



JABATAN PERDANA MENTERI
JABATAN PERANGKAAN MALAYSIA

ISSN 1511-872X



9 771511 872004

NOVEMBER
NOVEMBER
2021

PENUNJUK EKONOMI MALAYSIA
INDEKS PELOPOR, SERENTAK & SUSULAN
MALAYSIAN ECONOMIC INDICATORS
LEADING, COINCIDENT & LAGGING INDEXES

JABATAN PERANGKAAN MALAYSIA
DEPARTMENT OF STATISTICS, MALAYSIA



JABATAN PERDANA MENTERI
JABATAN PERANGKAAN MALAYSIA

PENUNJUK EKONOMI MALAYSIA

INDEKS PELOPOR, SERENTAK & SUSULAN

MALAYSIAN ECONOMIC INDICATORS *LEADING, COINCIDENT & LAGGING INDEXES*

NOVEMBER
NOVEMBER 2021

Pemakluman / Announcement:

Jabatan Perangkaan Malaysia akan menjalankan Survei Pendapatan, Perbelanjaan Isi Rumah dan Kemudahan Asas (HIES/BA) 2022 bermula dari 1 Januari 2022 sehingga 31 Disember 2022.

Department of Statistics Malaysia will conduct Household Income, Expenditure and Basic Amenities Survey (HIES/BA) 2022 from 1st January 2022 until 31st December 2022.

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"

*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

ISSN 1511 -872X



KATA PENGANTAR

Penerbitan ini membentangkan statistik Penunjuk Ekonomi Malaysia (PEM) secara bulanan yang terdiri daripada Indeks Pelopor, Serentak dan Susulan. Statistik ini menunjukkan isyarat pergerakan ekonomi di Malaysia dan disusun berasaskan garis panduan *Handbook on Cyclical Composite Indicators, 2017* yang disarankan oleh *Eurostat*.

Ringkasan penemuan dipaparkan di bahagian pertama penerbitan ini. Bahagian kedua memuatkan jadual terperinci bagi membolehkan pengguna menganalisis keadaan ekonomi di Malaysia. Aspek teknikal seperti konsep, sumber data dan metodologi diterangkan di bahagian ketiga bagi membantu pengguna memahami statistik yang diterbitkan.

Jabatan merakamkan penghargaan kepada semua pihak yang telah memberikan kerjasama dan menyumbang dalam menjayakan penerbitan ini. Setiap maklum balas dan cadangan untuk penambahbaikan penerbitan ini pada masa akan datang amat dihargai.

DATO' SRI DR. MOHD UZIR MAHIDIN

Ketua Perangkawan Malaysia

Januari 2022

Summary of findings are highlighted in the first part of this publication. The second part presents detailed tables to enable users to analyse the economic situation in Malaysia. Technical aspects such as concepts, data sources and methodology are described in the third part to assist users to understand the published statistics.

DATO' SRI DR. MOHD UZIR MAHIDIN
Chief Statistician, Malaysia

KANDUNGAN

CONTENTS

	Muka surat Page
Kata pengantar <i>Preface</i>	i
Penemuan utama <i>Main findings</i>	1
Ringkasan penemuan <i>Summary of findings</i>	3
Jadual <i>Tables</i>	
1. Sumbangan Setiap Komponen terhadap Perubahan Peratusan Indeks Pelopor daripada Bulan Sebelumnya <i>Contribution of Each Component to the Percentage Change in the Leading Index from the Previous Month</i>	4
2. Sumbangan Setiap Komponen terhadap Perubahan Peratusan Indeks Serentak daripada Bulan Sebelumnya <i>Contribution of Each Component to the Percentage Change in the Coincident Index from the Previous Month</i>	4
3. Sumbangan Setiap Komponen terhadap Perubahan Peratusan Indeks Susulan daripada Bulan Sebelumnya <i>Contribution of Each Component to the Percentage Change in the Lagging Index from the Previous Month</i>	4
4. Indeks Komposit dan Indeks Difusi <i>Composite Index and Diffusion Index</i>	7
Carta <i>Chart</i>	
1. Kadar Pertumbuhan bagi Indeks Pelopor (Terlicin) dan Kitaran Perniagaan <i>Growth Rate of Leading Index (Smoothed) and Business Cycle</i>	5
2. Indeks Komposit Pelopor dan Aktiviti Ekonomi (Arah Aliran Jangka Panjang=100) <i>Leading Composite Index and Economic Activity (Long Term Trend=100)</i>	5
3. Indeks Difusi Pelopor dan Kitaran Perniagaan <i>Leading Diffusion Index and Business Cycle</i>	6
4. Indeks Difusi Serentak dan Kitaran Perniagaan <i>Coincident Diffusion Index and Business Cycle</i>	6
Nota Keterangan <i>Explanatory Notes</i>	15
Kalendar Awalan Keluaran <i>Advance Release Calendar</i>	23

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

PENEMUAN UTAMA



JABATAN PERDANA MENTERI
JABATAN PERANGKAAAN MALAYSIA



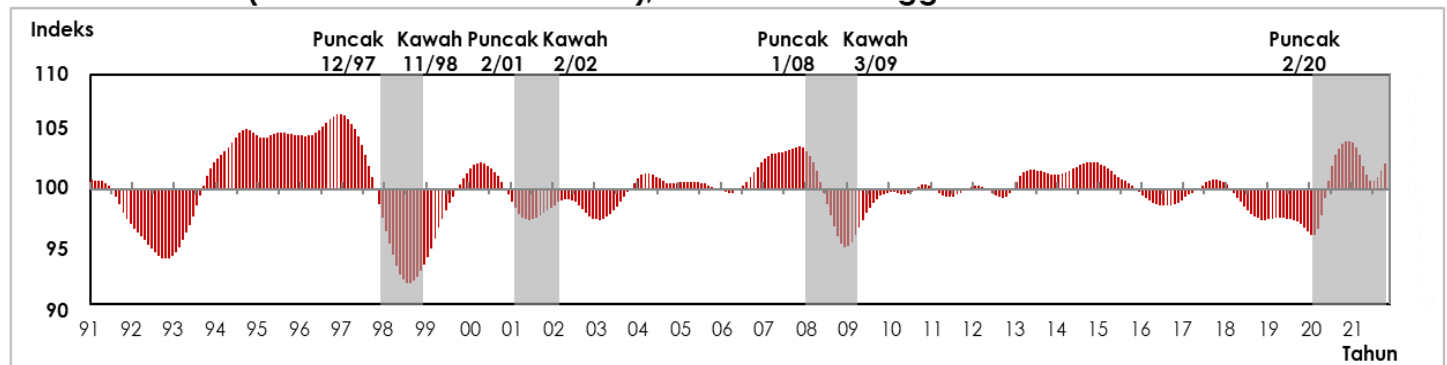
StatsMalaysia
www.dosm.gov.my

#KELUARGA
MALAYSIA

INDEKS PELOPOR MELEPASI 100.0 MATA DAN BERGERAK KE ATAS PADA NOVEMBER 2021, MEMBERI ISYARAT BAHAWA MALAYSIA MENGALAMI PEMULIHAN EKONOMI YANG LEBIH BAIK PADA BULAN-BULAN AKAN DATANG



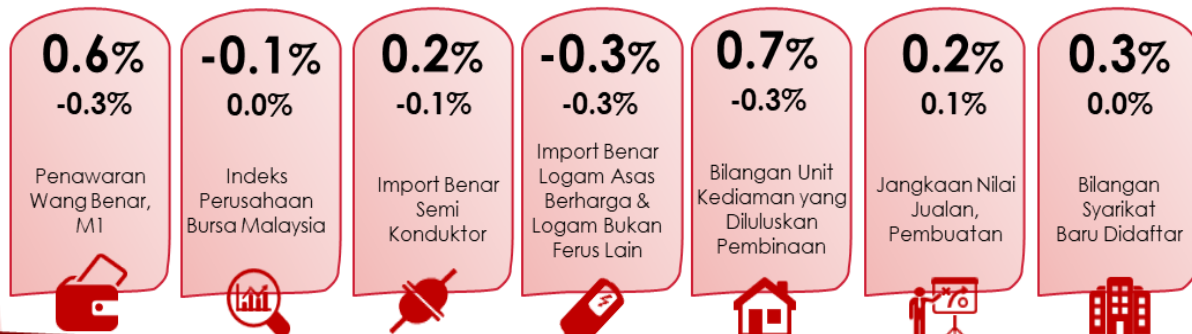
Indeks Komposit Pelopor (Arah Aliran Jangka Panjang = 100) dan Kitaran Perniagaan (Kawasan Berlorek Kelabu), Januari 1991 hingga November 2021



November 21: 1.6%
Oktober 21: -0.9%

Indeks Pelopor, Bulan ke Bulan (%)

Sumbangan Setiap Komponen terhadap Perubahan Peratusan Indeks Pelopor daripada Bulan Sebelumnya

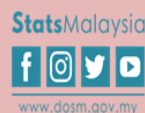


Sumber: Penunjuk Ekonomi Malaysia – Indeks Pelopor, Serentak & Susulan, November 2021
Jabatan Perangkaan Malaysia

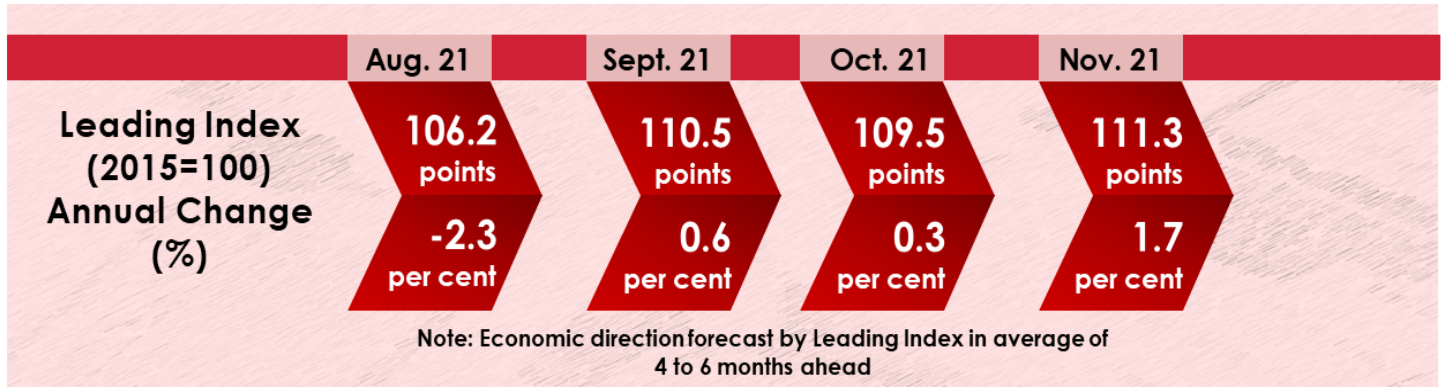
MAIN FINDINGS



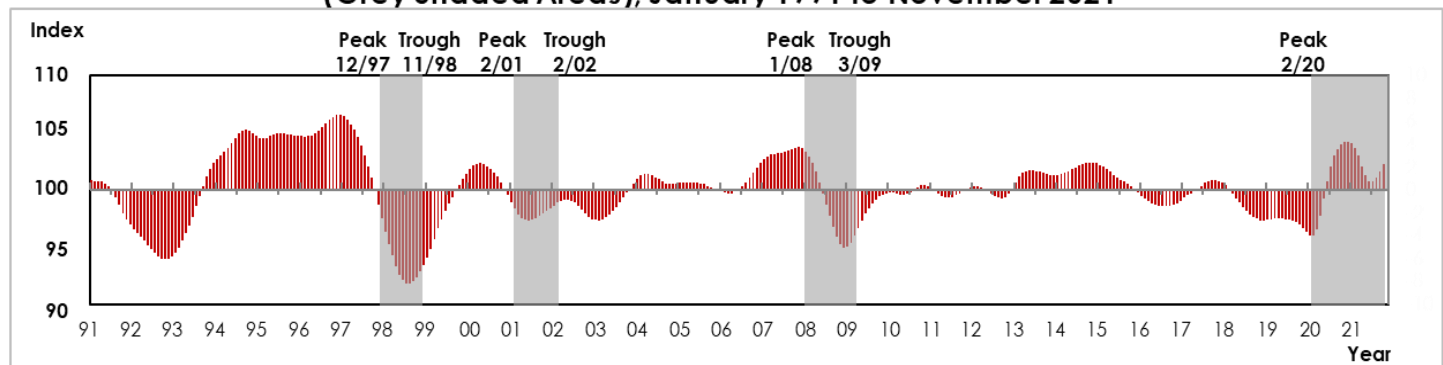
PRIME MINISTER'S DEPARTMENT
DEPARTMENT OF STATISTICS MALAYSIA



LEADING INDEX SURPASSED 100.0 POINTS AND MOVING UPWARDS IN NOVEMBER 2021, SIGNALLING THAT MALAYSIA IS STAGING A BETTER ECONOMIC RECOVERY IN THE UPCOMING MONTHS



Leading Composite Index (Long Term Trend = 100) and Business Cycle (Grey Shaded Areas), January 1991 to November 2021



November 21: 1.6%
October 21: -0.9%

Leading Index, Month-on-Month (%)

Contribution of Each Component to the Percentage Change in the Leading Index from the Previous Month

0.6%
-0.3%

Real Money Supply, M1



-0.1%
0.0%

Bursa Malaysia Industrial Index



0.2%
-0.1%

Real Imports of Semi Conductors



-0.3%
-0.3%

Real Imports of Other Basic Precious & Other Non-ferrous Metals



0.7%
-0.3%

Number of Housing Units Approved



0.2%
0.1%

Expected Sales Value, Manufacturing



0.3%
0.0%

Number of New Companies Registered



Source: Malaysian Economic Indicators - Leading, Coincident & Lagging Indexes, November 2021
Department of Statistics Malaysia

Indeks Pelopor melebihi 100.0 mata dan bergerak ke atas pada November 2021, memberi isyarat bahawa Malaysia mengalami pemulihan ekonomi yang lebih baik pada bulan-bulan akan datang

Prestasi Indeks Pelopor (IP) kekal optimistik dengan mencatatkan 111.3 mata pada November 2021 (November 2020: 109.4 mata) apabila ekonomi beransur pulih daripada gangguan akibat pandemik COVID-19. Ini selaras dengan pertumbuhan IP sebanyak 1.7 peratus tahun ke tahun terutamanya didorong oleh kenaikan dalam Bilangan Unit Kediaman yang Diluluskan Pembinaan. Menelusuri perspektif bulan ke bulan, trend yang sama didapati oleh IP dengan mencatatkan 1.6 peratus pada November 2021, melonjak daripada negatif 0.9 peratus pada Oktober 2021 yang disumbangkan terutamanya oleh Bilangan Unit Kediaman yang Diluluskan Pembinaan (0.7%) dan Penawaran Wang Benar, M1 (0.6%). IP yang menunjukkan keupayaan untuk menjangka hala tuju ekonomi lebih awal menggambarkan prospek ekonomi yang lebih baik dengan mengekalkan paras indeks melebihi 100.0 mata dan bergerak ke atas, memberi isyarat bahawa Malaysia mengalami pemulihan ekonomi yang lebih baik pada bulan-bulan akan datang. Banjir baru-baru ini dijangka memberi kesan terhadap kepada pemulihan ekonomi. Tindakan pantas kerajaan dalam menyediakan inisiatif bantuan iaitu Bantuan Banjir Keluarga Malaysia berjumlah RM1.4 bilion dijangka dapat memulihkan aktiviti ekonomi di kawasan terjejas.

Indeks Serentak (IS) yang mengukur keseluruhan prestasi ekonomi semasa meningkat sejak Ogos 2021, mencerminkan peningkatan dalam aktiviti ekonomi apabila langkah pembendungan dilonggarkan secara berperingkat. IS terus meningkat sebanyak 3.0 peratus tahun ke tahun untuk mencapai 114.3 mata pada November 2021. Berasaskan bulanan, pertumbuhan IS meningkat kepada 0.9 peratus pada bulan rujukan daripada 0.8 peratus yang direkodkan pada bulan sebelumnya. Pertumbuhan ini didorong oleh peningkatan ketara dalam Indeks Pengeluaran Perindustrian (0.3%) dan Nilai Caruman Benar kepada Kumpulan Wang Simpanan Pekerja (0.3%).

Indeks Difusi bagi IP dan IS menunjukkan prestasi yang lebih baik pada November 2021. Indeks Difusi bagi IP mencatatkan 71.4 peratus manakala lebih separuh komponen Indeks Difusi bagi IS meningkat untuk mencapai 83.3 peratus.

Leading Index surpassed 100.0 points and moving upwards in November 2021, signalling that Malaysia is staging a better economic recovery in the upcoming months

The performance of Leading Index (LI) remained optimistic by registering 111.3 points in November 2021 (November 2020: 109.4 points) as the economy gradually recovered from disruptions caused by the COVID-19 pandemic. This corresponds to the growth of LI 1.7 per cent year-on-year mainly contributed by the increment in the Number of Housing Units Approved. Looking into month-on-month perspective, the LI observed a similar trend by registering 1.6 per cent in November 2021, rebounded from negative 0.9 per cent in October 2021 attributed mainly by Number of Housing Units Approved (0.7%) and Real Money Supply, M1 (0.6%). The LI which elucidated the ability to anticipate the economic direction in advance pointed a better economic outlook by keeping the index level surpassed 100.0 points and moving upwards, signalling that Malaysia is staging a better economic recovery in the upcoming months. The recent flood is expected to have limited effect on the economic recovery. A fast action by the government in providing aid initiatives namely Bantuan Banjir Keluarga Malaysia amounting to RM1.4 billion are expected to revive the economic activities of the affected areas.

The Coincident Index (CI) which measures the overall current economic performance is picking up since August 2021, reflecting an increase in economic activities as containment measures are progressively relaxed. The CI continued to climb by 3.0 per cent year-on-year to attain 114.3 points in November 2021. On monthly basis, the growth of CI improved to 0.9 per cent in the reference month from 0.8 per cent recorded in the previous month. The growth was driven by the significant increases in Industrial Production Index (0.3%) and Real Contributions to Employee Provident Fund (0.3%).

The Diffusion Index for LI and CI performed better in November 2021. The Diffusion Index for LI posted 71.4 per cent while more than half components of the Diffusion Index for CI increased to achieve 83.3 per cent.

Jadual 1: Sumbangan Setiap Komponen terhadap Perubahan Peratusan Indeks Pelopor daripada Bulan Sebelumnya
Table 1: Contribution of Each Component to the Percentage Change in the Leading Index from the Previous Month

Komponen Indeks Pelopor <i>Leading Index Components</i>	September 2021 <i>September 2021</i>	Oktober 2021 <i>October 2021</i>	November 2021 <i>November 2021</i>
1. Penawaran Wang Benar, M1 <i>Real Money Supply, M1</i>	0.2	-0.3	0.6
2. Indeks Perusahaan Bursa Malaysia <i>Bursa Malaysia Industrial Index</i>	-0.4	0.0	-0.1
3. Import Benar Semi Konduktor <i>Real Imports of Semi Conductors</i>	1.1	-0.1	0.2
4. Import Benar Logam Asas Berharga & Logam Bukan Ferus Lain <i>Real Imports of Other Basic Precious & Other Non-ferrous Metals</i>	1.6	-0.3	-0.3
5. Bilangan Unit Kediaman yang Diluluskan Pembinaan <i>Number of Housing Units Approved</i>	0.5	-0.3	0.7
6. Jangkaan Nilai Jualan, Pembuatan <i>Expected Sales Value, Manufacturing</i>	0.0	0.1	0.2
7. Bilangan Syarikat Baru Didaftarkan <i>Number of New Companies Registered</i>	1.0	0.0	0.3
Perubahan Peratusan <i>Percentage Change</i>	4.0	-0.9	1.6

Jadual 2: Sumbangan Setiap Komponen terhadap Perubahan Peratusan Indeks Serentak daripada Bulan Sebelumnya
Table 2: Contribution of Each Component to the Percentage Change in the Coincident Index from the Previous Month

Komponen Indeks Serentak <i>Coincident Index Components</i>	September 2021 <i>September 2021</i>	Oktober 2021 <i>October 2021</i>	November 2021 <i>November 2021</i>
1. Jumlah Guna Tenaga, Pembuatan <i>Total Employment, Manufacturing</i>	0.3	0.3	0.2
2. Gaji & Upah Benar, Pembuatan <i>Real Salaries & Wages, Manufacturing</i>	0.5	0.1	0.2
3. Indeks Pengeluaran Perindustrian <i>Industrial Production Index</i>	0.4	0.2	0.3
4. Nilai Caruman Benar, KWSP <i>Real Contributions, EPF</i>	0.3	-0.1	0.3
5. Kapasiti Penggunaan, Pembuatan <i>Capacity Utilisation, Manufacturing</i>	0.9	-0.1	-0.3
6. Indeks Kuantiti Perdagangan Runcit <i>Volume Index of Retail Trade</i>	1.5	0.4	0.2
Perubahan Peratusan <i>Percentage Change</i>	3.9	0.8	0.9

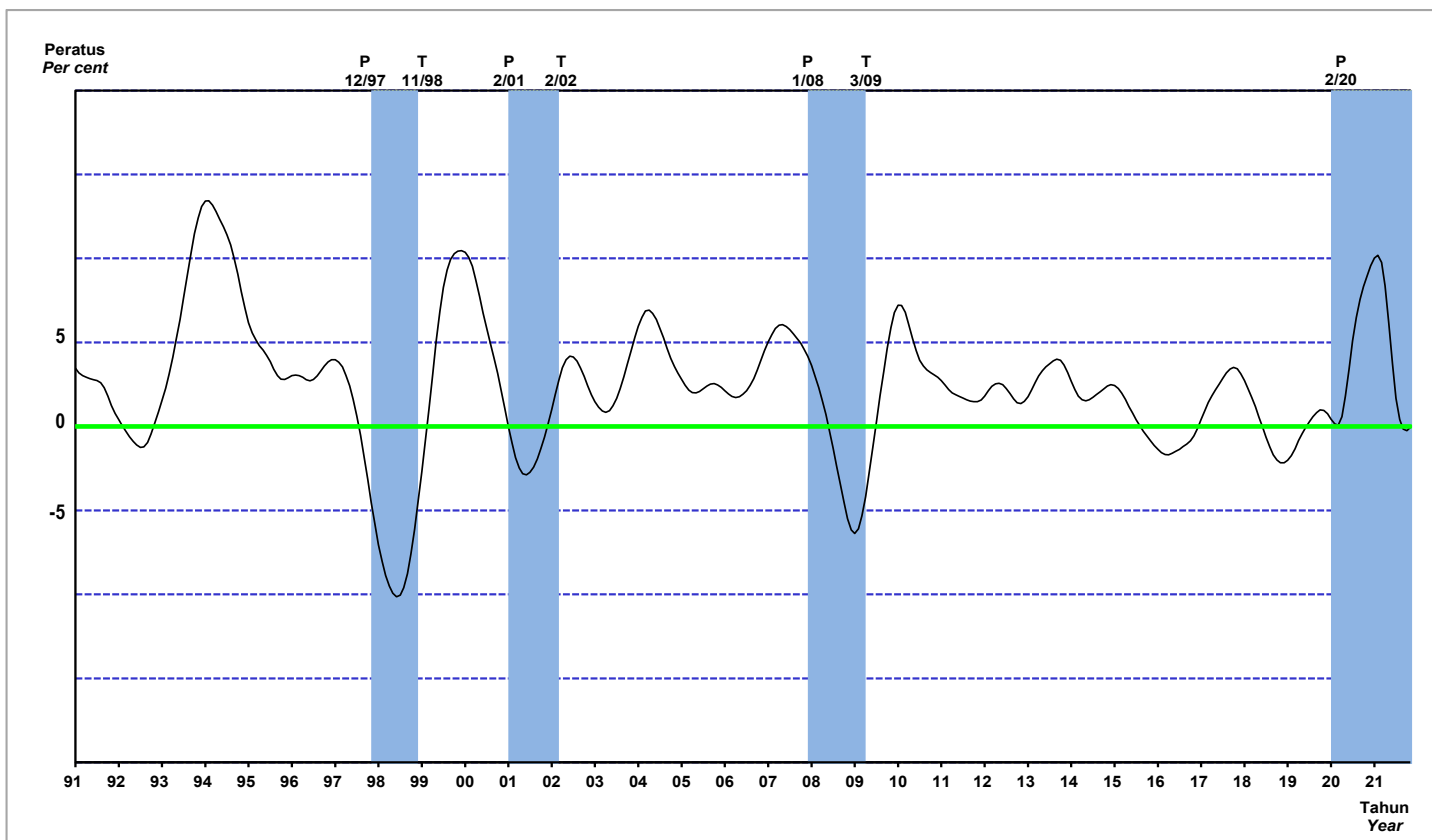
Jadual 3: Sumbangan Setiap Komponen terhadap Perubahan Peratusan Indeks Susulan daripada Bulan Sebelumnya
Table 3: Contribution of Each Component to the Percentage Change in the Lagging Index from the Previous Month

Komponen Indeks Susulan <i>Lagging Index Components</i>	September 2021 <i>September 2021</i>	Oktober 2021 <i>October 2021</i>	November 2021 <i>November 2021</i>
1. Kos Seunit Buruh, Pembuatan <i>Unit Labour Cost, Manufacturing</i>	-0.2	-0.3	-0.2
2. Bilangan Projek Pelaburan Baru Diluluskan <i>Number of Investment Projects Approved</i>	0.3	0.3	-0.4
3. Bilangan Kenderaan Baru Didaftarkan <i>Number of New Vehicles Registered</i>	3.4	0.5	0.1
4. Eksport Gas Asli & Minyak Mentah <i>Exports of Natural Gas & Crude Oil</i>	0.2	-1.2	1.0
5. IHP Perkhidmatan <i>CPI for Services</i>	0.0	0.0	0.0
Perubahan Peratusan <i>Percentage Change</i>	3.7	-0.7	0.5



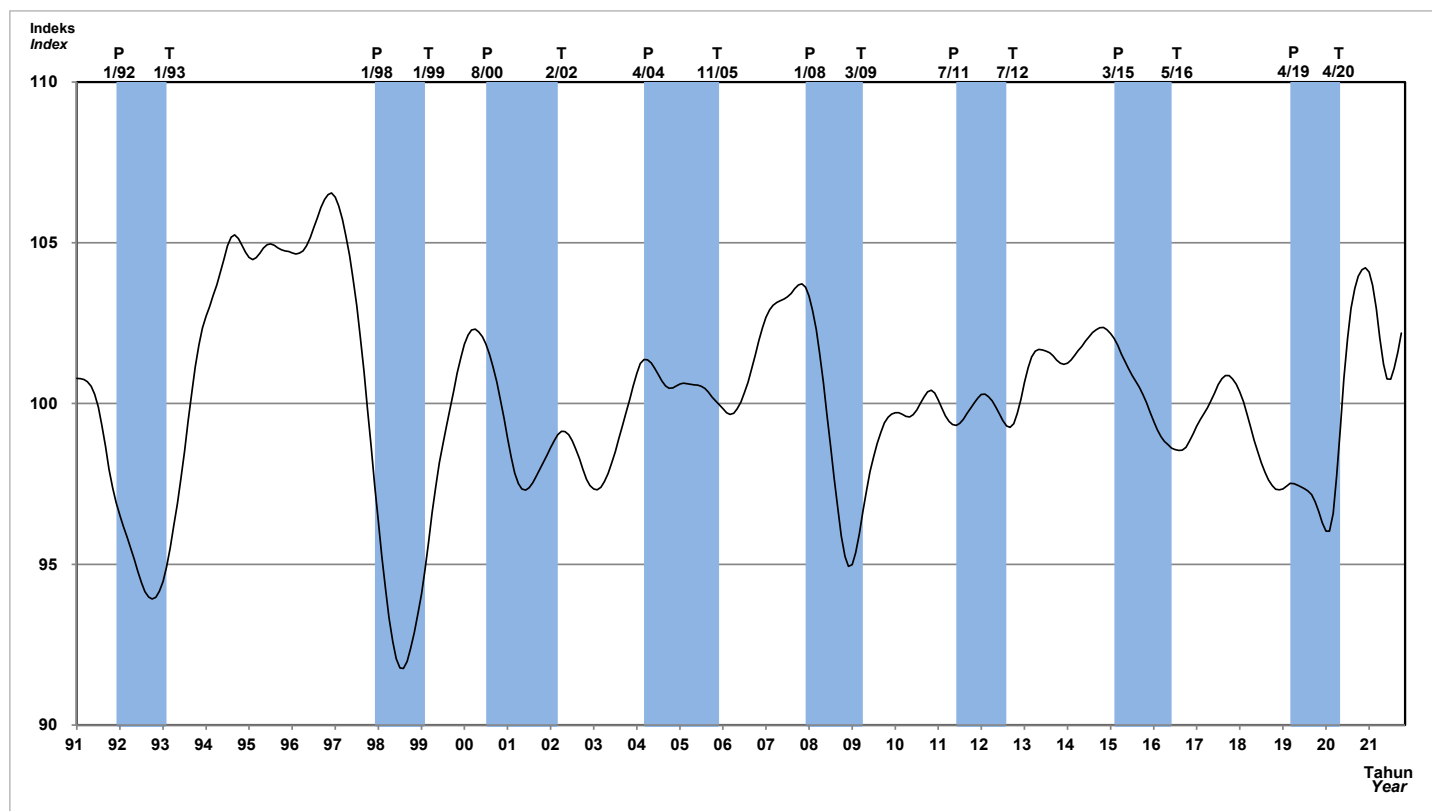
Carta 1: Kadar Pertumbuhan bagi Indeks Pelopor (Terlicin) dan Kitaran Perniagaan

Chart 1: Growth Rate of Leading Index (Smoothed) and Business Cycle



Carta 2: Indeks Komposit Pelopor dan Aktiviti Ekonomi (Arah Aliran Jangka Panjang=100)

Chart 2: Leading Composite Index and Economic Activity (Long Term Trend=100)



Nota/Note :

Kawasan berlorek adalah kemelesetan kitaran perniagaan (Carta 1) dan kemelesetan kitaran pertumbuhan (Carta 2) di Malaysia.

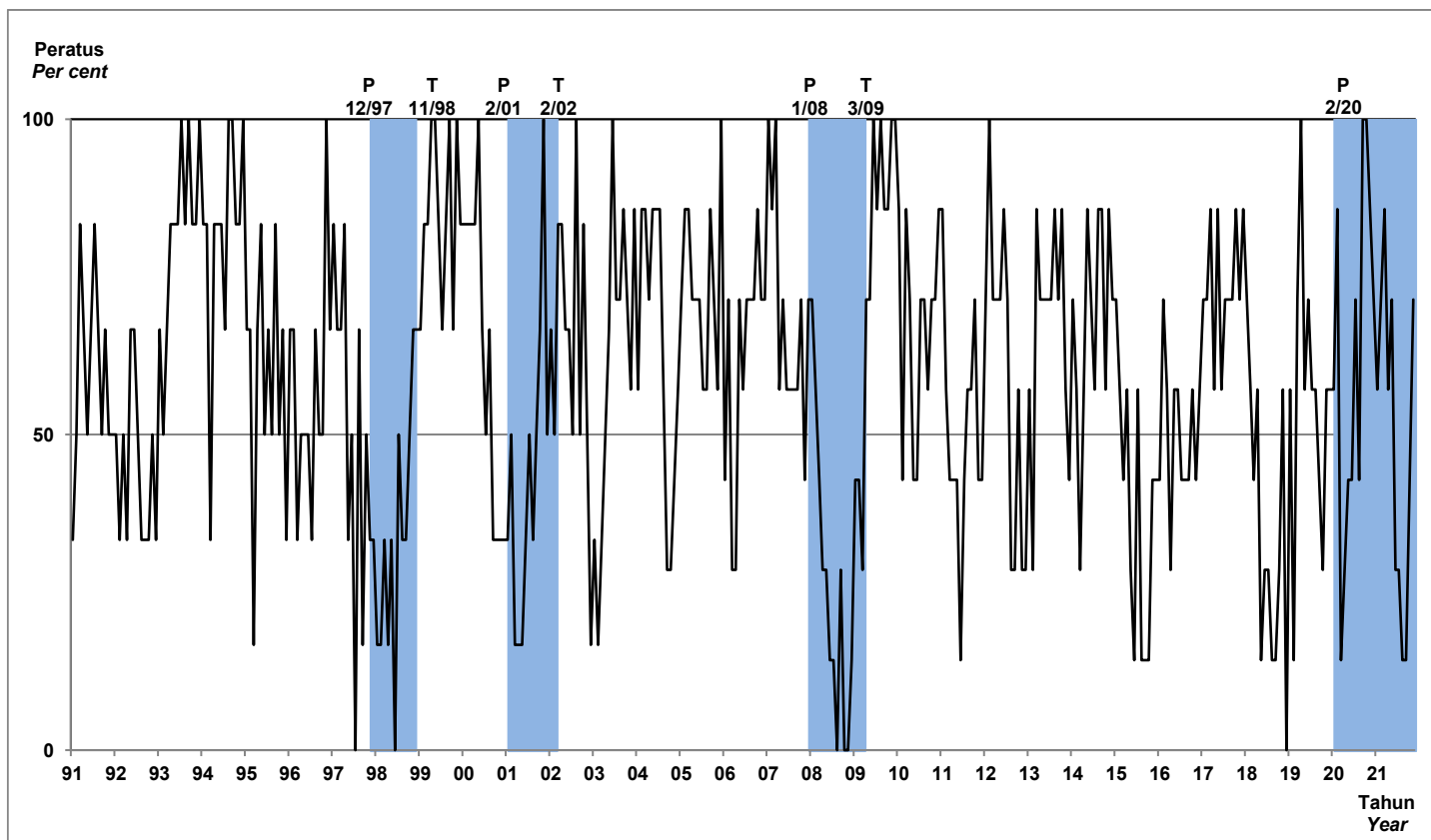
Shaded areas are business cycle recession (Chart 1) and growth cycle recession (Chart 2) in Malaysia.

P Puncak/Peak T Kawah/Trough

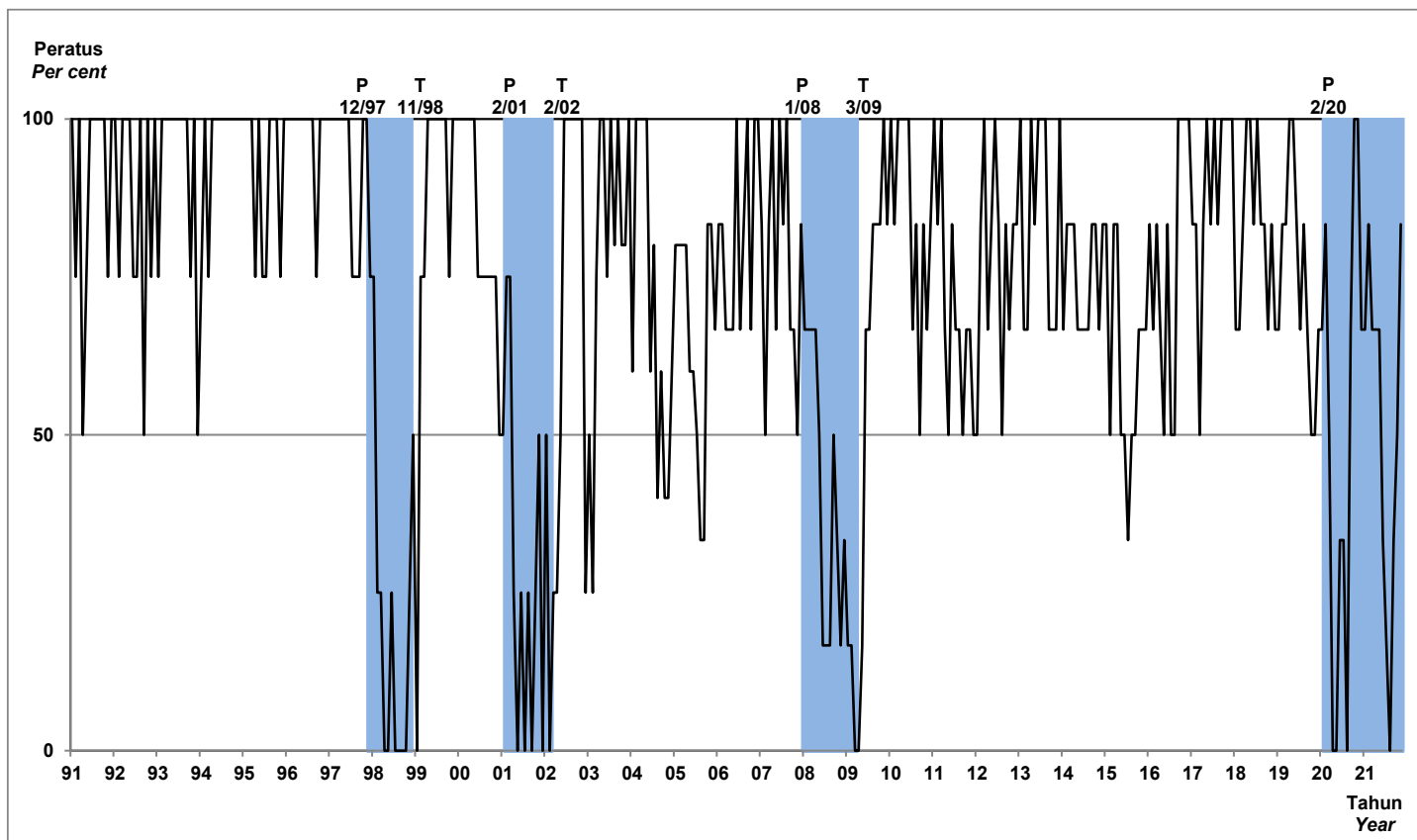
P Puncak/Peak T Kawah/Trough



Carta 3 : Indeks Difusi Pelopor dan Kitaran Perniagaan
Chart 3 : Leading Diffusion Index and Business Cycle



Carta 4 : Indeks Difusi Serentak dan Kitaran Perniagaan
Chart 4 : Coincident Diffusion Index and Business Cycle



Nota/Note :

Kawasan berlorek adalah kemelesetan kitaran perniagaan di Malaysia.

Shaded areas are business cycle recession in Malaysia.

P Puncak/Peak

T Kawah/Trough



Jadual 4 : Indeks Komposit dan Indeks Difusi

Table 4 : Composite Index and Diffusion Index

Tempoh Period	Indeks Komposit Composite Index						Indeks Difusi Diffusion Index	
	Indeks Pelopor (IP) Leading Index (LI)		Indeks Serentak (IS) Coincident Index (CI)		Indeks Susulan (ISL) Lagging Index (LG)		Indeks Pelopor (IP) Leading Index (LI)	Indeks Serentak (IS) Coincident Index (CI)
	Perubahan Tahunan Annual Change (%)		Perubahan Tahunan Annual Change (%)		Perubahan Tahunan Annual Change (%)		Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
	2015=100		2015=100		2015=100			
2000								
Jan/Jan	75.1	7.7	73.6	9.2	64.3	3.0	83.3	100.0
Feb/Feb	76.2	9.6	74.8	9.7	65.1	5.5	83.3	100.0
Mac/Mar	76.5	10.2	74.7	7.9	65.2	4.3	83.3	100.0
Apr/Apr	76.7	7.3	74.3	5.8	65.2	3.8	83.3	100.0
Mei/May	76.7	6.1	75.6	7.4	65.1	3.2	100.0	100.0
Jun/June	76.2	4.7	76.3	7.5	65.2	3.7	66.7	75.0
Jul/July	76.5	3.9	75.9	6.3	65.9	3.6	50.0	75.0
Ogos/Aug	77.1	5.0	76.7	6.8	65.9	3.6	66.7	75.0
Sep/Sep	76.1	3.0	76.9	6.1	66.2	3.3	33.3	75.0
Okt/Oct	76.4	3.8	76.8	6.2	66.3	3.1	33.3	75.0
Nov/Nov	76.2	2.7	77.3	5.7	66.5	3.1	33.3	75.0
Dis/Dec	76.1	0.0	76.8	4.2	66.8	2.5	33.3	50.0
2001								
Jan/Jan	75.7	0.8	76.9	4.5	66.8	3.9	33.3	50.0
Feb/Feb	75.9	-0.4	77.5	3.6	67.5	3.7	50.0	75.0
Mac/Mar	74.6	-2.5	77.7	4.0	67.4	3.4	16.7	75.0
Apr/Apr	74.3	-3.1	76.4	2.8	67.4	3.4	16.7	25.0
Mei/May	74.3	-3.1	75.8	0.3	67.9	4.3	16.7	0.0
Jun/June	74.8	-1.8	75.1	-1.6	66.8	2.5	33.3	25.0
Jul/July	74.9	-2.1	75.0	-1.2	67.3	2.1	50.0	0.0
Ogos/Aug	74.8	-3.0	75.0	-2.2	67.4	2.3	33.3	25.0
Sep/Sep	75.2	-1.2	74.8	-2.7	67.2	1.5	50.0	0.0
Okt/Oct	75.5	-1.2	75.0	-2.3	66.9	0.9	66.7	25.0
Nov/Nov	76.2	0.0	74.6	-3.5	66.9	0.6	100.0	50.0
Dis/Dec	75.6	-0.7	73.7	-4.0	67.1	0.4	50.0	0.0
2002								
Jan/Jan	76.4	0.9	74.0	-3.8	66.6	-0.3	66.7	50.0
Feb/Feb	76.1	0.3	73.1	-5.7	67.4	-0.1	50.0	0.0
Mac/Mar	76.7	2.8	73.7	-5.1	68.3	1.3	83.3	25.0
Apr/Apr	77.4	4.2	73.9	-3.3	69.3	2.8	83.3	25.0
Mei/May	77.5	4.3	74.4	-1.8	68.2	0.4	66.7	50.0
Jun/June	77.2	3.2	75.3	0.3	68.6	2.7	66.7	100.0
Jul/July	77.6	3.6	75.7	0.9	69.2	2.8	50.0	100.0
Ogos/Aug	77.6	3.7	75.6	0.8	69.9	3.7	100.0	100.0
Sep/Sep	77.2	2.7	75.5	0.9	69.4	3.3	50.0	100.0
Okt/Oct	77.7	2.9	75.5	0.7	69.8	4.3	83.3	100.0
Nov/Nov	78.0	2.4	75.5	1.2	69.1	3.3	50.0	100.0
Dis/Dec	75.8	0.3	74.7	1.4	68.4	1.9	16.7	25.0



Jadual 4 : Indeks Komposit dan Indeks Difusi (samb.)
Table 4 : Composite Index and Diffusion Index (cont'd)

Tempoh Period	Indeks Komposit Composite Index						Indeks Difusi Diffusion Index	
	Indeks Pelopor (IP) Leading Index (LI)		Indeks Serentak (IS) Coincident Index (CI)		Indeks Susulan (ISL) Lagging Index (LG)		Indeks Pelopor (IP) Leading Index (LI)	Indeks Serentak (IS) Coincident Index (CI)
	Perubahan 2015=100 Tahunan Annual Change (%)		Perubahan 2015=100 Tahunan Annual Change (%)		Perubahan 2015=100 Tahunan Annual Change (%)		Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
2003								
Jan/Jan	77.2	1.0	75.7	2.3	70.3	5.6	33.3	50.0
Feb/Feb	77.8	2.2	75.5	3.3	69.8	3.6	16.7	25.0
Mac/Mar	77.0	0.4	75.4	2.3	69.7	2.0	33.3	75.0
Apr/Apr	77.4	0.0	76.1	3.0	70.0	1.0	50.0	100.0
Mei/May	77.8	0.4	76.1	2.3	69.8	2.3	66.7	100.0
Jun/June	78.2	1.3	76.0	0.9	69.7	1.6	100.0	75.0
Jul/July	78.7	1.4	77.0	1.7	70.2	1.4	71.4	100.0
Ogos/Aug	78.4	1.0	76.7	1.5	70.1	0.3	71.4	80.0
Sep/Sep	79.5	3.0	76.7	1.6	70.3	1.3	85.7	100.0
Okt/Oct	80.2	3.2	77.2	2.3	70.3	0.7	71.4	80.0
Nov/Nov	80.0	2.6	77.3	2.4	70.3	1.7	57.1	80.0
Dis/Dec	80.2	5.8	78.3	4.8	70.6	3.2	85.7	100.0
2004								
Jan/Jan	80.6	4.4	78.1	3.2	71.0	1.0	57.1	60.0
Feb/Feb	81.5	4.8	78.8	4.4	70.7	1.3	85.7	100.0
Mac/Mar	83.2	8.1	78.7	4.4	70.7	1.4	85.7	100.0
Apr/Apr	82.1	6.1	79.3	4.2	71.4	2.0	71.4	100.0
Mei/May	82.0	5.4	78.6	3.3	71.2	2.0	85.7	100.0
Jun/June	82.7	5.8	78.7	3.6	71.5	2.6	85.7	60.0
Jul/July	82.3	4.6	78.6	2.1	71.4	1.7	85.7	80.0
Ogos/Aug	82.4	5.1	78.6	2.5	71.9	2.6	57.1	40.0
Sep/Sep	82.7	4.0	78.5	2.3	71.9	2.3	28.6	60.0
Okt/Oct	82.1	2.4	78.8	2.1	72.5	3.1	28.6	40.0
Nov/Nov	82.0	2.5	78.2	1.2	72.7	3.4	42.9	40.0
Dis/Dec	83.1	3.6	79.2	1.1	72.6	2.8	57.1	60.0
2005								
Jan/Jan	82.6	2.5	78.8	0.9	72.3	1.8	71.4	80.0
Feb/Feb	84.1	3.2	79.2	0.5	72.6	2.7	85.7	80.0
Mac/Mar	83.5	0.4	79.7	1.3	72.8	3.0	85.7	80.0
Apr/Apr	83.4	1.6	79.4	0.1	73.6	3.1	71.4	80.0
Mei/May	83.6	2.0	79.0	0.5	73.7	3.5	71.4	60.0
Jun/June	83.5	1.0	79.3	0.8	74.3	3.9	71.4	60.0
Jul/July	84.2	2.3	79.0	0.5	73.6	3.1	57.1	50.0
Ogos/Aug	84.1	2.1	79.6	1.3	74.5	3.6	57.1	33.3
Sep/Sep	84.6	2.3	80.0	1.9	74.6	3.8	85.7	33.3
Okt/Oct	84.8	3.3	80.3	1.9	75.0	3.4	71.4	83.3
Nov/Nov	83.4	1.7	80.5	2.9	74.6	2.6	57.1	83.3
Dis/Dec	84.9	2.2	80.3	1.4	75.0	3.3	100.0	66.7



Jadual 4 : Indeks Komposit dan Indeks Difusi (samb.)

Table 4 : Composite Index and Diffusion Index (cont'd)

Tempoh Period	Indeks Komposit Composite Index						Indeks Difusi Diffusion Index	
	Indeks Pelopor (IP) Leading Index (LI)		Indeks Serentak (IS) Coincident Index (CI)		Indeks Susulan (ISL) Lagging Index (LG)		Indeks Pelopor (IP) Leading Index (LI)	Indeks Serentak (IS) Coincident Index (CI)
	Perubahan 2015=100 Tahunan Annual Change (%)		Perubahan 2015=100 Tahunan Annual Change (%)		Perubahan 2015=100 Tahunan Annual Change (%)		Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
2006								
Jan/Jan	84.2	1.9	80.4	2.0	74.8	3.5	42.9	83.3
Feb/Feb	85.7	1.9	81.8	3.3	74.6	2.8	71.4	83.3
Mac/Mar	84.2	0.8	82.2	3.1	75.7	4.0	28.6	66.7
Apr/Apr	84.2	1.0	82.3	3.7	75.4	2.4	28.6	66.7
Mei/May	84.9	1.6	82.9	4.9	75.8	2.8	71.4	66.7
Jun/June	85.4	2.3	83.5	5.3	75.3	1.3	57.1	100.0
Jul/July	85.2	1.2	83.5	5.7	75.5	2.6	71.4	66.7
Ogos/Aug	86.4	2.7	84.2	5.8	75.8	1.7	71.4	83.3
Sep/Sep	85.8	1.4	84.8	6.0	75.9	1.7	71.4	100.0
Okt/Oct	86.6	2.1	84.1	4.7	76.3	1.7	85.7	66.7
Nov/Nov	87.4	4.8	86.4	7.3	76.0	1.9	71.4	100.0
Dis/Dec	87.4	2.9	85.5	6.5	76.2	1.6	71.4	100.0
2007								
Jan/Jan	88.5	5.1	85.6	6.5	76.7	2.5	100.0	83.3
Feb/Feb	88.8	3.6	85.1	4.0	76.5	2.5	85.7	50.0
Mac/Mar	89.3	6.1	88.2	7.3	76.1	0.5	100.0	83.3
Apr/Apr	88.9	5.6	87.9	6.8	77.2	2.4	57.1	100.0
Mei/May	89.7	5.7	88.3	6.5	77.4	2.1	71.4	66.7
Jun/June	89.2	4.4	87.7	5.0	78.0	3.6	57.1	100.0
Jul/July	90.0	5.6	87.9	5.3	78.1	3.4	57.1	83.3
Ogos/Aug	89.5	3.6	87.9	4.4	78.2	3.2	57.1	100.0
Sep/Sep	89.4	4.2	88.5	4.4	78.6	3.6	57.1	66.7
Okt/Oct	90.9	5.0	88.0	4.6	79.3	3.9	71.4	66.7
Nov/Nov	90.2	3.2	89.0	3.0	79.2	4.2	42.9	50.0
Dis/Dec	91.4	4.6	89.8	5.0	79.4	4.2	71.4	83.3
2008								
Jan/Jan	91.2	3.1	87.7	2.5	79.8	4.0	71.4	66.7
Feb/Feb	90.9	2.4	87.0	2.2	79.8	4.3	57.1	66.7
Mac/Mar	90.4	1.2	86.5	-1.9	79.4	4.3	42.9	66.7
Apr/Apr	90.8	2.1	86.9	-1.1	81.2	5.2	28.6	66.7
Mei/May	90.4	0.8	86.2	-2.4	81.6	5.4	28.6	50.0
Jun/June	89.3	0.1	85.3	-2.7	82.2	5.4	14.3	16.7
Jul/July	88.5	-1.7	86.0	-2.2	82.2	5.2	14.3	16.7
Ogos/Aug	87.6	-2.1	85.5	-2.7	82.3	5.2	0.0	16.7
Sep/Sep	88.5	-1.0	86.1	-2.7	83.9	6.7	28.6	50.0
Okt/Oct	87.2	-4.1	84.6	-3.9	82.8	4.4	0.0	33.3
Nov/Nov	86.5	-4.1	83.3	-6.4	84.1	6.2	0.0	16.7
Dis/Dec	84.7	-7.3	81.9	-8.8	84.3	6.2	14.3	33.3



Jadual 4 : Indeks Komposit dan Indeks Difusi (samb.)
Table 4 : Composite Index and Diffusion Index (cont'd)

Tempoh Period	Indeks Komposit Composite Index						Indeks Difusi Diffusion Index	
	Indeks Pelopor (IP) Leading Index (LI)		Indeks Serentak (IS) Coincident Index (CI)		Indeks Susulan (ISL) Lagging Index (LG)		Indeks Pelopor (IP) Leading Index (LI)	Indeks Serentak (IS) Coincident Index (CI)
	Perubahan 2015=100 Tahunan Annual Change (%)		Perubahan 2015=100 Tahunan Annual Change (%)		Perubahan 2015=100 Tahunan Annual Change (%)		Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
2009								
Jan/Jan	85.2	-6.6	80.5	-8.2	82.7	3.6	42.9	16.7
Feb/Feb	85.4	-6.1	81.3	-6.6	82.7	3.6	42.9	16.7
Mac/Mar	85.7	-5.2	79.4	-8.2	82.9	4.4	28.6	0.0
Apr/Apr	87.8	-3.3	79.8	-8.2	81.3	0.1	71.4	0.0
Mei/May	88.0	-2.7	79.8	-7.4	82.2	0.7	71.4	16.7
Jun/June	88.8	-0.6	80.8	-5.3	82.4	0.2	100.0	66.7
Jul/July	89.7	1.4	82.3	-4.3	82.6	0.5	85.7	66.7
Ogos/Aug	89.5	2.2	82.6	-3.4	83.3	1.2	100.0	83.3
Sep/Sep	89.5	1.1	82.3	-4.4	83.2	-0.8	85.7	83.3
Okt/Oct	89.9	3.1	83.6	-1.2	83.6	1.0	85.7	83.3
Nov/Nov	91.6	5.9	83.7	0.5	83.8	-0.4	100.0	100.0
Dis/Dec	91.2	7.7	84.0	2.6	84.6	0.4	100.0	83.3
2010								
Jan/Jan	90.8	6.6	85.0	5.6	84.3	1.9	85.7	100.0
Feb/Feb	91.1	6.7	85.2	4.8	85.0	2.8	42.9	83.3
Mac/Mar	92.5	7.9	86.8	9.3	85.4	3.0	85.7	100.0
Apr/Apr	91.4	4.1	86.8	8.8	85.3	4.9	71.4	100.0
Mei/May	91.4	3.9	87.4	9.5	85.3	3.8	42.9	100.0
Jun/June	91.6	3.2	87.2	7.9	85.9	4.2	42.9	100.0
Jul/July	91.3	1.8	86.9	5.6	85.3	3.3	71.4	66.7
Ogos/Aug	92.2	3.0	87.5	5.9	86.2	3.5	71.4	83.3
Sep/Sep	92.5	3.4	87.9	6.8	85.9	3.2	57.1	50.0
Okt/Oct	92.5	2.9	88.8	6.2	85.6	2.4	71.4	83.3
Nov/Nov	93.4	2.0	88.9	6.2	86.0	2.6	71.4	66.7
Dis/Dec	94.1	3.2	88.8	5.7	86.1	1.8	85.7	83.3
2011								
Jan/Jan	93.9	3.4	90.3	6.2	87.5	3.8	85.7	100.0
Feb/Feb	93.2	2.3	88.7	4.1	86.6	1.9	57.1	83.3
Mac/Mar	93.0	0.5	90.4	4.1	87.4	2.3	42.9	100.0
Apr/Apr	92.8	1.5	89.8	3.5	89.0	4.3	42.9	66.7
Mei/May	92.9	1.6	89.6	2.5	88.4	3.6	42.9	50.0
Jun/June	93.3	1.9	90.4	3.7	89.3	4.0	14.3	83.3
Jul/July	93.0	1.9	91.8	5.6	89.3	4.7	42.9	66.7
Ogos/Aug	93.2	1.1	90.7	3.7	89.6	3.9	57.1	66.7
Sep/Sep	93.5	1.1	90.2	2.6	89.2	3.8	57.1	50.0
Okt/Oct	94.6	2.3	89.9	1.2	90.2	5.4	71.4	66.7
Nov/Nov	94.2	0.9	90.4	1.7	90.4	5.1	42.9	66.7
Dis/Dec	94.0	-0.1	90.5	1.9	90.7	5.3	42.9	50.0



Jadual 4 : Indeks Komposit dan Indeks Difusi (samb.)

Table 4 : Composite Index and Diffusion Index (cont'd)

Tempoh Period	Indeks Komposit Composite Index						Indeks Difusi Diffusion Index	
	Indeks Pelopor (IP) Leading Index (LI)		Indeks Serentak (IS) Coincident Index (CI)		Indeks Susulan (ISL) Lagging Index (LG)		Indeks Pelopor (IP) Leading Index (LI)	Indeks Serentak (IS) Coincident Index (CI)
	Perubahan 2015=100 Tahunan Annual Change (%)		Perubahan 2015=100 Tahunan Annual Change (%)		Perubahan 2015=100 Tahunan Annual Change (%)		Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
2012								
Jan/Jan	94.4	0.5	90.3	0.0	90.4	3.3	71.4	50.0
Feb/Feb	96.1	3.1	93.2	5.1	90.5	4.5	100.0	83.3
Mac/Mar	95.2	2.4	92.9	2.8	91.8	5.0	71.4	100.0
Apr/Apr	94.9	2.3	92.1	2.6	92.4	3.8	71.4	66.7
Mei/May	95.2	2.5	92.6	3.3	92.3	4.4	71.4	83.3
Jun/June	95.6	2.5	92.6	2.4	91.9	2.9	85.7	100.0
Jul/July	95.2	2.4	92.2	0.4	91.3	2.2	71.4	83.3
Ogos/Aug	95.3	2.3	93.0	2.5	92.5	3.2	28.6	50.0
Sep/Sep	94.7	1.3	93.0	3.1	91.8	2.9	28.6	83.3
Okt/Oct	95.0	0.4	93.0	3.4	92.4	2.4	57.1	66.7
Nov/Nov	94.3	0.1	93.8	3.8	92.5	2.3	28.6	83.3
Dis/Dec	95.5	1.6	93.5	3.3	92.8	2.3	28.6	83.3
2013								
Jan/Jan	95.7	1.4	94.3	4.4	93.1	3.0	57.1	100.0
Feb/Feb	97.1	1.0	93.5	0.3	92.7	2.4	28.6	66.7
Mac/Mar	98.0	2.9	94.9	2.2	93.8	2.2	85.7	66.7
Apr/Apr	98.3	3.6	95.2	3.4	93.2	0.9	71.4	100.0
Mei/May	98.3	3.3	95.5	3.1	93.9	1.7	71.4	83.3
Jun/June	97.9	2.4	95.1	2.7	93.9	2.2	71.4	100.0
Jul/July	97.5	2.4	96.1	4.2	94.7	3.7	71.4	100.0
Ogos/Aug	97.9	2.7	95.6	2.8	93.6	1.2	85.7	100.0
Sep/Sep	98.8	4.3	96.1	3.3	94.5	2.9	71.4	66.7
Okt/Oct	98.9	4.1	96.5	3.8	93.1	0.8	85.7	66.7
Nov/Nov	98.2	4.1	96.8	3.2	95.4	3.1	57.1	66.7
Dis/Dec	97.8	2.4	97.5	4.3	96.1	3.6	42.9	100.0
2014								
Jan/Jan	98.2	2.6	97.0	2.9	96.5	3.7	71.4	66.7
Feb/Feb	98.6	1.5	97.3	4.1	96.5	4.1	57.1	83.3
Mac/Mar	98.2	0.2	96.2	1.4	96.8	3.2	28.6	83.3
Apr/Apr	99.6	1.3	97.8	2.7	98.5	5.7	57.1	83.3
Mei/May	99.4	1.1	97.7	2.3	97.5	3.8	85.7	66.7
Jun/June	98.9	1.0	98.2	3.3	97.8	4.2	71.4	66.7
Jul/July	99.7	2.3	98.3	2.3	97.3	2.7	57.1	66.7
Ogos/Aug	99.7	1.8	99.2	3.8	97.9	4.6	85.7	66.7
Sep/Sep	100.4	1.6	99.0	3.0	97.8	3.5	85.7	83.3
Okt/Oct	99.7	0.8	99.1	2.7	98.5	5.8	57.1	83.3
Nov/Nov	100.5	2.3	99.1	2.4	97.9	2.6	85.7	66.7
Dis/Dec	101.0	3.3	99.6	2.2	97.7	1.7	71.4	83.3



Jadual 4 : Indeks Komposit dan Indeks Difusi (samb.)

Table 4 : Composite Index and Diffusion Index (cont'd)

Tempoh Period	Indeks Komposit Composite Index						Indeks Difusi Diffusion Index	
	Indeks Pelopor (IP) Leading Index (LI)		Indeks Serentak (IS) Coincident Index (CI)		Indeks Susulan (ISL) Lagging Index (LG)		Indeks Pelopor (IP) Leading Index (LI)	Indeks Serentak (IS) Coincident Index (CI)
	Perubahan 2015=100 Tahunan Annual Change (%)		Perubahan 2015=100 Tahunan Annual Change (%)		Perubahan 2015=100 Tahunan Annual Change (%)		Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
2015								
Jan/Jan	100.3	2.1	100.2	3.3	98.9	2.5	71.4	83.3
Feb/Feb	99.8	1.2	99.8	2.6	98.9	2.5	57.1	50.0
Mac/Mar	101.1	3.0	100.5	4.5	99.8	3.1	42.9	83.3
Apr/Apr	100.8	1.2	99.8	2.0	98.5	0.0	57.1	83.3
Mei/May	99.4	0.0	99.4	1.7	99.6	2.2	28.6	50.0
Jun/June	99.8	0.9	99.6	1.4	99.8	2.0	14.3	50.0
Jul/July	100.3	0.6	98.9	0.6	100.0	2.8	57.1	33.3
Ogos/Aug	99.1	-0.6	99.8	0.6	99.6	1.7	14.3	50.0
Sep/Sep	100.0	-0.4	100.2	1.2	100.4	2.7	14.3	50.0
Okt/Oct	99.9	0.2	100.5	1.4	101.4	2.9	14.3	66.7
Nov/Nov	99.6	-0.9	100.5	1.4	101.9	4.1	42.9	66.7
Dis/Dec	99.8	-1.2	100.8	1.2	101.2	3.6	42.9	66.7
2016								
Jan/Jan	99.3	-1.0	101.9	1.7	100.5	1.6	42.9	83.3
Feb/Feb	98.7	-1.1	102.0	2.2	101.0	2.1	71.4	66.7
Mac/Mar	99.0	-2.1	101.8	1.3	100.7	0.9	57.1	83.3
Apr/Apr	98.2	-2.6	101.4	1.6	100.5	2.0	28.6	66.7
Mei/May	98.8	-0.6	101.3	1.9	100.5	0.9	57.1	50.0
Jun/June	99.5	-0.3	102.3	2.7	101.7	1.9	57.1	83.3
Jul/July	97.9	-2.4	101.5	2.6	100.4	0.4	42.9	50.0
Ogos/Aug	99.3	0.2	102.3	2.5	102.5	2.9	42.9	50.0
Sep/Sep	99.3	-0.7	103.5	3.3	103.1	2.7	42.9	100.0
Okt/Oct	98.6	-1.3	103.5	3.0	102.4	1.0	57.1	100.0
Nov/Nov	98.2	-1.4	103.8	3.3	103.2	1.3	42.9	100.0
Dis/Dec	99.5	-0.3	104.2	3.4	103.8	2.6	57.1	100.0
2017								
Jan/Jan	99.9	0.6	103.8	1.9	103.6	3.1	71.4	83.3
Feb/Feb	100.0	1.3	104.7	2.6	104.0	3.0	71.4	83.3
Mac/Mar	100.9	1.9	105.2	3.3	105.0	4.3	85.7	50.0
Apr/Apr	99.7	1.5	105.7	4.2	105.7	5.2	57.1	83.3
Mei/May	100.9	2.1	106.5	5.1	104.9	4.4	85.7	100.0
Jun/June	100.2	0.7	106.7	4.3	105.9	4.1	57.1	83.3
Jul/July	100.8	3.0	107.2	5.6	106.0	5.6	71.4	100.0
Ogos/Aug	102.0	2.7	107.2	4.8	107.2	4.6	71.4	83.3
Sep/Sep	102.1	2.8	107.2	3.6	105.9	2.7	71.4	100.0
Okt/Oct	101.9	3.3	107.3	3.7	107.3	4.8	85.7	100.0
Nov/Nov	102.6	4.5	107.7	3.8	107.2	3.9	71.4	100.0
Dis/Dec	101.4	1.9	107.8	3.5	107.6	3.7	85.7	100.0



Jadual 4 : Indeks Komposit dan Indeks Difusi (samb.)

Table 4 : Composite Index and Diffusion Index (cont'd)

Tempoh Period	Indeks Komposit Composite Index						Indeks Difusi Diffusion Index	
	Indeks Pelopor (IP) Leading Index (LI)		Indeks Serentak (IS) Coincident Index (CI)		Indeks Susulan (ISL) Lagging Index (LG)		Indeks Pelopor (IP) Leading Index (LI)	Indeks Serentak (IS) Coincident Index (CI)
	Perubahan Tahunan Annual Change (%)		Perubahan Tahunan Annual Change (%)		Perubahan Tahunan Annual Change (%)		Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
	2015=100		2015=100		2015=100			
2018								
Jan/Jan	102.3	2.4	107.4	3.5	109.1	5.3	71.4	66.7
Feb/Feb	102.2	2.2	108.8	3.9	108.9	4.7	57.1	66.7
Mac/Mar	102.2	1.3	109.8	4.4	110.5	5.2	42.9	83.3
Apr/Apr	102.0	2.3	110.7	4.7	111.4	5.4	57.1	100.0
Mei/May	100.7	-0.2	110.1	3.4	111.1	5.9	14.3	100.0
Jun/June	100.8	0.6	110.0	3.1	110.3	4.2	28.6	83.3
Jul/July	100.6	-0.2	110.1	2.7	111.7	5.4	28.6	100.0
Ogos/Aug	100.9	-1.1	110.2	2.8	112.1	4.6	14.3	83.3
Sep/Sep	100.0	-2.1	111.3	3.8	111.5	5.3	14.3	83.3
Okt/Oct	100.3	-1.6	111.4	3.8	113.6	5.9	28.6	66.7
Nov/Nov	100.3	-2.2	110.6	2.7	113.5	5.9	57.1	83.3
Dis/Dec	99.3	-2.1	110.8	2.8	113.3	5.3	0.0	66.7
2019								
Jan/Jan	100.9	-1.4	111.6	3.9	114.5	4.9	57.1	66.7
Feb/Feb	99.0	-3.1	112.8	3.7	116.0	6.5	14.3	83.3
Mac/Mar	100.4	-1.8	112.6	2.6	113.7	2.9	71.4	83.3
Apr/Apr	102.8	0.8	114.6	3.5	114.5	2.8	100.0	100.0
Mei/May	100.8	0.1	114.3	3.8	115.1	3.6	57.1	100.0
Jun/June	100.1	-0.7	112.6	2.4	113.4	2.8	71.4	83.3
Jul/July	101.2	0.6	112.0	1.7	114.9	2.9	57.1	66.7
Ogos/Aug	100.5	-0.4	112.6	2.2	115.3	2.9	57.1	83.3
Sep/Sep	100.6	0.6	113.5	2.0	114.9	3.0	42.9	66.7
Okt/Oct	102.5	2.2	113.5	1.9	115.5	1.7	28.6	50.0
Nov/Nov	101.8	1.5	113.2	2.4	115.2	1.5	57.1	50.0
Dis/Dec	101.5	2.2	112.9	1.9	116.2	2.6	57.1	66.7
2020								
Jan/Jan	101.7	0.8	113.5	1.7	115.9	1.2	57.1	66.7
Feb/Feb	102.5	3.5	116.7	3.5	115.4	-0.5	85.7	83.3
Mac/Mar	96.6	-3.8	110.0	-2.3	107.9	-5.1	14.3	50.0
Apr/Apr	96.6	-6.0	95.9	-16.3	118.8	3.8	28.6	0.0
Mei/May	101.6	0.8	103.5	-9.4	123.1	7.0	42.9	0.0
Jun/June	105.1	5.0	109.9	-2.4	123.1	8.6	42.9	33.3
Jul/July	109.4	8.1	109.5	-2.2	124.5	8.4	71.4	33.3
Ogos/Aug	108.7	8.2	110.0	-2.3	124.8	8.2	42.9	0.0
Sep/Sep	109.8	9.1	112.1	-1.2	126.5	10.1	100.0	66.7
Okt/Oct	109.2	6.5	111.0	-2.2	124.4	7.7	100.0	100.0
Nov/Nov	109.4	7.5	111.0	-1.9	124.6	8.2	85.7	100.0
Dis/Dec	109.2	7.6	111.4	-1.3	125.4	7.9	71.4	66.7



Jadual 4 : Indeks Komposit dan Indeks Difusi (samb.)

Table 4 : Composite Index and Diffusion Index (cont'd)

Tempoh Period	Indeks Komposit Composite Index						Indeks Difusi Diffusion Index	
	Indeks Pelopor (IP) Leading Index (LI)		Indeks Serentak (IS) Coincident Index (CI)		Indeks Susulan (ISL) Lagging Index (LG)		Indeks Pelopor (IP) Leading Index (LI)	Indeks Serentak (IS) Coincident Index (CI)
	Perubahan Tahunan Annual Change (%)		Perubahan Tahunan Annual Change (%)		Perubahan Tahunan Annual Change (%)		Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
	2015=100		2015=100		2015=100			
2021								
Jan/Jan	110.1	8.3	111.0	-2.2	123.8	6.8	57.1	66.7
Feb/Feb	111.2	8.5	114.4	-2.0	125.4	8.7	71.4	83.3
Mac/Mar	113.2	17.2	114.5	4.1	127.1	17.8	85.7	66.7
Apr/Apr	111.7	15.6	115.3	20.2	127.5	7.3	57.1	66.7
Mei/May	108.7	7.0	113.8	10.0	127.2	3.3	71.4	66.7
Jun/June	105.6	0.5	106.5	-3.1	118.7	-3.6	28.6	33.3
Jul/July	105.0	-4.0	103.8	-5.2	124.4	-0.1	28.6	16.7
Ogos/Aug	106.2	-2.3	108.2	-1.6	125.6	0.6	14.3	0.0
Sep/Sep	110.5	0.6	112.4	0.3	130.2	2.9	14.3	33.3
Okt/Oct	109.5	0.3	113.3	2.1	129.3	3.9	42.9	50.0
Nov/Nov	111.3	1.7	114.3	3.0	129.9	4.3	71.4	83.3
Dis/Dec								

PENGASASAN SEMULA INDEKS PELOPOR, SERENTAK & SUSULAN MALAYSIA KEPADA TAHUN ASAS 2015

1.0 PENGENALAN

- 1.1 Penunjuk Ekonomi Malaysia yang terdiri daripada Indeks Pelopor, Serentak dan Susulan telah diasaskan semula kepada tahun 2015 berbanding tahun 2005. Pengasasan semula ini dilaksanakan bagi menambahbaik konsep dan metodologi penyusunan selaras dengan amalan terbaik antarabangsa.
- 1.2 Pengasasan semula indeks kepada tahun asas 2015 dilaksanakan meliputi beberapa perkara iaitu:
 - i. Penambahbaikan ujian pelarasan musim menggunakan pakej standard pelarasan bermusim. Pelarasan bermusim telah dilaksanakan bagi data siri masa terdahulu sehingga terkini.
 - ii. Penambahbaikan kerangka penyusunan indeks.

2.0 OBJEKTIF

Objektif utama Penunjuk Ekonomi Malaysia adalah untuk memantau prestasi ekonomi Malaysia secara bulanan dan membantu penggubal dasar, pelabur, penyelidik serta masyarakat umum untuk menilai prestasi ekonomi.

3.0 SUMBER DATA

Data bagi penyediaan Indeks Komposit dan Indeks Difusi diperoleh daripada Jabatan Perangkaan Malaysia serta agensi berikut:

- i. Kementerian Perumahan dan Kerajaan Tempatan (KPKT);
- ii. Bank Negara Malaysia (BNM);
- iii. Jabatan Pengangkutan Jalan (JPJ);
- iv. Lembaga Pembangunan Pelaburan Malaysia (MIDA); dan
- v. Kumpulan Wang Simpanan Pekerja (KWSP).

4.0 METODOLOGI

- 4.1 Pemilihan setiap komponen bagi Indeks Komposit adalah mengikut garis panduan yang terkandung dalam *Business Cycle Indicators Handbook*¹ iaitu:
 - i. **Keakuran terhadap kitaran perniagaan**
Data siri yang dipilih perlu seiring dengan kitaran perniagaan.
 - ii. **Konsisten terhadap fungsi indeks**
Data siri perlu sentiasa berfungsi secara konsisten sama ada sebagai indeks pelopor, serentak atau susulan.
 - iii. **Signifikan terhadap ekonomi**
Data siri yang dipilih perlu menyumbang secara signifikan kepada aktiviti ekonomi.
 - iv. **Kecukupan statistik**
Data mestilah dikumpul dan diproses dengan menggunakan kaedah statistik yang diprakeru.
 - v. **Kelicinan**
Pergerakan data siri masa bulan ke bulan mestilah licin dan tidak banyak elemen ketidaktentuan.
 - vi. **Ketepatan**
Komponen yang terpilih mestilah mempunyai data siri yang bertepatan masa, tepat dan terkini untuk menghasilkan penunjuk yang berguna kepada analisis semasa.
- 4.2 Data siri masa yang terpilih perlu menjalani ujian pelarasan musim bagi mengeluarkan pengaruh musim terhadap data siri tersebut.

¹ McGuckin R.H. *et al.* (2000) *Business Cycle Indicators Handbook*. The Conference Board, United States.

5.0 KONSEP DAN DEFINISI

5.1 Indeks Komposit

Indeks Komposit merupakan gabungan komponen individu yang digunakan untuk mengukur gelagat kitaran ekonomi. Kebaikan Indeks Komposit berbanding analisis komponen individu ialah ianya dapat mengeluarkan pengaruh ketidakstabilan sesuatu komponen. Pada umumnya, Indeks Komposit lebih berupaya menghasilkan isyarat titik pusing yang jelas dan konsisten berbanding penunjuk secara individu. Terdapat tiga jenis Indeks Komposit dalam Penunjuk Ekonomi Malaysia iaitu indeks pelopor, serentak dan susulan.

i. **Indeks Pelopor (IP)**

Indeks Pelopor merupakan ukuran jangkaan keseluruhan aktiviti ekonomi untuk masa hadapan. Indeks ini memberitahu kita ke mana arah tuju ekonomi.

ii. **Indeks Serentak (IS)**

Indeks Serentak merupakan ukuran komprehensif terhadap prestasi keseluruhan ekonomi semasa.

iii. **Indeks Susulan (ISL)**

Indeks Susulan berfungsi sebagai pengesah kepada isyarat Indeks Pelopor dan Indeks Serentak.

5.2 Indeks Difusi

Indeks Difusi adalah pelengkap kepada Indeks Komposit. Ia digunakan untuk membantu membuat keputusan terutamanya dalam penentuan titik pusing kitaran ekonomi.

Nilai 100 bagi Indeks Difusi menunjukkan semua komponen meningkat dan nilai sifar bermaksud semua komponen mengalami penurunan. Sebagai contoh, nilai Indeks Difusi pada 85 mata bagi IP menunjukkan bahawa 85 peratus komponen IP meningkat pada bulan berkenaan.

5.3 Kitaran Perniagaan

Kitaran perniagaan merujuk kepada turun naik aktiviti ekonomi agregat seperti pengeluaran, pendapatan, guna tenaga, perdagangan dan sebagainya. Terdapat 2 fasa utama kitaran perniagaan iaitu fasa pengembangan dan kemelesetan.

Peningkatan dari titik kawah ke puncak ditakrifkan sebagai fasa pengembangan manakala penurunan dari titik puncak ke kawah ditakrifkan sebagai fasa kemelesetan. Fasa kemelesetan kitaran perniagaan ditentukan oleh kejatuhan Indeks Komposit Serentak sekurang-kurangnya enam bulan secara berturut-turut.

Sebagai contoh, Paparan 1 menunjukkan puncak bagi kitaran kelima Indeks Serentak pada Januari 2008 menandakan bermulanya fasa kemelesetan ekonomi dan kawah pada Mac 2009 menandakan berakhirnya fasa kemelesetan atau bermulanya fasa pengembangan ekonomi.

Paparan 1: Tempoh Rujukan Kitaran Perniagaan Malaysia

Kitaran Penuh (Bulan)	Tempoh Rujukan	Kawah ke Puncak (Bulan)	Puncak ke Kawah (Bulan)	Tempoh Rujukan
Kitaran Pertama (-)	Jul 74		7	Jul 74 - Feb 75
Kitaran Kedua (131)	Feb 75 - Jan 85	119	12	Jan 85 - Jan 86
Kitaran Ketiga (154)	Jan 86 - Dis 97	143	11	Dis 97 - Nov 98
Kitaran Keempat (39)	Nov 98 - Feb 01	27	12	Feb 01 - Feb 02
Kitaran Kelima (85)	Feb 02 - Jan 08	71	14	Jan 08 - Mac 09
Kitaran Keenam (-)	Mac 09 - Feb 20	131		Feb 20
Purata		98	11	

5.4 Kitaran Pertumbuhan

Kitaran pertumbuhan ialah turun naik aktiviti ekonomi agregat di sepanjang arah aliran jangka panjangnya. Arah aliran jangka panjang aktiviti ekonomi agregat dianggarkan menggunakan kaedah *Hodrick Prescott Filter* terhadap Indeks Serentak. Kitaran pertumbuhan dihasilkan melalui penyisihan indeks daripada arah aliran jangka panjangnya.

Puncak kitaran pertumbuhan bermaksud berakhirnya fasa kenaikan dan bermulanya fasa penurunan pertumbuhan ekonomi. Sementara kawah bagi kitaran pertumbuhan menunjukkan berakhirnya fasa penurunan atau bermulanya fasa kenaikan pertumbuhan ekonomi.

Sebagai contoh, Paparan 2 menunjukkan titik puncak bagi kitaran kesembilan pada bulan April 2004 menandakan bahawa ekonomi telah memasuki fasa pertumbuhan perlahan dan kawah bagi kitaran pertumbuhan pada November 2005 menunjukkan bermulanya fasa pertumbuhan tinggi.

Paparan 2: Tempoh Rujukan Kitaran Pertumbuhan Malaysia

Kitaran Penuh (Bulan)	Tempoh Rujukan	Kawah ke Puncak (Bulan)	Puncak ke Kawah (Bulan)	Tempoh Rujukan
Kitaran Pertama (25)	Feb 73 - Mei 74	15	10	Mei 74 - Mac 75
Kitaran Kedua (28)	Mac 75 - Nov 76	20	8	Nov 76 - Jul 77
Kitaran Ketiga (64)	Jul 77 - Jul 81	48	16	Jul 81 - Nov 82
Kitaran Keempat (50)	Nov 82 - Jan 85	26	24	Jan 85 - Jan 87
Kitaran Kelima (39)	Jan 87 - Okt 88	21	18	Okt 88 - Apr 90
Kitaran Keenam (33)	Apr 90 - Jan 92	21	12	Jan 92 - Jan 93
Kitaran Ketujuh (72)	Jan 93 - Jan 98	60	12	Jan 98 - Jan 99
Kitaran Kelapan (37)	Jan 99 - Ogo 00	19	18	Ogo 00 - Feb 02
Kitaran Kesembilan (45)	Feb 02 - Apr 04	26	19	Apr 04 - Nov 05
Kitaran Kesepuluh (40)	Nov 05 - Jan 08	26	14	Jan 08 - Mac 09
Kitaran Kesebelas (40)	Mac 09 - Jul 11	28	12	Jul 11 - Jul 12
Kitaran Keduabelas (46)	Jul 12 - Mac 15	32	14	Mac 15 - Mei 16
Kitaran Ketigabelas (47)	Mei 16 - Apr 19	35	12	Apr 19 - Apr 20
Purata		29	15	

6.0 KEKANGAN PENUNJUK EKONOMI MALAYSIA

Terdapat beberapa kekangan Penunjuk Ekonomi Malaysia yang perlu diambil perhatian oleh pengguna:

- Indeks Pelopor tidak dapat mengukur atau meramal perubahan magnitud dalam aktiviti ekonomi. Indeks ini hanya menunjukkan arah tuju ekonomi di masa hadapan.
- Indeks Serentak tidak menggambarkan tahap situasi ekonomi semasa. Justeru itu, ia tidak boleh ditafsirkan sebagai aras Keluaran Dalam Negeri Kasar (KDNK) semasa bulanan.
- Sistem penunjuk ekonomi tidak berupaya untuk mengambil kira kejutan pengaruh dalaman atau/dan luaran kepada ekonomi.

REBASING MALAYSIA LEADING, COINCIDENT & LAGGING INDEXES TO THE BASE YEAR 2015

1.0 INTRODUCTION

- 1.1 The Malaysian Economic Indicators consisting Leading, Coincident and Lagging Indexes were rebased to year 2015 from 2005. This rebasing was implemented to improve compilation concepts and methodologies in line with international best practices.
- 1.2 The rebasing of the index to the base year 2015 was implemented by including the following:
 - i. Improvement of seasonal adjustment test using seasonal adjustment standard package. The seasonal adjustments have been made to past and current time series data.
 - ii. Improvement of index framework.

2.0 OBJECTIVES

The main objectives of Malaysian Economic Indicators are to monitor Malaysian economic performance on a monthly basis and to assist the policy makers, investors, researchers as well as the public to assess the economic performance.

3.0 SOURCES OF DATA

Data for the compilation of Composite and Diffusion Indexes is obtained from the Department of Statistics Malaysia and the following agencies:

- i. Ministry of Housing and Local Government (MHLG);
- ii. Bank Negara Malaysia (BNM);
- iii. Road Transport Department (RTD);
- iv. Malaysian Investment Development Authority (MIDA); and
- v. Employees Provident Fund (EPF).

4.0 METHODOLOGY

- 4.1 Selection of each component for the Composite Index is based on the guideline in the Business Cycle Indicators Handbook¹ namely:
 - i. **Conformity to business cycle**
The selected data series must conform to the business cycle.
 - ii. **Consistent timing**
The data series must exhibit a consistent timing pattern over time as leading, coincident or lagging indexes.
 - iii. **Economic significance**
The selected data series must significantly contribute to the economy.
 - iv. **Statistical adequacy**
Data must be collected and processed in a statistically reliable manner.
 - v. **Smoothness**
The month to month movements of the data series must not be too erratic.
 - vi. **Promptness**
The selected components must be timely, accurate and updated to contribute to the current analysis.
- 4.2 The selected time series data are seasonally adjusted to remove the seasonal influences of the data series.

¹ McGuckin R.H. et al. (2000) Business Cycle Indicators Handbook. The Conference Board, United States.

5.0 CONCEPTS AND DEFINITIONS

5.1 Composite Index

The Composite Index is the combination of individual indicators which measures the economic cycles behaviour. The advantage of Composite Index compared to individual analysis is the tendency to smooth out some of the volatility of the series. The Composite Index is generally more reliable in generating clear and consistent turning points than individual indicators. There are three types of Composite Index in the Malaysian Economic Indicators, i.e. leading, coincident and lagging indexes.

i. Leading Index (LI)

The Leading Index measures anticipations of the overall economic activity in the months ahead. The index tells us where the economy is going.

ii. Coincident Index (CI)

The Coincident Index is a comprehensive measure of the overall current economic performance.

iii. Lagging Index (LG)

The Lagging Index is to validate the signal of the Leading and Coincident Indexes.

5.2 Diffusion Index

The Diffusion Index is a complement to the Composite Index. It is used to assist in making a decision especially in determining turning point of economic cycle.

The value of 100 for Diffusion Index implies that all components are increasing and the value of zero shows that all components are decreasing. For example, the Diffusion Index of 85 points for the LI shows that 85 per cent of LI components are increasing for that particular month.

5.3 Business Cycle

Business cycle is a fluctuation of the aggregated economic activity such as production, income, employment, trade and etc. There are two main phases of business cycle namely expansion and recession phases.

The upward movement from trough to peak is defined as expansion phase meanwhile the downward movement from peak to trough is classified as recession phase. The phase of business cycle recession is determined by declining of the Coincident Composite Index for at least six months successively.

For example, Exhibit 1 shows that the peak of the fifth cycle of Coincident Index in January 2008 indicates the beginning of business cycle recession and the trough in March 2009 indicates the end of recession phase or the beginning of economic expansion phase.

Exhibit 1: Malaysian Business Cycles Reference Periods

Full Cycles (Month)	Reference Periods	Trough to Peak (Month)	Peak to Trough (Month)	Reference Periods
First Cycle (-)	Jul 74		7	Jul 74 - Feb 75
Second Cycle (131)	Feb 75 - Jan 85	119	12	Jan 85 - Jan 86
Third Cycle (154)	Jan 86 - Dec 97	143	11	Dec 97 - Nov 98
Fourth Cycle (39)	Nov 98 - Feb 01	27	12	Feb 01 - Feb 02
Fifth Cycle (85)	Feb 02 - Jan 08	71	14	Jan 08 - Mar 09
Sixth Cycle (-)	Mar 09 - Feb 20	131		Feb 20
Average		98	11	

5.4 Growth Cycle

The growth cycle is a fluctuation of the aggregated economic activity along its long term trend. The long term trend of the aggregated economic activity is estimated using the Hodrick Prescott Filter method on the Coincident Index. The growth cycle is generated through the deviation of the index from its long term trend.

The peak of growth cycle reflects the end of the upswing and the beginning of downswing phase of economic growth. Meanwhile trough for growth cycle indicates the end of downswing or the beginning of upswing phase of economic growth.

For example, Exhibit 2 shows that the peak point of the ninth cycle in April 2004 reflects that economy is entering the slow growth phase and the trough for growth cycle in November 2005 shows the beginning of a higher growth phase.

EXPLANATORY NOTES

Exhibit 2: Malaysian Growth Cycles Reference Periods

Full Cycles (Month)	Reference Periods	Trough to Peak (Month)	Peak to Trough (Month)	Reference Periods
First Cycle (25)	Feb 73 - May 74	15	10	May 74 - Mar 75
Second Cycle (28)	Mar 75 - Nov 76	20	8	Nov 76 - Jul 77
Third Cycle (64)	Jul 77 - Jul 81	48	16	Jul 81 - Nov 82
Fourth Cycle (50)	Nov 82 - Jan 85	26	24	Jan 85 - Jan 87
Fifth Cycle (39)	Jan 87 - Oct 88	21	18	Oct 88 - Apr 90
Sixth Cycle (33)	Apr 90 - Jan 92	21	12	Jan 92 - Jan 93
Seventh Cycle (72)	Jan 93 - Jan 98	60	12	Jan 98 - Jan 99
Eighth Cycle (37)	Jan 99 - Aug 00	19	18	Aug 00 - Feb 02
Ninth Cycle (45)	Feb 02 - Apr 04	26	19	Apr 04 - Nov 05
Tenth Cycle (40)	Nov 05 - Jan 08	26	14	Jan 08 - Mar 09
Eleventh Cycle (40)	Mar 09 - Jul 11	28	12	Jul 11 - Jul 12
Twelfth Cycle (46)	Jul 12 - Mar 15	32	14	Mar 15 - May 16
Thirteenth Cycle (47)	May 16 - Apr 19	35	12	Apr 19 - Apr 20
Average		29	15	

6.0 LIMITATION OF MALAYSIAN ECONOMIC INDICATORS

There are some limitations of the Malaysian Economic Indicators that users should be aware of:

- The Leading Index is unable to measure or predict the magnitude of any changes of economic activity. The index shows the direction of the economy in advance.
- The Coincident Index does not represent the level of the current economic situation. Thus it should not be interpreted as the level of current monthly Gross Domestic Product (GDP).
- The economic indicators are unable to take into account the internal or/and external shock to the economy.



KALENDAR AWALAN KELUARAN 2021 PENUNJUK EKONOMI MALAYSIA: INDEKS PELOPOR, SERENTAK & SUSULAN

ADVANCE RELEASE CALENDAR 2021

MALYSIAN ECONOMIC INDICATORS: LEADING, COINCIDENT & LAGGING INDEXES

Bulan Rujukan
Reference Month

Tarikh Keluaran
Release Date



Nota : TLD Tidak lewat daripada

Note : NLT Not later than

January March, 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February April, 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

March May, 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

April June, 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

May July, 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

June August, 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

July September, 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

August October, 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

September November, 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

October December, 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

November January, 2022						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

December February, 2022						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

www.dosm.gov.my

