

1. Scope and coverage *The survey covered all registered establishments engaged in **financial services** which included main activities as follows:*

- i. Monetary intermediation activities;*
- ii. Other financial service activities and auxiliary to financial services;*
- iii. Insurance/takaful, reinsurance/retakaful and pension & provident funding activities; and*
- iv. Activities auxiliary to insurance/takaful and pension funding.*

*Overall, coverage of the survey for financial services was 52 industries at 5-digit level under the Malaysia Standard Industrial Classification (MSIC), 2008. The complete lists of industries are shown in **Appendix**.*

2. Source of establishment

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 consider 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 Activities

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.

3. Type of business Activities (cont'd)

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 Ver 1.0. The MSIC 2008 conforms to the International Standard Industrial Classification of All Economic Activities

4. Concepts and definitions

The definition of financial services adopted in this publication is based on the recommendations of the Malaysia Standard Industrial Classification (MSIC) 2008 Ver. 1.0:

Financial services include monetary intermediation activities; other financial service activities and activities auxiliary to financial services; insurance/ takaful, reinsurance/ retakaful and pension & provident funding activities; and activities auxiliary to insurance/ takaful and pension funding;

i. Monetary intermediation activities

This group includes the obtaining of funds in the form of transferable deposits, i.e. funds that are fixed in money terms, and obtained on a day-to-day basis and, apart from central banking, obtained from non-financial sources.

ii. Other financial service activities and activities auxiliary to financial services

This group includes the activities of holding companies, i.e. units that hold the assets (owning controlling-levels of equity) of a group of subsidiary corporations and whose principal activity is owning the group. The holding companies in this group do not provide any other service to the businesses in which the equity is held, i.e. they do not administer or manage other units, includes legal entities organised to pool securities or other financial asset, without managing, on behalf of shareholders or beneficiaries. The portfolios are customised to achieve specific investment characteristics, such as diversification, risk, rate of return, and other property income, but have little or no employment and no revenue from the sale of services; Includes financial service activities other than those conducted by monetary institutions; includes the furnishing of physical or electronic marketplaces for the purpose of facilitating the buying and selling of stock options, bonds or commodity contracts; includes portfolio and fund management activities on a fee or contract basis, for individuals, businesses and others.

4. Concepts and definitions(cont'd)

This group includes the underwriting annuities and insurance policies/ takaful certificates and investing premiums/ contributions to build up a portfolio of financial assets to be used against future claims; provision of direct insurance/ takaful and reinsurance/retakaful are included; Includes life insurance/family takaful and life reinsurance/ takaful and reinsurance/ retakaful are included; Includes the activities of assuming all or part of the risk associated with existing insurance policies/takaful carriers; Includes legal entities (i.e.funds, plans and/or programmed) organised to provide retirement income benefits exclusively for the sponsor's employees or members. This includes pension plans with defined benefits, as well as individual plans where benefits are simply defined through the member's contribution.

iv. Activities auxiliary to insurance/takaful and pension funding

Includes acting as agents (i.e. brokers) in selling annuities and insurance policies/takaful certificates or providing other employee benefits and insurance/takaful and pension related services such as claims adjustment and third party administration.

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 (MSME) 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 i |
| S_i^2 | = | Variance for stratum i |
| 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 |

9. Sample size and Estimation procedure (cont'd)

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 79,481 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. Weight

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 h is as follows:

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

where,

| | | |
|-------|---|------------------------------------|
| N_h | = | Total population of substratum h |
| n_h | = | Total sample of substratum h |

10. Weight (cont'd)

Non response weight at substratum h as below:

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

where,

$$\begin{aligned} n'_h &= \text{Number of response sample size for substratum } ^h \\ n_h &= \text{Number of sample size for substratum } ^h \end{aligned}$$

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,

$$\begin{aligned} W_h &= \text{Sampling design weight at substratum } ^h \\ NRW_h &= \text{Non response weight at substratum } ^h \end{aligned}$$

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 to an industry classification based on its principal activity.

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, if 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 is defined to include the following items:

a) Monetary intermediation services

The output for financial intermediation including FISIM income and fee-based income

$$\begin{aligned}\text{Output} &= \text{FISIM on loans} + \text{FISIM on deposits} \\ &= (r_L - rr)y_L = (rr - r_D)y_D\end{aligned}$$

Where,

y_L = Total loans

y_D = Total deposits

r_L = Interest rate on loans

r_D = Interest rate on deposits

rr = Reference rate

*Note:

FISIM – Financial intermediation services indirectly measured

b) Insurance/takaful

Premium income

+ Investment (premiums supplement)

- Claims paid

c) Other financial activities

Income from services rendered

+ Management services

+ Commission and brokerage earned

+ Rental Income received expect land rental

+ Research and development expenditure (in-house)

+ Capital expenditure on own construction

+ Value or service tax / serviced charges

+ All other output (such as amount received for repairs and maintenance carried out on other establishments' machinery and equipment, etc.)

13. Value of intermediate input *Value of intermediate input of financial services is defined to include the following items:*

- + *Cost of industrial work done by others*
- + *Cost of electricity and water purchased*
- + *Value of fuels, lubricants and water consume*
- + *All other input costs (such as printing, purchase of transport services, travelling expenses, advertising, legal fees, postage, management fees, rental, etc.)*
- + *Fees paid to non-working directors for their attendance at Board of Directors meeting.*
- + *Value of free wearing apparel provided*
- + *Staff training cost*
- + *Payment to other establishment for providing worker*

Effective 2014, research and development expenditure has been removed from calculation of intermediate input and treated as capital asset in line with

14. Value added *Value added is the increment to the value of commodities and services contributed by the establishment. This value added is derived as the difference between the value of gross output and intermediate input.*

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:*

i. 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 silent and inactive partners.

ii. Unpaid family workers

This is defined as all persons (full-time or part-time) in the household of any of the owners of the establishment who perform a specified job 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.

iii. 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.

iv. 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

Category of skills has been categorised according to Malaysia Standard Classification of Occupations 2020 (MASCO) as follow:

a. High-skilled workers

Managers, Professionals, Technicians and 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 workers

Elementary occupations

17. Value of fixed assets

Fixed assets covers all goods, new or used, tangible or intangible and repeated & continuously that have a normal economic life span of more than one year. Included are land, buildings and structure, transport equipment, other machinery equipment, computer software and furniture and fittings. Value of assets as at the beginning and end of 2017 were based on net book value. Purchases, alterations and major repairs or capital expenditure during the year valued at actual cost incurred. Value of assets sold during the year refers to the realized value. Research and development expenditure also treated as capital asset in line with the recommendation of System of National Accounts (SNA) 2008.

18. Rounding

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

19. Percentage Change Year on Year

The calculation 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

| | | |
|-------|---|--------------------------|
| - | : | nil |
| % | : | per cent |
| & | : | and |
| > | : | more than |
| < | : | less than |
| } | : | combined |
| RM | : | Ringgit Malaysia |
| etc. | : | et cetera |
| i.e | : | that is |
| n.e.c | : | not elsewhere classified |
| W.P. | : | Federal Territory |