



**KEMENTERIAN EKONOMI
JABATAN PERANGKAAN MALAYSIA**

PRODUKTIVITI BURUH

LABOUR PRODUCTIVITY

SUKU KEEMPAT 2022

FOURTH QUARTER 2022

Pemakluman

Jabatan Perangkaan Malaysia (DOSM) akan menjalankan Banci Ekonomi pada tahun 2023. DOSM amat menghargai kerjasama daripada responden untuk memberikan maklumat kepada DOSM serta menjayakan banci ini. Sila layari www.dosm.gov.my untuk maklumat lanjut.

DOSM telah melancarkan OpenDOSM NextGen sebagai platform yang menyediakan katalog data dan visualisasi bagi memudahkan pengguna menganalisis pelbagai jenis data. OpenDOSM NextGen ialah medium perkongsian data sumber terbuka dan boleh diakses melalui portal <https://open.dosm.gov.my>.

Dimaklumkan bahawa Kerajaan Malaysia telah mengisytiharkan Hari Statistik Negara (MyStats Day) pada 20 Oktober setiap tahun. Tema sambutan MyStats Day adalah "Connecting the World with Data We Can Trust".

Announcement

The Department of Statistics Malaysia (DOSM) will conduct the Economic Census in 2023. DOSM greatly appreciates the cooperation from respondents to provide information with DOSM and make this census a success. Please visit www.dosm.gov.my for more information.

DOSM has launched OpenDOSM NextGen as a platform that provides a catalogue of data and visualisation that facilitates users in analysing various types of data. OpenDOSM NextGen is an open source data sharing medium and accessible through <https://open.dosm.gov.my> portal.

Please be informed that the Government of Malaysia has declared National Statistics Day (MyStats Day) on October 20 each year. MyStats Day theme is "Connecting the World with Data We Can Trust".

**JABATAN PERANGKAAN MALAYSIA
DEPARTMENT OF STATISTICS MALAYSIA**

Diterbitkan dan dicetak oleh / *Published and printed by:*

Jabatan Perangkaan Malaysia

Department of Statistics, Malaysia

Blok C6, Kompleks C

Pusat Pentadbiran Kerajaan Persekutuan

62514 Putrajaya

MALAYSIA

Tel.	:	03-8885 7000
Faks	:	03-8888 9248
Portal	:	www.dosm.gov.my
Facebook / Twitter / Instagram	:	StatsMalaysia
Emel / Email	:	info@dosm.gov.my (pertanyaan umum / <i>general enquiries</i>) data@dosm.gov.my (pertanyaan & permintaan data / <i>data request & enquiries</i>)

Harga / *Price* : RM25.00

Diterbitkan pada Februari 2023 / *Published on February 2023*

Hakcipta terpelihara / *All rights reserved.*

Tiada bahagian daripada terbitan ini boleh diterbitkan semula, disimpan untuk pengeluaran atau ditukar dalam apa-apa bentuk atau alat apa jua pun kecuali setelah mendapat kebenaran daripada Jabatan Perangkaan Malaysia.

Pengguna yang mengeluarkan sebarang maklumat dari terbitan ini sama ada yang asal atau diolah semula hendaklah meletakkan kenyataan berikut:

“Sumber : Jabatan Perangkaan Malaysia”.

No part of this publication may be reproduced or distributed in any form or by any means or stored in data base without the prior written permission from Department of Statistics, Malaysia.

Users reproducing content of this publication with or without adaptation should quote the following:

“Source : Department of Statistics, Malaysia.”

ISSN: 2590-4426

KATA PENGANTAR

Penerbitan ini memaparkan statistik suku tahunan produktiviti buruh di Malaysia bagi suku keempat 2022. Konsep produktiviti buruh yang digunakan merujuk kepada nisbah antara nilai ditambah dan input, iaitu jam bekerja dan pekerja. Statistik yang diterbitkan adalah berdasarkan saranan daripada *System of National Accounts 2008, The United Nations* dan *The Organisation for Economic Co-operation and Development Manual: Measuring Productivity*.

Data suku tahunan yang dibentangkan dalam penerbitan ini bermula dari suku pertama 2018 hingga suku keempat 2022. Anggaran nilai ditambah pada harga malar dinilai pada harga asas 2015 selaras dengan pengasasan semula Statistik Akaun Negara.

Statistik ini disusun mengikut aktiviti ekonomi bagi memenuhi keperluan *Malaysia Productivity Blueprint*. Maklumat yang dihasilkan boleh dijadikan petunjuk utama dalam mengukur produktiviti negara bagi pembentukan, pelaksanaan dan pemantauan polisi serta prestasi ekonomi. Statistik ini juga menjadi rujukan penyelidik, ahli akademik, organisasi sektor swasta dan individu.

Terdapat empat bahagian di dalam penerbitan ini. Bahagian pertama memaparkan ringkasan penemuan utama statistik produktiviti buruh. Jadual perangkaan terperinci dipaparkan di bahagian kedua manakala jadual indeks produktiviti buruh di bahagian ketiga. Sementara itu, aspek teknikal seperti skop dan liputan, konsep dan definisi serta pemboleh ubah utama yang digunakan disediakan di bahagian keempat bagi memudahkan pengguna memahami statistik yang diterbitkan.

Jabatan Perangkaan Malaysia merakamkan setinggi-tinggi penghargaan atas kerjasama semua pihak yang terlibat dalam menjayakan penerbitan ini. Sebarang cadangan dan pandangan untuk penambahbaikan laporan ini pada masa hadapan amatlah dihargai.

DATO' SRI DR. MOHD UZIR MAHIDIN

Ketua Perangkawan Malaysia

Februari 2023

PREFACE

This publication presents quarterly labour productivity statistics in Malaysia for the fourth quarter of 2022. The concept of labour productivity used refers to the ratio of value added and input, namely hours worked and employment. The statistics published are based on the recommendations of the System of National Accounts 2008, The United Nations and The Organisation for Economic Co-operation and Development Manual: Measuring Productivity.

Quarterly data presented in this publication commences from the first quarter of 2018 to the fourth quarter of 2022. The value added estimates in constant prices are expressed in 2015 prices in tandem with the rebasing of National Accounts Statistics.

The information is produced by economic activity to fulfil the requirements of the Malaysia Productivity Blueprint. The statistics provided can be used as an important indicator in measuring national productivity for the formulation, implementation and monitoring policy as well as performance of the economy. The statistics also serve as an essential reference to analysts, economists, academician, private sector organisations and individuals.

This publication is divided into four sections. The first section presents the summary of findings of the statistics on labour productivity. The second section of this publication provides detailed statistical tables with labour productivity indices in the third section. Meanwhile, technical aspects such as scope and coverage, concepts and definitions as well as key variables used are described in the fourth section to facilitate and assist users' understanding of the published statistics.

The Department of Statistics, Malaysia gratefully acknowledges all parties involved in the success of this publication. All comments and suggestions towards improving this publication in the future are appreciated.

DATO' SRI DR. MOHD UZIR MAHIDIN

Chief Statistician Malaysia

February 2023

Kata Pengantar*Preface***i****Kandungan***Contents***iii****Bahagian 1: Ringkasan Penemuan***Part 1: Summary of Findings***6****Bahagian 2: Jadual***Part 2: Tables***1a****Produktiviti buruh tahunan, nilai ditambah per jam bekerja mengikut aktiviti ekonomi, 2017 - 2022****19***Annual labour productivity, value added per hour worked by economic activity, 2017 - 2022***1b****Produktiviti buruh tahunan, nilai ditambah per jam bekerja mengikut aktiviti ekonomi, 2017 - 2022: Perubahan peratusan tahunan****20***Annual labour productivity, value added per hour worked by economic activity, 2017 - 2022: Annual percentage change***2a****Produktiviti buruh tahunan, nilai ditambah per pekerja mengikut aktiviti ekonomi, 2017 - 2022****21***Annual labour productivity, value added per employment by economic activity, 2017 - 2022***2b****Produktiviti buruh tahunan, nilai ditambah per pekerja mengikut aktiviti ekonomi, 2017 - 2022: Perubahan peratusan tahunan****22***Annual labour productivity, value added per employment by economic activity, 2017 - 2022: Annual percentage change***3a****Produktiviti buruh tahunan, nilai ditambah per jam bekerja mengikut 9 subsektor keutamaan, 2017- 2022****23***Annual labour productivity, value added per hour worked by 9 priority sub-sectors, 2017 - 2022***3b****Produktiviti buruh tahunan, nilai ditambah per jam bekerja mengikut 9 subsektor keutamaan, 2017- 2022: Perubahan peratusan tahunan****24***Annual labour productivity, value added per hour worked by 9 priority sub-sectors, 2017 - 2022: Annual percentage change*

4a	Produktiviti buruh tahunan, nilai ditambah per pekerja mengikut 9 subsektor keutamaan, 2017- 2022	25
	<i>Annual labour productivity, value added per employment by 9 priority sub-sectors, 2017 - 2022</i>	
4b	Produktiviti buruh tahunan, nilai ditambah per pekerja mengikut 9 subsektor keutamaan, 2017- 2022: Perubahan peratusan tahunan	26
	<i>Annual labour productivity, value added per employment by 9 priority sub-sectors, 2017 - 2022: Annual percentage change</i>	
5a	Produktiviti buruh suku tahunan, nilai ditambah per jam bekerja mengikut aktiviti ekonomi, ST1 2018 - ST4 2022	27
	<i>Quarterly labour productivity, value added per hour worked by economic activity, Q1 2018 - Q4 2022</i>	
5b	Produktiviti buruh suku tahunan, nilai ditambah per jam bekerja mengikut aktiviti ekonomi, ST1 2018 - ST4 2022: Perubahan peratusan dari suku tahun yang sama tahun sebelumnya	29
	<i>Quarterly labour productivity, value added per hour worked by economic activity, Q1 2018 - Q4 2022: Percentage change from corresponding quarter of preceding year</i>	
6a	Produktiviti buruh suku tahunan, nilai ditambah per pekerja mengikut aktiviti ekonomi, ST1 2018 - ST4 2022	31
	<i>Quarterly labour productivity, value added per employment by economic activity, Q1 2018 - Q4 2022</i>	
6b	Produktiviti buruh suku tahunan, nilai ditambah per pekerja mengikut aktiviti ekonomi, ST1 2018 - ST4 2022: Perubahan peratusan dari suku tahun yang sama tahun sebelumnya	33
	<i>Quarterly labour productivity, value added per employment by economic activity, Q1 2018 - Q4 2022: Percentage change from corresponding quarter of preceding year</i>	
7a	Keluaran Dalam Negeri Kasar (KDNK) tahunan mengikut aktiviti ekonomi pada harga malar 2015, 2017 - 2022	35
	<i>Annual Gross Domestic Product (GDP) by economic activity at constant 2015 prices, 2017 - 2022</i>	
7b	Keluaran Dalam Negeri Kasar (KDNK) tahunan mengikut aktiviti ekonomi pada harga malar 2015, 2017 - 2022: Perubahan peratusan tahunan	36
	<i>Annual Gross Domestic Product (GDP) by economic activity at constant 2015 prices, 2017 - 2022: Annual percentage change</i>	

8a	Keluaran Dalam Negeri Kasar (KDNK) suku tahunan mengikut aktiviti ekonomi pada harga malar 2015, ST1 2018 - ST4 2022	37
	<i>Quarterly Gross Domestic Product (GDP) by economic activity at constant 2015 prices, Q1 2018 - Q4 2022</i>	
8b	Keluaran Dalam Negeri Kasar (KDNK) suku tahunan mengikut aktiviti ekonomi pada harga malar 2015, ST1 2018 - ST4 2022: Perubahan peratusan dari suku tahun yang sama tahun sebelumnya	39
	<i>Quarterly Gross Domestic Product (GDP) by economic activity at constant 2015 prices, Q1 2018 - Q4 2022: Percentage change from corresponding quarter of preceding year</i>	
9a	Jumlah jam bekerja tahunan mengikut aktiviti ekonomi, 2017 - 2022	41
	<i>Annual total hours worked by economic activity, 2017- 2022</i>	
9b	Jumlah jam bekerja tahunan mengikut aktiviti ekonomi, 2017 - 2022: Perubahan peratusan tahunan	42
	<i>Annual total hours worked by economic activity, 2017 - 2022: Annual percentage change</i>	
10a	Jumlah jam bekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022	43
	<i>Quarterly total hours worked by economic activity, Q1 2018 - Q4 2022</i>	
10b	Jumlah jam bekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022: Perubahan peratusan dari suku tahun yang sama tahun sebelumnya	45
	<i>Quarterly total hours worked by economic activity, Q1 2018 - Q4 2022: Percentage change from corresponding quarter of preceding year</i>	
11a	Pekerja tahunan mengikut aktiviti ekonomi, 2017 - 2022	47
	<i>Annual employment by economic activity, 2017 - 2022</i>	
11b	Pekerja tahunan mengikut aktiviti ekonomi, 2017 - 2022: Perubahan peratusan tahunan	48
	<i>Annual employment by economic activity, 2017 - 2022: Annual percentage change</i>	
12a	Pekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022	49
	<i>Quarterly employment by economic activity, Q1 2018 - Q4 2022</i>	

12b

Pekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022: Perubahan peratusan dari suku tahun yang sama tahun sebelumnya

51

*Quarterly employment by economic activity, Q1 2018 - Q4 2022: Percentage change from corresponding quarter of preceding year***Bahagian 3: Indeks***Part 3: Indices*

I1

Produktiviti buruh tahunan, indeks produktiviti buruh per jam bekerja mengikut aktiviti ekonomi (2015=100), 2015 - 2022

54

Annual labour productivity, index of labour productivity per hour worked by economic activity (2015=100), 2015 - 2022

I2

Produktiviti buruh tahunan, indeks produktiviti buruh per pekerja mengikut aktiviti ekonomi (2015=100), 2015 - 2022

55

Annual labour productivity, index of labour productivity per employment by economic activity (2015=100), 2015 - 2022

I3

Produktiviti buruh tahunan, indeks produktiviti buruh per jam bekerja mengikut 9 subsektor keutamaan (2015=100), 2015 - 2022

56

Annual labour productivity, Index of labour productivity per hour worked by 9 priority sub-sectors (2015=100), 2015 - 2022

I4

Produktiviti buruh tahunan, indeks produktiviti buruh per pekerja mengikut 9 subsektor keutamaan (2015=100), 2015 - 2022

57

Annual labour productivity, index of labour productivity per employment by 9 priority sub-sectors (2015=100), 2015 - 2022

I5

Produktiviti buruh suku tahunan, indeks produktiviti buruh per jam bekerja mengikut aktiviti ekonomi (2015=100), ST1 2015 - ST4 2022

58

Quarterly labour productivity, index of labour productivity per hour worked by economic activity (2015=100), Q1 2015 - Q4 2022

I6

Produktiviti buruh suku tahunan, indeks produktiviti buruh per pekerja mengikut aktiviti ekonomi (2015=100), ST1 2015 - ST4 2022

60

Quarterly labour productivity, index of labour productivity per employment by economic activity (2015=100), Q1 2015 - Q4 2022

I7

Indeks jam bekerja tahunan mengikut aktiviti ekonomi (2015=100), 2015 - 2022

62

Annual hours worked index by economic activity (2015=100), 2015 - 2022

I8	Indeks pekerja tahunan mengikut aktiviti ekonomi (2015=100), 2015 - 2022 <i>Annual employment index by economic activity (2015=100), 2015 - 2022</i>	63
I9	Indeks jam bekerja suku tahunan mengikut aktiviti ekonomi (2015=100), ST1 2015 - ST4 2022 <i>Quarterly hours worked index by economic activity (2015=100), Q1 2015 - Q4 2022</i>	64
I10	Indeks pekerja suku tahunan mengikut aktiviti ekonomi (2015=100), ST1 2015 - ST4 2022 <i>Quarterly employment index by economic activity (2015=100), Q1 2015 - Q4 2022</i>	66
Bahagian 4: Nota Teknikal <i>Part 4: Technical Notes</i>		69

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



RINGKASAN PENEMUAN

Summary of Findings



KEMENTERIAN EKONOMI
JABATAN PERANGKAAN MALAYSIA

B/E/23
BANKI EKONOMI 2023
DATA PERANGKATAN EKONOMI

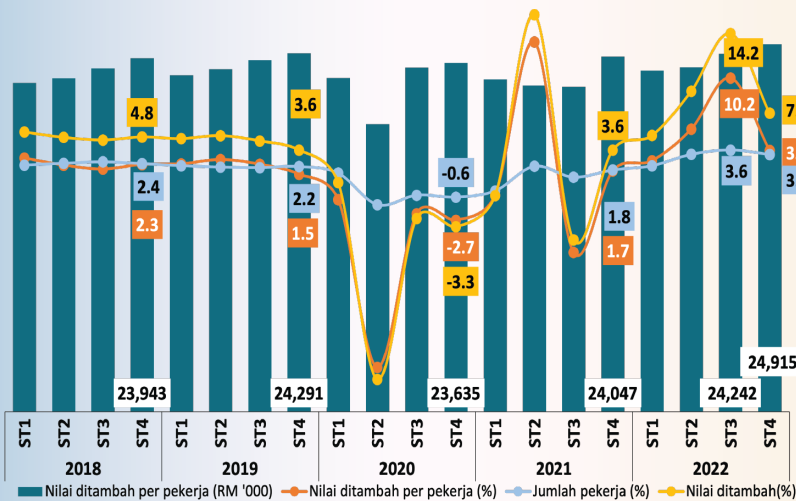


StatsMalaysia
f i t y
www.dosm.gov.my

PRODUKTIVITI BURUH SUKU KEEMPAT 2022

PRODUKTIVITI BURUH, NILAI DITAMBAH PER PEKERJA

Produktiviti buruh per pekerja pada ST4 2022 **meningkat 3.6%** merekodkan nilai ditambah per pekerja sebanyak RM24,915



ST4 2022
RM24,915
(3.6%)

ST4 2022
15,942
(3.2%)

RM13,679 | 1.6%
RM14,766 | 1.9%

RM334,940 | 6.5%
RM305,891 | 8.8%

RM34,854 | 1.6%
RM33,935 | 8.2%

RM9,992 | 10.0%
RM9,881 | 14.9%

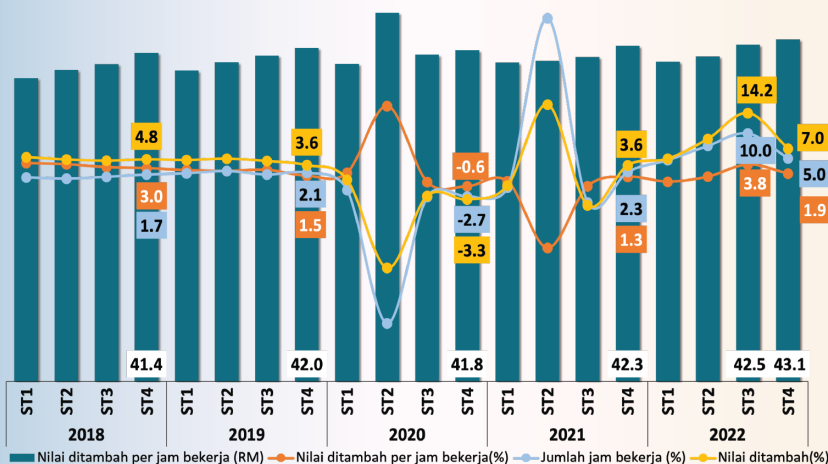
RM23,519 | 4.0%
RM22,758 | 11.4%



ST4 2022
ST3 2022

PRODUKTIVITI BURUH, NILAI DITAMBAH PER JAM BEKERJA

Produktiviti buruh per jam bekerja pada ST4 2022 **naik 1.9%** mencatatkan nilai ditambah per jam bekerja sebanyak RM43.1



ST4 2022
RM43.1
(1.9%)

ST4 2022
9,210
(5.0%)

RM25.2 | -0.6%
RM27.3 | -0.8%

RM557.3 | 4.7%
RM508.3 | 4.2%

RM58.5 | 0.4%
RM58.1 | 1.4%

RM16.8 | 8.0%
RM16.6 | -2.1%

RM40.8 | 2.3%
RM40.0 | 6.0%



ST4 2022
ST3 2022

Nota:

Produktiviti buruh per pekerja

Produktiviti buruh per jam bekerja

Jumlah pekerja ('000 orang)

Jumlah jam bekerja (juta jam)

% merujuk kepada perubahan peratusan tahunan daripada suku yang sama pada tahun sebelumnya

Pertanian

Perdagangan & Pengangkutan

Pembinaan

Perkhidmatan

Pembuatan

Sumber:

Produktiviti Buruh, Suku Keempat 2022,
Jabatan Perangkaan Malaysia (DOSM).



KEMENTERIAN EKONOMI
JABATAN PERANGKAAAN MALAYSIA

B/23
BANKI EKONOMI 2023
DATA PERANGKAAAN MALAYSIA



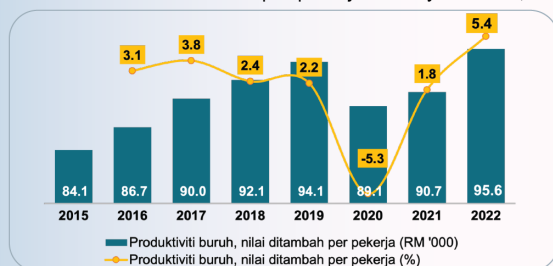
StatsMalaysia
f i t y
www.dosm.gov.my

PRODUKTIVITI BURUH TAHUNAN 2022



PRODUKTIVITI BURUH, NILAI DITAMBAH PER PEKERJA

Produktiviti buruh per pekerja pada 2022 **meningkat 5.4%** merekodkan nilai ditambah per pekerja sebanyak RM95,628



PERTANIAN
RM53.2 | 0.7%



PERLOMBONGAN & PENGKUARIAN
RM1,269.3 | 2.2%



PEMBUATAN
RM134.0 | 4.1%



PEMBINAAN
RM38.6 | 5.2%



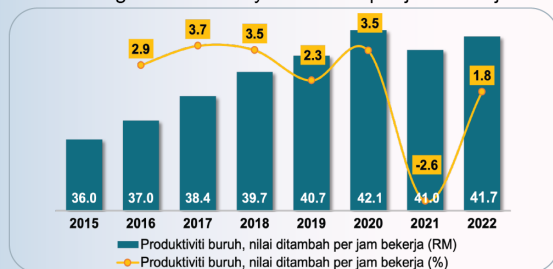
PERKHIDMATAN
RM90.2 | 6.5%

Nilai ('000) | Pertumbuhan



PRODUKTIVITI BURUH, NILAI DITAMBAH PER JAM BEKERJA

Nilai ditambah per jam bekerja **naik 1.8%** dengan nilai sebanyak RM41.7 per jam bekerja



PERTANIAN
RM24.7 | -1.2%



PERLOMBONGAN & PENGKUARIAN
RM531.1 | -0.4%



PEMBUATAN
RM57.0 | -0.1%



PEMBINAAN
RM16.2 | -2.0%



PERKHIDMATAN
RM39.4 | 3.3%

Nilai | Pertumbuhan

PRODUKTIVITI BURUH TAHUNAN MENGIKUT 9 SUBSEKTOR KEUTAMAAN

Nilai (RM)

(%)



Nilai (RM)

(%)

92,639	311,382	98,383	216,480	47,423	64,413	384,845	82,211	67,971
-1.4	2.0	4.7	9.1	12.9	144.2	1.2	11.6	5.8
Agro-makanan	Kimia dan Produk Kimia	Mesin dan Peralatan	Elektrik dan Elektronik	Peruncitan dan Makanan & Minuman	Pelancongan	Teknologi Maklumat & Komunikasi	Perkhidmatan Profesional	Penjagaan Kesihatan Swasta
47.0	136.1	42.4	96.6	22.0	31.1	169.8	38.3	31.0
-1.4	2.2	4.6	13.0	16.8	147.1	3.6	16.2	6.8

Nota:

1) Produktiviti buruh per pekerja Produktiviti buruh per jam bekerja

2) % merujuk kepada perubahan peratusan tahunan daripada suku yang sama tahun sebelumnya. Sumber: Produktiviti Buruh, Suku Keempat 2022, Jabatan Perangkaan Malaysia (DOSM).



MINISTRY OF ECONOMY
DEPARTMENT OF STATISTICS MALAYSIA

B23
BANKI EKONOMI 2023



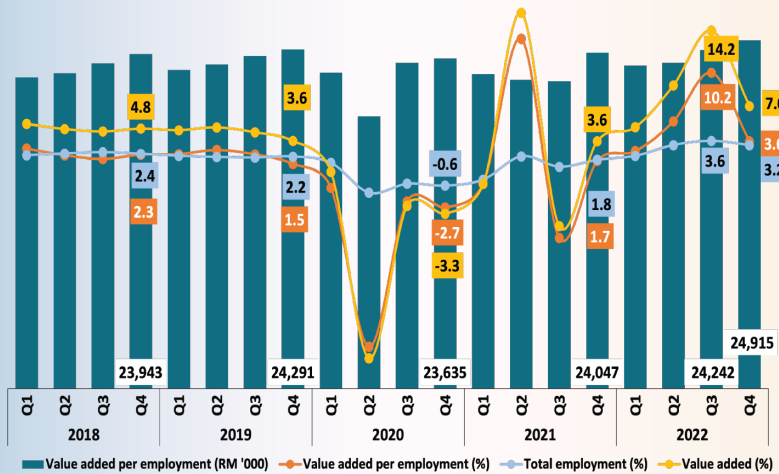
StatsMalaysia
f i t y
www.dosm.gov.my

LABOUR PRODUCTIVITY OF FOURTH QUARTER 2022



LABOUR PRODUCTIVITY, VALUE ADDED PER EMPLOYMENT

Labour productivity per employment in Q4 2022 **increased 3.6%** to record value added per employment at RM24,915.



Q4 2022
RM24,915
(3.6%)



Q4 2022
15,942
(3.2%)

RM13,679 | 1.6%
RM14,766 | 1.9%



RM334,940 | 6.5%
RM305,891 | 8.8%



RM34,854 | 1.6%
RM33,935 | 8.2%



RM9,992 | 10.0%
RM9,881 | 14.9%



RM23,519 | 4.0%
RM22,758 | 11.4%

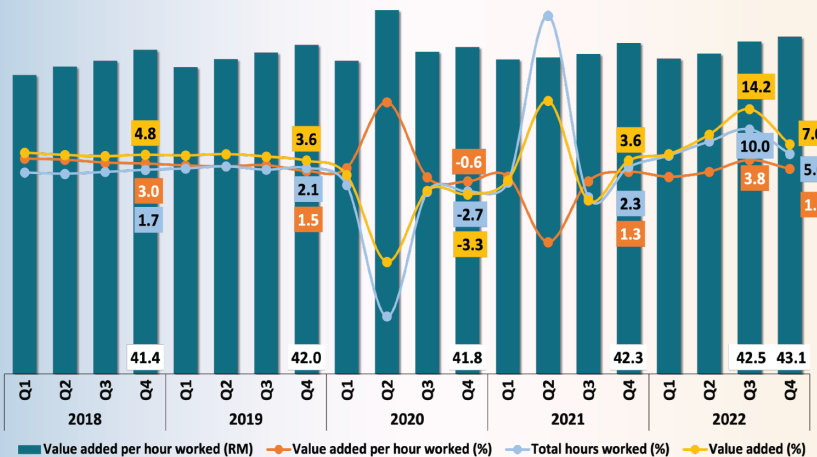


Q4 2022
Q3 2022



LABOUR PRODUCTIVITY, VALUE ADDED PER HOUR WORKED

Labour productivity per hour worked in Q4 2022 **grew 1.9%** to post value added per hour worked at RM43.1



Q4 2022
RM43.1
(1.9%)



Q4 2022
9,210
(5.0%)

RM25.2 | -0.6%
RM27.3 | -0.8%



RM557.3 | 4.7%
RM508.3 | 4.2%



RM58.5 | 0.4%
RM58.1 | 1.4%



RM16.8 | 8.0%
RM16.6 | -2.1%



RM40.8 | 2.3%
RM40.0 | 6.0%



Q4 2022
Q3 2022

Notes:

Labour productivity per employment

Labour productivity per hour worked

Total employment ('000 persons)

Total hours worked (million hours)

% refers to the annual percentage change from the same quarter of the previous year

Agriculture

Mining & Quarrying

Manufacturing

Construction

Services

Source:

Labour Productivity, Fourth Quarter 2022,
Department of Statistics Malaysia (DOSM).



MINISTRY OF ECONOMY
DEPARTMENT OF STATISTICS MALAYSIA

BK23
BANCI EKONOMI 2023
DATA PERALIHAN EKONOMI



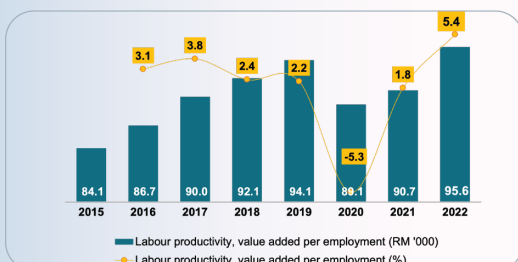
StatsMalaysia
f i t y
www.dosm.gov.my

ANNUAL LABOUR PRODUCTIVITY 2022



LABOUR PRODUCTIVITY, VALUE ADDED PER EMPLOYMENT

Labour productivity per employment for 2022 increased 5.4% to record value added per employment of RM95,628



AGRICULTURE
RM53.2 | 0.7%



MINING & QUARRYING
RM1,269.3 | 2.2%



MANUFACTURING
RM134.0 | 4.1%



CONSTRUCTION
RM38.6 | 5.2%



SERVICES
RM90.2 | 6.5%

Level ('000) | Growth



LABOUR PRODUCTIVITY, VALUE ADDED PER HOUR WORKED

Value added per hour worked posted and increase of 1.8% with a value of RM41.7 per hour



AGRICULTURE
RM24.7 | -1.2%



MINING & QUARRYING
RM531.1 | -0.4%



MANUFACTURING
RM57.0 | -0.1%



CONSTRUCTION
RM16.2 | -2.0%



SERVICES
RM39.4 | 3.3%

Level | Growth

ANNUAL LABOUR PRODUCTIVITY BY 9 PRIORITY SUB-SECTORS

Level (RM)

(%)



Level (RM)

(%)



Agro-food



Chemical and Chemical Products



Machinery and Equipment



Electrical and Electronics



Retail and Food & Beverages



Tourism



Information, Communication, & Technology



Professional Services



Private Healthcare

92,639

-1.4

311,382

2.0

98,383

4.7

216,480

9.1

47,423

12.9

64,413

144.2

384,845

1.2

82,211

11.6

67,971

5.8

47.0

-1.4

136.1

2.2

42.4

4.6

96.6

13.0

22.0

16.8

31.1

147.1

169.8

3.6

38.3

16.2

31.0

6.8

Notes:

- 1) Labour productivity per employment Labour productivity per hour worked
- 2) % refers to the annual percentage change from the same quarter of the previous year

Source: Labour Productivity,
Fourth Quarter 2022,
Department of Statistics Malaysia (DOSM).

PRESTASI PRODUKTIVITI BURUH SUKU KEEMPAT 2022

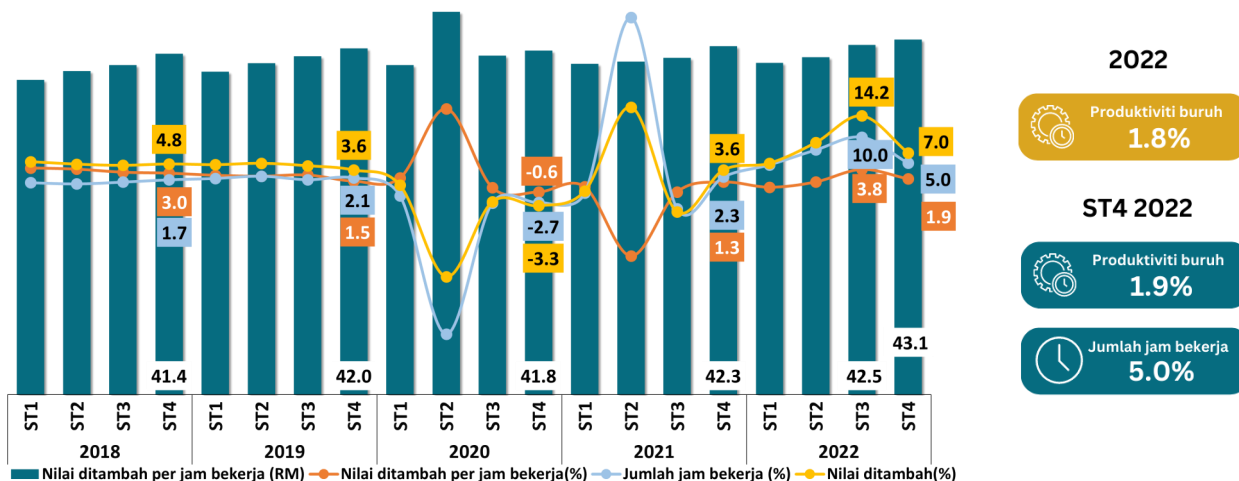


PRODUKTIVITI BURUH MALAYSIA

Produktiviti buruh Malaysia yang diukur dari segi nilai ditambah per jam bekerja meningkat 1.9 peratus (ST3 2022: 3.8%), tahun ke tahun, sejajar perkembangan 7.0 peratus (ST3 2022: 14.2%) ekonomi pada suku ini, manakala jumlah jam bekerja meningkat 5.0 peratus (ST3 2022: 10.0%). **Dari segi nilai, produktiviti buruh mengikut nilai ditambah per jam bekerja adalah RM43.1 (ST3 2022: RM42.5 per jam).** [Carta 1]

Jumlah jam bekerja pada suku keempat 2022 adalah 9.2 bilion (ST3 2022: 9.0 bilion jam).

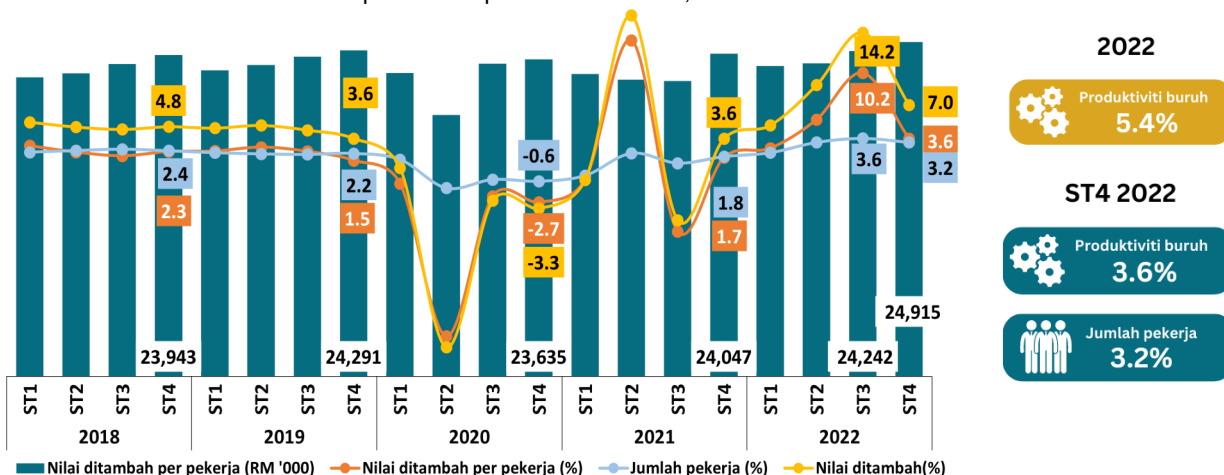
Carta 1: Produktiviti buruh per jam bekerja dan jumlah jam bekerja, perubahan peratusan tahunan, ST1 2018 – ST4 2022



Produktiviti buruh seperti yang dinyatakan sebagai nilai ditambah per pekerja meningkat 3.6 peratus (ST3 2022: 10.2%), tahun ke tahun, manakala jumlah pekerja meningkat 3.2 peratus (ST3 2022: 3.6%). **Dari segi nilai, produktiviti buruh mengikut nilai ditambah per pekerja adalah RM24,915 (ST3 2022: RM24,242 per pekerja).** [Carta 2]

Bilangan pekerja pada suku keempat 2022 adalah 15.9 juta (ST3 2022: 15.8 juta orang).

Carta 2: Produktiviti buruh per pekerja dan jumlah pekerja, perubahan peratusan tahunan, ST1 2018 – ST4 2022



Secara keseluruhan bagi tahun 2022, produktiviti buruh yang digambarkan sebagai nilai ditambah per jam bekerja melonjak 1.8 peratus kepada RM41.7 sejam bagi setiap pekerja berbanding 2021 (-2.6%, RM41.0 per jam). Sementara itu, produktiviti buruh yang diukur sebagai nilai ditambah per pekerja mengukuh pada 5.4 peratus, mencatatkan peningkatan produktiviti bagi setiap pekerja adalah RM95,628 berbanding 2021 (1.8%, RM90,697 per pekerja).



PERTANIAN

Produktiviti buruh per jam bekerja bagi sektor Pertanian menyusut 0.6 peratus, tahun ke tahun, walau bagaimanapun bertumbuh lebih baik berbanding suku sebelumnya (ST3 2022: -0.8%). Nilai ditambah bagi sektor ini mencatatkan peningkatan 1.1 peratus (ST3 2022: 1.2%). [Paparan 1]

Sementara itu, pada suku keempat 2022, produktiviti buruh mengikut nilai ditambah per pekerja bagi sektor ini meningkat 1.6 peratus (ST3 2022: 1.9%), manakala bilangan pekerja turun marginal pada 0.5 peratus.

Pada suku keempat 2022, nilai ditambah per jam bekerja bagi sektor ini adalah RM25.2 (ST3 2022: RM27.3 per jam), manakala nilai ditambah per pekerja adalah RM13,679 (ST3 2022: RM14,766 per pekerja).

Produktiviti buruh yang diukur sebagai nilai ditambah per jam bekerja pada 2022 menyusut 1.2 peratus kepada RM24.7 sejam bagi setiap pekerja berbanding 2021 (-4.6%, RM25.0 per jam). Manakala, produktiviti buruh yang dinyatakan sebagai nilai ditambah per pekerja naik marginal 0.7 peratus mencatatkan peningkatan kepada RM53,173 berbanding 2021 (-0.6%, RM52,786 per pekerja).

Paparan 1: Produktiviti buruh sektor Pertanian:
ST4 2021, ST3 & ST4 2022, 2021-2022

	ST3 22	ST4 22	YoY			2021	2022
			ST4 21	ST3 22	ST4 22		
 Produktiviti buruh per jam bekerja	RM27.3	RM25.2	1.7%	-0.8%	-0.6%	RM25.0	RM24.7
 Jumlah jam bekerja (juta jam)	1,017,247	999,867	1.1%	2.1%	1.7%	3,954,241	4,006,342
 Nilai ditambah (juta)	RM27,729	RM25,162	2.8%	1.2%	1.1%	RM98,898	RM98,949
 Produktiviti buruh per pekerja	RM14,766	RM13,679	2.9%	1.9%	1.6%	RM52,786	RM53,173
 Jumlah pekerja ('000 orang)	1,878	1,840	-0.1%	-0.6%	-0.5%	1,874	1,861

Nota:
YoY: Pertumbuhan tahun ke tahun



PERLOMBONGAN DAN PENGKUARIAN

Bagi sektor Perlombongan dan pengkuarian, **produktiviti buruh yang diukur sebagai nilai ditambah per jam bekerja meningkat 4.7 peratus** (ST3 2022: 4.2%), tahun ke tahun, manakala nilai ditambah bagi sektor ini naik 6.8 peratus dan jumlah jam bekerja bertambah 2.0 peratus. **[Paparan 2]**

Produktiviti buruh mengikut nilai ditambah per pekerja turut merekodkan peningkatan 6.5 peratus (ST3 2022: 8.8%) dengan peningkatan pekerja marginal pada 0.3 peratus.

Dari segi nilai, **produktiviti buruh bagi nilai ditambah per jam bekerja dan nilai ditambah per pekerja masing-masing adalah RM557.3** (ST3 2022: RM508.3 per jam) dan **RM334,940** (ST3 2022: RM305,891 per pekerja).

Pada 2022, produktiviti buruh yang dinyatakan sebagai nisbah nilai ditambah per jam bekerja dalam sektor Perlombongan dan pengkuarian menyusut marginal 0.4 peratus kepada RM531.1 sejam bagi setiap pekerja berbanding 2021 (-3.8%, RM533.3 per jam). Manakala, produktiviti buruh yang diukur sebagai **nilai ditambah per pekerja kembali pulih kepada 2.2 peratus** dengan nilai RM1,269,266 per pekerja berbanding 2021 (-1.4%, RM1,242,406 per pekerja).

Paparan 2: Produktiviti buruh sektor Perlombongan dan pengkuarian:
ST4 2021, ST3 & ST4 2022, 2021-2022

		YoY			2021	2022
	ST3 22	ST4 22	ST4 21	ST3 22	ST4 22	
 Produktiviti buruh per jam bekerja	RM508.3	RM557.3	-9.1%	4.2%	4.7%	RM533.3
 Jumlah jam bekerja (juta jam)	45,756	45,748	9.3%	4.8%	2.0%	174,652
 Nilai ditambah (juta)	RM25,255	RM25,498	-0.6%	9.2%	6.8%	RM96,150
 Produktiviti buruh per pekerja	RM305,891	RM334,940	-10.5%	8.8%	6.5%	RM1,242,406
 Jumlah pekerja ('000 orang)	76	76	11.0%	0.4%	0.3%	75

Nota:
YoY: Pertumbuhan tahun ke tahun



PEMBUATAN

Pada suku keempat 2022, **produktiviti buruh dari segi nilai ditambah per jam bekerja bagi sektor Pembuatan meningkat marginal 0.4 peratus** (ST3 2022: 1.4%), tahun ke tahun, dengan pertumbuhan nilai ditambah pada 3.9 peratus dan jumlah jam bekerja 3.6 peratus. **[Paparan 3]**

Tiga subsektor yang mencatatkan peningkatan bagi produktiviti buruh per jam bekerja adalah Produk elektrik, elektronik dan optikal (3.7%); Produk mineral bukan logam, logam asas dan produk logam yang direka (1.3%); dan Produk tekstil, pakaian dan kulit (1.1%).

Produktiviti buruh bagi nilai ditambah per pekerja meningkat 1.6 peratus (ST3 2022: 8.2%), manakala bilangan pekerja meningkat 2.3 peratus (ST3 2022: 4.5%).

Empat subsektor mencatatkan pertumbuhan positif iaitu Produk elektrik, elektronik dan optikal (5.0%); Produk tekstil, pakaian dan kulit (2.8%); Produk mineral bukan logam, logam asas dan produk logam yang direka (0.8%); dan Minyak dan lemak daripada sayuran & haiwan dan proses makanan (0.5%).

Dari segi nilai, produktiviti buruh yang diukur sebagai nilai ditambah per jam bekerja adalah RM58.5 (ST3 2022: RM58.1 per jam) manakala **nilai ditambah per pekerja adalah RM34,854** (ST3 2022: RM33,935 per pekerja).

Pertumbuhan produktiviti buruh yang digambarkan sebagai nilai ditambah per jam bekerja pada 2022 dalam sektor Pembuatan menyusut marginal 0.1 peratus kepada RM57.0 sejam bagi setiap pekerja berbanding 2021 (3.1%, RM57.0 per jam). Manakala, produktiviti buruh dari segi **nilai ditambah per pekerja naik 4.1 peratus** dengan merekodkan peningkatan kepada RM134,046 berbanding 2021 (6.8%, RM128,807 per pekerja).

Paparan 3: Produktiviti buruh sektor Pembuatan:
ST4 2021, ST3 & ST4 2022, 2021-2022

	YoY					2021	2022
	ST3 22	ST4 22	ST4 21	ST3 22	ST4 22		
 Produktiviti buruh per jam bekerja	RM58.1	RM58.5	4.6	1.4%	0.4%	RM57.0	RM57.0
 Jumlah jam bekerja (juta jam)	1,594,872	1,631,398	4.3%	11.6%	3.6%	5,916,630	6,400,002
 Nilai ditambah (juta)	RM92,664	RM95,514	9.1%	13.2%	3.9%	RM337,219	RM364,522
 Produktiviti buruh per pekerja	RM33,935	RM34,854	5.3%	8.2%	1.6%	RM128,807	RM134,046
 Jumlah pekerja ('000 orang)	2,731	2,740	3.6%	4.5%	2.3%	2,618	2,719

Nota:
YoY: Pertumbuhan tahun ke tahun



PEMBINAAN

Tahun ke tahun, nilai ditambah per jam bekerja bagi sektor Pembinaan memulih kepada 8.0 peratus (ST3 2022: -2.1%). Nilai ditambah bagi sektor ini berkembang 10.1 peratus dan jumlah jam bekerja meningkat 1.9 peratus. [Paparan 4]

Sementara itu, produktiviti buruh yang diukur sebagai nilai ditambah per pekerja kekal dengan pertumbuhan dua digit kepada 10.0 peratus (ST3 2022: 14.9%), dengan bilangan pekerja meningkat marginal 0.02 peratus.

Nilai ditambah per jam bekerja bagi sektor ini adalah RM16.8 (ST3 2022: RM16.6 per jam), manakala nilai ditambah per pekerja adalah RM9,992 (ST3 2022: RM9,881 per pekerja).

Pada 2022, produktiviti buruh yang dinyatakan sebagai nilai ditambah per jam bekerja menyusut 2.0 peratus kepada RM16.2 sejam bagi setiap pekerja berbanding 2021 (-8.3%, RM16.5 per jam). Manakala, produktiviti buruh yang diukur sebagai nilai ditambah per pekerja memulih 5.2 peratus mencatatkan peningkatan kepada RM38,575 berbanding 2021 (-4.3%, RM36,669 per pekerja).

Paparan 4: Produktiviti buruh sektor Pembinaan:
ST4 2021, ST3 & ST4 2022, 2021-2022

		YoY						
		ST3 22	ST4 22	ST4 21	ST3 22	ST4 22	2021	2022
	Produktiviti buruh per jam bekerja	RM16.6	RM16.8	-11.0%	-2.1%	8.0%	RM16.5	RM16.2
	Jumlah jam bekerja (juta jam)	822,835	826,783	-1.4%	17.7%	1.9%	3,072,455	3,290,788
	Nilai ditambah (juta)	RM13,621	RM13,856	-12.2%	15.3%	10.1%	RM50,802	RM53,327
	Produktiviti buruh per pekerja	RM9,881	RM9,992	-11.2%	14.9%	10.0%	RM36,669	RM38,575
	Jumlah pekerja ('000 orang)	1,378	1,387	-1.2%	0.3%	0.02%	1,385	1,382

Nota:
YoY: Pertumbuhan tahun ke tahun



PERKHIDMATAN

Pada suku ini, **produktiviti buruh yang dinyatakan sebagai nisbah nilai ditambah per jam bekerja bagi sektor Perkhidmatan meningkat 2.3 peratus** (ST3 2022: 6.0%), tahun ke tahun, sejajar dengan pertumbuhan nilai ditambah pada 8.9 peratus dan peningkatan jumlah jam bekerja kepada 6.4 peratus. [Paparan 5]

Dua subsektor yang mencatatkan pertumbuhan dua digit adalah Makanan & minuman dan penginapan (19.0%); dan Hartanah dan perkhidmatan perniagaan (16.7%), diikuti pertumbuhan positif dalam subsektor Pengangkutan dan penyimpanan (9.0%); Kewangan dan insurans (6.5%); Perdagangan borong dan runcit (1.7%); dan Perkhidmatan lain (0.2%).

Sementara itu, **produktiviti buruh per pekerja bagi sektor Perkhidmatan naik 4.0 peratus** (ST3 2022: 11.4%), dengan peningkatan jumlah pekerja 4.7 peratus.

Tiga subsektor yang mencatatkan pertumbuhan dua digit adalah Hartanah dan perkhidmatan perniagaan (21.7%); Makanan & minuman dan penginapan (16.4%); dan Pengangkutan dan penyimpanan (11.9%), diikuti pertumbuhan positif dalam subsektor Perdagangan borong dan runcit (4.8%); Perkhidmatan lain (1.8%); Maklumat dan komunikasi (0.7%); dan Kewangan dan insurans (0.1%).

Dari segi nilai, **produktiviti buruh yang diukur sebagai nilai ditambah per jam bekerja pada suku keempat 2022 adalah RM40.8** (ST3 2022: RM40.0 per jam), manakala **nilai ditambah per pekerja adalah RM23,519** (ST3 2022: RM22,758 per pekerja).

Secara keseluruhan bagi tahun 2022, **produktiviti buruh yang diukur sebagai nilai ditambah per jam bekerja dalam sektor Perkhidmatan naik 3.3 peratus** kepada RM39.4 sejam bagi setiap pekerja berbanding 2021 (-4.2%, RM38.2 per jam). Manakala, **produktiviti buruh yang dinyatakan sebagai nilai ditambah per pekerja meningkat 6.5 peratus** kepada RM90,236 berbanding 2021 (0.5%, RM84,716 per pekerja).

Paparan 5: Produktiviti buruh sektor Perkhidmatan:
ST4 2021, ST3 & ST4 2022, 2021-2022

	YoY						2021	2022
	ST3 22	ST4 22	ST4 21	ST3 22	ST4 22			
 Produktiviti buruh per jam bekerja	RM40.0	RM40.8	0.8	6.0%	2.3%		RM38.2	RM39.4
 Jumlah jam bekerja (juta jam)	5,557,847	5,705,916	2.5%	10.2%	6.4%		20,721,672	22,243,363
 Nilai ditambah (juta)	RM222,307	RM232,808	3.2%	16.7%	8.9%		RM791,068	RM877,426
 Produktiviti buruh per pekerja	RM22,758	RM23,519	1.1%	11.4%	4.0%		RM84,716	RM90,236
 Jumlah pekerja ('000 orang)	9,768	9,899	2.1%	4.8%	4.7%		9,338	9,724

Nota:
YoY: Pertumbuhan tahun ke tahun

LABOUR PRODUCTIVITY PERFORMANCE OF FOURTH QUARTER 2022

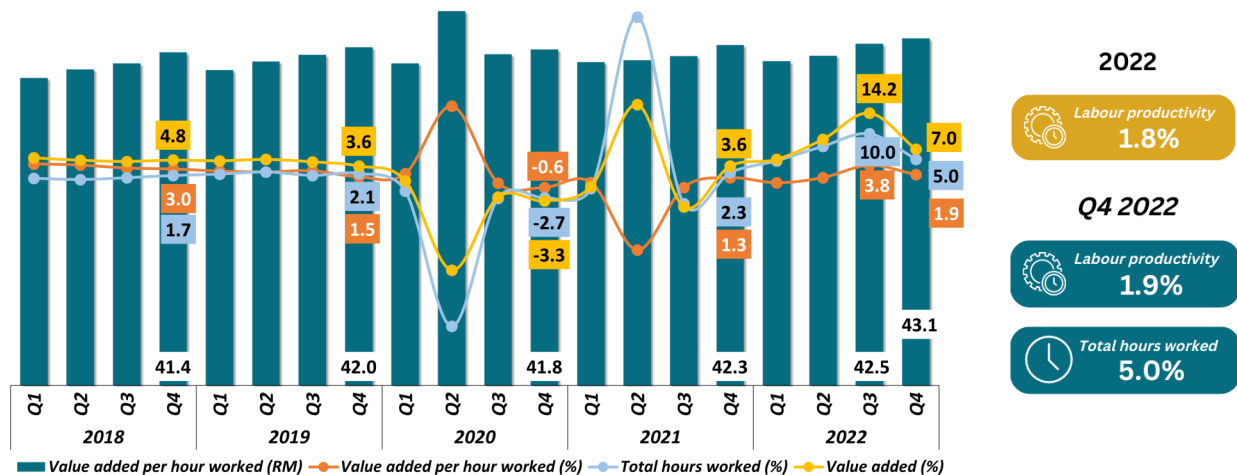


MALAYSIA'S LABOUR PRODUCTIVITY

Malaysia's labour productivity measured as value added per hour worked improved 1.9 per cent (Q3 2022: 3.8%), year-on-year, as the economy expanded at 7.0 per cent for this quarter (Q3 2022: 14.2%), while total hours worked went up 5.0 per cent (Q3 2022: 10.0%). In terms of level, labour productivity by value added per hour worked was RM43.1 (Q3 2022: RM42.5 per hour). [Chart 1]

Total hours worked in the fourth quarter of 2022 was 9.2 billion (Q3 2022: 9.0 billion hours).

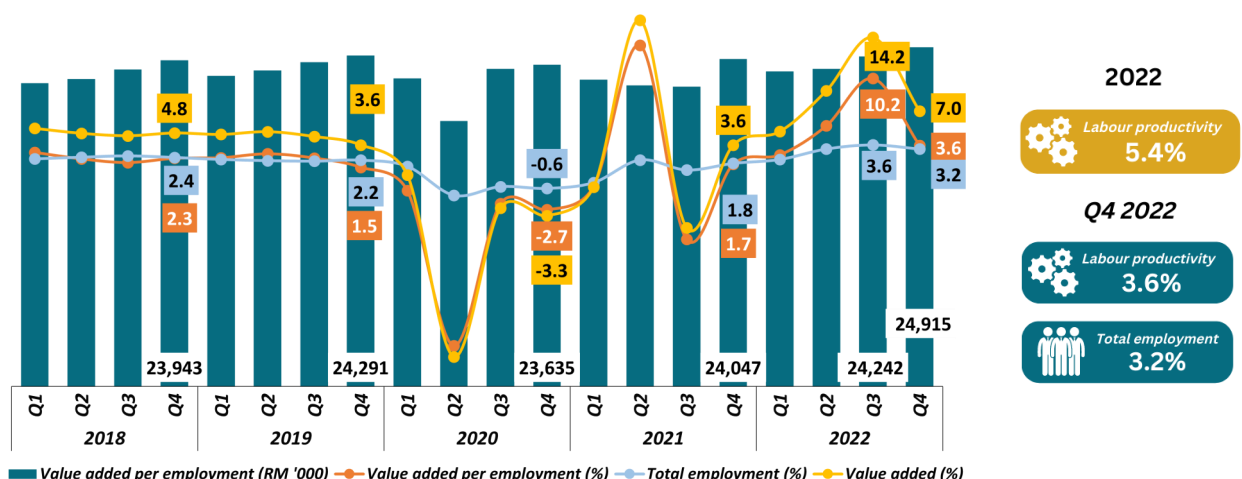
Chart 1: Labour productivity per hour worked and total hours worked, annual percentage change, Q1 2018 – Q4 2022



Labour productivity as expressed by value added per employment rose 3.6 per cent (Q3 2022: 10.2%), year on year, as total employment increased 3.2 per cent (Q3 2022: 3.6%). In terms of level, value added per employment was RM24,915 (Q3 2022: RM24,242 per person). [Chart 2]

Total employment in the fourth quarter of 2022 was 15.9 million (Q3 2022: 15.8 million persons).

Chart 2: Labour productivity per employment and total employment, annual percentage change, Q1 2018 – Q4 2022



Overall for 2022, labour productivity as expressed by value added per hour worked rebounded 1.8 per cent with a level of RM41.7 per hour as compared to 2021 (-2.6%, RM41.0 per hour). Meanwhile, labour productivity measured as **value added per employment rose 5.4 per cent** to record value a level of RM95,628 per person as compared to 2021 (1.8%, RM90,697 per person).



AGRICULTURE

Labour productivity per hour worked in Agriculture sector fell 0.6 per cent, year-on-year, however improved as compared to the previous quarter (Q3 2022: -0.8%). Value added for this sector posted an increase of 1.1 per cent (Q3 2022: 1.2%). **[Exhibit 1]**

Meanwhile, **labour productivity by value added per employment for this sector increased 1.6 per cent** in the fourth quarter of 2022 (Q3 2022: 1.9%), while employment fell marginal 0.5 per cent.

In the fourth quarter 2022, level of value added per hour worked for this sector was RM25.2 (Q3 2022: RM27.3 per hour), while **value added per employment was RM13,679** (Q3 2022: RM14,766 per person).

Labour productivity measured as value added per hour worked in 2022 decreased 1.2 per cent with a level of RM24.7 per hour as compared to 2021 (-4.6%, RM25.0 per hour). Meanwhile, labour productivity in terms of **value added per employment rose marginal 0.7 per cent** to record a level of RM53,173 as compared to 2021 (-0.6%, RM52,786 per person).

Exhibit 1: Labour productivity of Agriculture sector:
Q4 2021, Q3 & Q4 2022, 2021-2022

	YoY					2021	2022
	Q3 22	Q4 22	Q4 21	Q3 22	Q4 22		
 Labour productivity per hour worked	RM27.3	RM25.2	1.7%	-0.8%	-0.6%	RM25.0	RM24.7
 Total hours worked (million hours)	1,017,247	999,867	1.1%	2.1%	1.7%	3,954,241	4,006,342
 Value added (million)	RM27,729	RM25,162	2.8%	1.2%	1.1%	RM98,898	RM98,949
 Labour productivity per employment	RM14,766	RM13,679	2.9%	1.9%	1.6%	RM52,786	RM53,173
 Total employment ('000 persons)	1,878	1,840	-0.1%	-0.6%	-0.5%	1,874	1,861

Note:
YoY: Year-on-year growth



MINING AND QUARRYING

For Mining and quarrying sector, **labour productivity measured as value added per hour worked increased 4.7 per cent** (Q3 2022: 4.2%), year-on-year, as value added for this sector expanded 6.8 per cent and hours worked increased 2.0 per cent. **[Exhibit 2]**

Labour productivity by added value per employment also recorded an increase of 6.5 per cent (Q3 2022: 8.8%) as employment increased marginal at 0.3 per cent.

In terms of labour productivity level, the **value added per hour worked and value added per employment were RM557.3** (Q3 2022: RM508.3 per hour) and RM334,940 (Q3 2022: RM305,891 per person), respectively.

In 2022, labour productivity expressed as the ratio of value added to hours worked for Mining and quarrying sector marginally decreased 0.4 per cent with a level of RM531.1 per hour as compared to 2021 (-3.8%, RM533.3 per hour). Meanwhile, labour productivity as measured by **value added per employment recovered to 2.2 per cent** to record a level of RM1,269,266 as compared to 2021 (-1.4%, RM1,242,406 per person).

**Exhibit 2: Labour productivity of Mining and quarrying sector,
Q4 2021, Q3 & Q4 2022, 2021-2022**

	Q3 22	Q4 22	YoY			2021	2022
			Q4 21	Q3 22	Q4 22		
Labour productivity per hour worked	RM508.3	RM557.3	-9.1%	4.2%	4.7%	RM533.3	RM531.1
Total hours worked (million hours)	45,756	45,748	9.3%	4.8%	2.0%	174,652	181,412
Value added (million)	RM25,255	RM25,498	-0.6%	9.2%	6.8%	RM96,150	RM96,350
Labour productivity per employment	RM305,891	RM334,940	-10.5%	8.8%	6.5%	RM1,242,406	RM1,269,266
Total employment ('000 persons)	76	76	11.0%	0.4%	0.3%	75	76

Note:
YoY: Year-on-year growth



MANUFACTURING

In the fourth quarter of 2022, **labour productivity in terms of value added per hour worked for Manufacturing sector marginally improved at 0.4 per cent** (Q3 2022: 1.4%), year-on-year, with value added growth at 3.9 per cent and hours worked 3.6 per cent. **[Exhibit 3]**

Three sub-sectors that recorded an increase in productivity per hour worked were Electrical, electronic and optical products (3.7%); Non-metallic mineral products, basic metal and fabricated metal products (1.3%); and Textiles, wearing apparel and leather products (1.1%).

Labour productivity by value added per employment improved at 1.6 per cent (Q3 2022: 8.2%), while employment rose 2.3 per cent (Q3 2022: 4.5%).

Four sub-sectors that posted double-digit increases were Electrical, electronic and optical products (5.0%); Textiles, wearing apparel and leather products (2.8%); Non-metallic mineral products, basic metal and fabricated metal products (0.8%); and Vegetable and animal oils and fats and food processing (0.5%).

In terms of level, labour productivity as measured by value added per hour worked was RM58.5 (Q3 2022: RM58.1 per hour), while **value added per employment was RM34,854** (Q3 2022: RM33,935 per person).

The growth of labour productivity expressed as value added per hour worked in 2022 for Manufacturing sector marginally decreased 0.1 per cent with a level of RM57.0 per hour as compared to 2021 (3.1%, RM57.0 per hour). Meanwhile, labour productivity in terms of **value added per employment rose 4.1 per cent** to record a level of RM134,046 as compared to 2021 (6.8%, RM128,807 per person).

Exhibit 3: Labour productivity of Manufacturing sector, Q4 2021, Q3 & Q4 2022, 2021-2022

	YoY					2021	2022
	Q3 22	Q4 22	Q4 21	Q3 22	Q4 22		
 Labour productivity per hour worked	RM58.1	RM58.5	4.6	1.4%	0.4%	RM57.0	RM57.0
 Total hours worked (million hours)	1,594,872	1,631,398	4.3%	11.6%	3.6%	5,916,630	6,400,002
 Value added (million)	RM92,664	RM95,514	9.1%	13.2%	3.9%	RM337,219	RM364,522
 Labour productivity per employment	RM33,935	RM34,854	5.3%	8.2%	1.6%	RM128,807	RM134,046
 Total employment ('000 persons)	2,731	2,740	3.6%	4.5%	2.3%	2,618	2,719

Note:
YoY: Year-on-year growth



CONSTRUCTION

Year-on-year, value added per hour worked for Construction sector recovered 8.0 per cent (Q3 2022: -2.1%). Value added for this sector expanded 10.1 per cent and total employment increased 1.9 per cent. **[Exhibit 4]**

Meanwhile, **labour productivity as measured by value added per employment sustained a double digit growth of 10.0 per cent** (Q3 2022: 14.9%), with marginal increase in employment at 0.02 per cent.

Value added per hour worked for this sector was RM16.8 (Q3 2022: RM16.6 per hour), while **value added per employment was RM9,992** (Q3 2022: RM9,881 per person).

In 2022, labour productivity expressed as value added per hour worked fell 2.0 per cent with a level of RM16.2 per hour as compared to 2021 (-8.3%, RM16.5 per hour). Meanwhile, **labour productivity measured as value added of employment improved 5.2 per cent** to record a value of RM38,575 as compared to 2021 (-4.3%, RM36,669 per person).

Exhibit 4: Labour productivity of Construction sector:
Q4 2021, Q3 & Q4 2022, 2021-2022

		YoY						
		Q3 22	Q4 22	Q4 21	Q3 22	Q4 22	2021	2022
	Labour productivity per hour worked	RM16.6	RM16.8	-11.0%	-2.1%	8.0%	RM16.5	RM16.2
	Total hours worked (million hours)	822,835	826,783	-1.4%	17.7%	1.9%	3,072,455	3,290,788
	Value added (million)	RM13,621	RM13,856	-12.2%	15.3%	10.1%	RM50,802	RM53,327
	Labour productivity per employment	RM9,881	RM9,992	-11.2%	14.9%	10.0%	RM36,669	RM38,575
	Total employment ('000 persons)	1,378	1,387	-1.2%	0.3%	0.02%	1,385	1,382

Note:
YoY: Year-on-year growth



SERVICES

During the quarter, **labour productivity expressed as ratio of value added per hour worked for Services sector increased 2.3 per cent** (Q3 2022: 6.0%), year-on-year, as value added expanded 8.9 per cent and hours worked increased 6.4 per cent. **[Exhibit 5]**

Two sub-sectors that posted double digit growth were Food & beverages and accommodation (19.0%); and Real Estate and business services (16.7%), followed by positive growth in subsector of Transportation and storage (9.0%); Finance and insurance (6.5%); Wholesale and retail trade (1.7%); and Other services (0.2%).

Meanwhile, **labour productivity per employment for Services sector increased 4.0 per cent** (Q3 2022: 11.4%), with an increase in total employment of 4.7 per cent.

Three sub-sectors that posted double digit growth were Real estate and business services (21.7%); Food & beverages and accommodation (16.4%); and Transportation and storage (11.9%), followed by positive growth in the subsectors of Wholesale and retail trade (4.8%); Other services (1.8%); Information and communication (0.7%); and Finance and insurance (0.1%).

In terms of level, labour productivity measured as value added per hour worked in fourth quarter 2022 was RM40.8 (Q3 2022: RM40.0 per hour), while **value added per employment was RM23,519** (Q3 2022: RM22,758 per person).

For the overall of 2022, labour productivity as measured by value added per hour worked for Services sector increased 3.3 per cent to a level of RM39.4 per hour as compared to 2021 (-4.2%, RM38.2 per hour). Meanwhile, labour productivity expressed as **value added per employment rose 6.5 per cent** to record a level of RM90,236 as compared to 2021 (0.5%, RM84,716 per person).

Exhibit 5: Labour productivity of Services sector:
Q4 2021, Q3 & Q4 2022, 2021-2022

	Q3 22	Q4 22	YoY			2021	2022
			Q4 21	Q3 22	Q4 22		
Labour productivity per hour worked	RM40.0	RM40.8	0.8	6.0%	2.3%	RM38.2	RM39.4
Total hours worked (million hours)	5,557,847	5,705,916	2.5%	10.2%	6.4%	20,721,672	22,243,363
Value added (million)	RM222,307	RM232,808	3.2%	16.7%	8.9%	RM791,068	RM877,426
Labour productivity per employment	RM22,758	RM23,519	1.1%	11.4%	4.0%	RM84,716	RM90,236
Total employment ('000 persons)	9,768	9,899	2.1%	4.8%	4.7%	9,338	9,724

Note:
YoY: Year-on-year growth

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



2

JADUAL

Tables

1a

Produktiviti buruh tahunan, nilai ditambah per jam bekerja mengikut aktiviti ekonomi, 2017 - 2022
Annual labour productivity, value added per hour worked by economic activity, 2017 - 2022

Aktiviti ekonomi Economic activity		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	25.6	25.7	25.8	26.2	25.0	24.7
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	540.2	558.3	556.3	554.4	533.3	531.1
3.	Pembuatan <i>Manufacturing</i>	48.9	50.5	51.7	55.3	57.0	57.0
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	30.0	30.9	30.4	32.6	31.0	29.5
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	190.6	185.6	187.4	184.1	190.7	213.5
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	12.3	12.0	12.1	10.8	11.2	11.0
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	25.8	26.6	28.3	30.7	32.2	30.9
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	85.2	87.3	90.7	95.4	100.2	97.0
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	38.7	40.6	41.7	40.3	40.1	40.4
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	59.3	62.0	63.6	72.4	76.5	80.4
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	58.4	61.3	64.7	73.6	69.0	71.5
4.	Pembinaan <i>Construction</i>	17.6	18.3	19.0	18.0	16.5	16.2
5.	Perkhidmatan <i>Services</i>	35.7	37.5	38.5	39.8	38.2	39.4
5.1	Utiliti <i>Utilities</i>	147.0	151.7	157.0	168.0	164.6	157.8
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	36.2	38.3	39.8	41.0	39.4	40.8
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	12.7	12.9	13.1	10.8	8.9	11.1
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	37.3	39.0	40.6	36.4	34.2	40.2
5.5	Maklumat dan komunikasi <i>Information and communication</i>	140.6	148.5	151.5	170.1	163.9	161.3
5.6	Kewangan dan insurans <i>Finance and insurance</i>	101.6	105.3	108.1	119.8	125.3	126.7
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	23.0	24.3	25.5	23.7	20.3	23.4
5.8	Perkhidmatan lain <i>Other services</i>	30.3	32.5	33.2	35.0	33.6	33.7
Produktiviti buruh <i>Labour productivity</i>		38.4	39.7	40.7	42.1	41.0	41.7

1b

Produktiviti buruh tahunan, nilai ditambah per jam bekerja mengikut aktiviti ekonomi, 2017 - 2022:
 Perubahan peratusan tahunan
Annual labour productivity, value added per hour worked by economic activity, 2017 - 2022:
Annual percentage change

		(%)					
Aktiviti ekonomi <i>Economic activity</i>		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	1.7	0.7	0.2	1.7	-4.6	-1.2
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	-2.4	3.3	-0.4	-0.3	-3.8	-0.4
3.	Pembuatan <i>Manufacturing</i>	3.6	3.3	2.5	6.9	3.1	-0.1
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	8.1	2.8	-1.5	7.1	-4.7	-4.9
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	1.3	-2.6	1.0	-1.8	3.5	12.0
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	7.5	-2.3	1.1	-11.3	4.5	-2.2
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	7.1	3.3	6.4	8.5	4.8	-4.0
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	0.6	2.5	3.8	5.2	5.1	-3.2
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	-2.0	4.8	2.8	-3.4	-0.6	0.8
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	5.5	4.6	2.5	13.9	5.6	5.2
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	3.6	4.9	5.6	13.7	-6.2	3.6
4.	Pembinaan <i>Construction</i>	6.7	3.8	3.8	-5.0	-8.3	-2.0
5.	Perkhidmatan <i>Services</i>	4.3	5.0	2.7	3.4	-4.2	3.3
5.1	Utiliti <i>Utilities</i>	5.2	3.2	3.4	7.0	-2.0	-4.1
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	2.7	5.8	4.1	2.9	-3.9	3.7
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	3.5	2.0	1.3	-17.2	-17.6	24.1
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	6.6	4.3	4.3	-10.5	-5.8	17.5
5.5	Maklumat dan komunikasi <i>Information and communication</i>	0.8	5.6	2.0	12.3	-3.6	-1.6
5.6	Kewangan dan insurans <i>Finance and insurance</i>	2.0	3.7	2.7	10.8	4.6	1.1
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	4.6	5.6	5.1	-7.3	-14.0	15.2
5.8	Perkhidmatan lain <i>Other services</i>	6.9	7.1	2.4	5.4	-4.0	0.3
Produktiviti buruh <i>Labour productivity</i>		3.7	3.5	2.3	3.5	-2.6	1.8

2a

Produktiviti buruh tahunan, nilai ditambah per pekerja mengikut aktiviti ekonomi, 2017 - 2022
Annual labour productivity, value added per employment by economic activity, 2017 - 2022

							(RM)
Aktiviti ekonomi Economic activity		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	54,102	54,040	54,225	53,114	52,786	53,173
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	1,313,956	1,367,042	1,363,562	1,259,637	1,242,406	1,269,2666
3.	Pembuatan <i>Manufacturing</i>	119,011	121,860	123,881	120,645	128,807	134,046
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	68,302	68,713	69,312	69,029	67,306	66,762
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	466,084	461,884	469,493	426,241	436,636	501,626
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	25,302	24,763	24,763	21,551	22,444	22,892
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	65,105	68,046	70,662	67,085	71,577	74,910
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	218,504	223,805	226,277	219,726	239,387	235,583
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	97,835	100,423	104,049	90,283	93,119	97,425
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	149,008	153,500	155,087	158,915	177,534	193,738
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	142,021	150,083	157,859	157,916	159,064	171,950
4.	Pembinaan <i>Construction</i>	42,422	43,859	45,421	38,322	36,669	38,575
5.	Perkhidmatan <i>Services</i>	84,102	87,050	89,568	84,336	84,716	90,236
5.1	Utiliti <i>Utilities</i>	349,476	357,091	370,687	363,146	368,549	370,375
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	88,410	92,767	95,968	89,261	88,737	95,711
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	29,749	30,006	30,516	22,463	19,808	25,042
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	91,418	95,463	99,432	78,203	79,762	97,255
5.5	Maklumat dan komunikasi <i>Information and communication</i>	339,185	354,004	356,995	366,778	380,197	384,845
5.6	Kewangan dan insurans <i>Finance and insurance</i>	233,679	241,835	249,085	255,371	282,336	284,344
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	56,042	58,358	61,056	51,373	46,261	55,127
5.8	Perkhidmatan lain <i>Other services</i>	67,282	69,932	72,420	71,612	71,444	73,813
Produktiviti buruh <i>Labour productivity</i>		89,964	92,083	94,138	89,106	90,697	95,628

2b

Produktiviti buruh tahunan, nilai ditambah per pekerja mengikut aktiviti ekonomi, 2017 - 2022:
 Perubahan peratusan tahunan
 Annual labour productivity, value added per employment by economic activity, 2017 - 2022:
 Annual percentage change

(%)

Aktiviti ekonomi Economic activity		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	2.2	-0.1	0.3	-2.0	-0.6	0.7
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	-4.8	4.0	-0.3	-7.6	-1.4	2.2
3.	Pembuatan <i>Manufacturing</i>	3.9	2.4	1.7	-2.6	6.8	4.1
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan <i>Vegetable and animal oils & fats and food processing</i>	8.7	0.6	0.9	-0.4	-2.5	-0.8
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	0.7	-0.9	1.6	-9.2	2.4	14.9
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	6.5	-2.1	0.001	-13.0	4.1	2.0
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	6.4	4.5	3.8	-5.1	6.7	4.7
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	2.0	2.4	1.1	-2.9	8.9	-1.6
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	-0.8	2.6	3.6	-13.2	3.1	4.6
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	5.9	3.0	1.0	2.5	11.7	9.1
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	1.8	5.7	5.2	0.04	0.7	8.1
4.	Pembinaan <i>Construction</i>	6.8	3.4	3.6	-15.6	-4.3	5.2
5.	Perkhidmatan <i>Services</i>	4.3	3.5	2.9	-5.8	0.5	6.5
5.1	Utiliti <i>Utilities</i>	3.3	2.2	3.8	-2.0	1.5	0.5
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	3.0	4.9	3.5	-7.0	-0.6	7.9
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	4.8	0.9	1.7	-26.4	-11.8	26.4
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	5.4	4.4	4.2	-21.3	2.0	21.9
5.5	Maklumat dan komunikasi <i>Information and communication</i>	2.2	4.4	0.8	2.7	3.7	1.2
5.6	Kewangan dan insurans <i>Finance and insurance</i>	1.6	3.5	3.0	2.5	10.6	0.7
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	4.0	4.1	4.6	-15.9	-10.0	19.2
5.8	Perkhidmatan lain <i>Other services</i>	6.2	3.9	3.6	-1.1	-0.2	3.3
Produktiviti buruh <i>Labour productivity</i>		3.8	2.4	2.2	-5.3	1.8	5.4

3a

Produktiviti buruh tahunan, nilai ditambah per jam bekerja mengikut 9 subsektor keutamaan, 2017 - 2022
Annual labour productivity, value added per hour worked by 9 priority sub-sectors, 2017 - 2022

		(RM)					
Aktiviti ekonomi <i>Economic activity</i>		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Agro-makanan <i>Agro-food</i>	44.8	45.3	45.9	48.2	47.6	47.0
2.	Kimia dan produk kimia <i>Chemicals and chemical products</i>	115.7	119.0	119.3	121.9	133.2	136.1
3.	Mesin dan peralatan <i>Machinery and equipment</i>	33.3	35.4	36.3	38.8	40.6	42.4
4.	Elektrik dan elektronik <i>Electrical and electronics</i>	65.3	68.0	69.9	81.0	85.5	96.6
5.	Peruncitan dan makanan & minuman <i>Retail and food & beverages</i>	18.5	19.6	20.3	20.0	18.8	22.0
6.	Pelancongan <i>Tourism</i>	27.3	29.1	30.5	18.5	12.6	31.1
7.	Teknologi, maklumat dan komunikasi (ICT) <i>Information, communication and technology (ICT)</i>	140.6	148.5	151.5	170.1	163.9	169.8
8.	Perkhidmatan professional <i>Professional services</i>	33.3	35.5	37.5	37.9	33.0	38.3
9.	Penjagaan kesihatan swasta <i>Private healthcare</i>	25.8	27.1	27.7	27.2	29.0	31.0
Produktiviti buruh <i>Labour productivity</i>		35.0	36.5	37.2	39.0	38.4	42.6

3b

Produktiviti buruh tahunan, nilai ditambah per jam bekerja mengikut 9 subsektor keutamaan, 2017- 2022:
 Perubahan peratusan tahunan
 Annual labour productivity, value added per hour worked by 9 priority sub-sectors, 2017 - 2022:
 Annual percentage change

(%)

	Aktiviti ekonomi Economic activity	2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Agro-makanan Agro-food	1.6	1.1	1.3	5.1	-1.2	-1.4
2.	Kimia dan produk kimia Chemicals and chemical products	3.0	2.8	0.3	2.2	9.2	2.2
3.	Mesin dan peralatan Machinery and equipment	-1.1	6.3	2.6	6.7	4.6	4.6
4.	Elektrik dan elektronik Electrical and electronics	6.8	4.2	2.8	15.9	5.6	13.0
5.	Peruncitan dan makanan & minuman Retail and food & beverages	5.0	5.6	3.6	-1.4	-5.9	16.8
6.	Pelancongan Tourism	2.7	6.6	4.9	-39.3	-32.0	147.1
7.	Teknologi, maklumat dan komunikasi (ICT) Information, communication and technology (ICT)	0.8	5.6	2.0	12.3	-3.6	3.6
8.	Perkhidmatan professional Professional services	8.9	6.5	5.8	1.1	-13.1	16.2
9.	Penjagaan kesihatan swasta Private healthcare	-2.0	4.8	2.3	-1.9	6.7	6.8
	Produktiviti buruh Labour productivity	3.9	4.2	2.1	4.6	-1.5	11.0

4a

Produktiviti buruh tahunan, nilai ditambah per pekerja mengikut 9 subsektor keutamaan, 2017- 2022
Annual labour productivity, value added per employment by 9 priority sub-sectors, 2017 - 2022

							(RM)
Aktiviti ekonomi Economic activity		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Agro-makanan Agro-food	88,789	89,145	91,306	91,154	93,985	92,639
2.	Kimia dan produk kimia Chemicals and chemical products	291,100	294,621	288,306	276,827	305,206	311,382
3.	Mesin dan peralatan Machinery and equipment	84,547	87,834	88,408	86,229	93,981	98,383
4.	Elektrik dan elektronik Electrical and electronics	163,835	168,258	170,471	177,210	198,439	216,480
5.	Peruncitan dan makanan & minuman Retail and food & beverages	44,371	46,309	47,806	42,725	42,009	47,423
6.	Pelancongan Tourism	66,895	70,379	74,092	37,082	26,372	64,413
7.	Teknologi, maklumat dan komunikasi (ICT) Information, communication and technology (ICT)	339,185	354,004	356,995	366,778	380,197	384,845
8.	Perkhidmatan professional Professional services	76,928	81,831	86,671	78,008	73,642	82,211
9.	Penjagaan kesihatan swasta Private healthcare	61,332	63,121	64,188	59,088	64,259	67,971
Produktiviti buruh Labour productivity		82,606	85,107	86,621	82,205	84,911	91,665

4b

Produktiviti buruh tahunan, nilai ditambah per pekerja mengikut 9 subsektor keutamaan, 2017- 2022:
 Perubahan peratusan tahunan
 Annual labour productivity, value added per employment by 9 priority sub-sectors, 2017 - 2022:
 Annual percentage change

		(%)					
Aktiviti ekonomi Economic activity		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Agro-makanan Agro-food	2.0	0.4	2.4	-0.2	3.1	-1.4
2.	Kimia dan produk kimia Chemicals and chemical products	3.7	1.2	-2.1	-4.0	10.3	2.0
3.	Mesin dan peralatan Machinery and equipment	1.8	3.9	0.7	-2.5	9.0	4.7
4.	Elektrik dan elektronik Electrical and electronics	6.6	2.7	1.3	4.0	12.0	9.1
5.	Peruncitan dan makanan & minuman Retail and food & beverages	5.7	4.4	3.2	-10.6	-1.7	12.9
6.	Pelancongan Tourism	4.2	5.2	5.3	-50.0	-28.9	144.2
7.	Teknologi, maklumat dan komunikasi (ICT) Information, communication and technology (ICT)	2.2	4.4	0.8	2.7	3.7	1.2
8.	Perkhidmatan profesional Professional services	6.4	6.4	5.9	-10.0	-5.6	11.6
9.	Penjagaan kesihatan swasta Private healthcare	-0.2	2.9	1.7	-7.9	8.8	5.8
Produktiviti buruh Labour productivity		4.5	3.0	1.8	-5.1	3.3	8.0

5a Produktiviti buruh suku tahunan, nilai ditambah per jam bekerja mengikut aktiviti ekonomi, ST1 2018 - ST4 2022

		(RM)							
Aktiviti ekonomi <i>Economic activity</i>		2018				2019			
		I	II	III	IV	I	II	III	IV
1.	Pertanian <i>Agriculture</i>	24.1	24.3	27.8	26.7	24.9	24.8	28.3	25.2
2.	Perombongan dan pengkuarian <i>Mining and quarrying</i>	545.1	577.8	497.1	621.0	553.1	571.6	488.1	619.9
3.	Pembuatan <i>Manufacturing</i>	48.1	50.8	50.9	52.0	49.8	52.0	52.4	52.6
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	28.7	31.1	30.9	32.8	28.3	30.6	30.9	31.8
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	160.3	212.2	190.5	178.4	156.9	213.0	198.3	181.5
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	10.6	12.8	12.7	12.0	11.2	13.5	12.5	11.5
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	26.7	26.3	26.7	26.8	29.3	28.2	28.1	27.8
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	82.0	86.4	90.8	89.9	86.6	88.1	94.4	93.4
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	37.3	44.1	41.9	39.0	37.8	46.0	43.5	39.7
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	64.7	61.5	59.0	62.9	66.5	62.4	61.2	64.2
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	51.8	62.9	62.8	67.2	55.5	66.0	66.7	70.2
4.	Pembinaan <i>Construction</i>	18.1	18.0	19.3	17.8	19.0	18.7	19.7	18.6
5.	Perkhidmatan <i>Services</i>	35.8	36.9	37.8	39.5	36.9	37.8	38.9	40.6
5.1	Utiliti <i>Utilities</i>	148.8	154.0	153.4	150.7	153.9	159.7	159.0	155.3
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	35.4	36.4	39.6	41.7	37.5	37.8	41.0	43.1
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	12.6	13.0	12.7	13.3	12.6	13.0	13.1	13.6
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	36.5	39.8	40.2	39.4	38.3	41.3	41.7	41.3
5.5	Maklumat dan komunikasi <i>Information and communication</i>	149.7	152.5	151.4	140.8	155.0	156.1	153.2	142.5
5.6	Kewangan dan insurans <i>Finance and insurance</i>	107.8	100.3	104.6	108.6	107.7	105.0	107.7	112.1
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	23.2	24.8	23.8	25.2	24.5	26.0	25.2	26.3
5.8	Perkhidmatan lain <i>Other services</i>	30.7	31.3	32.1	35.9	31.4	32.0	33.0	36.7
Produktiviti buruh <i>Labour productivity</i>		38.2	39.3	40.0	41.4	39.2	40.2	41.1	42.0

5a

Quarterly labour productivity, value added per hour worked by economic activity, Q1 2018 - Q4 2022

(RM)											
2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV
23.1	28.8	28.5	24.9	22.9	24.3	27.5	25.3	22.9	23.4	27.3	25.2
569.2	616.5	467.3	585.7	557.7	556.0	487.9	532.4	530.9	527.9	508.3	557.3
50.8	59.9	56.0	55.8	54.9	57.4	57.3	58.3	54.9	56.2	58.1	58.5
27.1	41.4	34.2	29.4	27.4	32.8	33.6	30.4	25.6	30.3	31.9	30.3
158.2	149.8	219.9	206.1	193.2	208.3	137.5	223.9	192.8	251.7	199.6	212.0
11.0	9.0	11.4	11.4	11.5	11.2	10.8	11.5	11.1	10.4	10.9	11.6
30.1	32.5	30.3	30.8	33.9	33.2	30.4	31.4	34.0	31.1	29.7	29.1
90.3	95.4	97.3	98.3	94.1	97.5	108.1	101.1	89.8	92.1	106.5	99.5
38.6	40.2	42.6	39.9	39.1	40.5	39.3	41.3	40.5	40.1	39.3	41.8
69.6	84.7	68.8	70.6	77.5	75.5	75.3	77.5	83.7	78.2	79.6	80.3
55.3	89.2	74.2	83.2	62.0	71.9	56.8	83.9	59.0	77.1	67.4	82.0
18.7	18.2	17.9	17.4	17.0	16.8	16.9	15.5	15.6	15.9	16.6	16.8
38.3	44.3	38.4	39.6	37.7	37.3	37.8	39.9	38.2	38.7	40.0	40.8
163.2	195.7	159.1	161.1	164.2	160.2	169.8	164.5	161.9	158.5	160.3	151.0
38.3	41.2	41.2	43.2	39.1	37.5	37.9	42.7	38.1	39.7	42.0	43.4
12.6	11.1	10.0	9.5	9.2	8.8	8.0	9.7	10.6	11.0	11.2	11.6
38.3	36.5	36.4	34.2	32.4	33.3	33.7	37.5	39.4	40.1	40.5	40.9
160.0	236.3	155.9	151.5	166.0	164.4	167.0	158.8	165.7	166.8	160.0	153.4
115.4	127.3	116.3	121.7	126.3	124.9	124.4	125.7	124.0	120.8	128.5	133.8
25.2	27.5	21.8	21.2	21.2	20.4	19.6	20.1	22.5	23.6	24.2	23.5
33.2	39.9	32.5	35.6	32.0	32.3	34.4	35.7	32.8	32.6	33.7	35.7
40.0	46.5	41.2	41.8	40.2	40.4	40.9	42.3	40.3	41.0	42.5	43.1

5b

Produktiviti buruh suku tahunan, nilai ditambah per jam bekerja mengikut aktiviti ekonomi, ST1 2018 - ST4 2022:
Perubahan peratusan dari suku tahun yang sama tahun sebelumnya

		(%)							
Aktiviti ekonomi <i>Economic activity</i>		2018				2019			
		I	II	III	IV	I	II	III	IV
1.	Pertanian <i>Agriculture</i>	-1.7	3.5	1.9	-0.7	3.3	2.1	1.6	-5.8
2.	Perombongan dan pengkuarian <i>Mining and quarrying</i>	8.3	7.1	-1.6	-1.0	1.5	-1.1	-1.8	-0.2
3.	Pembuatan <i>Manufacturing</i>	4.8	2.6	2.7	3.0	3.4	2.5	2.9	1.2
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	16.0	2.2	0.2	-5.0	-1.3	-1.6	0.03	-2.8
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	-1.9	-4.7	-2.6	-1.5	-2.1	0.4	4.1	1.7
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	-5.1	-3.2	0.1	-0.4	4.9	5.7	-1.7	-4.2
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	4.5	-3.1	6.1	5.8	9.8	6.9	5.1	3.8
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	1.7	3.1	1.2	3.8	5.6	1.9	4.0	3.9
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	7.0	4.2	5.0	2.9	1.4	4.2	3.8	1.8
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	5.8	5.3	2.1	5.3	2.8	1.4	3.8	2.1
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	-0.7	7.3	5.5	6.7	7.1	4.9	6.2	4.5
4.	Pembinaan <i>Construction</i>	-0.1	4.9	4.7	5.5	4.9	3.9	1.7	4.6
5.	Perkhidmatan <i>Services</i>	6.4	4.5	5.2	3.9	2.9	2.5	2.9	2.6
5.1	Utiliti <i>Utilities</i>	7.7	1.7	0.5	2.9	3.4	3.7	3.6	3.1
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	5.7	5.6	5.7	6.1	5.9	3.6	3.4	3.4
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	4.4	2.2	0.9	0.5	-0.1	0.1	2.5	2.8
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	4.1	5.0	5.3	3.1	4.7	3.7	3.8	4.7
5.5	Maklumat dan komunikasi <i>Information and communication</i>	2.0	8.3	9.8	2.3	3.5	2.3	1.2	1.2
5.6	Kewangan dan insurans <i>Finance and insurance</i>	7.4	0.1	4.8	2.7	-0.1	4.7	3.0	3.2
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	1.8	1.2	11.5	7.9	5.3	4.8	5.9	4.4
5.8	Perkhidmatan lain <i>Other services</i>	11.1	7.6	4.9	4.6	2.1	2.5	3.0	2.2
Produktiviti buruh <i>Labour productivity</i>		4.0	3.8	3.2	3.0	2.6	2.4	2.7	1.5

5b

Quarterly labour productivity, value added per hour worked by economic activity, Q1 2018 - Q4 2022:
Percentage change from corresponding quarter of preceding year

												(%)
2020				2021				2022				
I	II	III	IV	I	II	III	IV	I	II	III	IV	
-7.2	15.8	0.6	-1.0	-0.7	-15.6	-3.4	1.7	-0.3	-3.4	-0.8	-0.6	
2.9	7.8	-4.3	-5.5	-2.0	-9.8	4.4	-9.1	-4.8	-5.1	4.2	4.7	
2.1	15.1	6.9	6.0	8.1	-4.2	2.3	4.6	-0.1	-1.9	1.4	0.4	
-4.2	35.6	10.6	-7.8	1.1	-20.9	-1.6	3.5	-6.7	-7.4	-5.1	-0.4	
0.8	-29.7	10.9	13.6	22.1	39.0	-37.5	8.6	-0.2	20.8	45.1	-5.3	
-1.4	-33.2	-8.9	-0.5	4.6	24.2	-5.5	0.9	-3.8	-6.9	1.5	1.1	
2.7	15.4	7.9	10.7	12.7	2.1	0.4	2.0	0.4	-6.4	-2.4	-7.3	
4.2	8.3	3.1	5.4	4.3	2.1	11.0	2.8	-4.6	-5.5	-1.5	-1.5	
2.2	-12.6	-2.1	0.4	1.3	0.7	-7.6	3.5	3.3	-1.0	-0.2	1.3	
4.6	35.8	12.4	9.9	11.4	-10.9	9.4	9.8	8.0	3.7	5.7	3.7	
-0.4	35.2	11.3	18.5	12.1	-19.4	-23.5	0.8	-4.8	7.2	18.7	-2.2	
-1.7	-2.8	-8.8	-6.5	-8.7	-7.8	-5.8	-11.0	-8.2	-5.2	-2.1	8.0	
3.8	17.2	-1.2	-2.4	-1.5	-15.9	-1.8	0.8	1.2	4.0	6.0	2.3	
6.0	22.6	0.1	3.7	0.6	-18.1	6.7	2.2	-1.4	-1.1	-5.6	-8.2	
2.3	9.0	0.6	0.3	2.0	-8.9	-7.9	-1.3	-2.6	5.7	10.8	1.7	
0.6	-14.6	-23.3	-30.0	-26.9	-21.4	-20.7	2.1	14.6	25.4	40.3	19.0	
-0.003	-11.6	-12.8	-17.1	-15.5	-8.9	-7.3	9.5	21.7	20.6	20.2	9.0	
3.2	51.4	1.7	6.3	3.7	-30.4	7.1	4.8	-0.2	1.5	-4.2	-3.4	
7.1	21.2	7.9	8.6	9.4	-1.9	7.0	3.3	-1.8	-3.2	3.3	6.5	
3.0	5.7	-13.6	-19.4	-15.8	-25.7	-10.2	-5.3	6.2	15.3	23.7	16.7	
5.9	24.7	-1.5	-2.9	-3.6	-19.0	5.8	0.1	2.5	0.7	-2.0	0.2	
2.1	15.6	0.2	-0.6	0.4	-13.1	-0.6	1.3	0.3	1.3	3.8	1.9	

6a Produktiviti buruh suku tahunan, nilai ditambah per pekerja mengikut aktiviti ekonomi, ST1 2018 - ST4 2022

		(RM)							
	Aktiviti ekonomi <i>Economic activity</i>	2018				2019			
		I	II	III	IV	I	II	III	IV
1.	Pertanian Agriculture	12,655	12,757	14,560	14,049	13,138	13,030	14,839	13,201
2.	Perombongan dan pengkuarian Mining and quarrying	329,958	339,544	308,787	395,290	346,101	342,989	296,963	383,037
3.	Pembuatan Manufacturing	29,259	30,378	30,867	31,337	29,834	31,113	31,343	31,576
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	15,735	17,095	17,705	18,150	16,063	17,490	17,753	17,991
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	97,460	132,360	121,122	110,826	98,771	135,055	124,166	111,647
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	5,617	6,734	6,356	6,076	5,659	6,795	6,302	6,020
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	17,504	17,177	16,765	16,609	18,142	17,903	17,479	17,148
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	52,723	54,020	58,176	58,854	53,713	54,795	58,620	59,091
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	22,865	27,174	26,119	24,273	23,832	28,328	26,964	24,930
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	40,765	37,130	36,913	38,754	40,948	37,836	37,378	38,958
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	32,215	37,814	38,275	41,406	33,968	39,964	40,529	43,081
4.	Pembinaan Construction	10,879	10,689	11,543	10,755	11,406	11,099	11,794	11,132
5.	Perkhidmatan Services	20,946	21,213	22,058	22,809	21,552	21,858	22,656	23,480
5.1	Utiliti <i>Utilities</i>	86,966	90,683	91,594	87,901	91,035	94,229	94,709	90,787
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	21,597	21,914	23,960	25,288	22,440	22,658	24,775	26,090
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	7,362	7,317	7,506	7,803	7,441	7,451	7,635	7,970
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	22,560	23,959	24,547	24,426	23,430	25,009	25,583	25,445
5.5	Maklumat dan komunikasi <i>Information and communication</i>	90,965	90,687	89,317	83,503	92,585	90,885	89,661	84,377
5.6	Kewangan dan insurans <i>Finance and insurance</i>	61,313	57,662	60,045	62,903	62,485	59,776	61,774	65,096
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	14,088	14,871	14,371	15,029	14,688	15,547	15,044	15,779
5.8	Perkhidmatan lain <i>Other services</i>	16,734	16,903	17,536	18,759	17,320	17,564	18,080	19,458
Produktiviti buruh Labour productivity		22,276	22,580	23,268	23,943	22,810	23,206	23,817	24,291

6a

Quarterly labour productivity, value added per employment by economic activity, Q1 2018 - Q4 2022

(RM)											
2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV
11,964	13,186	14,881	13,083	12,067	12,752	14,497	13,463	12,178	12,542	14,766	13,679
341,791	286,955	283,881	351,270	329,507	317,929	281,108	314,462	317,500	310,885	305,891	334,940
29,756	25,731	32,489	32,575	31,394	31,693	31,349	34,308	32,270	32,964	33,935	34,854
15,276	18,746	18,730	16,303	14,713	17,518	17,955	17,081	14,637	17,055	17,868	17,160
95,922	74,608	134,341	122,558	110,237	116,153	79,035	131,433	115,012	145,496	117,735	123,944
5,591	4,065	5,823	6,038	5,838	5,403	5,277	5,909	5,780	5,443	5,613	6,072
18,235	12,571	18,062	18,041	19,324	17,830	15,768	18,618	20,168	18,747	17,849	18,146
54,624	47,228	58,505	59,151	56,184	57,428	63,853	61,915	54,497	55,549	64,226	61,266
23,686	17,031	25,253	24,250	23,431	22,850	21,638	25,133	24,215	24,134	23,743	25,324
41,066	34,752	41,030	41,975	45,464	42,588	42,569	46,862	50,288	46,836	47,463	49,188
33,406	29,552	44,295	50,345	36,588	41,168	30,682	50,394	35,978	46,311	40,030	49,314
10,795	6,600	10,604	10,221	9,900	9,084	8,598	9,080	9,351	9,351	9,881	9,992
21,689	18,435	21,789	22,377	21,163	20,480	20,430	22,621	21,911	22,016	22,758	23,519
93,963	85,307	92,551	91,260	93,576	89,383	89,830	95,690	95,744	90,250	92,119	92,314
22,392	17,435	23,993	25,436	22,390	20,788	20,838	24,667	22,195	23,005	24,586	25,861
7,096	4,502	5,484	5,296	5,111	4,736	4,407	5,549	6,110	6,129	6,331	6,461
22,431	13,959	21,581	19,982	18,990	19,170	19,123	22,434	23,779	24,013	24,311	25,106
94,533	92,237	91,244	89,036	96,214	94,851	95,857	93,369	97,855	96,630	96,428	94,047
64,700	56,401	65,114	69,255	71,657	70,106	68,649	71,929	71,427	69,436	71,438	72,028
14,849	11,508	12,584	12,377	12,272	11,561	10,760	11,661	13,338	13,705	13,882	14,185
17,815	16,741	17,966	19,068	17,250	17,273	17,639	19,266	17,953	17,884	18,343	19,613
22,619	19,490	23,313	23,635	22,522	22,102	22,007	24,047	23,124	23,322	24,242	24,915

6b

Produktiviti buruh suku tahunan, nilai ditambah per pekerja mengikut aktiviti ekonomi, ST1 2018 - ST4 2022:
Perubahan peratusan dari suku tahun yang sama tahun sebelumnya

		(%)							
Aktiviti ekonomi Economic activity		2018				2019			
		I	II	III	IV	I	II	III	IV
1.	Pertanian <i>Agriculture</i>	-1.1	2.3	-1.2	-0.3	3.8	2.1	1.9	-6.0
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	5.7	6.2	0.4	3.3	4.9	1.0	-3.8	-3.1
3.	Pembuatan <i>Manufacturing</i>	3.3	1.5	2.3	2.5	2.0	2.4	1.5	0.8
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan <i>Vegetable and animal oils & fats and food processing</i>	8.1	-0.3	-1.1	-2.9	2.1	2.3	0.3	-0.9
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	-2.2	-0.8	-0.9	-0.1	1.3	2.0	2.5	0.7
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	-2.5	-5.1	-0.9	0.2	0.7	0.9	-0.8	-0.9
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	5.7	3.5	5.1	3.8	3.6	4.2	4.3	3.2
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	3.9	1.7	1.9	2.3	1.9	1.4	0.8	0.4
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	2.4	1.9	3.5	2.7	4.2	4.2	3.2	2.7
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	4.3	2.0	2.0	3.8	0.4	1.9	1.3	0.5
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	1.0	7.0	7.1	6.8	5.4	5.7	5.9	4.0
4.	Pembinaan <i>Construction</i>	0.8	4.1	3.3	5.2	4.8	3.8	2.2	3.5
5.	Perkhidmatan <i>Services</i>	4.7	2.5	3.9	2.9	2.9	3.0	2.7	2.9
5.1	Utiliti <i>Utilities</i>	4.2	1.3	1.3	1.8	4.7	3.9	3.4	3.3
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	5.6	3.6	5.3	4.9	3.9	3.4	3.4	3.2
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	2.0	0.3	0.6	0.6	1.1	1.8	1.7	2.1
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	4.4	3.9	4.5	4.9	3.9	4.4	4.2	4.2
5.5	Maklumat dan komunikasi <i>Information and communication</i>	4.7	5.8	6.5	0.8	1.8	0.2	0.4	1.0
5.6	Kewangan dan insurans <i>Finance and insurance</i>	6.8	0.6	3.9	2.8	1.9	3.7	2.9	3.5
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	2.3	0.3	8.7	5.2	4.3	4.5	4.7	5.0
5.8	Perkhidmatan lain <i>Other services</i>	6.0	4.3	2.9	2.6	3.5	3.9	3.1	3.7
Produktiviti buruh <i>Labour productivity</i>		2.9	2.3	1.9	2.3	2.4	2.8	2.4	1.5

6b

Quarterly labour productivity, value added per employment by economic activity, Q1 2018 - Q4 2022:
Percentage change from corresponding quarter of preceding year

(%)

2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV
-8.9	1.2	0.3	-0.9	0.9	-3.3	-2.6	2.9	0.9	-1.6	1.9	1.6
-1.2	-16.3	-4.4	-8.3	-3.6	10.8	-1.0	-10.5	-3.6	-2.2	8.8	6.5
-0.3	-17.3	3.7	3.2	5.5	23.2	-3.5	5.3	2.8	4.0	8.2	1.6
-4.9	7.2	5.5	-9.4	-3.7	-6.5	-4.1	4.8	-0.5	-2.6	-0.5	0.5
-2.9	-44.8	8.2	9.8	14.9	55.7	-41.2	7.2	4.3	25.3	49.0	-5.7
-1.2	-40.2	-7.6	0.3	4.4	32.9	-9.4	-2.1	-1.0	0.7	6.4	2.8
0.5	-29.8	3.3	5.2	6.0	41.8	-12.7	3.2	4.4	5.1	13.2	-2.5
1.7	-13.8	-0.2	0.1	2.9	21.6	9.1	4.7	-3.0	-3.3	0.6	-1.0
-0.6	-39.9	-6.3	-2.7	-1.1	34.2	-14.3	3.6	3.3	5.6	9.7	0.8
0.3	-8.2	9.8	7.7	10.7	22.5	3.8	11.6	10.6	10.0	11.5	5.0
-1.7	-26.1	9.3	16.9	9.5	39.3	-30.7	0.1	-1.7	12.5	30.5	-2.1
-5.4	-40.5	-10.1	-8.2	-8.3	37.6	-18.9	-11.2	-5.5	2.9	14.9	10.0
0.6	-15.7	-3.8	-4.7	-2.4	11.1	-6.2	1.1	3.5	7.5	11.4	4.0
3.2	-9.5	-2.3	0.5	-0.4	4.8	-2.9	4.9	2.3	1.0	2.5	-3.5
-0.2	-23.1	-3.2	-2.5	-0.01	19.2	-13.2	-3.0	-0.9	10.7	18.0	4.8
-4.6	-39.6	-28.2	-33.5	-28.0	5.2	-19.6	4.8	19.6	29.4	43.7	16.4
-4.3	-44.2	-15.6	-21.5	-15.3	37.3	-11.4	12.3	25.2	25.3	27.1	11.9
2.1	1.5	1.8	5.5	1.8	2.8	5.1	4.9	1.7	1.9	0.6	0.7
3.5	-5.6	5.4	6.4	10.8	24.3	5.4	3.9	-0.3	-1.0	4.1	0.1
1.1	-26.0	-16.4	-21.6	-17.4	0.5	-14.5	-5.8	8.7	18.5	29.0	21.7
2.9	-4.7	-0.6	-2.0	-3.2	3.2	-1.8	1.0	4.1	3.5	4.0	1.8
-0.8	-16.0	-2.1	-2.7	-0.4	13.4	-5.6	1.7	2.7	5.5	10.2	3.6

7a

Keluaran Dalam Negeri Kasar (KDNK) tahunan mengikut aktiviti ekonomi pada harga malar 2015, 2017 - 2022
Annual Gross Domestic Product (GDP) by economic activity at constant 2015 prices, 2017 - 2022

		(RM juta/ RM million)					
Aktiviti ekonomi Economic activity		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	99,509	99,637	101,573	99,106	98,898	98,949
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	105,838	103,557	102,887	92,879	93,150	96,350
3.	Pembuatan <i>Manufacturing</i>	290,464	304,843	316,283	307,847	337,219	364,522
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	28,420	29,468	30,448	30,941	31,590	32,930
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	8,598	8,819	9,181	7,687	7,731	9,030
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	5,682	5,927	6,251	5,419	5,864	6,200
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	19,657	20,570	21,685	20,070	21,430	23,056
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	84,998	88,419	90,982	90,084	101,691	102,698
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	34,516	36,224	37,716	32,778	34,171	36,726
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	81,218	86,317	89,133	91,438	104,819	119,688
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	27,374	29,098	30,887	29,429	29,923	34,194
4.	Pembinaan <i>Construction</i>	63,522	66,194	66,453	53,616	50,802	53,327
5.	Perkhidmatan <i>Services</i>	723,361	772,990	820,576	776,361	791,068	877,426
5.1	Utiliti <i>Utilities</i>	34,396	36,109	38,326	37,857	38,837	40,318
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	209,885	227,166	242,704	228,260	232,006	263,390
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	41,748	45,502	49,821	36,527	32,513	43,293
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	47,212	50,208	53,632	42,139	42,671	55,834
5.5	Maklumat dan komunikasi <i>Information and communication</i>	73,113	79,110	84,225	89,252	94,874	99,829
5.6	Kewangan dan insurans <i>Finance and insurance</i>	84,532	89,088	93,358	96,106	105,713	106,643
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	59,132	63,745	68,762	58,399	51,972	63,821
5.8	Perkhidmatan lain <i>Other services</i>	173,343	182,061	189,747	187,820	192,483	204,299
tambah Duti import <i>plus Import duties</i>		18,076	16,546	16,179	15,335	15,602	16,731
KDNK pada harga pembeli <i>GDP at purchasers' prices</i>		1,300,769	1,363,766	1,423,952	1,345,144	1,386,738	1,507,306

7b

Keluaran Dalam Negeri Kasar (KDNK) tahunan mengikut aktiviti ekonomi pada harga malar 2015, 2017 - 2022:
 Perubahan peratusan tahunan
Annual Gross Domestic Product (GDP) by economic activity at constant 2015 prices, 2017 - 2022:
Annual percentage change

		Aktiviti ekonomi <i>Economic activity</i>						(%)
		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p	
1.	Pertanian <i>Agriculture</i>	5.9	0.1	1.9	-2.4	-0.2	0.1	
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	0.4	-2.2	-0.6	-9.7	0.3	3.4	
3.	Pembuatan <i>Manufacturing</i>	6.0	5.0	3.8	-2.7	9.5	8.1	
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan <i>Vegetable and animal oils & fats and food processing</i>	11.2	3.7	3.3	1.6	2.1	4.2	
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	6.0	2.6	4.1	-16.3	0.6	16.8	
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	7.9	4.3	5.5	-13.3	8.2	5.7	
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	4.7	4.6	5.4	-7.4	6.8	7.6	
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	4.0	4.0	2.9	-1.0	12.9	1.0	
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	4.9	4.9	4.1	-13.1	4.2	7.5	
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	7.5	6.3	3.3	2.6	14.6	14.2	
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	5.3	6.3	6.1	-4.7	1.7	14.3	
4.	Pembinaan <i>Construction</i>	6.7	4.2	0.4	-19.3	-5.2	5.0	
5.	Perkhidmatan <i>Services</i>	6.3	6.9	6.2	-5.4	1.9	10.9	
5.1	Utiliti <i>Utilities</i>	2.9	5.0	6.1	-1.2	2.6	3.8	
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	7.2	8.2	6.8	-6.0	1.6	13.5	
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	7.5	9.0	9.5	-26.7	-11.0	33.2	
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	6.2	6.3	6.8	-21.4	1.3	30.8	
5.5	Maklumat dan komunikasi <i>Information and communication</i>	8.6	8.2	6.5	6.0	6.3	5.2	
5.6	Kewangan dan insurans <i>Finance and insurance</i>	4.7	5.4	4.8	2.9	10.0	0.9	
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	7.6	7.8	7.9	-15.1	-11.0	22.8	
5.8	Perkhidmatan lain <i>Other services</i>	5.0	5.0	4.2	-1.0	2.5	6.1	
tambah Duti import <i>plus Import duties</i>		13.0	-8.5	-2.2	-5.2	1.7	7.2	
KDNK pada harga pembeli <i>GDP at purchasers' prices</i>		5.8	4.8	4.4	-5.5	3.1	8.7	

8a

Keluaran Dalam Negeri Kasar (KDNK) suku tahunan mengikut aktiviti ekonomi pada harga malar 2015, ST1 2018 - ST4 2022

		(RM juta/ RM million)							
Aktiviti ekonomi Economic activity		2018				2019			
		I	II	III	IV	I	II	III	IV
1.	Pertanian Agriculture	23,298	23,292	27,089	25,958	24,707	24,266	28,082	24,519
2.	Perlombongan dan pengkuarian Mining and quarrying	26,189	25,853	24,238	27,277	26,216	26,483	23,567	26,622
3.	Pembuatan Manufacturing	72,643	75,745	77,131	79,324	75,627	79,005	79,922	81,729
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan <i>Vegetable and animal oils & fats and food processing</i>	6,680	7,296	7,619	7,874	7,020	7,623	7,807	7,997
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	1,860	2,532	2,329	2,098	1,946	2,643	2,416	2,177
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	1,385	1,616	1,476	1,450	1,450	1,710	1,558	1,534
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	5,242	5,176	5,094	5,057	5,530	5,460	5,386	5,308
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	20,751	21,311	22,932	23,425	21,385	22,002	23,570	24,025
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	8,285	9,811	9,400	8,728	8,620	10,234	9,793	9,069
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	22,370	20,810	20,966	22,171	23,189	21,648	21,598	22,698
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	6,069	7,193	7,315	8,522	6,486	7,684	7,795	8,921
4.	Pembinaan Construction	16,604	15,985	17,206	16,399	16,704	16,161	16,967	16,620
5.	Perkhidmatan Services	183,367	188,290	196,947	204,386	195,144	199,852	208,474	217,106
5.1	Utiliti <i>Utilities</i>	8,709	9,024	9,217	9,158	9,329	9,610	9,732	9,656
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	51,979	54,324	59,307	61,556	55,776	58,053	63,277	65,599
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	10,770	11,049	11,391	12,293	11,793	12,075	12,450	13,504
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	12,103	12,291	12,616	13,200	12,902	13,157	13,472	14,101
5.5	Maklumat dan komunikasi <i>Information and communication</i>	19,104	19,938	20,296	19,773	20,468	21,164	21,504	21,090
5.6	Kewangan dan insurans <i>Finance and insurance</i>	22,032	21,636	22,345	23,075	23,050	22,676	23,317	24,315
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	15,387	15,893	15,840	16,625	16,548	17,160	17,069	17,985
5.8	Perkhidmatan lain <i>Other services</i>	43,284	44,135	45,935	48,707	45,279	45,957	47,653	50,858
tambah Duti import plus Import duties		4,995	4,272	3,074	4,204	3,976	4,142	4,106	3,956
KDNK pada harga pembeli GDP at purchasers' prices		327,096	333,438	345,685	357,547	342,373	349,910	361,117	370,552

8a

Quarterly Gross Domestic Product (GDP) by economic activity at constant 2015 prices, Q1 2018 - Q4 2022

(RM juta/ RM million)

2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV
22,533	24,422	27,938	24,213	22,563	24,053	27,389	24,894	22,577	23,480	27,729	25,162
25,460	21,387	22,009	24,023	24,337	23,648	21,296	23,870	24,066	23,531	23,255	25,498
76,661	64,490	82,509	84,186	81,761	81,679	81,890	91,888	87,191	89,153	92,664	95,514
6,795	8,312	8,374	7,460	6,776	8,137	8,421	8,256	7,113	8,339	8,864	8,615
1,919	1,287	2,349	2,132	2,001	1,994	1,404	2,333	2,119	2,569	2,100	2,242
1,495	993	1,419	1,511	1,534	1,394	1,353	1,583	1,608	1,494	1,521	1,577
5,600	3,643	5,388	5,439	5,853	5,103	4,732	5,742	6,237	5,703	5,522	5,594
22,202	19,067	24,068	24,747	23,821	24,405	27,102	26,363	23,703	24,189	28,222	26,584
8,605	6,126	9,145	8,901	8,713	8,176	7,865	9,417	9,175	9,022	8,923	9,607
23,662	19,739	23,577	24,459	26,166	24,935	25,246	28,472	30,183	28,788	29,618	31,100
6,382	5,323	8,189	9,535	6,897	7,535	5,768	9,722	7,054	9,049	7,895	10,196
15,377	9,003	14,890	14,346	13,770	12,627	11,816	12,588	12,922	12,929	13,621	13,856
201,370	167,515	200,390	207,085	196,765	190,044	190,474	213,785	209,499	212,812	222,307	232,808
9,791	8,779	9,575	9,713	9,891	9,357	9,411	10,178	10,227	9,757	10,140	10,194
56,955	44,585	61,834	64,886	57,721	53,849	54,681	65,754	60,023	63,141	68,001	72,226
11,967	7,115	8,737	8,709	8,332	7,741	7,243	9,198	10,350	10,473	10,954	11,516
12,660	7,296	11,282	10,902	10,565	10,013	9,902	12,191	13,292	13,600	14,002	14,940
21,843	22,176	22,637	22,596	23,224	23,474	24,040	24,136	24,694	24,856	25,132	25,147
24,230	21,384	24,663	25,829	26,899	26,292	25,709	26,813	26,630	25,911	26,847	27,255
17,129	12,810	14,338	14,122	13,820	12,969	12,009	13,175	15,131	15,785	16,229	16,675
46,796	43,371	47,325	50,328	46,313	46,349	47,481	52,340	49,152	49,290	51,003	54,855
3,386	3,272	4,189	4,487	3,967	4,057	3,296	4,283	3,895	4,284	4,199	4,354
344,788	290,090	351,926	358,340	343,162	336,108	336,161	371,308	360,151	366,188	383,775	397,191

8b

Keluaran Dalam Negeri Kasar (KDNK) suku tahunan mengikut aktiviti ekonomi pada harga malar 2015, ST1 2018 - ST4 2022: Perubahan peratusan dari suku tahun yang sama tahun sebelumnya

		8b							
		KDNK							
		Perubahan peratusan (%)							
Aktiviti ekonomi Economic activity		2018				2019			
		I	II	III	IV	I	II	III	IV
1. Pertanian Agriculture		3.1	-1.5	-0.7	-0.1	6.0	4.2	3.7	-5.5
2. Perlombongan dan pengkuarian Mining and quarrying		-2.4	-1.3	-5.0	-0.1	0.1	2.4	-2.8	-2.4
3. Pembuatan Manufacturing		5.2	4.9	5.0	4.7	4.1	4.3	3.6	3.0
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan Vegetable and animal oils & fats and food processing	9.2	4.5	2.4	-0.1	5.1	4.5	2.5	1.6
3.2	Minuman dan produk tembakau Beverages and tobacco products	1.4	3.3	3.2	2.1	4.6	4.4	3.7	3.8
3.3	Produk tekstil, pakaian dan kulit Textiles, wearing apparel and leather products	6.6	4.1	2.9	3.8	4.7	5.8	5.5	5.8
3.4	Produk kayu, perabot, keluaran kertas dan percetakan Wood products, furniture, paper products and printing	4.0	3.4	6.3	4.9	5.5	5.5	5.7	5.0
3.5	Produk petroleum, kimia, getah dan plastik Petroleum, chemical, rubber and plastic products	4.9	3.8	3.9	3.6	3.1	3.2	2.8	2.6
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka Non-metallic mineral products, basic metal and fabricated metal products	5.3	5.2	5.2	4.1	4.0	4.3	4.2	3.9
3.7	Produk elektrik, elektronik dan optikal Electrical, electronic and optical products	5.8	6.1	6.3	6.9	3.7	4.0	3.0	2.4
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan Transport equipment, other manufacturing and repair	2.2	6.0	7.7	8.4	6.9	6.8	6.6	4.7
4. Pembinaan Construction		4.9	4.8	4.7	2.5	0.6	1.1	-1.4	1.3
5. Perkhidmatan Services		6.6	6.6	7.3	6.9	6.4	6.1	5.9	6.2
5.1	Utiliti Utilities	4.4	5.0	5.4	5.0	7.1	6.5	5.6	5.4
5.2	Perdagangan borong dan runcit Wholesale and retail trade	6.9	7.4	9.6	8.8	7.3	6.9	6.7	6.6
5.3	Makanan & minuman dan penginapan Food & beverages and accommodation	7.9	9.1	9.4	9.5	9.5	9.3	9.3	9.9
5.4	Pengangkutan dan penyimpanan Transportation and storage	5.7	6.3	6.7	6.7	6.6	7.0	6.8	6.8
5.5	Maklumat dan komunikasi Information and communication	8.1	8.5	8.3	7.9	7.1	6.2	6.0	6.7
5.6	Kewangan dan insurans Finance and insurance	7.4	4.8	5.7	3.9	4.6	4.8	4.3	5.4
5.7	Hartanah dan perkhidmatan perniagaan Real estate and business services	7.6	8.0	7.9	7.7	7.5	8.0	7.8	8.2
5.8	Perkhidmatan lain Other services	5.1	5.0	4.7	5.2	4.6	4.1	3.7	4.4
tambah Duti import plus Import duties		14.9	-0.9	-31.8	-14.3	-20.4	-3.0	33.6	-5.9
KDNK pada harga pembeli GDP at purchasers' prices		5.3	4.8	4.5	4.8	4.7	4.9	4.5	3.6

8b

Quarterly Gross Domestic Product (GDP) by economic activity at constant 2015 prices, Q1 2018 - Q4 2022:
Percentage change from corresponding quarter of preceding year

(%)

2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV
-8.8	0.6	-0.5	-1.2	0.1	-1.5	-2.0	2.8	0.1	-2.4	1.2	1.1
-2.9	-19.2	-6.6	-9.8	-4.4	10.6	-3.2	-0.6	-1.1	-0.5	9.2	6.8
1.4	-18.4	3.2	3.0	6.7	26.7	-0.8	9.1	6.6	9.2	13.2	3.9
-3.2	9.0	7.3	-6.7	-0.3	-2.1	0.6	10.7	5.0	2.5	5.3	4.3
-1.4	-51.3	-2.8	-2.1	4.2	54.9	-40.2	9.4	5.9	28.9	49.6	-3.9
3.1	-41.9	-8.9	-1.5	2.6	40.3	-4.7	4.7	4.8	7.2	12.4	-0.3
1.3	-33.3	0.04	2.5	4.5	40.1	-12.2	5.6	6.6	11.7	16.7	-2.6
3.8	-13.3	2.1	3.0	7.3	28.0	12.6	6.5	-0.5	-0.9	4.1	0.8
-0.2	-40.1	-6.6	-1.9	1.3	33.5	-14.0	5.8	5.3	10.3	13.4	2.0
2.0	-8.8	9.2	7.8	10.6	26.3	7.1	16.4	15.4	15.5	17.3	9.2
-1.6	-30.7	5.0	6.9	8.1	41.6	-29.6	2.0	2.3	20.1	36.9	4.9
-7.9	-44.3	-12.2	-13.7	-10.4	40.3	-20.6	-12.2	-6.2	2.4	15.3	10.1
3.2	-16.2	-3.9	-4.6	-2.3	13.4	-4.9	3.2	6.5	12.0	16.7	8.9
5.0	-8.7	-1.6	0.6	1.0	6.6	-1.7	4.8	3.4	4.3	7.8	0.2
2.1	-23.2	-2.3	-1.1	1.3	20.8	-11.6	1.3	4.0	17.3	24.4	9.8
1.5	-41.1	-29.8	-35.5	-30.4	8.8	-17.1	5.6	24.2	35.3	51.2	25.2
-1.9	-44.5	-16.3	-22.7	-16.5	37.3	-12.2	11.8	25.8	35.8	41.4	22.6
6.7	4.8	5.3	7.1	6.3	5.9	6.2	6.8	6.3	5.9	4.5	4.2
5.1	-5.7	5.8	6.2	11.0	23.0	4.2	3.8	-1.0	-1.4	4.4	1.7
3.5	-25.3	-16.0	-21.5	-19.3	1.2	-16.2	-6.7	9.5	21.7	35.1	26.6
3.3	-5.6	-0.7	-1.0	-1.0	6.9	0.3	4.0	6.1	6.3	7.4	4.8
-14.8	-21.0	2.0	13.4	17.1	24.0	-21.3	-4.6	-1.8	5.6	27.4	1.7
0.7	-17.1	-2.5	-3.3	-0.5	15.9	-4.5	3.6	5.0	8.9	14.2	7.0

9a

Jumlah jam bekerja tahunan mengikut aktiviti ekonomi, 2017 - 2022
Annual total hours worked by economic activity, 2017 - 2022

		(Juta jam/ Million hours)					
Aktiviti ekonomi Economic activity		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	3,893	3,870	3,938	3,779	3,954	4,006
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	196	185	185	168	175	181
3.	Pembuatan <i>Manufacturing</i>	5,945	6,041	6,118	5,568	5,917	6,400
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan <i>Vegetable and animal oils & fats and food processing</i>	947	955	1,001	950	1,018	1,115
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	45	48	49	42	41	42
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	463	494	515	504	521	564
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	762	772	765	653	665	745
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	998	1,013	1,004	945	1,015	1,059
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	891	893	904	813	853	909
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	1,370	1,392	1,402	1,262	1,371	1,488
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	468	475	477	400	434	478
4.	Pembinaan <i>Construction</i>	3,601	3,616	3,498	2,972	3,072	3,291
5.	Perkhidmatan <i>Services</i>	20,242	20,599	21,286	19,483	20,722	22,243
5.1	Utiliti <i>Utilities</i>	234	238	244	225	236	255
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	5,802	5,934	6,092	5,571	5,894	6,451
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	3,297	3,524	3,807	3,370	3,641	3,907
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	1,264	1,289	1,320	1,159	1,246	1,388
5.5	Maklumat dan komunikasi <i>Information and communication</i>	520	533	556	525	579	619
5.6	Kewangan dan insurans <i>Finance and insurance</i>	832	846	863	802	843	842
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	2,573	2,626	2,695	2,469	2,555	2,723
5.8	Perkhidmatan lain <i>Other services</i>	5,719	5,610	5,708	5,363	5,727	6,059
Jumlah jam bekerja Total hours worked		33,877	34,312	35,025	31,970	33,840	36,122

9b

Jumlah jam bekerja tahunan mengikut aktiviti ekonomi, 2017 - 2022: Perubahan peratusan tahunan
 Annual total hours worked by economic activity, 2017 - 2022: Annual percentage change

		(%)					
Aktiviti ekonomi Economic activity		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian Agriculture	4.1	-0.6	1.8	-4.0	4.6	1.3
2.	Perlombongan dan pengkuarian Mining and quarrying	2.9	-5.3	-0.3	-9.4	4.2	3.9
3.	Pembuatan Manufacturing	2.4	1.6	1.3	-9.0	6.3	8.2
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan Vegetable and animal oils & fats and food processing	2.8	0.8	4.8	-5.1	7.1	9.6
3.2	Minuman dan produk tembakau Beverages and tobacco products	4.7	5.3	3.1	-14.8	-2.9	4.3
3.3	Produk tekstil, pakaian dan kulit Textiles, wearing apparel and leather products	0.4	6.8	4.3	-2.3	3.6	8.1
3.4	Produk kayu, perabot, keluaran kertas dan percetakan Wood products, furniture, paper products and printing	-2.2	1.3	-0.9	-14.7	1.8	12.1
3.5	Produk petroleum, kimia, getah dan plastik Petroleum, chemical, rubber and plastic products	3.4	1.5	-0.9	-5.9	7.4	4.3
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka Non-metallic mineral products, basic metal and fabricated metal products	7.1	0.2	1.3	-10.1	4.8	6.6
3.7	Produk elektrik, elektronik dan optikal Electrical, electronic and optical products	1.9	1.6	0.7	-10.0	8.6	8.5
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan Transport equipment, other manufacturing and repair	1.6	1.3	0.5	-16.2	8.4	10.3
4.	Pembinaan Construction	0.01	0.4	-3.3	-15.0	3.4	7.1
5.	Perkhidmatan Services	1.9	1.8	3.3	-8.5	6.4	7.3
5.1	Utiliti Utilities	-2.1	1.7	2.6	-7.7	4.7	8.3
5.2	Perdagangan borong dan runcit Wholesale and retail trade	4.4	2.3	2.7	-8.6	5.8	9.4
5.3	Makanan & minuman dan penginapan Food & beverages and accommodation	3.9	6.9	8.0	-11.5	8.1	7.3
5.4	Pengangkutan dan penyimpanan Transportation and storage	-0.4	1.9	2.5	-12.2	7.5	11.3
5.5	Maklumat dan komunikasi Information and communication	7.7	2.5	4.4	-5.6	10.3	7.0
5.6	Kewangan dan insurans Finance and insurance	2.6	1.7	2.0	-7.1	5.1	-0.2
5.7	Hartanah dan perkhidmatan perniagaan Real estate and business services	2.8	2.0	2.6	-8.4	3.5	6.6
5.8	Perkhidmatan lain Other services	-1.8	-1.9	1.7	-6.0	6.8	5.8
Jumlah jam bekerja Total hours worked		2.0	1.3	2.1	-8.7	5.8	6.7

10a

Jumlah jam bekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022

		(Juta jam/ Million hours)							
		2018				2019			
Aktiviti ekonomi Economic activity		I	II	III	IV	I	II	III	IV
1.	Pertanian Agriculture	966	958	973	973	993	977	993	975
2.	Perlombongan dan pengkuarian Mining and quarrying	48	45	49	44	47	46	48	43
3.	Pembuatan Manufacturing	1,510	1,491	1,515	1,526	1,520	1,518	1,526	1,554
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan Vegetable and animal oils & fats and food processing	233	235	247	240	248	249	253	251
3.2	Minuman dan produk tembakau Beverages and tobacco products	12	12	12	12	12	12	12	12
3.3	Produk tekstil, pakaian dan kulit Textiles, wearing apparel and leather	130	127	116	121	130	127	125	134
3.4	Produk kayu, perabot, keluaran kertas dan percetakan Wood products, furniture, paper products and printing	197	197	191	189	189	194	192	191
3.5	Produk petroleum, kimia, getah dan plastik Petroleum, chemical, rubber and plastic products	253	247	253	261	247	250	250	257
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka Non-metallic mineral products, basic metal and fabricated metal products	222	222	224	224	228	223	225	228
3.7	Produk elektrik, elektronik dan optikal Electrical, electronic and optical products	346	338	356	353	349	347	353	354
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan Transport equipment, other manufacturing and repair	117	114	116	127	117	116	117	127
4.	Pembinaan Construction	917	888	890	920	880	864	862	891
5.	Perkhidmatan Services	5,116	5,104	5,210	5,169	5,290	5,287	5,358	5,351
5.1	Utiliti Utilities	59	59	60	61	61	60	61	62
5.2	Perdagangan borong dan runcit Wholesale and retail trade	1,468	1,491	1,497	1,478	1,488	1,537	1,545	1,522
5.3	Makanan & minuman dan penginapan Food & beverages and accommodation	856	847	893	928	938	925	952	992
5.4	Pengangkutan dan penyimpanan Transportation and storage	331	309	314	335	337	319	323	341
5.5	Maklumat dan komunikasi Information and communication	128	131	134	140	132	136	140	148
5.6	Kewangan dan insurans Finance and insurance	204	216	214	212	214	216	216	217
5.7	Hartanah dan perkhidmatan perniagaan Real estate and business services	663	640	665	659	676	659	676	683
5.8	Perkhidmatan lain Other services	1,408	1,412	1,433	1,357	1,443	1,435	1,444	1,386
Jumlah jam bekerja Total hours worked		8,558	8,486	8,636	8,632	8,730	8,693	8,788	8,815

10a

Quarterly total hours worked by economic activity, Q1 2018 - Q4 2022

(Juta jam/ Million hours)

2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV
975	849	982	972	983	991	997	983	987	1,002	1,017	1,000
45	35	47	41	44	43	44	45	45	45	46	46
1,509	1,077	1,473	1,510	1,488	1,424	1,430	1,575	1,589	1,585	1,595	1,631
251	201	245	254	247	248	250	272	278	275	278	285
12	9	11	10	10	10	10	10	11	10	11	11
136	110	125	133	133	125	126	138	145	144	139	136
186	112	178	177	173	154	156	183	183	184	186	192
246	200	247	252	253	250	251	261	264	263	265	267
223	152	215	223	223	202	200	228	227	225	227	230
340	233	343	347	338	330	335	368	361	368	372	387
115	60UY	110	115	111	105	102	116	120	117	117	124
824	495	830	823	809	754	699	811	827	814	823	827
5,257	3,780	5,213	5,232	5,214	5,101	5,046	5,361	5,487	5,493	5,558	5,706
60	45	60	60	60	58	55	62	63	62	63	67
1,485	1,083	1,501	1,501	1,476	1,436	1,442	1,541	1,576	1,592	1,618	1,665
947	639	871	913	902	884	910	945	977	954	981	995
331	200	310	318	327	301	294	325	338	339	346	365
136	94	145	149	140	143	144	152	149	149	157	164
210	168	212	212	213	211	207	213	215	214	209	204
680	466	658	665	651	635	613	655	672	670	670	711
1,408	1,086	1,456	1,412	1,445	1,433	1,381	1,468	1,497	1,512	1,514	1,536
8,611	6,236	8,545	8,578	8,538	8,312	8,214	8,775	8,935	8,939	9,039	9,210

10b

Jumlah jam bekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022:
Perubahan peratusan dari suku tahun yang sama tahun sebelumnya

		(%)							
Aktiviti ekonomi <i>Economic activity</i>		2018				2019			
		I	II	III	IV	I	II	III	IV
1.	Pertanian <i>Agriculture</i>	4.8	-4.9	-2.5	0.6	2.7	2.1	2.0	0.2
2.	Perombongan dan pengkuarian <i>Mining and quarrying</i>	-10.0	-7.8	-3.4	0.9	-1.3	3.5	-1.0	-2.2
3.	Pembuatan <i>Manufacturing</i>	0.5	2.2	2.2	1.6	0.7	1.8	0.7	1.9
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	-5.8	2.2	2.2	5.3	6.5	6.2	2.4	4.5
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	3.4	8.4	6.0	3.6	6.9	3.9	-0.4	2.0
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	12.4	7.5	2.8	4.2	-0.2	0.2	7.4	10.5
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	-0.4	6.7	0.2	-0.9	-3.9	-1.4	0.6	1.1
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	3.1	0.7	2.7	-0.3	-2.4	1.3	-1.2	-1.3
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	-1.6	1.0	0.2	1.1	2.6	0.1	0.4	2.1
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	0.1	0.7	4.2	1.5	0.8	2.6	-0.8	0.3
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	2.9	-1.1	2.0	1.6	-0.3	1.8	0.4	0.2
4.	Pembinaan <i>Construction</i>	5.0	-0.1	-0.03	-2.9	-4.1	-2.7	-3.1	-3.2
5.	Perkhidmatan <i>Services</i>	0.2	2.0	2.0	2.9	3.4	3.6	2.8	3.5
5.1	Utiliti <i>Utilities</i>	-3.0	3.2	4.9	2.0	3.6	2.7	1.9	2.3
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	1.1	1.7	3.7	2.6	1.3	3.1	3.2	3.0
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	3.4	6.7	8.4	9.0	9.6	9.2	6.6	6.9
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	1.5	1.3	1.4	3.5	1.8	3.3	2.8	2.0
5.5	Maklumat dan komunikasi <i>Information and communication</i>	6.0	0.2	-1.4	5.4	3.5	3.8	4.7	5.4
5.6	Kewangan dan insurans <i>Finance and insurance</i>	-0.02	4.6	0.9	1.2	4.7	0.1	1.3	2.1
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	5.6	6.7	-3.2	-0.1	2.1	3.0	1.8	3.7
5.8	Perkhidmatan lain <i>Other services</i>	-5.4	-2.4	-0.2	0.7	2.5	1.6	0.8	2.1
Jumlah jam bekerja <i>Total hours worked</i>		1.2	0.9	1.3	1.7	2.0	2.4	1.8	2.1

10b

Quarterly total hours worked by economic activity, Q1 2018 - Q4 2022:
Percentage change from corresponding quarter of preceding year

(%)

2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV
-1.7	-13.1	-1.1	-0.3	0.8	16.7	1.5	1.1	0.4	1.1	2.1	1.7
-5.6	-25.1	-2.4	-4.5	-2.5	22.6	-7.3	9.3	3.9	4.8	4.8	2.0
-0.7	-29.1	-3.4	-2.9	-1.4	32.3	-3.0	4.3	6.8	11.3	11.6	3.6
1.1	-19.6	-3.1	1.2	-1.3	23.8	2.2	7.0	12.5	10.7	10.9	4.7
-2.2	-30.8	-12.3	-13.8	-14.6	11.4	-4.4	0.7	6.1	6.7	3.1	1.5
4.6	-13.0	0.01	-0.9	-1.8	13.0	0.9	3.8	8.9	15.1	10.7	-1.5
-1.4	-42.2	-7.3	-7.4	-7.3	37.1	-12.5	3.5	6.2	19.4	19.5	5.1
-0.4	-20.0	-1.0	-2.2	2.9	25.3	1.4	3.6	4.3	4.9	5.7	2.4
-2.4	-31.5	-4.6	-2.3	-0.1	32.5	-6.9	2.2	1.9	11.4	13.7	0.8
-2.4	-32.8	-2.9	-2.0	-0.7	41.8	-2.2	6.0	6.8	11.3	11.0	5.3
-1.2	-48.8	-5.6	-9.8	-3.6	75.7	-7.9	1.2	7.5	12.0	15.3	7.2
-6.4	-42.7	-3.8	-7.7	-1.9	52.2	-15.7	-1.4	2.3	8.0	17.7	1.9
-0.6	-28.5	-2.7	-2.2	-0.8	34.9	-3.2	2.5	5.2	7.7	10.1	6.4
-1.0	-25.5	-1.7	-3.0	0.4	30.2	-7.9	2.6	4.9	5.4	14.1	9.1
-0.2	-29.5	-2.8	-1.4	-0.6	32.6	-3.9	2.6	6.8	10.9	12.2	8.0
0.9	-31.0	-8.5	-7.9	-4.7	38.5	4.5	3.5	8.4	7.9	7.8	5.2
-1.9	-37.3	-4.0	-6.8	-1.3	50.7	-5.3	2.1	3.4	12.6	17.6	12.4
3.4	-30.8	3.5	0.8	2.5	52.2	-0.9	1.9	6.5	4.4	9.1	7.8
-1.9	-22.2	-2.0	-2.2	1.5	25.3	-2.6	0.5	0.8	1.9	1.1	-4.5
0.5	-29.4	-2.8	-2.6	-4.2	36.3	-6.7	-1.5	3.1	5.6	9.3	8.5
-2.4	-24.3	0.8	1.9	2.6	31.9	-5.2	3.9	3.6	5.6	9.6	4.6
-1.4	-28.3	-2.8	-2.7	-0.8	33.3	-3.9	2.3	4.6	7.5	10.0	5.0

11a

Pekerja tahunan mengikut aktiviti ekonomi, 2017 - 2022
Annual employment by economic activity, 2017 - 2022

		('000)					
Aktiviti ekonomi Economic activity		2017	2018	2019	2020 ^a	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	1,839	1,844	1,873	1,866	1,874	1,861
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	81	76	75	74	75	76
3.	Pembuatan <i>Manufacturing</i>	2,441	2,502	2,553	2,552	2,618	2,719
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan <i>Vegetable and animal oils & fats and food processing</i>	416	429	439	448	469	493
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	18	19	20	18	18	18
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	225	239	252	251	261	271
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	302	302	307	299	299	308
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	389	395	402	410	425	436
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	353	361	362	363	367	377
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	545	562	575	575	590	618
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	193	194	196	186	188	199
4.	Pembinaan <i>Construction</i>	1,497	1,509	1,463	1,399	1,385	1,382
5.	Perkhidmatan <i>Services</i>	8,601	8,880	9,161	9,206	9,338	9,724
5.1	Utiliti <i>Utilities</i>	98	101	103	104	105	109
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	2,374	2,449	2,529	2,557	2,615	2,752
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	1,403	1,516	1,633	1,626	1,641	1,729
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	516	526	539	539	535	574
5.5	Maklumat dan komunikasi <i>Information and communication</i>	216	223	236	243	250	259
5.6	Kewangan dan insurans <i>Finance and insurance</i>	362	368	375	376	374	375
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	1,055	1,092	1,126	1,137	1,123	1,158
5.8	Perkhidmatan lain <i>Other services</i>	2,576	2,603	2,620	2,623	2,694	2,768
Jumlah pekerja <i>Total employment</i>		14,459	14,810	15,126	15,096	15,290	15,762

11b

Pekerja tahunan mengikut aktiviti ekonomi, 2017 - 2022: Perubahan peratusan tahunan
 Annual employment by economic activity, 2017 - 2022: Annual percentage change

		2017 2018 2019 2020 ^e 2021 ^p 2022 ^p						(%)
Aktiviti ekonomi Economic activity		2017	2018	2019	2020 ^e	2021 ^p	2022 ^p	
1.	Pertanian Agriculture	3.6	0.2	1.6	-0.4	0.4	-0.7	
2.	Perlombongan dan pengkuarian Mining and quarrying	5.5	-6.0	-0.4	-2.3	1.7	1.2	
3.	Pembuatan Manufacturing	2.1	2.5	2.1	-0.1	2.6	3.9	
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan Vegetable and animal oils & fats and food processing	2.2	3.1	2.4	2.0	4.7	5.1	
3.2	Minuman dan produk tembakau Beverages and tobacco products	5.3	3.5	2.4	-7.8	-1.8	1.7	
3.3	Produk tekstil, pakaian dan kulit Textiles, wearing apparel and leather products	1.4	6.6	5.5	-0.4	3.9	3.7	
3.4	Produk kayu, perabot, keluaran kertas dan percetakan Wood products, furniture, paper products and printing	-1.6	0.1	1.5	-2.5	0.1	2.8	
3.5	Produk petroleum, kimia, getah dan plastik Petroleum, chemical, rubber and plastic products	2.0	1.6	1.8	2.0	3.6	2.6	
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka Non-metallic mineral products, basic metal and fabricated metal products	5.7	2.2	0.5	0.2	1.1	2.7	
3.7	Produk elektrik, elektronik dan optikal Electrical, electronic and optical products	1.6	3.2	2.2	0.1	2.6	4.6	
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan Transport equipment, other manufacturing and repair	3.4	0.6	0.9	-4.8	0.9	5.7	
4.	Pembinaan Construction	-0.1	0.8	-3.1	-4.4	-1.0	-0.2	
5.	Perkhidmatan Services	1.9	3.2	3.2	0.5	1.4	4.1	
5.1	Utiliti Utilities	-0.4	2.7	2.2	0.8	1.1	3.3	
5.2	Perdagangan borong dan runcit Wholesale and retail trade	4.1	3.2	3.3	1.1	2.2	5.3	
5.3	Makanan & minuman dan penginapan Food & beverages and accommodation	2.6	8.1	7.7	-0.4	0.9	5.3	
5.4	Pengangkutan dan penyimpanan Transportation and storage	0.7	1.8	2.6	-0.1	-0.7	7.3	
5.5	Maklumat dan komunikasi Information and communication	6.3	3.7	5.6	3.1	2.5	4.0	
5.6	Kewangan dan insurans Finance and insurance	3.1	1.8	1.7	0.4	-0.5	0.2	
5.7	Hartanah dan perkhidmatan perniagaan Real estate and business services	3.4	3.5	3.1	0.9	-1.2	3.0	
5.8	Perkhidmatan lain Other services	-1.1	1.1	0.6	0.1	2.7	2.7	
Jumlah pekerja Total employment		2.0	2.4	2.1	-0.2	1.3	3.1	

12a Pekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022

		('000)							
Aktiviti ekonomi <i>Economic activity</i>		2018				2019			
		I	II	III	IV	I	II	III	IV
1.	Pertanian <i>Agriculture</i>	1,841	1,826	1,861	1,848	1,881	1,862	1,892	1,857
2.	Perombongan dan pengkuarian <i>Mining and quarrying</i>	79	76	78	69	76	77	79	70
3.	Pembuatan <i>Manufacturing</i>	2,483	2,493	2,499	2,531	2,535	2,539	2,550	2,588
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	425	427	430	434	437	436	440	444
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	19	19	19	19	20	20	19	19
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	247	240	232	239	256	252	247	255
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	299	301	304	305	305	305	308	310
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	394	395	394	398	398	402	402	407
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	362	361	360	360	362	361	363	364
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	549	560	568	572	566	572	578	583
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	188	190	191	206	191	192	192	207
4.	Pembinaan <i>Construction</i>	1,526	1,495	1,491	1,525	1,464	1,456	1,439	1,493
5.	Perkhidmatan <i>Services</i>	8,754	8,876	8,928	8,961	9,054	9,143	9,202	9,246
5.1	Utiliti <i>Utilities</i>	100	100	101	104	102	102	103	106
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	2,407	2,479	2,475	2,434	2,486	2,562	2,554	2,514
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	1,463	1,510	1,517	1,575	1,585	1,621	1,631	1,694
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	536	513	514	540	551	526	527	554
5.5	Maklumat dan komunikasi <i>Information and communication</i>	210	220	227	237	221	233	240	250
5.6	Kewangan dan insurans <i>Finance and insurance</i>	359	375	372	367	369	379	377	374
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	1,092	1,069	1,102	1,106	1,127	1,104	1,135	1,140
5.8	Perkhidmatan lain <i>Other services</i>	2,587	2,611	2,620	2,597	2,614	2,617	2,636	2,614
Jumlah pekerja <i>Total employment</i>		14,684	14,767	14,857	14,933	15,010	15,078	15,162	15,255

12a Quarterly employment by economic activity, Q1 2018 - Q4 2022

('000)											
2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV
1,883	1,852	1,877	1,851	1,870	1,886	1,889	1,849	1,854	1,872	1,878	1,840
74	75	78	68	74	74	76	76	76	76	76	76
2,576	2,506	2,540	2,584	2,604	2,577	2,612	2,678	2,702	2,705	2,731	2,740
445	443	447	458	461	464	469	483	486	489	496	502
20	17	17	17	18	17	18	18	18	18	18	18
267	244	244	250	263	258	256	268	278	274	271	260
307	290	298	302	303	286	300	308	309	304	309	308
406	404	411	418	424	425	424	426	435	435	439	434
363	360	362	367	372	358	363	375	379	374	376	379
576	568	575	583	576	585	593	608	600	615	624	632
191	180	185	189	189	183	188	193	196	195	197	207
1,424	1,364	1,404	1,404	1,391	1,390	1,374	1,386	1,382	1,383	1,378	1,387
9,284	9,087	9,197	9,255	9,298	9,279	9,323	9,451	9,561	9,666	9,768	9,899
104	103	103	106	106	105	105	106	107	108	110	110
2,544	2,557	2,577	2,551	2,578	2,590	2,624	2,666	2,704	2,745	2,766	2,793
1,686	1,580	1,593	1,644	1,630	1,634	1,643	1,658	1,694	1,709	1,730	1,782
564	523	523	546	556	522	518	543	559	566	576	595
231	240	248	254	241	247	251	259	252	257	261	267
374	379	379	373	375	375	374	373	373	373	376	378
1,154	1,113	1,139	1,141	1,126	1,122	1,116	1,130	1,134	1,152	1,169	1,176
2,627	2,591	2,634	2,639	2,685	2,683	2,692	2,717	2,738	2,756	2,781	2,797
15,243	14,884	15,096	15,162	15,237	15,207	15,275	15,441	15,575	15,701	15,831	15,942

12b

Pekerja suku tahunan mengikut aktiviti ekonomi, ST1 2018 - ST4 2022:
Perubahan peratusan dari suku tahun yang sama tahun sebelumnya

		(%)							
	Aktiviti ekonomi <i>Economic activity</i>	2018				2019			
		I	II	III	IV	I	II	III	IV
1.	Pertanian <i>Agriculture</i>	4.2	-3.7	0.6	0.2	2.2	2.0	1.7	0.5
2.	Perombongan dan pengkuarian <i>Mining and quarrying</i>	-7.7	-7.0	-5.4	-3.3	-4.6	1.4	1.1	0.7
3.	Pembuatan <i>Manufacturing</i>	1.9	3.3	2.7	2.1	2.1	1.8	2.0	2.3
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	1.0	4.8	3.6	2.9	3.0	2.1	2.2	2.5
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	3.7	4.1	4.1	2.2	3.2	2.3	1.2	3.0
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	9.3	9.7	3.8	3.6	3.9	4.9	6.4	6.8
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	-1.6	-0.1	1.1	1.1	1.8	1.2	1.4	1.7
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	0.9	2.1	2.0	1.3	1.2	1.8	2.0	2.2
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	2.8	3.2	1.6	1.3	-0.2	0.1	0.9	1.2
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	1.5	4.0	4.2	3.0	3.2	2.1	1.7	1.8
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	1.2	-0.9	0.5	1.5	1.3	1.1	0.6	0.6
4.	Pembinaan <i>Construction</i>	4.1	0.6	1.3	-2.6	-4.0	-2.6	-3.5	-2.1
5.	Perkhidmatan <i>Services</i>	1.8	4.0	3.3	3.9	3.4	3.0	3.1	3.2
5.1	Utiliti <i>Utilities</i>	0.2	3.7	4.0	3.2	2.3	2.5	2.1	2.1
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	1.2	3.7	4.1	3.7	3.3	3.4	3.2	3.3
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	5.8	8.8	8.8	8.9	8.3	7.3	7.5	7.6
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	1.2	2.4	2.1	1.7	2.6	2.6	2.5	2.6
5.5	Maklumat dan komunikasi <i>Information and communication</i>	3.3	2.6	1.7	7.0	5.3	5.9	5.5	5.6
5.6	Kewangan dan insurans <i>Finance and insurance</i>	0.5	4.1	1.7	1.0	2.7	1.1	1.4	1.8
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	5.2	7.7	-0.7	2.5	3.2	3.3	2.9	3.0
5.8	Perkhidmatan lain <i>Other services</i>	-0.8	0.7	1.8	2.6	1.1	0.2	0.6	0.7
Jumlah pekerja <i>Total employment</i>		2.3	2.4	2.6	2.4	2.2	2.1	2.1	2.2

12b

Quarterly employment by economic activity, Q1 2018 - Q4 2022:
Percentage change from corresponding quarter of preceding year

(%)

2020 ^e				2021 ^p				2022 ^p			
I	II	III	IV	I	II	III	IV	I	II	III	IV
0.1	-0.5	-0.8	-0.4	-0.7	1.8	0.6	-0.1	-0.8	-0.7	-0.6	-0.5
-1.7	-3.5	-2.3	-1.6	-0.8	-0.2	-2.3	11.0	2.6	1.8	0.4	0.3
1.6	-1.3	-0.4	-0.2	1.1	2.8	2.9	3.6	3.7	4.9	4.5	2.3
1.8	1.7	1.7	3.0	3.5	4.7	4.9	5.6	5.5	5.3	5.8	3.9
1.5	-11.9	-10.1	-10.8	-9.3	-0.5	1.6	2.0	1.5	2.9	0.5	1.9
4.4	-2.9	-1.4	-1.7	-1.7	5.6	5.2	7.0	5.9	6.4	5.7	-3.0
0.7	-5.0	-3.2	-2.6	-1.4	-1.2	0.6	2.3	2.1	6.3	3.1	-0.05
2.1	0.5	2.3	2.9	4.3	5.3	3.2	1.8	2.6	2.5	3.5	1.9
0.4	-0.4	-0.3	0.9	2.4	-0.5	0.4	2.1	1.9	4.5	3.4	1.3
1.7	-0.7	-0.6	0.01	-0.1	3.1	3.2	4.3	4.3	5.0	5.2	4.1
0.1	-6.3	-3.9	-8.5	-1.3	1.6	1.7	1.9	4.0	6.8	4.9	7.2
-2.7	-6.3	-2.4	-6.0	-2.4	1.9	-2.1	-1.2	-0.6	-0.5	0.3	0.02
2.5	-0.6	-0.1	0.1	0.1	2.1	1.4	2.1	2.8	4.2	4.8	4.7
1.7	0.9	0.7	0.1	1.4	1.7	1.3	-0.1	1.1	3.3	5.1	3.8
2.3	-0.2	0.9	1.5	1.4	1.3	1.8	4.5	4.9	6.0	5.4	4.8
6.4	-2.5	-2.3	-3.0	-3.3	3.4	3.2	0.8	3.9	4.5	5.3	7.5
2.5	-0.7	-0.7	-1.6	-1.4	-0.1	-0.9	-0.4	0.5	8.4	11.2	9.5
4.5	3.2	3.4	1.5	4.5	2.9	1.1	1.9	4.5	3.9	3.9	3.4
1.5	-0.1	0.3	-0.2	0.2	-1.1	-1.1	-0.1	-0.7	-0.5	0.3	1.5
2.4	0.8	0.4	0.1	-2.4	0.8	-2.0	-1.0	0.7	2.7	4.7	4.0
0.5	-1.0	-0.1	1.0	2.2	3.6	2.2	2.9	2.0	2.7	3.3	2.9
1.6	-1.3	-0.4	-0.6	-0.04	2.2	1.2	1.8	2.2	3.2	3.6	3.2

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



3

INDEKS

Indices

11 Produktiviti buruh tahunan, indeks produktiviti buruh per jam bekerja mengikut aktiviti ekonomi (2015=100), 2015 - 2022
 Annual labour productivity, index of labour productivity per hour worked by economic activity (2015=100), 2015 - 2022

Aktiviti ekonomi Economic activity		2015	2016	2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	100.0	99.7	101.4	102.2	102.4	104.1	99.3	98.0
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	100.0	102.3	99.8	103.2	102.8	102.4	98.5	98.1
3.	Pembuatan <i>Manufacturing</i>	100.0	103.6	107.3	110.8	113.6	121.4	125.2	125.1
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	100.0	94.8	102.4	105.3	103.8	111.2	106.0	100.8
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	100.0	107.8	109.1	106.3	107.3	105.5	109.2	122.3
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	100.0	102.2	109.8	107.3	108.5	96.3	100.6	98.4
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	100.0	108.7	116.3	120.1	127.8	138.7	145.4	139.6
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	100.0	103.6	104.3	106.9	111.0	116.7	122.7	118.8
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	100.0	102.7	100.6	105.4	108.3	104.7	104.1	105.0
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	100.0	106.7	112.5	117.7	120.7	137.5	145.1	152.7
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	100.0	106.7	110.5	115.9	122.4	139.1	130.5	135.2
4.	Pembinaan <i>Construction</i>	100.0	109.4	116.8	121.2	125.8	119.4	109.4	107.3
5.	Perkhidmatan <i>Services</i>	100.0	102.3	106.7	112.0	115.0	118.9	113.9	117.7
5.1	Utiliti <i>Utilities</i>	100.0	101.7	106.9	110.4	114.2	122.2	119.7	114.8
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	100.0	99.8	102.5	108.5	112.9	116.1	111.5	115.7
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	100.0	104.5	108.1	110.3	111.7	92.6	76.2	94.6
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	100.0	100.8	107.5	112.2	116.9	104.6	98.6	115.8
5.5	Maklumat dan komunikasi <i>Information and communication</i>	100.0	108.9	109.8	116.0	118.3	132.8	128.0	125.9
5.6	Kewangan dan insurans <i>Finance and insurance</i>	100.0	103.0	105.0	108.9	111.9	123.9	129.6	131.0
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	100.0	102.7	107.5	113.6	119.4	110.7	95.2	109.7
5.8	Perkhidmatan lain <i>Other services</i>	100.0	103.7	110.9	118.7	121.6	128.1	122.9	123.3
Produktiviti buruh <i>Labour productivity</i>		100.0	102.9	106.7	110.5	113.0	116.9	113.9	116.0

12

Produktiviti buruh tahunan, indeks produktiviti buruh per pekerja mengikut aktiviti ekonomi (2015=100), 2015 - 2022
 Annual labour productivity, index of labour productivity per employment by economic activity (2015=100), 2015 - 2022

Aktiviti ekonomi Economic activity		2015	2016	2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	100.0	101.8	104.1	104.0	104.3	102.2	101.5	102.3
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	100.0	105.9	100.8	104.9	104.6	96.6	95.3	97.4
3.	Pembuatan <i>Manufacturing</i>	100.0	103.8	107.9	110.5	112.3	109.4	116.8	121.5
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	100.0	95.8	104.2	104.8	105.7	105.3	102.7	101.8
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	100.0	107.8	108.5	107.5	109.3	99.2	101.7	116.8
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	100.0	107.6	114.6	112.2	112.2	97.6	101.7	103.7
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	100.0	107.7	114.6	119.8	124.4	118.1	126.0	131.9
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	100.0	103.1	105.2	107.7	108.9	105.7	115.2	113.4
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	100.0	102.2	101.3	104.0	107.8	93.5	96.4	100.9
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	100.0	106.8	113.0	116.4	117.6	120.5	134.6	146.9
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	100.0	106.6	108.5	114.6	120.6	120.6	121.5	131.3
4.	Pembinaan <i>Construction</i>	100.0	108.8	116.2	120.2	124.5	105.0	100.5	105.7
5.	Perkhidmatan <i>Services</i>	100.0	102.0	106.3	110.1	113.2	106.6	107.1	114.1
5.1	Utiliti <i>Utilities</i>	100.0	105.4	108.9	111.2	115.5	113.1	114.8	115.4
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	100.0	99.4	102.4	107.4	111.1	103.3	102.7	110.8
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	100.0	102.8	107.7	108.7	110.5	81.4	71.7	90.7
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	100.0	101.3	106.7	111.5	116.1	91.3	93.1	113.6
5.5	Maklumat dan komunikasi <i>Information and communication</i>	100.0	109.4	111.8	116.6	117.6	120.8	125.3	126.8
5.6	Kewangan dan insurans <i>Finance and insurance</i>	100.0	102.1	103.7	107.3	110.5	113.3	125.3	126.2
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	100.0	102.9	107.0	111.4	116.6	98.1	88.3	105.3
5.8	Perkhidmatan lain <i>Other services</i>	100.0	103.5	109.9	114.2	118.3	116.9	116.7	120.5
Produktiviti buruh <i>Labour productivity</i>		100.0	103.1	107.0	109.5	111.9	105.9	107.8	113.7

I3

Produktiviti buruh tahunan, indeks produktiviti buruh per jam bekerja mengikut 9 subsektor keutamaan (2015=100), 2015 - 2022
 Annual labour productivity, Index of labour productivity per hour worked by 9 priority sub-sectors (2015=100), 2015 - 2022

	Aktiviti ekonomi Economic activity	2015	2016	2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Agro-makanan Agro-food	100.0	99.3	100.9	102.0	103.4	108.7	107.3	105.8
2.	Kimia dan produk kimia Chemicals and chemical products	100.0	107.8	111.1	114.2	114.5	117.1	127.8	130.7
3.	Mesin dan peralatan Machinery and equipment	100.0	108.1	107.0	113.7	116.7	124.5	130.2	136.2
4.	Elektrik dan elektronik Electrical and electronics	100.0	106.5	113.7	118.4	121.7	141.1	148.9	168.3
5.	Peruncitan dan makanan & minuman Retail and food & beverages	100.0	101.8	106.8	112.8	116.9	115.2	108.5	126.7
6.	Pelancongan Tourism	100.0	102.4	105.1	112.1	117.6	71.3	48.5	119.9
7.	Teknologi, maklumat dan komunikasi (ICT) Information, communication and technology (ICT)	100.0	108.9	109.8	116.0	118.3	132.8	128.0	132.6
8.	Perkhidmatan professional Professional services	100.0	104.5	113.8	121.2	128.3	129.7	112.7	131.0
9.	Penjagaan kesihatan swasta Private healthcare	100.0	103.5	101.5	106.4	108.9	106.8	113.9	121.6
	Produktiviti buruh Labour productivity	100.0	102.8	106.8	111.3	113.7	119.0	117.1	130.0

14

Produktiviti buruh tahunan, indeks produktiviti buruh per pekerja mengikut 9 subsektor keutamaan (2015=100), 2015 - 2022
 Annual labour productivity, index of labour productivity per employment by 9 priority sub-sectors (2015=100), 2015 - 2022

	Aktiviti ekonomi <i>Economic activity</i>	2015	2016	2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Agro-makanan <i>Agro-food</i>	100.0	102.3	104.4	104.8	107.4	107.2	110.5	109.0
2.	Kimia dan produk kimia <i>Chemicals and chemical products</i>	100.0	105.9	109.9	111.2	108.8	104.5	115.2	117.5
3.	Mesin dan peralatan <i>Machinery and equipment</i>	100.0	106.1	108.0	112.2	112.9	110.1	120.0	125.7
4.	Elektrik dan elektronik <i>Electrical and electronics</i>	100.0	106.9	114.0	117.1	118.6	123.3	138.1	150.6
5.	Peruncitan dan makanan & minuman <i>Retail and food & beverages</i>	100.0	100.8	106.5	111.1	114.7	102.5	100.8	113.8
6.	Pelancongan <i>Tourism</i>	100.0	101.0	105.3	110.8	116.6	58.4	41.5	101.4
7.	Teknologi, maklumat dan komunikasi (ICT) <i>Information, communication and technology (ICT)</i>	100.0	109.4	111.8	116.6	117.6	120.8	125.3	126.8
8.	Perkhidmatan professional <i>Professional services</i>	100.0	106.2	113.0	120.2	127.3	114.6	108.2	120.8
9.	Penjagaan kesihatan swasta <i>Private healthcare</i>	100.0	105.1	104.9	107.9	109.8	101.0	109.9	116.2
	Produktiviti buruh <i>Labour productivity</i>	100.0	102.7	107.2	110.5	112.4	106.7	110.2	119.0

15 Produktiviti buruh suku tahunan, indeks produktiviti buruh per jam bekerja mengikut aktiviti ekonomi (2015=100), ST1 2015 - ST4 2022

	Aktiviti ekonomi <i>Economic activity</i>	2015				2016				2017			
		I	II	III	IV	I	II	III	IV	I	II	III	IV
1.	Pertanian <i>Agriculture</i>	90.4	94.7	112.1	102.8	95.1	98.2	105.3	99.6	97.3	93.2	108.4	106.7
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	106.5	106.2	99.6	89.6	100.0	97.1	102.7	110.0	93.0	99.7	93.4	115.9
3.	Pembuatan <i>Manufacturing</i>	95.3	99.9	101.3	103.5	101.0	103.2	104.0	106.1	100.9	108.7	108.9	110.9
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan <i>Vegetable and animal oils & fats and food processing</i>	84.2	105.1	106.9	104.0	86.6	94.1	96.4	101.4	84.4	103.7	105.2	117.8
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	76.5	116.8	114.6	95.4	97.6	119.4	115.1	98.3	93.6	127.6	112.0	103.7
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	93.9	108.5	99.2	98.2	97.0	109.4	103.8	98.2	100.3	118.0	113.7	107.3
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	97.7	102.0	99.6	100.6	109.6	109.4	107.8	107.9	115.2	122.5	113.6	114.2
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	95.1	96.2	104.8	104.0	98.9	100.9	106.7	107.9	98.7	102.6	109.8	105.9
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	92.3	108.3	103.6	95.8	98.1	112.5	101.4	98.7	90.5	110.0	103.7	98.5
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	105.2	93.8	97.3	103.8	112.2	100.7	105.2	108.7	116.1	110.9	109.6	113.3
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	85.3	104.2	95.6	114.4	93.9	111.2	105.1	115.6	98.6	110.9	112.6	119.1
4.	Pembinaan <i>Construction</i>	102.8	92.9	102.3	102.1	105.7	104.2	118.8	109.3	119.9	113.5	122.2	111.8
5.	Perkhidmatan <i>Services</i>	95.6	98.0	102.6	103.8	98.0	98.7	104.8	107.6	100.6	105.3	107.3	113.5
5.1	Utiliti <i>Utilities</i>	93.5	102.4	105.5	99.0	97.3	106.7	103.6	99.5	100.5	110.1	111.0	106.5
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	92.9	98.6	104.6	103.9	93.7	93.0	105.2	107.8	94.9	97.8	106.2	111.3
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	96.9	99.0	102.0	102.0	99.3	102.4	107.4	108.9	103.0	109.0	107.9	112.6
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	94.1	98.1	103.8	104.3	94.9	102.0	104.2	102.6	101.0	109.2	109.8	110.1
5.5	Maklumat dan komunikasi <i>Information and communication</i>	96.1	99.5	105.3	99.3	113.4	107.8	106.1	108.8	114.6	110.0	107.7	107.5
5.6	Kewangan dan insurans <i>Finance and insurance</i>	99.0	100.6	98.8	101.6	103.8	98.6	103.6	105.9	103.9	103.6	103.2	109.4
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	98.5	97.5	104.3	100.0	103.7	99.6	102.5	105.3	106.7	114.8	100.0	109.5
5.8	Perkhidmatan lain <i>Other services</i>	94.8	95.7	99.7	109.9	97.6	100.2	103.9	113.4	101.2	106.2	111.7	125.5
	Produktiviti buruh <i>Labour productivity</i>	96.3	98.0	102.3	103.4	99.4	100.5	104.8	106.9	102.1	105.2	107.8	111.7

I5

Quarterly labour productivity, index of labour productivity per hour worked by economic activity (2015=100),
Q1 2015 - Q4 2022

2018				2019				2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
95.7	96.5	110.5	105.9	98.8	98.5	112.2	99.8	91.7	114.1	112.9	98.8	91.1	96.3	109.1	100.5	90.8	93.0	108.2	99.9
100.7	106.8	91.8	114.7	102.2	105.6	90.2	114.5	105.2	113.9	86.3	108.2	103.1	102.7	90.2	98.4	98.1	97.5	93.9	103.0
105.7	111.6	111.9	114.2	109.3	114.3	115.1	115.5	111.6	131.6	123.0	122.5	120.7	126.0	125.8	128.2	120.5	123.6	127.6	128.6
97.9	106.0	105.4	111.8	96.6	104.3	105.4	108.7	92.6	141.5	116.7	100.3	93.6	111.9	114.8	103.7	87.3	103.6	109.0	103.3
91.8	121.5	109.1	102.2	89.9	122.0	113.6	103.9	90.6	85.8	125.9	118.0	110.7	119.3	78.8	128.2	110.4	144.1	114.3	121.4
95.2	114.2	113.8	107.0	99.8	120.6	111.9	102.4	98.4	80.6	101.9	101.9	102.9	100.0	96.3	102.8	99.0	93.1	97.7	104.0
120.3	118.8	120.5	120.9	132.1	127.0	126.6	125.6	135.7	146.6	136.6	138.9	152.9	149.7	137.1	141.7	153.5	140.1	133.9	131.4
100.4	105.8	111.1	110.0	106.0	107.9	115.6	114.3	110.5	116.8	119.2	120.4	115.2	119.3	132.3	123.8	109.9	112.8	130.4	121.9
96.8	114.6	108.9	101.3	98.2	119.4	113.0	103.1	100.4	104.4	110.6	103.5	101.7	105.2	102.2	107.2	105.1	104.1	102.0	108.5
122.8	116.8	111.9	119.3	126.3	118.4	116.2	121.8	132.1	160.8	130.6	133.9	147.1	143.2	142.9	147.0	158.8	148.5	151.1	152.4
97.9	118.9	118.8	127.1	104.9	124.8	126.2	132.8	104.6	168.7	140.4	157.4	117.2	136.0	107.4	158.6	111.5	145.8	127.5	155.1
119.8	119.1	128.0	117.9	125.6	123.8	130.3	123.4	123.5	120.3	118.8	115.4	112.7	110.9	111.9	102.7	103.5	105.1	109.6	110.9
107.0	110.1	112.8	118.0	110.1	112.8	116.1	121.1	114.3	132.2	114.7	118.1	112.6	111.2	112.7	119.0	114.0	115.6	119.4	121.8
108.3	112.0	111.6	109.6	111.9	116.1	115.6	113.0	118.7	142.4	115.7	117.1	119.4	116.6	123.5	119.7	117.7	115.3	116.6	109.8
100.3	103.3	112.3	118.1	106.2	107.0	116.1	122.1	108.7	116.7	116.7	122.5	110.8	106.3	107.5	120.9	107.9	112.4	119.1	122.9
107.5	111.4	108.9	113.2	107.3	111.4	111.7	116.3	108.0	95.1	85.7	81.4	78.9	74.7	68.0	83.1	90.4	93.7	95.4	98.9
105.2	114.7	115.6	113.5	110.2	118.9	120.0	118.9	110.2	105.1	104.7	98.6	93.1	95.7	97.0	108.0	113.3	115.5	116.6	117.7
116.9	119.1	118.2	110.0	121.0	121.9	119.6	111.2	125.0	184.5	121.7	118.3	129.6	128.4	130.4	124.0	129.4	130.2	125.0	119.8
111.6	103.7	108.2	112.3	111.4	108.6	111.4	115.9	119.4	131.6	120.3	125.9	130.6	129.2	128.7	130.0	128.3	125.0	132.9	138.4
108.7	116.2	111.5	118.1	114.4	121.7	118.1	123.2	117.8	128.7	102.0	99.3	99.3	95.6	91.6	94.1	105.4	110.2	113.3	109.8
112.4	114.3	117.2	131.3	114.7	117.1	120.7	134.2	121.6	146.0	118.9	130.3	117.2	118.3	125.8	130.4	120.1	119.2	123.2	130.7
106.2	109.2	111.2	115.1	109.0	111.9	114.2	116.8	111.3	129.3	114.5	116.1	111.7	112.4	113.7	117.6	112.0	113.8	118.0	119.8

	Aktiviti ekonomi <i>Economic activity</i>	2015				2016				2017			
		I	II	III	IV	I	II	III	IV	I	II	III	IV
1.	Pertanian <i>Agriculture</i>	89.9	94.3	110.3	105.7	96.2	98.4	108.6	103.6	98.5	95.9	113.4	108.5
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	105.2	108.4	92.9	94.6	105.7	102.1	103.9	112.1	95.8	98.1	94.3	117.5
3.	Pembuatan <i>Manufacturing</i>	94.9	100.9	100.8	103.4	99.5	104.1	104.0	107.7	102.7	108.6	109.4	110.9
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan <i>Vegetable and animal oils & fats and food processing</i>	83.0	107.5	106.5	103.5	85.7	93.3	98.3	105.7	88.8	104.6	109.3	114.0
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	80.4	114.9	107.3	98.1	93.9	120.5	114.0	101.9	92.8	124.2	113.8	103.3
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	91.8	110.4	100.2	97.7	99.5	119.7	108.1	103.4	104.4	128.6	116.2	109.8
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	96.3	101.7	100.5	101.5	106.2	108.9	106.7	109.0	116.7	116.9	112.3	112.7
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	95.2	97.1	102.9	104.8	97.7	100.8	106.2	107.6	97.7	102.2	109.9	110.8
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	93.5	110.3	101.2	95.2	95.0	112.7	103.7	97.4	92.5	110.5	104.5	97.9
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	104.9	94.4	97.4	103.2	112.3	102.6	102.8	109.3	118.6	110.4	109.7	113.2
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	85.2	105.0	95.7	113.5	90.3	110.5	104.0	121.4	97.4	108.0	109.2	118.4
4.	Pembinaan <i>Construction</i>	101.5	93.5	102.3	102.7	104.9	103.6	116.8	110.4	118.3	112.5	122.4	112.0
5.	Perkhidmatan <i>Services</i>	95.9	98.8	102.1	103.2	97.9	99.4	103.5	107.0	101.2	104.6	107.3	112.1
5.1	Utiliti <i>Utilities</i>	94.4	102.1	103.0	100.7	101.7	109.2	107.6	103.1	104.0	111.5	112.6	107.6
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	92.8	99.2	103.7	104.3	93.1	93.0	103.6	108.1	94.7	97.9	105.3	111.6
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	96.7	100.3	100.8	102.2	98.8	99.8	104.4	108.1	104.6	105.7	108.1	112.4
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	93.7	98.3	104.1	104.2	95.7	102.1	104.4	103.1	100.9	107.7	109.7	108.7
5.5	Maklumat dan komunikasi <i>Information and communication</i>	95.4	100.3	105.0	99.4	113.7	108.8	106.5	108.9	114.6	113.0	110.5	109.2
5.6	Kewangan dan insurans <i>Finance and insurance</i>	98.7	99.2	99.0	103.1	101.1	98.6	103.1	105.7	101.9	101.7	102.5	108.6
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	98.8	97.6	103.3	100.5	103.3	101.5	102.3	104.5	105.2	113.2	101.0	109.2
5.8	Perkhidmatan lain <i>Other services</i>	96.0	97.2	100.0	106.7	97.8	102.4	102.6	111.2	103.1	105.8	111.4	119.5
	Produktiviti buruh <i>Labour productivity</i>	96.2	98.6	101.6	103.6	99.3	101.1	104.3	107.5	102.9	105.0	108.6	111.3

16

Quarterly labour productivity, index of labour productivity per employment by economic activity (2015=100),
Q1 2015 - Q4 2022

2018				2019				2020 ^e				2021 ^p				2022 ^p			
I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
97.4	98.2	112.0	108.1	101.1	100.3	114.2	101.6	92.1	101.5	114.5	100.7	92.9	98.1	111.6	103.6	93.7	96.5	113.5	105.3
101.2	104.2	94.8	121.3	106.2	105.2	91.1	117.5	104.9	88.1	87.1	107.8	101.1	97.6	86.3	96.5	97.4	95.4	93.9	102.8
106.1	110.2	111.9	113.6	108.2	112.8	113.7	114.5	107.9	93.3	117.8	118.1	113.8	114.9	113.7	124.4	117.0	119.5	123.1	126.4
96.0	104.3	108.0	110.7	98.0	106.7	108.3	109.8	93.2	114.4	114.3	99.5	89.8	106.9	109.5	104.2	89.3	104.0	109.0	104.7
90.8	123.3	112.8	103.2	92.0	125.8	115.6	104.0	89.3	69.5	125.1	114.1	102.7	108.2	73.6	122.4	107.1	135.5	109.7	115.4
101.8	122.0	115.2	110.1	102.5	123.1	114.2	109.1	101.3	73.7	105.5	109.4	105.8	97.9	95.6	107.1	104.7	98.6	101.7	110.0
123.3	121.0	118.1	117.0	127.8	126.1	123.1	120.8	128.4	88.5	127.2	127.1	136.1	125.6	111.1	131.1	142.1	132.0	125.7	127.8
101.5	104.0	112.0	113.3	103.4	105.5	112.8	113.8	105.2	90.9	112.6	113.9	108.2	110.6	122.9	119.2	104.9	106.9	123.6	117.9
94.7	112.6	108.2	100.6	98.7	117.4	111.7	103.3	98.1	70.6	104.6	100.5	97.1	94.7	89.6	104.1	100.3	100.0	98.4	104.9
123.7	112.6	112.0	117.6	124.2	114.8	113.4	118.2	124.6	105.4	124.5	127.3	137.9	129.2	129.1	142.2	152.5	142.1	144.0	149.2
98.4	115.5	116.9	126.5	103.8	122.1	123.8	131.6	102.1	90.3	135.3	153.8	111.8	125.8	93.7	153.9	109.9	141.5	122.3	150.6
119.2	117.2	126.5	117.9	125.0	121.6	129.3	122.0	118.3	72.3	116.2	112.0	108.5	99.6	94.2	99.5	102.5	102.5	108.3	109.5
105.9	107.3	111.6	115.4	109.0	110.5	114.6	118.7	109.7	93.2	110.2	113.2	107.0	103.6	103.3	114.4	110.8	111.3	115.1	118.9
108.4	113.0	114.1	109.5	113.4	117.4	118.0	113.1	117.1	106.3	115.3	113.7	116.6	111.4	111.9	119.2	119.3	112.5	114.8	115.0
100.0	101.5	111.0	117.1	103.9	104.9	114.7	120.8	103.7	80.7	111.1	117.8	103.7	96.3	96.5	114.2	102.8	106.5	113.9	119.8
106.7	106.0	108.7	113.0	107.8	107.9	110.6	115.5	102.8	65.2	79.5	76.7	74.0	68.6	63.8	80.4	88.5	88.8	91.7	93.6
105.4	111.9	114.6	114.1	109.4	116.8	119.5	118.8	104.8	65.2	100.8	93.3	88.7	89.5	89.3	104.8	111.1	112.1	113.5	117.3
119.9	119.5	117.7	110.0	122.0	119.8	118.2	111.2	124.6	121.6	120.2	117.3	126.8	125.0	126.3	123.0	129.0	127.3	127.1	123.9
108.8	102.4	106.6	111.7	110.9	106.1	109.7	115.6	114.9	100.1	115.6	122.9	127.2	124.5	121.9	127.7	126.8	123.3	126.8	127.9
107.6	113.6	109.8	114.8	112.2	118.7	114.9	120.5	113.4	87.9	96.1	94.5	93.7	88.3	82.2	89.1	101.9	104.7	106.0	108.3
109.3	110.4	114.6	122.5	113.1	114.7	118.1	127.1	116.4	109.4	117.4	124.6	112.7	112.8	115.2	125.9	117.3	116.8	119.8	128.1
105.9	107.4	110.6	113.9	108.5	110.4	113.3	115.5	107.6	92.7	110.9	112.4	107.1	105.1	104.7	114.4	110.0	110.9	115.3	118.5

Indeks jam bekerja tahunan mengikut aktiviti ekonomi (2015=100), 2015 - 2022
Annual hours worked index by economic activity (2015=100), 2015 - 2022

Aktiviti ekonomi Economic activity		2015	2016	2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	100.0	96.6	100.6	100.0	101.7	97.6	102.1	103.5
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	100.0	100.0	102.9	97.4	97.1	88.0	91.7	95.3
3.	Pembuatan <i>Manufacturing</i>	100.0	100.8	103.1	104.8	106.2	96.6	102.7	111.0
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	100.0	107.3	110.4	111.3	116.7	110.7	118.6	129.9
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	100.0	99.0	103.7	109.2	112.6	95.9	93.2	97.2
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	100.0	104.6	105.1	112.2	117.0	114.3	118.4	128.0
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	100.0	97.1	95.0	96.3	95.4	81.4	82.9	92.9
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	100.0	100.7	104.1	105.7	104.7	98.5	105.9	110.4
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	100.0	101.5	108.7	108.8	110.3	99.2	104.0	110.8
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	100.0	100.8	102.8	104.4	105.2	94.7	102.8	111.6
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	100.0	90.9	92.4	93.6	94.1	78.9	85.5	94.4
4.	Pembinaan <i>Construction</i>	100.0	98.2	98.2	98.6	95.4	81.1	83.8	89.8
5.	Perkhidmatan <i>Services</i>	100.0	103.4	105.3	107.2	110.8	101.4	107.8	115.8
5.1	Utiliti <i>Utilities</i>	100.0	103.6	101.4	103.2	105.9	97.7	102.3	110.8
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	100.0	106.5	111.3	113.8	116.8	106.8	113.0	123.7
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	100.0	102.6	106.6	113.9	123.1	108.9	117.7	126.3
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	100.0	104.8	104.4	106.4	109.0	95.7	102.9	114.6
5.5	Maklumat dan komunikasi <i>Information and communication</i>	100.0	99.2	106.9	109.5	114.3	107.9	118.9	127.2
5.6	Kewangan dan insurans <i>Finance and insurance</i>	100.0	99.7	102.3	104.0	106.1	98.6	103.7	103.5
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	100.0	104.0	106.9	109.1	112.0	102.6	106.2	113.2
5.8	Perkhidmatan lain <i>Other services</i>	100.0	101.1	99.3	97.4	99.1	93.1	99.4	105.2
Jumlah jam bekerja <i>Total hours worked</i>		100.0	101.5	103.6	104.9	107.1	97.7	103.5	110.4

18

Indeks pekerja tahunan mengikut aktiviti ekonomi (2015=100), 2015 - 2022
Annual employment index by economic activity (2015=100), 2015 - 2022

Aktiviti ekonomi Economic activity		2015	2016	2017	2018	2019	2020 ^e	2021 ^p	2022 ^p
1.	Pertanian <i>Agriculture</i>	100.0	94.6	98.0	98.3	99.8	99.4	99.9	99.2
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	100.0	96.5	101.9	95.8	95.4	93.3	94.8	96.0
3.	Pembuatan <i>Manufacturing</i>	100.0	100.5	102.6	105.2	107.3	107.3	110.1	114.3
3.1	Minyak dan lemak daripada sayuran & haiwan dan prosesan makanan <i>Vegetable and animal oils & fats and food processing</i>	100.0	106.1	108.5	111.8	114.6	116.9	122.4	128.6
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	100.0	99.1	104.3	108.0	110.6	102.0	100.1	101.8
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	100.0	99.4	100.7	107.3	113.2	112.7	117.1	121.4
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	100.0	98.0	96.4	96.5	98.0	95.5	95.6	98.3
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	100.0	101.2	103.2	104.8	106.7	108.8	112.7	115.7
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	100.0	102.0	107.9	110.3	110.8	111.0	112.2	115.3
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	100.0	100.8	102.3	105.6	107.9	108.0	110.8	116.0
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	100.0	91.0	94.1	94.7	95.6	91.0	91.9	97.1
4.	Pembinaan <i>Construction</i>	100.0	98.7	98.7	99.5	96.4	92.2	91.3	91.1
5.	Perkhidmatan <i>Services</i>	100.0	103.7	105.7	109.1	112.5	113.1	114.7	119.4
5.1	Utiliti <i>Utilities</i>	100.0	100.0	99.6	102.4	104.7	105.5	106.7	110.2
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	100.0	107.0	111.4	114.9	118.7	120.0	122.7	129.2
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	100.0	104.3	107.0	115.6	124.5	124.0	125.1	131.8
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	100.0	104.4	105.2	107.1	109.8	109.7	108.9	116.9
5.5	Maklumat dan komunikasi <i>Information and communication</i>	100.0	98.8	105.0	108.9	114.9	118.5	121.6	126.4
5.6	Kewangan dan insurans <i>Finance and insurance</i>	100.0	100.5	103.7	105.6	107.4	107.8	107.3	107.5
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	100.0	103.9	107.4	111.2	114.7	115.8	114.4	117.9
5.8	Perkhidmatan lain <i>Other services</i>	100.0	101.3	100.2	101.2	101.9	102.0	104.7	107.6
Jumlah pekerja Total employment		100.0	101.3	103.3	105.8	108.1	107.9	109.3	112.6

	Aktiviti ekonomi <i>Economic activity</i>	2015				2016				2017			
		I	II	III	IV	I	II	III	IV	I	II	III	IV
1.	Pertanian <i>Agriculture</i>	98.5	103.9	101.3	96.4	91.4	94.5	102.8	97.8	95.2	104.0	103.2	99.9
2.	Perlombongan dan pengkuarian <i>Mining and quarrying</i>	98.0	94.1	94.5	113.4	103.2	105.2	94.2	97.2	112.1	102.0	106.0	91.4
3.	Pembuatan <i>Manufacturing</i>	99.7	100.3	99.1	100.9	98.3	100.7	100.6	103.4	104.3	101.3	102.8	104.2
3.1	Minyak dan lemak daripada sayuran & haiwan dan proses makanan <i>Vegetable and animal oils & fats and food processing</i>	100.5	100.9	98.1	100.4	103.6	105.3	108.9	111.5	115.3	107.1	112.5	106.4
3.2	Minuman dan produk tembakau <i>Beverages and tobacco products</i>	107.7	97.4	93.2	101.8	91.1	101.6	99.2	104.3	103.2	101.2	106.1	104.3
3.3	Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	97.3	100.9	101.1	100.7	101.6	107.4	103.1	106.5	105.2	106.9	102.5	105.7
3.4	Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	99.7	99.1	100.1	101.1	94.8	97.7	97.0	99.0	98.4	91.9	94.8	94.9
3.5	Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	100.6	100.2	97.8	101.3	99.2	100.6	100.5	102.4	102.4	102.2	102.7	109.1
3.6	Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	100.0	100.3	98.4	101.4	97.9	100.9	104.6	102.6	110.1	107.4	109.1	107.9
3.7	Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	99.4	100.3	99.9	100.4	99.7	102.0	98.6	103.1	103.7	100.8	102.4	104.2
3.8	Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	98.5	100.9	99.4	101.2	88.3	87.9	89.6	97.9	89.9	91.3	90.0	98.4
4.	Pembinaan <i>Construction</i>	96.5	100.5	101.2	101.9	101.3	97.6	94.1	99.9	95.4	97.1	97.1	103.4
5.	Perkhidmatan <i>Services</i>	100.4	99.5	98.2	101.9	103.1	104.4	102.1	103.8	106.3	104.2	106.3	104.6
5.1	Utiliti <i>Utilities</i>	102.9	98.3	96.4	102.4	105.7	99.4	103.4	106.0	104.6	98.5	99.3	103.3
5.2	Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	101.4	96.9	97.8	103.9	106.0	109.6	104.0	106.6	111.4	112.4	110.7	110.5
5.3	Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	99.7	98.3	97.4	104.6	103.5	101.7	99.5	105.6	107.1	102.7	106.6	110.1
5.4	Pengangkutan dan penyimpanan <i>Transportation and storage</i>	102.9	99.4	96.8	100.9	108.1	101.5	101.5	108.3	107.8	100.7	102.4	106.9
5.5	Maklumat dan komunikasi <i>Information and communication</i>	100.5	100.3	97.5	101.6	92.2	100.5	104.0	99.9	99.0	107.3	111.7	109.5
5.6	Kewangan dan insurans <i>Finance and insurance</i>	101.4	97.6	99.3	101.8	97.1	101.3	99.6	100.9	100.5	101.4	104.2	103.3
5.7	Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	98.8	102.0	95.2	104.0	99.9	106.7	103.5	105.9	104.3	99.7	114.2	109.6
5.8	Perkhidmatan lain <i>Other services</i>	99.8	101.6	100.5	98.1	102.1	101.8	101.5	99.1	103.3	100.4	99.7	93.6
Jumlah jam bekerja <i>Total hours worked</i>		99.6	100.2	99.0	101.1	100.7	101.8	101.0	102.5	103.4	102.8	104.3	103.8

19

Quarterly hours worked index by economic activity (2015=100), Q1 2015 - Q4 2022

2018				2019				2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
99.9	99.0	100.6	100.5	102.6	101.0	102.6	100.7	100.8	87.8	101.5	100.5	101.6	102.4	103.0	101.6	102.0	103.6	105.1	103.3
100.9	94.0	102.4	92.3	99.6	97.3	101.4	90.2	94.0	72.9	98.9	86.2	91.7	89.3	91.7	94.2	95.2	93.6	96.1	96.1
104.8	103.5	105.1	105.9	105.5	105.4	105.9	107.9	104.7	74.7	102.2	104.8	103.3	98.8	99.2	109.3	110.3	110.0	110.7	113.2
108.6	109.5	115.0	112.0	115.6	116.3	117.8	117.0	116.8	93.5	114.2	118.4	115.2	115.7	116.7	126.6	129.6	128.1	129.4	132.6
106.7	109.7	112.4	108.1	114.0	114.1	112.0	110.3	111.5	79.0	98.2	95.1	95.2	88.0	93.8	95.8	101.0	93.9	96.8	97.2
118.3	115.0	105.4	110.1	118.1	115.2	113.1	121.6	123.5	100.2	113.1	120.5	121.2	113.2	114.2	125.1	132.0	130.4	126.4	123.2
98.0	98.0	95.1	94.1	94.1	96.7	95.6	95.1	92.8	55.9	88.7	88.0	86.1	76.7	77.6	91.1	91.4	91.5	92.8	95.7
105.6	102.9	105.4	108.8	103.0	104.2	104.2	107.4	102.6	83.4	103.2	105.0	105.6	104.5	104.6	108.8	110.2	109.5	110.6	111.4
108.4	108.4	109.4	109.1	111.2	108.6	109.8	111.4	108.6	74.4	104.7	108.9	108.5	98.5	97.5	111.3	110.6	109.8	110.8	112.1
103.8	101.5	106.7	105.8	104.6	104.1	105.9	106.1	102.0	69.9	102.8	104.0	101.3	99.2	100.6	110.3	108.2	110.4	111.6	116.2
92.5	90.2	91.8	100.0	92.2	91.9	92.2	100.2	91.1	47.1	87.0	90.4	87.8	82.7	80.2	91.5	94.4	92.6	92.4	98.1
100.1	96.9	97.1	100.4	96.0	94.3	94.1	97.3	89.9	54.1	90.5	89.8	88.2	82.2	76.3	88.5	90.2	88.9	89.8	90.2
106.5	106.2	108.5	107.6	110.1	110.1	111.5	111.4	109.4	78.7	108.5	108.9	108.5	106.2	105.0	111.6	114.2	114.3	115.7	118.8
101.5	101.7	104.2	105.4	105.1	104.4	106.2	107.8	104.1	77.8	104.3	104.6	104.5	101.3	96.1	107.3	109.6	106.8	109.7	117.1
112.6	114.3	114.8	113.3	114.1	117.9	118.5	116.8	113.9	83.1	115.1	115.1	113.2	110.1	110.6	118.2	120.9	122.1	124.1	127.7
110.7	109.6	115.5	120.0	121.3	119.7	123.1	128.3	122.4	82.6	112.6	118.1	116.6	114.4	117.7	122.2	126.4	123.4	126.9	128.6
109.4	101.9	103.8	110.6	111.4	105.3	106.7	112.8	109.3	66.0	102.5	105.2	107.9	99.5	97.0	107.4	111.5	112.0	114.2	120.7
104.9	107.5	110.2	115.4	108.6	111.5	115.4	121.7	112.2	77.2	119.4	122.6	115.0	117.4	118.4	125.0	122.5	122.5	129.1	134.8
100.5	106.1	105.1	104.5	105.2	106.2	106.4	106.7	103.2	82.6	104.3	104.4	104.8	103.5	101.6	104.9	105.6	105.5	102.8	100.1
110.1	106.4	110.5	109.5	112.5	109.6	112.5	113.5	113.1	77.4	109.3	110.6	108.3	105.5	102.0	108.9	111.7	111.4	111.4	118.1
97.8	98.1	99.5	94.2	100.2	99.6	100.3	96.2	97.8	75.4	101.1	98.1	100.3	99.5	95.9	101.9	103.9	105.0	105.1	106.6
104.7	103.8	105.6	105.6	106.8	106.3	107.5	107.8	105.3	76.3	104.5	104.9	104.4	101.7	100.5	107.3	109.3	109.3	110.5	112.6

Aktiviti ekonomi <i>Economic activity</i>	2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
1. Pertanian <i>Agriculture</i>	99.0	104.4	102.9	93.8	90.4	94.3	99.7	94.0	94.2	101.1	98.6	98.3
2. Perlombongan dan pengkuarian <i>Mining and quarrying</i>	99.1	92.1	101.4	107.4	97.6	100.0	93.1	95.4	108.8	103.6	104.9	90.2
3. Pembuatan <i>Manufacturing</i>	100.1	99.2	99.6	101.0	99.8	99.8	100.6	101.9	102.5	101.4	102.3	104.2
3.1 Minyak dan lemak daripada sayuran & haiwan dan proses makanan <i>Vegetable and animal oils & fats and food processing</i>	101.9	98.7	98.5	100.9	104.7	106.2	106.8	106.9	109.6	106.2	108.4	109.9
3.2 Minuman dan produk tembakau <i>Beverages and tobacco products</i>	102.5	98.9	99.6	98.9	94.7	100.7	100.2	100.6	104.1	103.9	104.5	104.7
3.3 Produk tekstil, pakaian dan kulit <i>Textiles, wearing apparel and leather products</i>	99.5	99.2	100.1	101.2	99.1	98.2	98.9	101.2	101.1	98.1	100.3	103.3
3.4 Produk kayu, perabot, keluaran kertas dan percetakan <i>Wood products, furniture, paper products and printing</i>	101.1	99.4	99.2	100.3	97.8	98.1	98.0	98.0	97.2	96.3	95.9	96.2
3.5 Produk petroleum, kimia, getah dan plastik <i>Petroleum, chemical, rubber and plastic products</i>	100.5	99.3	99.6	100.5	100.4	100.8	101.0	102.7	103.5	102.5	102.6	104.3
3.6 Produk mineral bukan logam, logam asas dan produk logam yang direka <i>Non-metallic mineral products, basic metal and fabricated metal products</i>	98.7	98.5	100.7	102.1	101.2	100.8	102.3	103.9	107.8	106.9	108.3	108.6
3.7 Produk elektrik, elektronik dan optikal <i>Electrical, electronic and optical products</i>	99.6	99.6	99.8	100.9	99.6	100.1	100.9	102.4	101.5	101.2	102.3	104.3
3.8 Peralatan pengangkutan, pembuatan lain dan pembaikan <i>Transport equipment, other manufacturing and repair</i>	98.6	100.1	99.3	102.0	91.8	88.5	90.5	93.2	91.0	93.7	92.9	99.0
4. Pembinaan <i>Construction</i>	97.6	99.9	101.2	101.3	102.1	98.2	95.7	99.0	96.7	97.9	96.9	103.2
5. Perkhidmatan <i>Services</i>	100.1	98.7	98.7	102.5	103.2	103.8	103.3	104.4	105.6	104.9	106.2	105.9
5.1 Utiliti <i>Utilities</i>	102.0	98.6	98.7	100.7	101.1	97.1	99.6	102.2	101.2	97.2	97.9	102.2
5.2 Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	101.6	96.4	98.6	103.5	106.6	109.6	105.5	106.3	111.6	112.2	111.6	110.2
5.3 Makanan & minuman dan penginapan <i>Food & beverages and accommodation</i>	99.9	97.1	98.6	104.4	104.0	104.4	102.4	106.4	105.4	105.8	106.4	110.3
5.4 Pengangkutan dan penyimpanan <i>Transportation and storage</i>	103.4	99.1	96.5	101.0	107.2	101.3	101.3	107.8	107.9	102.1	102.5	108.2
5.5 Maklumat dan komunikasi <i>Information and communication</i>	101.3	99.5	97.8	101.5	92.0	99.7	103.6	99.8	99.0	104.4	108.8	107.8
5.6 Kewangan dan insurans <i>Finance and insurance</i>	101.7	98.9	99.1	100.3	99.7	101.3	100.0	101.1	102.4	103.3	104.9	104.0
5.7 Hartanah dan perkhidmatan perniagaan <i>Real estate and business services</i>	98.5	102.0	96.1	103.4	100.3	104.7	103.8	106.6	105.7	101.1	113.1	109.9
5.8 Perkhidmatan lain <i>Other services</i>	98.5	100.1	100.3	101.0	101.8	99.7	102.8	101.1	101.4	100.8	100.0	98.4
Jumlah pekerja <i>Total employment</i>	99.7	99.7	99.7	101.0	100.7	101.2	101.5	101.9	102.6	103.0	103.5	104.2

I10

Quarterly employment index by economic activity (2015=100), Q1 2015 - Q4 2022

2018				2019				2020				2021				2022			
I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
98.1	97.3	99.2	98.5	100.2	99.3	100.9	99.0	100.4	98.7	100.1	98.6	99.6	100.5	100.7	98.5	98.8	99.8	100.1	98.0
100.4	96.3	99.3	87.3	95.8	97.7	100.4	87.9	94.2	94.3	98.1	86.5	93.4	94.1	95.8	96.0	95.9	95.7	96.2	96.3
104.4	104.8	105.1	106.4	106.6	106.8	107.2	108.8	108.3	105.4	106.8	108.6	109.5	108.3	109.8	112.6	113.6	113.7	114.8	115.2
110.7	111.3	112.2	113.1	114.0	113.7	114.7	115.9	116.0	115.6	116.6	119.3	120.1	121.1	122.3	126.0	126.7	127.5	129.4	130.9
107.9	108.1	108.7	107.0	111.4	110.6	110.0	110.2	113.1	97.5	98.8	98.3	102.6	97.0	100.4	100.3	104.1	99.8	100.9	102.3
110.6	107.6	104.1	107.0	114.9	112.8	110.8	114.2	119.9	109.6	109.3	112.2	117.9	115.7	115.0	120.1	124.8	123.1	121.5	116.5
95.6	96.2	97.0	97.2	97.3	97.4	98.4	98.8	98.1	92.5	95.2	96.3	96.7	91.4	95.8	98.5	98.7	97.1	98.8	98.4
104.4	104.7	104.6	105.6	105.6	106.5	106.7	107.9	107.9	107.1	109.2	111.0	112.5	112.8	112.6	113.0	115.4	115.5	116.6	115.1
110.8	110.4	110.1	110.0	110.6	110.5	111.1	111.2	111.1	110.0	110.7	112.3	113.7	109.4	111.2	114.6	115.9	114.3	114.9	116.0
103.0	105.2	106.6	107.4	106.3	107.4	108.5	109.4	108.2	106.6	107.9	109.4	108.0	109.9	111.3	114.1	112.7	115.4	117.1	118.7
92.0	92.9	93.3	100.5	93.3	93.9	93.9	101.1	93.3	88.0	90.3	92.5	92.1	89.4	91.8	94.2	95.8	95.4	96.3	101.0
100.6	98.5	98.2	100.5	96.5	95.9	94.8	98.4	93.9	89.9	92.5	92.5	91.7	91.6	90.6	91.4	91.1	91.1	90.8	91.4
107.5	109.0	109.7	110.1	111.2	112.3	113.0	113.6	114.1	111.6	113.0	113.7	114.2	114.0	114.5	116.1	117.5	118.7	120.0	121.6
101.4	100.7	101.9	105.5	103.7	103.2	104.0	107.7	105.5	104.2	104.7	107.7	107.0	106.0	106.1	107.7	108.1	109.4	111.4	111.8
113.0	116.4	116.2	114.3	116.7	120.3	119.9	118.0	119.4	120.0	121.0	119.7	121.0	121.6	123.2	125.1	126.9	128.8	129.8	131.1
111.5	115.1	115.7	120.1	120.8	123.5	124.3	129.2	128.6	120.5	121.4	125.4	124.3	124.6	125.3	126.4	129.1	130.3	131.9	135.9
109.2	104.5	104.7	110.0	112.1	107.1	107.2	112.9	114.9	106.4	106.5	111.1	113.3	106.4	105.4	110.7	113.8	115.3	117.3	121.2
102.3	107.1	110.7	115.4	107.7	113.4	116.8	121.8	112.6	117.1	120.9	123.6	117.6	120.6	122.2	125.9	122.9	125.3	127.0	130.3
103.0	107.5	106.6	105.1	105.7	108.7	108.2	107.0	107.3	108.6	108.5	106.9	107.6	107.5	107.3	106.8	106.8	106.9	107.7	108.4
111.2	108.8	112.2	112.6	114.7	112.4	115.5	116.1	117.5	113.3	116.0	116.2	114.7	114.2	113.7	115.1	115.5	117.3	119.0	119.7
100.6	101.5	101.8	100.9	101.6	101.7	102.5	101.6	102.1	100.7	102.4	102.6	104.4	104.3	104.6	105.6	106.4	107.1	108.1	108.7
104.9	105.5	106.2	106.7	107.3	107.8	108.4	109.0	108.9	106.4	107.9	108.4	108.9	108.7	109.2	110.4	111.3	112.2	113.1	113.9

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank



NOTA TEKNIKAL

Technical Notes

PENGENALAN

Penerbitan ini membentangkan statistik produktiviti buruh suku tahunan bagi tempoh suku pertama 2018 hingga suku keempat 2022 mengikut aktiviti ekonomi. Statistik ini disusun berdasarkan konsep dan panduan yang digariskan dalam **System of National Accounts 2008, United Nations** dan **The Organisation for Economic Co-operation and Development (OECD) Manual: Measuring Productivity**.

Statistik yang tersedia dalam penerbitan ini adalah nilai dan perubahan peratusan tahunan. Namun, metodologi penyusunan telah ditambah baik dengan komponen baharu iaitu indeks produktiviti buruh per jam bekerja dan indeks produktiviti buruh per pekerja yang diterbitkan kepada umum bermula pada suku pertama 2022. Indeks produktiviti buruh ini menggunakan 2015 sebagai tahun asas.

SKOP DAN LIPUTAN

Penyusunan statistik produktiviti buruh adalah meliputi lima sektor utama iaitu Pertanian, Perlombongan & pengkuarian, Pembuatan, Pembinaan dan Perkhidmatan berdasarkan Piawaian Klasifikasi Industri Malaysia (MSIC) 2008 Ver.1.0, selaras dengan *International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4* yang diterbitkan oleh United Nations. Pengelasan subsektor dan aktiviti ekonomi adalah seperti paparan di bawah, dengan perincian lapan (8) subsektor bagi sektor Pembuatan dan Perkhidmatan.

Klasifikasi Aktiviti Ekonomi mengikut MSIC 2008 Ver. 1.0

SEKTOR	MSIC	KETERANGAN
Pertanian	A	Pertanian, perhutanan dan perikanan
Perlombongan dan pengkuarian	B	Perlombongan dan pengkuarian
Pembuatan	C	Pembuatan
	10	Minyak & lemak daripada sayuran & haiwan dan prosesan makanan
	11, 12	Minuman dan produk tembakau
	13, 14, 15	Produk tekstil, pakaian dan kulit
	16, 17, 18, 31	Produk kayu, perabot, keluaran kertas dan percetakan
	19, 20, 21, 22	Produk petroleum, kimia, getah dan plastik
	23, 24, 25*	Produk mineral bukan logam, logam asas dan produk logam yang direka *tidak termasuk 252
	26, 27, 28	Produk elektrik, elektronik dan optikal *termasuk 252 & 325
	29, 30, 32*, 33	Peralatan pengangkutan, pembuatan lain dan pembaikan *tidak termasuk 325
Pembinaan	F	Pembinaan
Perkhidmatan	D, E	Utiliti
	G	Perdagangan borong & runcit
	I	Makanan & minuman dan penginapan
	H	Pengangkutan dan penyimpanan
	J	Maklumat dan komunikasi
	K	Kewangan dan insurans
	L, M, N	Hartanah dan perkhidmatan perniagaan
	P, Q, R, S, T	Perkhidmatan lain

KONSEP DAN DEFINISI

Konsep produktiviti buruh merujuk kepada kecekapan dan keberkesanan setiap pekerja untuk menjana nilai ditambah atau output keseluruhan. Produktiviti buruh boleh didefinisikan sebagai nisbah output (barangan dan perkhidmatan) kepada input (pekerja dan jumlah jam bekerja).

Produktiviti boleh diukur dengan pelbagai kaedah mengikut keperluan dan ketersediaan data. Kaedah-kaedah ini boleh diklasifikasikan kepada dua kategori iaitu **produktiviti faktor tunggal** dan **produktiviti faktor pelbagai**. *Malaysia Productivity Blueprint* (MPB) telah menggariskan penggunaan input buruh sebagai indikator produktiviti selari dengan keperluan Rancangan Malaysia Kesebelas. Namun begitu, faktor-faktor lain yang mempengaruhi nilai ditambah seperti aset dan teknologi tidak boleh diukur melalui kaedah ini.

Penggunaan kaedah produktiviti faktor tunggal boleh memberi kesan kepada nilai produktiviti di mana bagi sesetengah industri ianya mungkin tidak merujuk kepada jumlah sebenar pengeluaran bagi seorang pekerja. Pengguna disarankan menggunakan data indeks dan perubahan peratusan bagi tujuan analisis. **Nilai produktiviti buruh dalam penerbitan ini adalah sebagai rujukan sahaja dan sebarang analisis perbandingan perlu dibuat secara berhati-hati.**

Nilai ditambah

Nilai ditambah merujuk kepada perbezaan antara output dan penggunaan perantaraan. Output adalah nilai barangan dan perkhidmatan yang dikeluarkan. Ini termasuk pengeluaran untuk pasaran, pengeluaran untuk kegunaan sendiri dan pengeluaran bukan pasaran (perkhidmatan kerajaan dan NPISHs). Pengeluaran barangan dan perkhidmatan tidak semestinya untuk dijual atau perolehan oleh pertubuhan. Sementara itu, penggunaan perantaraan adalah nilai barangan dan perkhidmatan yang digunakan (sebagai input) dalam proses pengeluaran barangan dan perkhidmatan tidak termasuk gaji dan upah, susut nilai daripada modal dan faedah bersih yang dibayar.

Nilai ditambah barangan dan perkhidmatan dalam aktiviti ekonomi hampir menyamai dengan keuntungan perniagaan, gaji dan upah, susut nilai dan cukai tidak langsung; campur faedah yang dibayar dan tolak faedah yang diterima.

Pekerja

Pekerja merujuk kepada mereka yang bekerja sekurang-kurangnya sejam semasa minggu rujukan untuk mendapatkan upah, keuntungan atau keuntungan keluarga (sebagai majikan, pekerja, bekerja sendiri atau pekerja keluarga tanpa gaji). Mereka juga dianggap bekerja jika:

- Tidak bekerja semasa minggu rujukan disebabkan sakit, kecederaan, tiada upaya, cuaca buruk, bercuti, pertelingkahan buruh dan sebab-sebab sosial atau keagamaan tetapi mempunyai pekerjaan, perusahaan ladang atau perusahaan keluarga lain untuk kembali bekerja.
- Tidak bekerja buat sementara waktu tetapi bergaji dan pasti akan dipanggil bekerja semula.
- Bekerja kurang daripada 30 jam semasa minggu rujukan disebabkan bentuk kerja atau disebabkan kurang kerja, tetapi berkeupayaan serta sanggup menerima tambahan bilangan jam bekerja. Kumpulan ini merupakan guna tenaga tidak penuh.

Bagi seseorang yang mempunyai lebih daripada satu pekerjaan, hanya pekerjaan yang mengambil masa terbanyak semasa tempoh rujukan dianggap sebagai pekerjaan utamanya. Jika masa bekerja bagi tiap-tiap pekerjaan itu sama, maka pekerjaan yang menghasilkan pendapatan tertinggi adalah pekerjaan utamanya. Dalam kes di mana bilangan jam bekerja dan pendapatannya adalah sama bagi setiap pekerjaan, di pekerjaan mana dia telah bekerja paling lama dianggap sebagai pekerjaan utamanya.

Jumlah jam bekerja

Jumlah jam bekerja bagi pekerjaan dalam tempoh rujukan merujuk kepada agregat sebenar jam bekerja bagi suku tahun. Ia adalah hasil darab daripada purata jam bekerja dengan pekerja jam bekerja. Pekerja jam bekerja merujuk kepada keseluruhan pekerja tidak termasuk mereka yang tidak bekerja pada akhir tempoh rujukan kerana sakit, kecederaan, hilang upaya, cuaca buruk, cuti, pertikaian buruh dan sebab sosial atau agama.

$$THW = AHW \times EmpHW$$

di mana:

THW	jumlah jam bekerja
AHW	purata jam bekerja
EmpHW	pekerja jam bekerja

Produktiviti buruh per pekerja

Produktiviti buruh per pekerja ditakrifkan sebagai nisbah output (barangan dan perkhidmatan) kepada input (pekerja). Ia menggambarkan jumlah output yang dihasilkan oleh setiap orang yang bekerja sepenuh masa, separuh masa, bekerja sendiri atau pekerja keluarga tanpa gaji yang bekerja sekurang-kurangnya satu jam dalam seminggu. Pekerja merujuk kepada keseluruhan pekerja pada akhir tempoh rujukan.

$$LPE = \frac{VA}{Emp}$$

di mana:

LPE	produktiviti buruh per pekerja
VA	nilai ditambah
Emp	pekerja

Produktiviti buruh per jam bekerja

Produktiviti buruh per jam bekerja ditakrifkan sebagai nisbah output (barangan dan perkhidmatan) kepada input (jumlah jam bekerja). Ia menggambarkan jumlah output yang dihasilkan dalam tempoh sejam berdasarkan kategori pekerja yang bekerja sepenuh masa, separuh masa, bekerja sendiri atau pekerja keluarga tanpa gaji yang bekerja sekurang-kurangnya satu jam dalam seminggu. Pekerja jam bekerja merujuk kepada keseluruhan pekerja kecuali mereka yang tidak bekerja pada akhir tempoh rujukan kerana sakit, kecederaan, hilang upaya, cuaca buruk, cuti, pertikaian buruh dan sebab sosial atau agama.

$$LPHW = \frac{VA}{THW}$$

di mana:

LPHW	produktiviti buruh per jam bekerja
VA	nilai ditambah
THW	jumlah jam bekerja

Indeks produktiviti buruh

Indeks produktiviti buruh (LPI) adalah petunjuk untuk mengukur kecekapan input yang digunakan bagi menjana output dalam tempoh masa tertentu. LPI ditakrifkan sebagai nisbah indeks output (barangan dan perkhidmatan) kepada indeks input (pekerja dan jumlah jam bekerja). LPI diukur pada tempoh rujukan berbanding tahun asas 2015, (2015=100).

$$LP_i = \frac{O_i}{I_i} \times 100$$

di mana:

LP_i	indeks produktiviti buruh
O_i	indeks output (nilai ditambah)
I_i	indeks input (pekerja atau jumlah jam bekerja)

KAEDAH PENGANGGARAN PRODUKTIVITI BURUH

Penganggaran produktiviti buruh suku tahunan diukur menggunakan kaedah produktiviti faktor tunggal. Anggaran ini dibuat berdasarkan maklumat nilai ditambah per pekerja dan nilai ditambah per jam bekerja mengikut aktiviti ekonomi. Pengukuran produktiviti buruh per jam bekerja memberikan gambaran yang lebih baik berkenaan perkembangan produktiviti di dalam ekonomi berbanding produktiviti buruh per pekerja kerana elemen perbezaan komposisi pekerja sepenuh masa/ separuh masa telah dihapuskan. Maklumat tambahan berkaitan penganggaran produktiviti buruh boleh diperoleh dari www.dosm.gov.my.

Nilai ditambah yang digunakan adalah nilai pada harga malar di mana ia merujuk kepada nilai barangan dan perkhidmatan pada harga asas tahun 2015. Pekerja merujuk kepada bilangan keseluruhan pekerja dalam tempoh rujukan, manakala jumlah jam bekerja ialah agregat sebenar jam bekerja dalam tempoh rujukan.

Kaedah penganggaran data pekerja adalah berdasarkan data banci dan survei yang dijalankan oleh DOSM serta data pentadbiran daripada pelbagai agensi. Anggaran suku tahunan dan tahunan meliputi keseluruhan pekerja mengikut aktiviti ekonomi. Pekerja tahunan adalah purata pekerja suku tahunan bagi tahun tersebut. Anggaran pekerja dikira menggunakan kaedah ekstrapolasi yang merujuk kepada pelbagai sumber data manakala jumlah pekerja merujuk kepada penduduk bekerja yang diterbitkan dalam laporan suku tahunan Survei Tenaga Buruh (STB). Perlu diingatkan bahawa anggaran pekerja mengikut aktiviti ekonomi tidak semata-mata berdasarkan STB kerana komponen pekerja produktiviti buruh telah mengambil kira penyelarasan sumber data penawaran dan permintaan buruh.

9 SUBSEKTOR KEUTAMAAN

Salah satu strategi nasional untuk memacu pertumbuhan dan perkembangan ekonomi secara berterusan adalah melalui kerjasama industri di Malaysia. Selari dengan ini, kerajaan telah melancarkan **Malaysia Productivity Blueprint (MPB)** pada Mei 2017 sebagai sebahagian daripada Rancangan Malaysia Kesebelas. Terdapat 9 subsektor keutamaan dalam MPB yang dikenal pasti menunjukkan potensi pertumbuhan yang tinggi untuk negara. 9 subsektor keutamaan mengikut tiga sektor utama ekonomi ialah sektor Perkhidmatan, Pembuatan dan Pertanian.

9 subsektor keutamaan telah dikenal pasti iaitu Agro-makanan; Kimia dan produk kimia; Elektrik dan elektronik; Mesin dan peralatan; Peruncitan dan makanan & minuman; Pelancongan; Teknologi, maklumat dan komunikasi (ICT); Perkhidmatan professional; dan Penjagaan kesihatan swasta. Pemilihan 9 subsektor ini berikutan sumbangan sebanyak 30 peratus kepada Keluaran Dalam Negeri Kasar (KDNK) Malaysia dan 40 peratus kepada jumlah pekerja. Subsektor ini diberi keutamaan berdasarkan kriteria berikut:



9 subsektor keutamaan untuk memacu pelaksanaan inisiatif produktiviti seperti yang digariskan oleh MPB adalah seperti berikut:



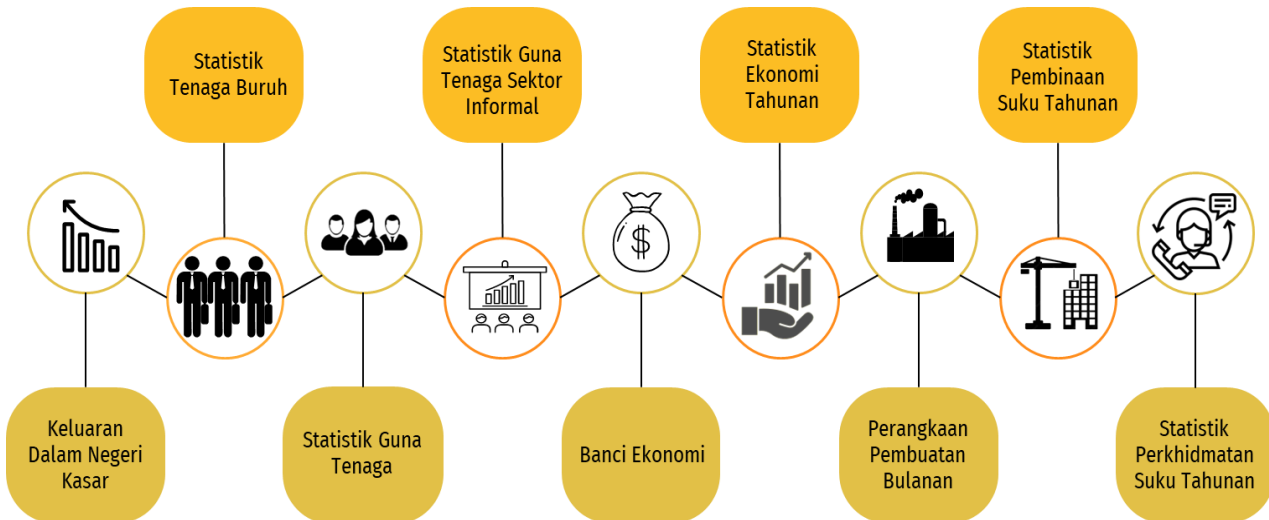
Klasifikasi 9 subsektor keutamaan yang telah ditentukan menggunakan MSIC 2008 Ver. 1.0 adalah seperti yang ditunjukkan di bawah.

Klasifikasi 9 subsektor keutamaan menggunakan MSIC 2008 Ver. 1.0

MSIC	KETERANGAN
AGRO MAKANAN	
011	Penanaman tanaman tidak kekal
012	Penanaman tanaman kekal*
013	Pembiakan tumbuhan
014	Pengeluaran ternakan
015	Pertanian campuran
03	Perikanan dan akuakultur
	* tidak termasuk: 01261, 01262, 01273, 01281, 01291, 01292, 01295
KIMIA DAN PRODUK KIMIA	
20	Pembuatan kimia dan produk kimia
ELEKTRIK DAN ELEKTRONIK	
26	Pembuatan produk komputer, elektronik dan optikal
27	Pembuatan kelengkapan elektrik
MESIN DAN PERALATAN	
28	Pembuatan jentera dan peralatan t.t.t.l.
PERUNCITAN, MAKANAN DAN MINUMAN	
47	Perdagangan runcit, kecuali kenderaan bermotor dan motosikal
56	Aktiviti perkhidmatan makanan dan minuman
PELANCONGAN	
55	Penginapan
79	Agensi pengembaraan, operator pelancongan, khidmat penempahan dan aktiviti berkaitan
90	Aktiviti kesenian, hiburan dan kreatif
91	Aktiviti perpustakaan, arkib, muzium dan kebudayaan lain
93	Aktiviti sukan dan aktiviti hiburan dan rekreasi
TEKNOLOGI, MAKLUMAT DAN KOMUNIKASI (ICT)	
58	Aktiviti penerbitan
59	Aktiviti penerbitan wayang gambar, video dan program televisyen, rakaman bunyi dan penerbitan muzik
60	Aktiviti pemrograman dan penyiaran
61	Telekomunikasi
62	Pengaturcaraan komputer, perundingan dan aktiviti yang berkaitan
63	Aktiviti perkhidmatan maklumat
PERKHIDMATAN PROFESIONAL	
69	Aktiviti guaman dan perakaunan
70	Aktiviti ibu pejabat; aktiviti perundingan pengurusan
71	Aktiviti arkitek dan kejuruteraan; ujian teknikal dan analisis
72	Penyelidikan dan pembangunan saintifik
73	Pengiklanan dan penyelidikan pasaran
74	Perkhidmatan profesional, saintifik dan teknikal lain
75	Aktiviti veterinar
PENJAGAAN KESIHATAN SWASTA	
86	Aktiviti kesihatan kemanusiaan

SUMBER DATA

Sumber data utama penerbitan ini terdiri daripada statistik yang diterbitkan oleh Jabatan Perangkaan Malaysia:



Data sekunder turut digunakan dalam penganggaran produktiviti buruh iaitu *Employment Statistics in Financial Industry* dari Bank Negara Malaysia, Statistik Penjawat Awam dari Jabatan Perkhidmatan Awam dan Statistik Pekerja Asing dari Kementerian Dalam Negeri.

PEMBUNDARAN

Hasil tambah bagi sesuatu kategori mungkin berbeza dengan jumlah besar tertera di dalam jadual kerana pembundaran secara bebas.

SIMBOL DAN SINGKATAN

&	: dan	ST	: suku tahun	e	: anggaran
%	: peratus	KDNK	: Keluaran Dalam Negeri Kasar	p	: permulaan
RM	: Ringgit Malaysia	NPISHs	: <i>Non-Profit Institutions Serving Households</i>	OECD	: <i>Organisation for Economic Co-operation and Development</i>
MPB : <i>Malaysia Productivity Blueprint</i>					

PENERBITAN DAN SEMAKAN STATISTIK

Statistik produktiviti buruh yang dilaporkan dalam penerbitan ini bermula dari suku pertama 2018 hingga suku keempat 2022 disusun berdasarkan anggaran Keluaran Dalam Negeri Kasar, jam bekerja dan pekerja. Statistik pekerja telah diselaraskan berdasarkan data terkini banci dan survei yang dilaksanakan oleh DOSM. Semakan semula statistik produktiviti buruh adalah tertakluk kepada semakan statistik nilai ditambah, jam bekerja dan pekerja.

INTRODUCTION

This publication presents the quarterly statistics of labour productivity from the first quarter of 2018 to the fourth quarter of 2022 by economic activity. These statistics are compiled based on the concepts and guidelines outlined in the **System of National Accounts 2008, United Nations** and **The Organisation for Economic Co-operation and Development (OECD) Manual: Measuring Productivity**.

Statistics available in this publication are values and annual percentage changes. However, the compilation methodology has been improved with new components namely the index of labour productivity per hour worked and the index of labour productivity per employment that are available to the public starting in the first quarter of 2022. Labour productivity index uses 2015 as base year.

SCOPE AND COVERAGE

The compilation of labour productivity statistics comprises five main sectors namely Agriculture, Mining and quarrying, Manufacturing, Construction and Services based on the Malaysian Standard Industrial Classification (MSIC) 2008 Ver.1.0 in line with the International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4 published by the United Nations. The classification of sub-sectors and economic activities is as in exhibit below, with the Manufacturing and Services sectors can be detailed into eight sub-sectors.

Classification of Economic Activity according to MSIC 2008 Ver. 1.0

SECTOR	MSIC	DESCRIPTION
Agriculture	A	Agriculture, forestry & fishing
Mining and quarrying	B	Mining and quarrying
Manufacturing	C	Manufacturing
	10	Vegetable and animal oils & fats and food processing
	11, 12	Beverages and tobacco products
	13, 14, 15	Textiles, wearing apparel and leather products
	16, 17, 18, 31	Wood products, furniture, paper products and printing
	19, 20, 21, 22	Petroleum, chemical, rubber and plastic products
	23, 24, 25*	Non-metallic mineral products, basic metal and fabricated metal *not including 252
	26, 27, 28	Electrical, electronic and optical products *including 252 & 325
	29, 30, 32*, 33	Transport equipment, other manufacturing and repair * not including 325
Construction	F	Construction
Services	D, E	Utilities
	G	Wholesale and retail trade
	I	Food & beverages and accommodation
	H	Transportation and storage
	J	Information and communication
	K	Finance and insurance
	L, M, N	Real estate and business services
	P, Q, R, S, T	Other services

CONCEPT AND DEFINITION

The concept of labour productivity refers to the efficiency and effectiveness of each employee to generate value added or overall output. Labour productivity can be defined as output ratio (goods and services) to input (employment and total hours worked).

Productivity can be measured by various methods depending on the requirements and availability of data. These methods can be classified into two categories namely **Single Factor Productivity** and **Multifactor Productivity**. Malaysia Productivity Blueprint (MPB) has outlined the use of labour input as a productivity indicator in line with the requirement of the Eleventh Malaysia Plan. Meanwhile, other factors influencing value added such as assets and technology cannot be measured through this method.

The use of Single Factor Productivity method affects the productivity values where for certain industries it may not refer to the actual amount of production for an employee. Users are advised to use index and percentage change data for analysis purposes. **The labour productivity values in this publication are for reference only and any comparative analysis should be made with caution.**

Value added

Value added refers to the difference between output and intermediate consumption. Output is value of goods and services produced. This includes market production, production for own final use, and non-market production (government services and NPISHs). Production of goods and services are not necessarily for sale or turnover of establishment. Meanwhile, intermediate consumption is the value of goods and services consumed (as input) in the production process of goods and services excluding salaries and wages, depreciation of capital and net interest paid.

Value added good and services by economic activity is approximately equivalent to commercial profit, salaries and wages, depreciation and indirect taxes; plus, interest paid and less interest received.

Employment

Employment refers to all persons who, at any time during the reference week worked at least one hour for pay, profit or family gain (as an employer, employee, own-account worker or unpaid family worker). They are also considered as employed if they:

- Did not work during the reference week because of illness, injury, disability, bad weather, leave, labour dispute and social or religious reasons but had a job, farm enterprise or other family enterprise to return to.
- Were temporary laid-off with pay and would definitely be called back to work.
- Were employed less than 30 hours during the reference week because of the nature of their work or due to insufficient work and were able and willing to accept additional hours of work. This group is underemployed.

For a person having more than one job, only the job at which he worked for the longest number of hours during the reference week is treated as his principal occupation. Should the number of hours worked for each job is the same, then the job with the highest income is the principal occupation. In cases where the number of hours worked and the income earned from each job are the same, the job at which he was working for the longest period of time is considered as the principal occupation.

Total hours worked

Total hours worked for all employment during the reference period are the aggregate number of hours actually worked for a quarter. It is defined as the product of the average hours worked and the number of employment hours worked. Employment hours worked refers to the overall number of employees at the end of the reference period excluding the employees who did not work during the reference period because of illness, injury, disability, bad weather, leave, labour dispute and social or religious reasons.

$$THW = AHW \times EmpHW$$

where:

THW	total hours worked
AHW	average hours worked
EmpHW	employment hours worked

Labour productivity per employment

Labour productivity per employment is measured as the ratio of output (goods and services) to input (employment). It reflects the amount of output produced by each employee in full-time, part-time, self-employed or unpaid family worker for at least one hour within a week. Employment refers to the overall number of employees at the end of the reference period.

$$LPE = \frac{VA}{Emp}$$

where:

LPE	labour productivity per employment
VA	value added
Emp	employment

Labour productivity per hour worked

Labour productivity per hour worked is defined as the ratio of output (goods and services) to input (total hours worked). It reflects the amount of output produced within an hour based on the category of employees either in full-time, part-time, self-employed or unpaid family worker who worked for at least one hour within a week. Employment refers to the overall number of employees excluding the employees who did not work during the reference period because of illness, injury, disability, bad weather, leave, labour dispute and social or religious reasons.

$$LPHW = \frac{VA}{THW}$$

where:

LPHW	labour productivity per hour worked
VA	value added
THW	total hours worked

Labour productivity index

Labour productivity index (LPI) is an indicator to measure the efficiency of inputs used to generate output in a given period of time. LPI is defined as the ratio of the output index (goods and services) to the input index (employees or total hours worked). LPI is measured at the reference period against the based year 2015, (2015=100).

$$LP_i = \frac{O_i}{I_i} \times 100$$

where:

LP_i	index of labour productivity
O_i	output index (added value)
I_i	input index (employment or total hours worked)

GENERAL APPROACH OF LABOUR PRODUCTIVITY ESTIMATION

Quarterly labour productivity estimation is measured using the Single Factor Productivity method. This estimate is based on information of value added per employment and value added per hour worked by economic activity. Measurement of labour productivity per hour worked provides a better picture of the development of productivity in the economy than labour productivity per employment because the element of difference in the composition of full-time/part-time workers has been eliminated. Additional information regarding labour productivity estimation can be obtained from www.dosm.gov.my.

The value added at constant prices is used where it refers to the value of goods and services at 2015 prices. Employment refers to the overall number of employees in the reference period. Meanwhile, total hours worked is the aggregate number of hours actually worked during the period.

The methodology of estimating employment data are based on censuses and surveys data conducted by DOSM as well as administrative data from various agencies. Quarterly and annual estimations cover the entire employment according to the economic activity. Annual employment is the average quarterly employment for the year. Estimation for employment is calculated by using extrapolation method that refers to the various data sources. Meanwhile, the number of employees refers to the working population published in the quarterly report of the Labour Force Survey (LFS). It should be noted that employment estimates by economic activities are not solely based on LFS as the employment component of labour productivity has taken into account the harmonisation of labour supply and demand data sources.

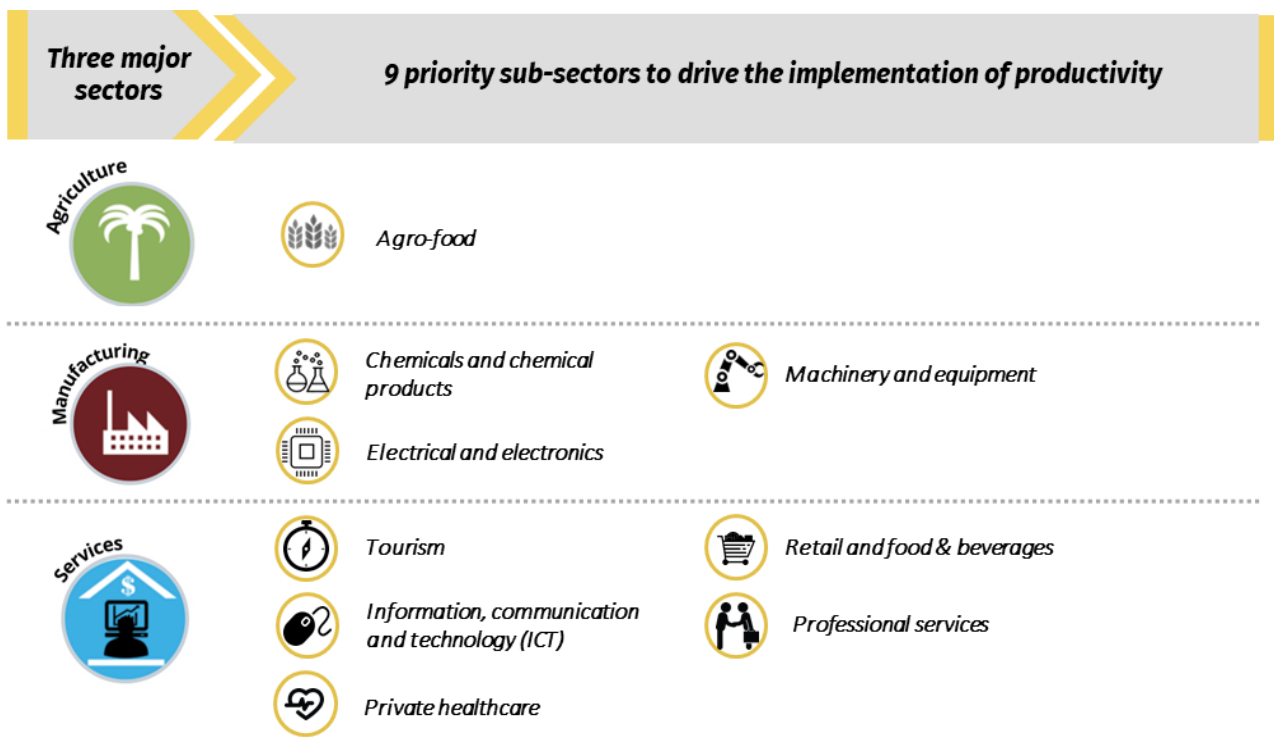
9 PRIORITY SUB-SECTORS

Unlocking greater productivity within industry in Malaysia is one of the national strategies to drive continuous economic growth and expansion. In line with this, the Government launched the **Malaysia Productivity Blueprint (MPB)** in May 2017 as part of the Eleventh Malaysia Plan. Within the MPB, 9 priority sub-sectors were identified as presenting high potential growth for the country. The 9 priority sub-sectors are under three main economic sectors namely Services, Manufacturing and Agriculture.

The 9 priority sub-sectors identified are Agro-food; Chemicals and chemical products; Electrical and electronics; Machinery and equipment; Retail and food & beverages; Tourism; Information, communication and technology (ICT); Professional services; and Private healthcare. Combined, the 9 priority sub-sectors selected contribute 30 per cent of Malaysia's Gross Domestic Product (GDP) and 40 per cent of total employment. These sub-sectors are prioritised based on the following criteria:



9 priority sub-sectors to drive the implementation of productivity initiatives as outlined by the MPB are as follows:



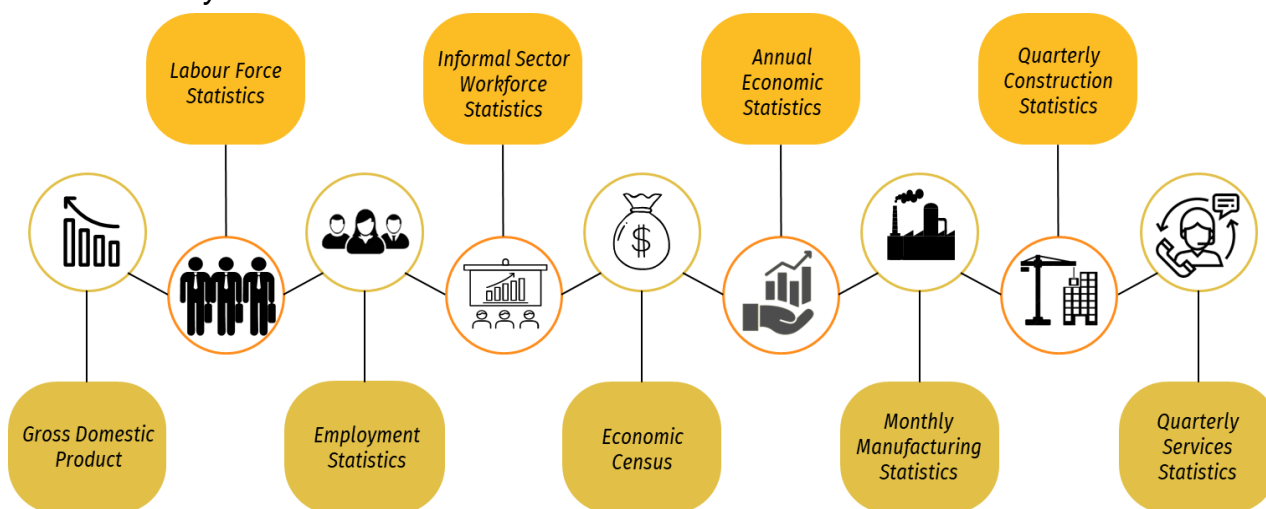
Classification of 9 priority sub-sectors is based on MSIC 2008 Ver. 1.0 as shown in table below.

Classification of 9 priority sub-sectors using MSIC 2008 Ver. 1.0

MSIC	DESCRIPTION
AGRO-FOOD	
011	Growing of non-perennial crops
012	Growing of perennial crops*
013	Plant propagation
014	Animal production
015	Mixed farming
03	Fishing & aquaculture
	* exclude: 01261, 01262, 01273, 01281, 01291, 01292, 01295
CHEMICALS AND CHEMICAL PRODUCTS	
20	Manufacture of chemicals and chemical products
ELECTRICAL AND ELECTRONICS	
26	Manufacture of computer, electronic and optical products
27	Manufacture of electrical equipment
MACHINERY AND EQUIPMENT	
28	Manufacture of machinery and equipment n.e.c.
RETAIL AND FOOD & BEVERAGES	
47	Retail trade, except of motor vehicles and motorcycles
56	Food and beverage service activities
TOURISM	
55	Accommodation
79	Travel agency, tour operator, reservation service and related activities
90	Creative, arts and entertainment activities
91	Libraries, archives, museums and other cultural activities
93	Sports activities and amusement and recreation activities
INFORMATION, COMMUNICATION AND TECHNOLOGY (ICT)	
58	Publishing activities
59	Motion picture, video and television programme production, sound recording and music publishing activities
60	Programming and broadcasting activities
61	Telecommunications
62	Computer programming, consultancy and related activities
63	Information service activities
PROFESSIONAL SERVICES	
69	Legal and accounting activities
70	Activities of head offices; management consultancy activities
71	Architectural and engineering activities; technical testing and analysis
72	Scientific research and development
73	Advertising and market research
74	Other professional, scientific and technical activities
75	Veterinary activities
PRIVATE HEALTHCARE	
86	Human health activities

DATA SOURCES

The main data sources of this publication comprise of statistics produced by the Department of Statistics Malaysia:



Secondary data also used in the estimation of labour productivity that are Employment Statistics in Financial Industry from the Central Bank of Malaysia, Statistics of Civil Servant from the Public Service Department Malaysia and Foreign Workers Statistics from the Ministry of Home Affairs.

ROUNDING

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

SYMBOLS AND ABBREVIATIONS

&	: and	ST	: quarter	e	: estimate
%	: percentage	KDNK	: Gross Domestic Product	p	: preliminary
RM	: Ringgit Malaysia	NPISHs	: Non-Profit Institutions Serving Households	OECD	: Organisation for Economic Co-operation and Development
MPB : Malaysia Productivity Blueprint					

PUBLICATION AND REVISION OF STATISTICS

Labour productivity statistics presented in this publication from the first quarter 2018 to fourth quarter 2022 are compiled based on the estimates of Gross Domestic Product, hours worked and employment. Statistics on employment has been aligned with the latest available data from the censuses and surveys conducted by DOSM. Revision of statistics on labour productivity are subject to any revision on the statistics of value added, hours worked and employment.

**PENERBITAN INI BOLEH JUGA DIPEROLEH DI JABATAN PERANGKAAN NEGERI SEPERTI BERIKUT:
THIS PUBLICATION IS ALSO AVAILABLE AT THE FOLLOWING STATES DEPARTMENT OF STATISTICS:**

Pengarah,
Jabatan Perangkaan Malaysia Negeri Johor,
Tingkat 14, Menara Tabung Haji, Jalan Air Molek,
80000 Johor Bahru, Johor.
Tel : 07-225 3700
Faks : 07-224 9972
E-mel : jpjohor@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Kedah,
Aras 1, Zon C, Wisma Persekutuan
Pusat Pentadbiran Kerajaan Persekutuan, Bandar Muadzam Shah,
06514 Anak Bukit, Alor Setar, Kedah.
Tel : 04 - 700 1240
Faks : 04 - 733 8412
E-mel : jpkedah@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Kelantan,
Tingkat 8, Bangunan Persekutuan,
Pusat Pentadbiran Kerajaan Persekutuan, Jalan Bayam,
15514 Kota Bharu, Kelantan.
Tel : 09-741 9449
Faks : 09-748 2142
E-mel : jpkelantan@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Melaka,
Aras 7 & 8, Wisma Persekutuan, Jalan MITC, Hang Tuah Jaya,
75450 Ayer Keroh, Melaka.
Tel : 06 - 252 2725
Faks : 06 - 252 2711
E-mel : jpmelaka@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Sembilan,
Tingkat 12, Wisma Persekutuan, Jalan Dato' Abdul Kadir,
70000 Seremban, Negeri Sembilan.
Tel : 06-765 5000
Faks : 06-765 5002
E-mel : jpnsembilan@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Pahang,
Tingkat 7, Bangunan Persekutuan, Jalan Gambut,
25000 Kuantan, Pahang.
Tel : 09-516 3931/7
Faks : 09-514 4636
E-mel : jppahang@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Pulau Pinang,
Tingkat 6, Bangunan Persekutuan,
10400 Jalan Anson, Pulau Pinang.
Tel : 04-226 6244
Faks : 04-229 9499
E-mel : jpppinang@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Perak,
Tingkat 3, Blok A, Bangunan Persekutuan Ipoh,
Jalan Dato' Seri Ahmad Said (Greentown),
30450 Ipoh, Perak.
Tel : 05-255 4963
Faks : 05-255 1073
E-mel : jpperak@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Perlis,
Tingkat 1, Bangunan Perodua Kangar,
No. 2, Persiaran Jubli Perak,
01000 Kangar, Perlis.
Tel : 04-976 7381/9769055
Faks : 04-976 8950
E-mel : jpperlis@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Selangor,
Tingkat 9, Bangunan Darul Ehsan,
Jalan Indah, Seksyen 14,
40000 Shah Alam, Selangor.
Tel : 03-5515 0200
Faks : 03-5518 0408
E-mel : jpselangor@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Terengganu,
Tingkat 9, Wisma Persekutuan,
Jalan Sultan Ismail,
20200 Kuala Terengganu, Terengganu.
Tel : 09-622 3062
Faks : 09-622 9659
E-mel : jpterengganu@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Sabah,
Tingkat 1-3, Blok C,
Kompleks Pentadbiran Kerajaan Persekutuan Sabah,
Jalan UMS, Beg Berkunci No. 2046,
88999 Kota Kinabalu, Sabah.
Tel : 088-484 602
Faks : 088-484 659
E-mel : jpsabah@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Negeri Sarawak,
Tingkat 7 & 8, Bangunan Tun Datuk Patinggi Tuanku
Haji Bujang, Jalan Simpang Tiga,
93514 Kuching, Sarawak.
Tel : 082 -240 287
Faks : 082-242 609
E-mel : jpsarawak@stats.gov.my

Pengarah,
Jabatan Perangkaan Malaysia Wilayah Persekutuan,
Tingkat 14 & 15, Wisma FGV,
Jalan Raja Laut, 50350 Kuala Lumpur.
Tel : 03-2267 2400
Faks : 03-2691 0639
E-mel : dosmwp@dosm.gov.my

Muka surat ini sengaja dibiarkan kosong
This page is deliberately left blank