resale (sale without transformation) of new and used goods to the general public for personal or household consumption or utilisation.

4.1.3 Motor Vehicles

Refers to 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 as well as commission agents.

4.2 Information & Communication

Refers to activities publishing, motion picture, video & television programme production, sound recording & music publishing, programming & broadcasting, telecommunications services, computer programming, consultancy & related activities and information services.

4.3 Transportation & Storage

Refers to provision of passengers or freight transport, whether scheduled or not, by rail, pipeline, road, water or air and associated activities such as terminal and parking facilities, cargo handling, storage and etc. Renting of transport equipment with driver or operator and postal and courier services are also included.

4.4 Food & Beverages

Refers to establishments that includes food and beverage serving activities providing complete meals or drinks fit for immediate consumption, whether in traditional restaurants, self-service or take-away restaurants, whether as permanent or temporary stands with or without seating. Determinant is the fact that meals fit for immediate consumption are offered, not the kind of facility providing them.

4.5 Professional

Refers to establishments specialised in professional activities which require expertise and training. The establishments in this sub-sector services to industries and household. The activities include advisory and legal representation; accounting, bookkeeping and auditing; architectural; engineering; surveying; management consultancy services & market research; advertising; scientific research & development and technical testing & analysis; other professional and veterinary.

4.6 Private Health

Refers to establishments that provide private health services including private hospital and maternity home services, medical services (including general and specialised medical), dental services and other human health activities such as dialysis centres, medical laboratories, acupuncture services, herbalist and homeopathy services, physiotherapy & occupational therapy services, ambulance services and other alternative medical.

4.7 Private Education

Refers to establishments that provide private education services such as pre-primary education, secondary education and higher education, higher education, and other education. The main process of learning is in the classroom. Moreover, there is also a learning process outside the classroom such as through television, internet or sport centres involving for certain level.

4.8 Accommodation

Refers to the provision of short-term paid accommodation whether open to the public or restricted to members of a particular organisation. It includes hotels (including resorts), budget hotels/ motels, service apartments, chalets and rest houses/ guest houses/ hostels/ bed & breakfast/ homestay.

4.9 Arts, Entertainment & Recreation

Refers to a wide range of activities to meet various cultural, entertainment and recreational interests of the general public, including live performances, operation of museum sites, gambling, sport and recreation activities.

4.10 Real Estate

Refers to establishments that provide real estate services which cover the activities of real estate developers with own or leased property; and real estate agent activities on a fee or contract basis.

4.11 Administrative & Support Services

Refers to a variety of activities that support general business operations including rental and leasing activities, employment activities, travel agency, tour operator and other reservation service activities, security and investigation activities, services to building and landscape activities and office administrative, office support and other business support activities.

4.12 Personal Services & Other Activities

Refers to personal services & other activities include activities of membership organisations such as activities of business, employers and professional membership organisations; activities of trade unions; and activities of others membership organisations; repair of computers & personal and household goods; and other personal service activities such as washing and dry-cleaning of textiles and fur products; hairdressing and other beauty treatment; funeral; and other service activities.

5. REPORTING UNIT

*The reporting unit is an **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 by its parent company.*

6. REVENUE

Revenue refers to the amount received and receivable for services rendered and other transactions made during the reference quarter. It comprised both operating and non-operating revenue.

E-commerce income means the total income of establishments with e-commerce transactions.

Income for Wholesale and Retail Trade establishments refers to the value of sales of goods and services. Sales value means the value of all items for which ownership or effective right to use with a view to ultimate purchase, has been transferred to others; and value added is the increment to the value of commodities and services contributed by the establishment. This value is derived as the difference between the value of gross output and intermediate input.

7. SALES VALUE

This definition is an applicable to Wholesale and Retail Trade.

Sales value refer to:

*(a) the value of all **goods,** for which ownership or effective right to use with a view to ultimate purchase, has been transferred to others; and*

*(b) the value of **services** rendered during the inquiry period, irrespective of time or method of payment.*

*The sales value in this survey refers to the **total sum paid** by the customers. It includes:*

(a) sales price;

(b) financing, delivery and installation charges, if these services are rendered by the establishment enumerated.

8. NUMBER OF PERSONS ENGAGED

The total number of persons engaged includes all working proprietors and active business partners, unpaid family workers and employees who worked during the last pay period of the reference quarter. It also includes part-time workers in the payroll and persons on strike and short-term leave (sick leave, emergency leave or vacation). Not included are workers on indefinite leave as well as pensioners.

9. SALARIES & WAGES PAID

Salaries & wages paid refers to cash payments, including bonuses, commissions, overtime pay, cost of living allowances and other allowances made to all employees during the reference quarter. The employees' contributions to Employees' Provident Fund (EPF) and Social Security Organisation (SOCSO) are included, while the employer's contributions are ***excluded****. Allowances to working proprietors, working partners and unpaid family workers are also* ***excluded.***

10. DEFINITION OF E-COMMERCE

Based on Organisation for Economic Co-operation and Development (OECD), 2015, ***e-commerce transaction*** *is defined as sale or purchase of goods or services, through a network of computers that have been designed for this purpose. E-commerce transactions can occur between enterprises, households, individuals, governments and public or private organisation to another.*

Goods or services that have been ordered through e-commerce methods, but the payment or receipt of goods or services can be received either through online or offline. E-commerce transaction, includes orders placed on websites, extranet or Electronic Data Interchange (EDI). However, the transactions made by telephone, fax, email (mail that is typed manually) and the similar transactions are not categorised as e-commerce transactions.

11. CONFIDENTIALITY REQUIREMENTS

The information is gathered under the provisions of the ***Statistics Act 1965 (Revised 1989)****. Section 5 of this Act requires all establishments services operating in Malaysia to provide actual information or best estimates to the Department. The Act stipulates that the content of individual returns are* ***confidential*** *and only aggregated figures are published. Meanwhile, Section 7 under the same Act provides the penalty to the respondents that could not comply with the surveys undertaken.*

12. REVISION POLICY

- *For monthly data, subject to changes in data source, revision is t-1 where t refers to current month.*
- *For quarterly data, subject to changes in data source, revision is t-1 where t refers to current quarter.*
- *For annual data, subject to changes in data source, revision is t-3 where t refers to current year.*

13. METHODOLOGY

13.1 Population

All establishments encompass Quarterly Survey of Services that consist of 357 industries at five (5) digits based on Malaysia Standard Industrial Classification 2008 Ver 1.0.

13.2 Sampling Frame

From the identified population, establishments that are still operating as at December 2024 were listed as sampling frame.

13.3 Sampling Design

Sampling design of the survey is a one-stage stratified random sampling. Categories of industries at national level have been classified as stratum and the establishment as the sampling unit.

Each stratum (industry) has been set up to four substratum to ensure the distributed sample takes into account the economic characteristics of the industry. The main substratum is heterogeneous covered in full coverage. Whereas, the others homogenous substratum was sampled.

Major substratum includes large-scale establishments that have significant revenue streams in the coverage industry while for second and fourth sub-sectors based on micro, small and medium enterprise (MSMEs) categories.

13.4 Sample Size

The main statistics used to estimate the sample size is the total revenue. The formula used in the estimation of the sample size using Neyman Allocation Method is as follows:

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

where;

n = *Sample size*

N_i = *Population size for stratum* i

S_i^2 = *Variance for stratum* i

V = *Desired variance*

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

where;

$\hat{Y}_i$ = *Estimated total revenue for stratum* i

RSE = *Relative standard error*

Z = *Value of cofindence level*

Sample is distributed to sub stratum of the industry using method as follows:

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

h

i = 2,3 and 4

= 1,2,…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_j = *Sample size for stratum* i

h = *Substratum*

i = *Stratum*

Establishments for the major substratum are categorized into 4 groups, namely large 1, large 2, large 3 and large 4. Establishments of the large 1 category were fully covered while establishments of the large 2,3 and 4 as well as MSMEs sub stratum were randomly selected using systematic random sampling.

13.5 Weight

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

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

$$W_h = \frac{N_h}{n_h}$$

where,

N_h = *Total population of sub stratum* h*; and*

n_h = *Total sample of sub stratum* h

Non response weight at sub stratum h as below:

$$NRW_h = \frac{1}{n'_h / n_h}$$

, $h = 1,...,4$

where;

n'_h = *Number of response sampel for substratum h; and*

n_h = *Number of sampel for substratum h*

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

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

where,

W_h = *Sampling design weight at substratum h*

NRW_h = *Non response weight at substratum h*

14. ROUNDING

The sum of component figures may not tally with the sub total or total figures due to rounding.