



MALAYSIA

**PENUNJUK EKONOMI MALAYSIA
INDEKS PELOPOR, SERENTAK & SUSULAN**

2016

***MALYSIAN ECONOMIC INDICATORS
LEADING, COINCIDENT & LAGGING INDEXES***



**JABATAN PERANGKAAN MALAYSIA
DEPARTMENT OF STATISTICS, MALAYSIA**



PENUNJUK EKONOMI MALAYSIA

INDEKS PELOPOR, SERENTAK & SUSULAN

MALAYSIAN ECONOMIC INDICATORS

LEADING, COINCIDENT & LAGGING INDEXES

APRIL

2016

JABATAN PERANGKAAN MALAYSIA

DEPARTMENT OF STATISTICS, MALAYSIA

Penunjuk Ekonomi Malaysia

Indeks Pelopor, Serentak & Susulan

Malaysian Economic Indicators *Leading, Coincident & Lagging Indexes*

APRIL 2016

Intisari

Indeks Pelopor (IP) yang memantau prestasi ekonomi ke hadapan menurun 1.1% pada April 2016 kepada 115.5 mata daripada 116.8 mata pada bulan sebelumnya. Penurunan ini adalah kesan daripada momentum yang perlahan dalam semua komponen IP kecuali Import Benar Logam Asas Berharga & Logam Bukan Ferus Lain dan Jangkaan Nilai Jualan di Sektor Pembuatan, masing-masing mencatatkan 0.1%. Perubahan tahunan IP pada bulan rujukan adalah lebih perlahan berbanding pada Mac 2016.

Indeks Serentak (IS) yang mengukur aktiviti ekonomi semasa, juga menurun 1.1% pada April 2016. Indeks Kuantiti Perdagangan Runcit (-0.5%) dan Nilai Caruman Benar kepada KWSP (-0.4%) adalah di antara empat komponen yang

menyumbang kepada penurunan. Walau bagaimanapun, perubahan tahunan IS kekal pada 1.1% pada bulan semasa.

IS mengekalkan perubahan tahunan pada April 2016. Sebaliknya, IP merekodkan pertumbuhan lebih rendah berbanding bulan sebelumnya. Indeks Difusi bagi IS berada pada 50.0% manakala IP di bawah 50.0%. Berdasarkan senario ini, pertumbuhan ekonomi dijangka akan terus berkembang pada kadar perlahan dalam tempoh terdekat.

Highlights

The Leading Index (LI) which monitors the economic performance in advance decreased 1.1% in April 2016 to 115.5 points from 116.8 points in the previous month. The decline was reflected by the slow momentum in all LI components except Real Imports of Other Basic Precious & Other Non-ferrous Metal and Expected Sales Value in Manufacturing Sector which posted 0.1%, respectively. The annual change of LI in the reference month was slower than in March 2016.

The Coincident Index (CI) which measures the current economic activity, also decreased 1.1% in April 2016. Volume Index of Retail Trade (-0.5%) and Real Contributions to EPF (-0.4%) were among the four components that contributed to the decrease.

However, the annual change of CI remained at 1.1% in the current month.

The CI maintained its annual change in April 2016. On the other hand, the LI recorded a lower growth as compared to the previous month. The Diffusion Index for CI reached 50.0% while LI was below 50.0%. Based on this scenario, it is expected that the economic growth will continue to expand at a slower rate in the near term.

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>	Februari 2016 <i>February 2016</i>	Mac 2016 <i>March 2016</i>	April 2016 <i>April 2016</i>
1. Penawaran Wang Benar, M1 <i>Real Money Supply, M1</i>	0.6	-0.5	-0.1
2. Indeks Perusahaan Bursa Malaysia <i>Bursa Malaysia Industrial Index</i>	-0.3	0.0	-0.1
3. Import Benar Semi Konduktor <i>Real Imports of Semi Conductors</i>	0.1	-0.4	-0.4
4. Import Benar Logam Asas Berharga & Logam Bukan Ferus Lain <i>Real Imports of Other Basic Precious & Other Non-ferrous Metal</i>	-0.9	-0.6	0.1
5. Bilangan Unit Kediaman yang Diluluskan Pembinaan <i>Number of Housing Units Approved</i>	-0.4	0.9	-0.4
6. Jangkaan Nilai Jualan, Pembuatan <i>Expected Sales Value, Manufacturing</i>	-0.7	0.6	0.1
7. Bilangan Syarikat Baru Didaftarkan <i>Number of New Companies Registered</i>	0.1	0.3	-0.3
Perubahan Peratusan <i>Percentage Change</i>	-1.5	0.3	-1.1

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

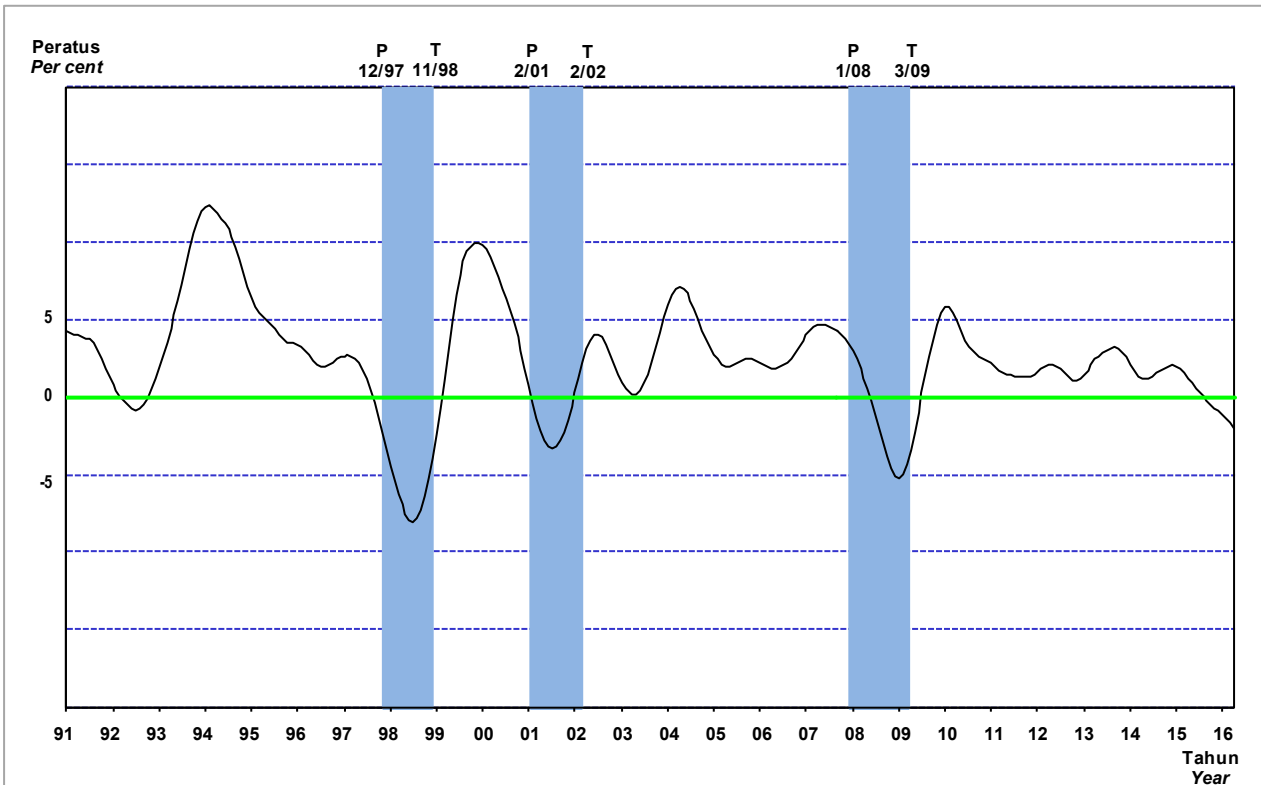
Komponen Indeks Serentak <i>Coincident Index Components</i>	Februari 2016 <i>February 2016</i>	Mac 2016 <i>March 2016</i>	April 2016 <i>April 2016</i>
1. Jumlah Guna Tenaga, Pembuatan <i>Total Employment, Manufacturing</i>	0.2	-0.3	-0.1
2. Gaji & Upah Benar, Pembuatan <i>Real Salaries & Wages, Manufacturing</i>	0.2	-0.5	0.0
3. Indeks Pengeluaran Perindustrian <i>Industrial Production Index</i>	0.1	-0.1	-0.1
4. Nilai Caruman Benar, KWSP <i>Real Contributions, EPF</i>	0.0	0.2	-0.4
5. Kapasiti Penggunaan, Pembuatan <i>Capacity Utilisation, Manufacturing</i>	-0.4	0.1	0.0
6. Indeks Kuantiti Perdagangan Runcit <i>Volume Index of Retail Trade</i>	0.4	0.1	-0.5
Perubahan Peratusan <i>Percentage Change</i>	0.5	-0.5	-1.1

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>	Februari 2016 <i>February 2016</i>	Mac 2016 <i>March 2016</i>	April 2016 <i>April 2016</i>
1. Kos Seunit Buruh, Pembuatan <i>Unit Labour Cost, Manufacturing</i>	0.2	-0.5	0.2
2. Bilangan Projek Pelaburan Baru Diluluskan <i>Number of Investment Projects Approved</i>	0.3	0.1	-0.1
3. Bilangan Kenderaan Baru Didaftarkan <i>Number of New Vehicles Registered</i>	-0.4	0.5	-0.4
4. Eksport Gas Asli & Minyak Mentah <i>Exports of Natural Gas & Crude Oil</i>	0.2	-0.3	-0.4
5. IHP Perkhidmatan <i>CPI for Services</i>	0.3	0.1	0.1
Perubahan Peratusan <i>Percentage Change</i>	0.6	-0.1	-0.6

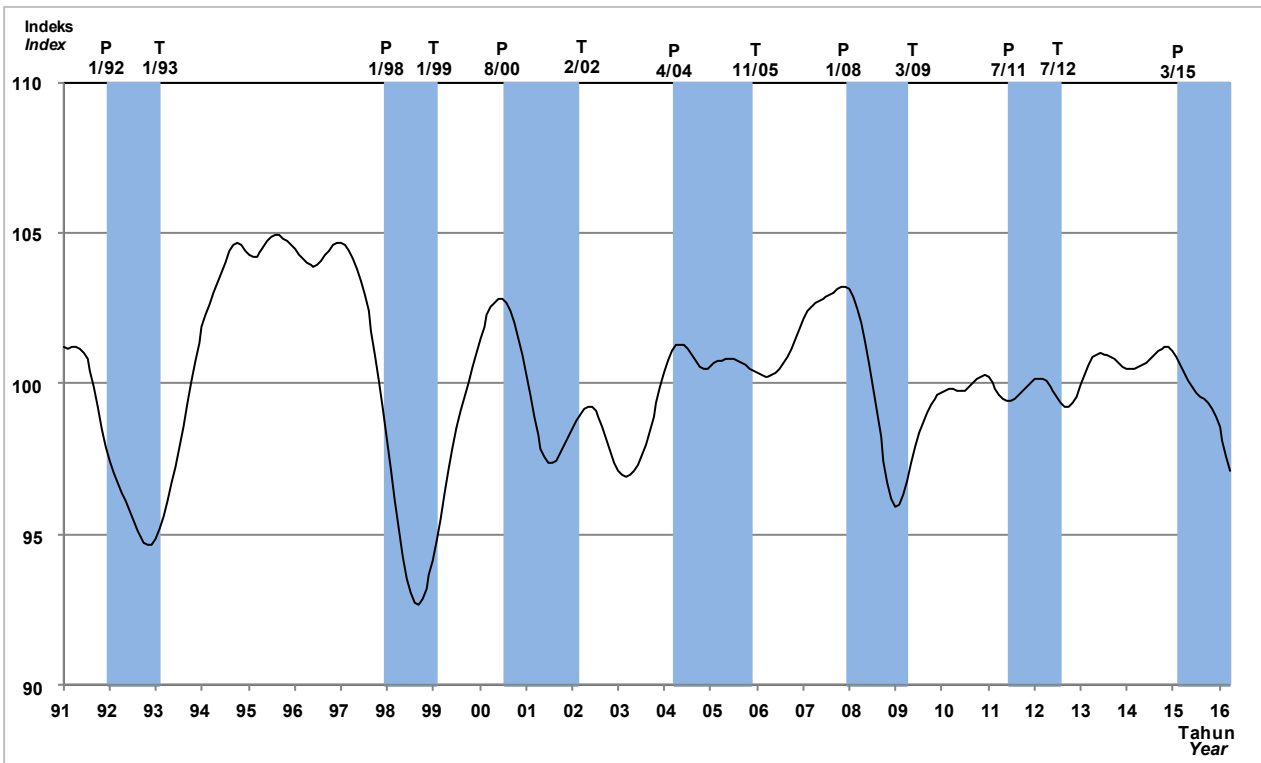
Carta 1: Kadar Pertumbuhan bagi Indeks Pelopor (Terlicin) dan Kitaran Perniagaan

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 :

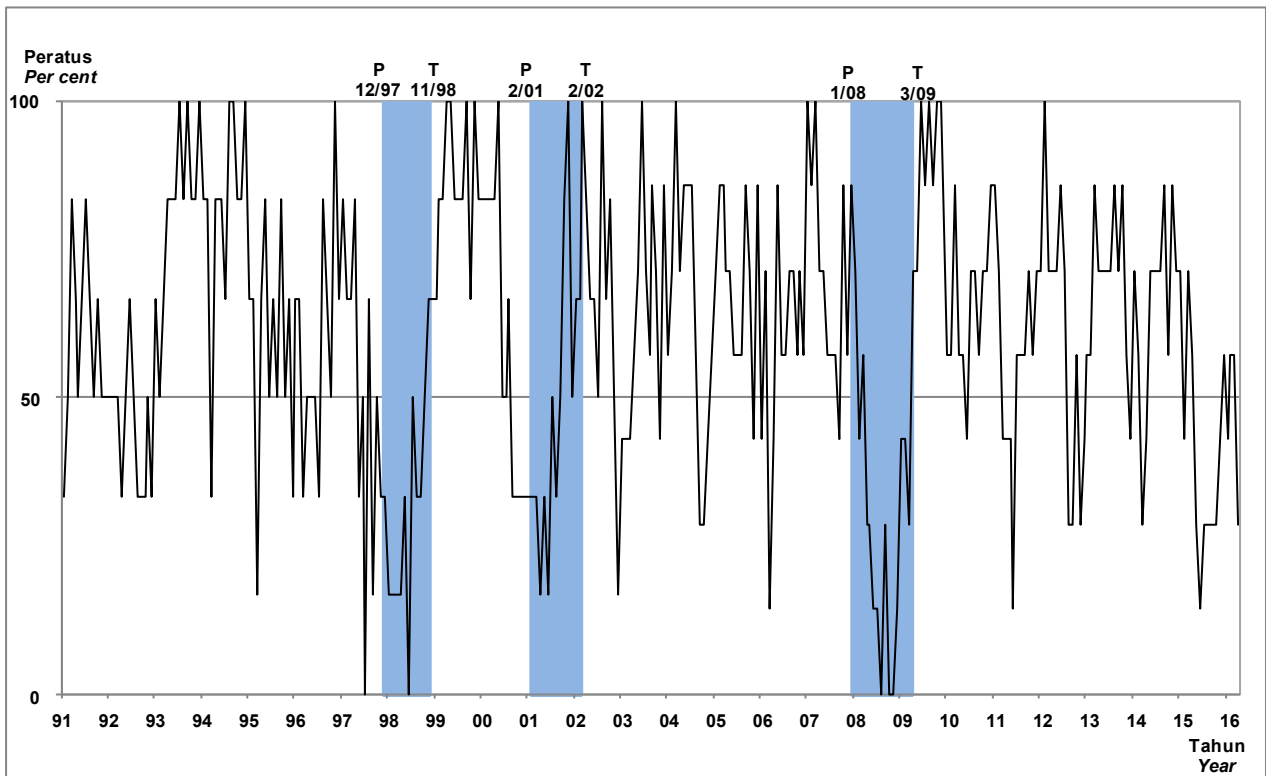
Kawasan berlorek adalah kemelesetan kitaran perniagaan (Carta 1) dan kemelesetan kitaran pertumbuhan (Carta 2) di Malaysia.

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

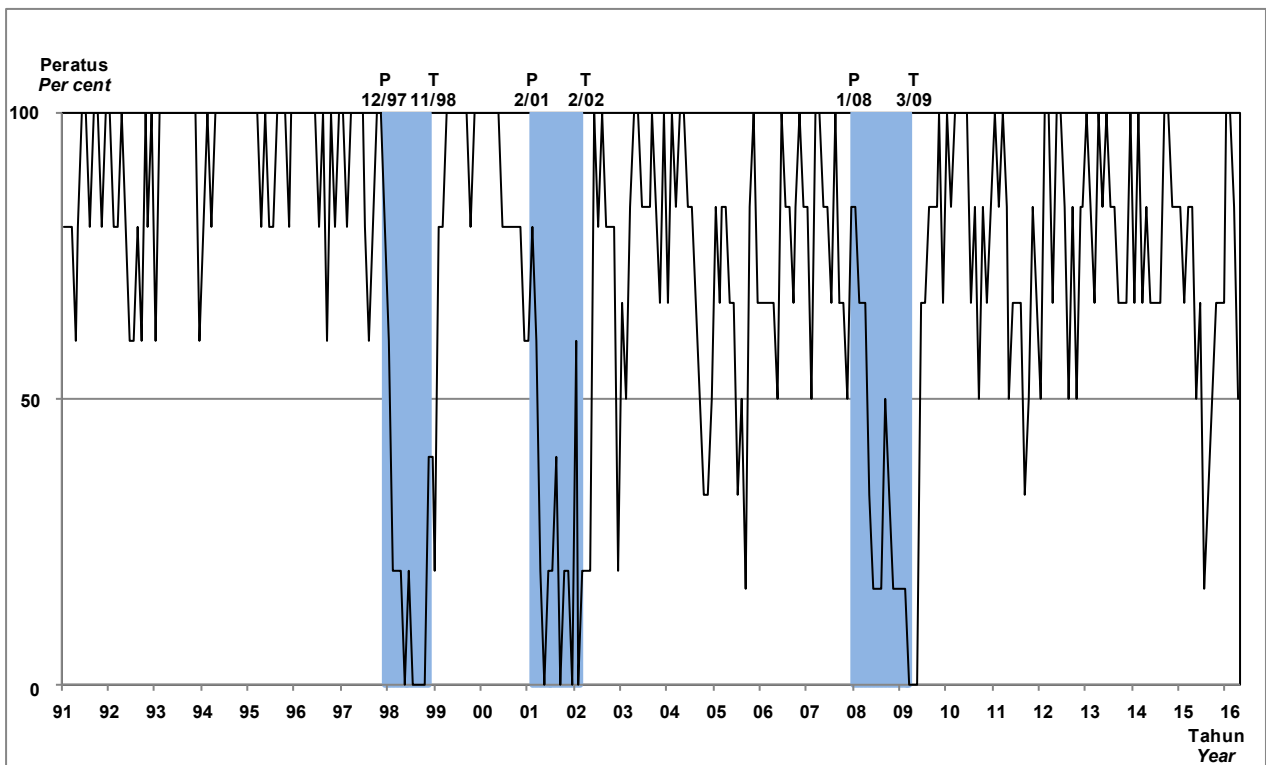
P Puncak/Peak

T Kawah/Trough

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)
	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
1996								
Jan./Jan.	86.1	5.5	82.3	7.0	71.5	5.4	66.7	100.0
Feb./Feb.	84.8	2.3	81.9	5.7	71.5	7.0	66.7	100.0
Mac/Mar.	85.0	3.7	83.5	8.5	72.3	7.5	33.3	100.0
Apr./Apr.	85.9	3.6	83.5	7.3	72.5	6.0	50.0	100.0
Mei/May	85.2	1.8	83.8	5.8	72.5	6.4	50.0	100.0
Jun./June	84.9	1.0	83.6	5.8	73.7	5.7	50.0	100.0
Jul./July	86.0	1.4	84.6	6.9	72.7	4.2	33.3	80.0
Ogo./Aug.	86.4	2.2	84.6	6.1	73.8	6.9	83.3	100.0
Sep./Sep.	86.2	1.2	84.8	5.7	74.0	6.1	66.7	60.0
Okt./Oct.	86.8	3.2	85.4	6.1	75.2	7.6	50.0	100.0
Nov./Nov.	87.7	3.2	85.1	4.9	75.1	6.6	100.0	80.0
Dis./Dec.	86.4	2.1	85.7	5.6	76.1	7.7	66.7	100.0
1997								
Jan./Jan.	89.0	3.3	86.9	5.7	76.6	7.2	83.3	100.0
Feb./Feb.	86.5	2.0	85.7	4.6	76.2	6.5	66.7	80.0
Mac/Mar.	88.4	4.1	86.8	3.9	76.9	6.4	66.7	100.0
Apr./Apr.	87.1	1.4	87.0	4.1	77.0	6.2	83.3	100.0
Mei/May	87.0	2.1	87.2	4.0	76.8	5.9	33.3	100.0
Jun./June	87.4	2.9	87.2	4.4	77.3	4.9	50.0	100.0
Jul./July	86.5	0.5	87.5	3.4	77.2	6.1	0.0	80.0
Ogo./Aug.	86.4	0.0	87.9	3.9	77.6	5.2	66.7	80.0
Sep./Sep.	86.4	0.2	87.9	3.6	77.7	4.9	16.7	80.0
Okt./Oct.	86.0	-1.0	88.1	3.2	78.4	4.3	50.0	100.0
Nov./Nov.	84.3	-3.9	88.1	3.6	78.6	4.7	33.3	100.0
Dis./Dec.	84.7	-2.0	88.2	2.9	78.3	3.0	33.3	80.0
1998								
Jan./Jan.	82.5	-7.3	87.4	0.5	78.6	2.6	16.7	60.0
Feb./Feb.	83.2	-3.9	86.9	1.5	80.5	5.6	16.7	20.0
Mac/Mar.	82.3	-6.9	86.6	-0.2	79.6	3.4	16.7	20.0
Apr./Apr.	80.9	-7.2	85.9	-1.3	79.0	2.6	16.7	20.0
Mei/May	80.7	-7.3	85.0	-2.5	79.4	3.4	33.3	0.0
Jun./June	79.9	-8.6	84.8	-2.8	80.1	3.6	0.0	20.0
Jul./July	79.8	-7.8	84.3	-3.6	80.2	3.8	50.0	0.0
Ogo./Aug.	78.9	-8.7	83.8	-4.7	79.7	2.8	33.3	0.0
Sep./Sep.	79.6	-7.8	83.9	-4.5	81.2	4.5	33.3	0.0
Okt./Oct.	79.8	-7.2	83.8	-4.9	81.4	3.8	50.0	0.0
Nov./Nov.	80.5	-4.4	83.6	-5.1	81.3	3.4	66.7	40.0
Dis./Dec.	81.9	-3.3	84.0	-4.8	81.3	3.8	66.7	40.0

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)
	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
1999								
Jan./Jan.	81.2	-1.5	83.6	-4.3	81.9	4.2	66.7	20.0
Feb./Feb.	81.6	-1.9	84.6	-2.7	81.2	0.9	83.3	80.0
Mac/Mar.	81.5	-1.0	86.2	-0.5	82.2	3.3	83.3	80.0
Apr./Apr.	84.2	4.1	87.7	2.1	82.8	4.8	100.0	100.0
Mei/May	84.8	5.2	87.7	3.2	83.2	4.8	100.0	100.0
Jun/June	85.7	7.3	88.7	4.6	82.8	3.4	83.3	100.0
Jul./July	86.7	8.7	89.3	5.9	83.8	4.5	83.3	100.0
Ogo./Aug.	86.2	9.2	89.5	6.8	83.7	5.0	83.3	100.0
Sep./Sep.	87.0	9.2	90.2	7.5	84.6	4.2	100.0	100.0
Okt./Oct.	86.7	8.6	90.1	7.4	85.0	4.5	66.7	80.0
Nov./Nov.	87.3	8.4	91.1	9.0	85.3	4.9	100.0	100.0
Dis./Dec.	90.2	10.1	91.9	9.3	86.5	6.4	83.3	100.0
2000								
Jan./Jan.	88.0	8.3	92.0	10.0	85.3	4.2	83.3	100.0
Feb./Feb.	90.0	10.3	93.2	10.3	86.6	6.6	83.3	100.0
Mac/Mar.	90.2	10.7	93.3	8.3	86.7	5.4	83.3	100.0
Apr./Apr.	90.5	7.5	93.1	6.2	86.5	4.5	83.3	100.0
Mei/May	90.7	7.0	94.8	8.1	86.6	4.1	100.0	100.0
Jun/June	90.5	5.6	95.8	8.0	86.5	4.5	50.0	80.0
Jul./July	90.9	4.8	95.4	6.8	87.5	4.4	50.0	80.0
Ogo./Aug.	91.8	6.5	96.5	7.8	87.3	4.2	66.7	80.0
Sep./Sep.	90.6	4.2	96.6	7.1	87.9	3.9	33.3	80.0
Okt./Oct.	90.7	4.6	96.2	6.8	88.2	3.7	33.3	80.0
Nov./Nov.	90.5	3.7	97.0	6.4	88.4	3.7	33.3	80.0
Dis./Dec.	90.1	-0.1	96.4	4.9	88.6	2.5	33.3	60.0
2001								
Jan./Jan.	89.8	2.1	96.7	5.2	88.9	4.1	33.3	80.0
Feb./Feb.	90.1	0.2	97.2	4.2	90.0	4.0	33.3	80.0
Mac/Mar.	88.4	-2.0	97.2	4.1	89.5	3.3	33.3	60.0
Apr./Apr.	87.8	-3.0	95.9	3.0	89.7	3.7	16.7	20.0
Mei/May	87.8	-3.2	95.1	0.4	90.5	4.4	33.3	20.0
Jun/June	88.3	-2.4	94.2	-1.6	88.5	2.3	16.7	20.0
Jul./July	88.2	-2.9	94.0	-1.5	89.5	2.3	50.0	20.0
Ogo./Aug.	88.0	-4.1	94.0	-2.6	89.3	2.3	33.3	40.0
Sep./Sep.	88.4	-2.4	93.6	-3.1	89.2	1.4	50.0	0.0
Okt./Oct.	89.0	-1.8	94.0	-2.2	88.9	0.8	83.3	20.0
Nov./Nov.	89.9	-0.7	93.3	-3.8	88.8	0.4	100.0	20.0
Dis./Dec.	89.2	-1.0	92.2	-4.3	88.9	0.3	50.0	0.0

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)
	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
2002								
Jan./Jan.	90.4	0.6	93.0	-3.9	88.6	-0.3	66.7	60.0
Feb./Feb.	89.9	-0.3	91.3	-6.0	90.2	0.3	66.7	0.0
Mac/Mar.	90.9	2.8	92.6	-4.7	90.8	1.5	100.0	20.0
Apr./Apr.	91.7	4.5	92.7	-3.3	92.5	3.1	83.3	20.0
Mei/May	91.5	4.1	92.9	-2.4	90.9	0.4	66.7	20.0
Jun/June	91.2	3.3	94.4	0.2	91.0	2.8	66.7	100.0
Jul./July	91.8	4.1	94.4	0.5	92.4	3.2	50.0	80.0
Ogo./Aug.	91.9	4.5	94.5	0.5	93.0	4.2	100.0	100.0
Sep./Sep.	91.4	3.4	94.3	0.7	92.7	3.9	66.7	80.0
Okt./Oct.	91.8	3.1	94.1	0.1	93.5	5.1	83.3	80.0
Nov./Nov.	91.9	2.3	93.9	0.6	92.2	3.9	50.0	80.0
Dis./Dec.	88.9	-0.3	93.1	0.9	90.9	2.3	16.7	20.0
2003								
Jan./Jan.	91.0	0.7	94.7	1.9	94.2	6.3	42.9	66.7
Feb./Feb.	91.4	1.6	94.0	2.9	94.2	4.4	42.9	83.3
Mac/Mar.	90.8	0.0	94.5	2.0	93.0	2.4	42.9	83.3
Apr./Apr.	91.5	-0.2	95.1	2.6	93.5	1.1	57.1	100.0
Mei/May	92.0	0.6	94.9	2.1	93.8	3.2	71.4	100.0
Jun/June	92.1	1.0	95.3	0.9	92.8	2.0	100.0	83.3
Jul./July	92.8	1.0	96.1	1.7	94.1	1.8	71.4	83.3
Ogo./Aug.	92.2	0.4	95.9	1.5	93.5	0.5	57.1	83.3
Sep./Sep.	94.0	2.8	96.2	2.0	94.3	1.8	85.7	100.0
Okt./Oct.	94.8	3.4	96.3	2.3	94.2	0.7	71.4	83.3
Nov./Nov.	94.5	2.8	96.0	2.2	94.3	2.3	42.9	66.7
Dis./Dec.	95.7	7.6	97.7	5.0	94.6	4.1	85.7	100.0
2004								
Jan./Jan.	95.7	5.2	97.6	3.1	95.2	1.0	57.1	66.7
Feb./Feb.	96.7	5.8	97.9	4.1	96.1	2.0	71.4	100.0
Mac/Mar.	98.7	8.6	98.4	4.2	94.9	2.0	100.0	83.3
Apr./Apr.	97.8	7.0	99.2	4.3	96.1	2.7	71.4	100.0
Mei/May	97.5	5.9	98.1	3.4	96.0	2.3	85.7	100.0
Jun/June	98.5	7.0	98.9	3.8	95.7	3.1	85.7	100.0
Jul./July	98.0	5.6	98.4	2.5	96.2	2.3	85.7	83.3
Ogo./Aug.	98.0	6.3	98.4	2.6	96.6	3.2	57.1	66.7
Sep./Sep.	98.5	4.8	98.4	2.3	97.3	3.1	28.6	50.0
Okt./Oct.	97.5	2.8	98.5	2.4	97.6	3.6	28.6	50.0
Nov./Nov.	97.5	3.2	97.5	1.6	98.3	4.2	42.9	33.3
Dis./Dec.	98.8	3.2	99.4	1.7	98.0	3.5	57.1	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)
	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
2005								
Jan./Jan.	98.6	3.0	99.4	1.8	97.5	2.4	71.4	66.7
Feb./Feb.	99.8	3.2	98.9	1.0	99.0	3.1	85.7	66.7
Mac./Mar.	99.5	0.8	100.1	1.7	98.0	3.2	85.7	83.3
Apr./Apr.	99.4	1.6	99.7	0.5	99.5	3.6	71.4	83.3
Mei/May	99.9	2.5	99.0	0.9	99.9	4.1	71.4	66.7
Jun/June	99.7	1.1	99.9	1.0	100.0	4.5	57.1	66.7
Jul./July	100.4	2.4	99.5	1.1	99.5	3.4	57.1	50.0
Ogo./Aug.	100.3	2.3	100.2	1.8	100.6	4.1	57.1	50.0
Sep./Sep.	100.9	2.4	100.6	2.2	101.3	4.2	85.7	33.3
Okt./Oct.	101.0	3.6	100.9	2.4	101.5	4.0	71.4	66.7
Nov./Nov.	99.3	1.9	100.8	3.3	101.4	3.1	42.9	100.0
Dis./Dec.	101.2	2.5	101.1	1.7	101.8	3.9	85.7	66.7
2006								
Jan./Jan.	100.5	2.0	101.3	1.9	101.5	4.1	42.9	83.3
Feb./Feb.	102.1	2.4	102.0	3.2	102.3	3.3	71.4	66.7
Mac./Mar.	100.7	1.2	102.9	2.9	102.7	4.8	14.3	50.0
Apr./Apr.	100.7	1.3	103.1	3.4	102.4	2.9	42.9	66.7
Mei/May	101.6	1.8	103.6	4.6	103.2	3.3	85.7	50.0
Jun/June	102.3	2.6	104.6	4.7	102.1	2.1	57.1	100.0
Jul./July	101.7	1.3	105.2	5.7	102.5	3.1	57.1	83.3
Ogo./Aug.	103.2	2.9	105.9	5.7	102.8	2.2	71.4	83.3
Sep./Sep.	102.4	1.5	106.1	5.5	103.1	1.8	71.4	66.7
Okt./Oct.	102.9	1.9	105.9	5.0	103.1	1.6	57.1	83.3
Nov./Nov.	104.3	5.0	108.1	7.3	103.6	2.2	71.4	100.0
Dis./Dec.	104.2	2.9	107.2	6.0	103.2	1.4	57.1	83.3
2007								
Jan./Jan.	105.3	4.8	106.8	5.4	104.1	2.6	100.0	83.3
Feb./Feb.	105.6	3.4	105.9	3.8	104.1	1.8	85.7	50.0
Mac./Mar.	106.3	5.6	109.7	6.6	103.4	0.7	100.0	100.0
Apr./Apr.	105.6	4.9	109.1	5.8	105.1	2.7	71.4	100.0
Mei/May	106.7	5.0	109.5	5.7	105.3	2.1	71.4	83.3
Jun/June	106.1	3.7	108.8	4.0	106.3	4.2	57.1	83.3
Jul./July	107.1	5.4	109.1	3.7	106.3	3.7	57.1	66.7
Ogo./Aug.	106.6	3.3	109.4	3.4	106.7	3.8	57.1	100.0
Sep./Sep.	106.6	4.1	109.6	3.3	106.7	3.4	42.9	66.7
Okt./Oct.	108.0	5.0	109.5	3.4	108.0	4.7	85.7	66.7
Nov./Nov.	107.3	2.9	110.4	2.2	108.2	4.5	57.1	66.7
Dis./Dec.	108.6	4.3	111.5	4.1	108.4	5.1	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 (%)
	2005=100		2005=100		2005=100			
2008								
Jan./Jan.	108.6	3.1	113.2	5.9	109.5	5.2	71.4	100.0
Feb./Feb.	108.0	2.3	112.0	5.7	109.7	5.3	42.9	83.3
Mac/Mar.	107.7	1.3	111.3	1.4	109.0	5.4	57.1	66.7
Apr./Apr.	107.9	2.2	111.9	2.5	111.8	6.3	28.6	83.3
Mei/May	107.4	0.6	110.8	1.2	112.3	6.6	28.6	50.0
Jun/June	106.2	0.1	109.8	1.0	113.4	6.6	14.3	33.3
Jul./July	105.4	-1.7	110.3	1.1	113.3	6.6	14.3	16.7
Ogo./Aug.	104.4	-2.0	106.4	-2.8	113.1	6.0	0.0	16.7
Sep./Sep.	105.4	-1.1	106.6	-2.7	115.1	7.8	28.6	33.3
Okt./Oct.	104.1	-3.6	105.7	-3.5	113.6	5.2	0.0	16.7
Nov./Nov.	103.2	-3.9	104.2	-5.6	115.4	6.6	0.0	0.0
Dis./Dec.	101.3	-6.8	101.3	-9.2	115.2	6.2	14.3	0.0
2009								
Jan./Jan.	101.3	-6.7	98.8	-12.7	113.7	3.8	42.9	16.7
Feb./Feb.	101.8	-5.7	100.6	-10.2	114.0	3.9	42.9	16.7
Mac/Mar.	102.2	-5.1	98.5	-11.5	114.0	4.6	28.6	0.0
Apr./Apr.	104.3	-3.3	99.6	-11.0	111.7	-0.1	71.4	16.7
Mei/May	104.5	-2.7	101.0	-8.8	113.1	0.7	71.4	16.7
Jun/June	105.5	-0.6	101.9	-7.2	113.3	-0.1	100.0	83.3
Jul./July	106.5	1.0	102.8	-6.8	113.8	0.4	85.7	66.7
Ogo./Aug.	106.3	1.8	103.5	-2.7	114.5	1.2	100.0	83.3
Sep./Sep.	105.9	0.4	103.5	-2.9	114.4	-0.6	85.7	83.3
Okt./Oct.	106.5	2.3	105.1	-0.6	115.2	1.4	100.0	83.3
Nov./Nov.	108.1	4.7	105.3	1.0	115.5	0.1	100.0	100.0
Dis./Dec.	108.0	6.6	105.2	3.8	116.7	1.3	85.7	66.7
2010								
Jan./Jan.	107.7	6.3	105.6	6.9	117.8	3.6	57.1	100.0
Feb./Feb.	108.3	6.4	105.9	5.3	118.5	3.9	57.1	83.3
Mac/Mar.	110.1	7.7	107.7	9.3	119.4	4.7	85.7	100.0
Apr./Apr.	108.7	4.2	107.7	8.1	119.3	6.8	57.1	100.0
Mei/May	108.8	4.1	108.4	7.3	119.2	5.4	57.1	100.0
Jun/June	108.9	3.2	108.2	6.2	120.2	6.1	42.9	100.0
Jul./July	108.8	2.2	107.8	4.9	119.2	4.7	71.4	66.7
Ogo./Aug.	109.8	3.3	108.2	4.5	120.5	5.2	71.4	83.3
Sep./Sep.	109.9	3.8	109.0	5.3	119.9	4.8	57.1	50.0
Okt./Oct.	110.0	3.3	109.9	4.6	119.4	3.6	71.4	83.3
Nov./Nov.	110.7	2.4	110.0	4.5	120.2	4.1	71.4	66.7
Dis./Dec.	111.5	3.2	110.0	4.6	120.8	3.5	85.7	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)
	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
2011								
Jan./Jan.	111.5	3.5	111.9	6.0	122.6	4.1	85.7	100.0
Feb./Feb.	110.5	2.0	110.3	4.2	121.1	2.2	71.4	83.3
Mac./Mar.	110.2	0.1	112.0	4.0	122.3	2.4	42.9	100.0
Apr./Apr.	110.3	1.5	111.4	3.4	125.0	4.8	42.9	83.3
Mei/May	110.3	1.4	111.0	2.4	123.9	3.9	42.9	50.0
Jun./June	110.7	1.7	112.0	3.5	125.2	4.2	14.3	66.7
Jul./July	110.8	1.8	113.6	5.4	125.2	5.0	57.1	66.7
Ogo./Aug.	110.6	0.7	111.8	3.3	125.8	4.4	57.1	66.7
Sep./Sep.	111.0	1.0	111.5	2.3	125.2	4.4	57.1	33.3
Okt./Oct.	112.3	2.1	111.2	1.2	126.8	6.2	71.4	50.0
Nov./Nov.	111.7	0.9	111.9	1.7	127.4	6.0	57.1	83.3
Dis./Dec.	111.8	0.3	112.1	1.9	127.5	5.5	71.4	66.7
2012								
Jan./Jan.	112.3	0.7	111.7	-0.2	126.8	3.4	71.4	50.0
Feb./Feb.	114.1	3.3	115.1	4.4	127.4	5.2	100.0	100.0
Mac./Mar.	112.9	2.5	114.9	2.6	129.1	5.6	71.4	100.0
Apr./Apr.	112.7	2.2	113.9	2.2	129.9	3.9	71.4	66.7
Mei/May	112.9	2.4	114.4	3.1	129.9	4.8	71.4	100.0
Jun./June	113.3	2.3	114.3	2.1	129.4	3.4	85.7	100.0
Jul./July	113.3	2.3	113.8	0.2	128.4	2.6	71.4	83.3
Ogo./Aug.	112.9	2.1	114.4	2.3	130.4	3.7	28.6	50.0
Sep./Sep.	112.3	1.2	114.7	2.9	129.5	3.4	28.6	83.3
Okt./Oct.	112.8	0.4	114.8	3.2	130.3	2.8	57.1	50.0
Nov./Nov.	112.1	0.4	115.7	3.4	130.9	2.7	28.6	83.3
Dis./Dec.	113.5	1.5	115.3	2.9	131.0	2.7	42.9	83.3
2013								
Jan./Jan.	113.7	1.2	116.5	4.3	130.4	2.8	57.1	100.0
Feb./Feb.	114.9	0.7	115.8	0.6	130.1	2.1	57.1	83.3
Mac./Mar.	116.0	2.7	117.2	2.0	131.7	2.0	85.7	66.7
Apr./Apr.	116.2	3.1	117.4	3.1	130.8	0.7	71.4	100.0
Mei/May	116.2	2.9	117.7	2.9	131.8	1.5	71.4	83.3
Jun./June	115.8	2.2	117.3	2.6	131.9	1.9	71.4	100.0
Jul./July	115.3	1.8	118.4	4.0	133.6	4.0	71.4	83.3
Ogo./Aug.	115.8	2.6	117.7	2.9	131.5	0.8	85.7	83.3
Sep./Sep.	116.9	4.1	118.3	3.1	133.2	2.9	71.4	66.7
Okt./Oct.	117.0	3.7	118.8	3.5	130.6	0.2	85.7	66.7
Nov./Nov.	116.2	3.7	119.3	3.1	134.8	3.0	57.1	66.7
Dis./Dec.	115.7	1.9	120.0	4.1	136.0	3.8	42.9	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)
	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	2005=100	Perubahan Tahunan Annual Change (%)	Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
2014								
Jan./Jan.	116.7	2.6	119.8	2.8	135.8	4.1	71.4	66.7
Feb./Feb.	116.6	1.5	120.1	3.7	136.5	4.9	57.1	100.0
Mac/Mar.	116.1	0.1	118.7	1.3	137.0	4.0	28.6	66.7
Apr./Apr.	117.4	1.0	120.1	2.3	139.4	6.6	42.9	83.3
Mei/May	117.4	1.0	119.9	1.9	137.8	4.6	71.4	66.7
Jun./June	116.8	0.9	120.8	3.0	138.5	5.0	71.4	66.7
Jul./July	117.5	1.9	120.8	2.0	137.7	3.1	71.4	66.7
Ogo./Aug.	117.9	1.8	121.6	3.3	138.8	5.6	71.4	66.7
Sep./Sep.	118.8	1.6	121.5	2.7	138.9	4.3	85.7	100.0
Okt./Oct.	118.0	0.9	121.7	2.4	139.7	7.0	57.1	100.0
Nov./Nov.	119.0	2.4	121.9	2.2	139.0	3.1	85.7	83.3
Dis./Dec.	119.4	3.2	122.3	1.9	139.1	2.3	71.4	83.3
2015								
Jan./Jan.	119.3	2.2	123.3	2.9	139.6	2.8	71.4	83.3
Feb./Feb.	117.8	1.0	123.3	2.7	139.5	2.2	42.9	66.7
Mac/Mar.	119.3	2.8	123.8	4.3	141.0	2.9	71.4	83.3
Apr./Apr.	118.6	1.0	122.4	1.9	138.6	-0.6	57.1	83.3
Mei/May	117.3	-0.1	121.8	1.6	140.4	1.9	28.6	50.0
Jun./June	117.8	0.9	122.6	1.5	141.0	1.8	14.3	66.7
Jul./July	118.1	0.5	121.6	0.7	141.5	2.8	28.6	16.7
Ogo./Aug.	117.2	-0.6	122.5	0.7	141.2	1.7	28.6	33.3
Sep./Sep.	118.3	-0.4	123.1	1.3	142.5	2.6	28.6	50.0
Okt./Oct.	118.3	0.3	123.7	1.6	144.2	3.2	28.6	66.7
Nov./Nov.	118.1	-0.8	123.8	1.6	145.0	4.3	42.9	66.7
Dis./Dec.	118.0	-1.2	123.9	1.3	143.8	3.4	57.1	66.7
2016								
Jan./Jan.	118.2	-0.9	125.2	1.5	141.6	1.4	42.9	100.0
Feb./Feb.	116.4	-1.2	125.8	2.0	142.5	2.2	57.1	100.0
Mac/Mar.	116.8	-2.1	125.2	1.1	142.4	1.0	57.1	83.3
Apr./Apr.	115.5	-2.6	123.8	1.1	141.6	2.2	28.6	50.0

NOTA KETERANGAN

1.0 PENGENALAN

- 1.1 Penerbitan Penunjuk Ekonomi Malaysia ini memberikan maklumat ekonomi semasa yang bertujuan untuk memantau kedudukan ekonomi Negara. Ia terdiri daripada Indeks Pelopor, Serentak dan Susulan bagi Indeks Komposit dan Indeks Difusi yang diterbitkan secara bulanan.
- 1.2 Oleh kerana penerbitan Penunjuk Ekonomi Malaysia ini disusun semula, siri sebelumnya turut disemak berasaskan siri komponen baru.

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);
- iii. Lembaga Kemajuan Perindustrian Malaysia (MIDA) dan
- iv. 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 diperaku.
 - 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.

NOTA KETERANGAN

- 4.2 Data siri masa yang terpilih perlu menjalani ujian pelarasan musim bagi mengeluarkan pengaruh musim terhadap data siri tersebut.
- 4.3 Penyusunan semula Penunjuk Ekonomi Malaysia telah membawa kepada perubahan komponen indeks komposit seperti di bawah:

Bil.	Komponen	Status
	Indeks Pelopor	
1	Penawaran Wang Benar, M1	Dikekalkan
2	Indeks Perusahaan Bursa Malaysia	Dikekalkan
3	Jumlah Dagangan Benar: Lapan Negara Utama	Dikeluarkan
4	IHP Perkhidmatan, Kadar Pertumbuhan (Songsang)	Dikeluarkan
5	Indeks Harga Bahan Perindustrian, Kadar Pertumbuhan	Dikeluarkan
6	Nisbah Harga terhadap Kos Seunit Buruh, Pembuatan	Dikeluarkan
7	Bilangan Unit Kediaman yang Diluluskan Pembinaan	Dikekalkan
8	Bilangan Syarikat Baru Didaftar	Dikekalkan
9	Import Benar Semi Konduktor	Baru
10	Import Benar Logam Asas Berharga dan Logam Bukan Ferus Lain	Baru
11	Jangkaan Nilai Jualan, Pembuatan	Baru

Bil.	Komponen	Status
	Indeks Serentak	
1	Indeks Pengeluaran Perindustrian	Dikekalkan
2	Import Kasar Benar	Dikeluarkan
3	Gaji & Upah Benar, Pembuatan	Dikekalkan
4	Jumlah Guna Tenaga, Pembuatan	Dikekalkan
5	Nilai Jualan Benar, Pembuatan	Dikeluarkan
6	Nilai Caruman Benar, KWSP	Dikekalkan
7	Kapasiti Penggunaan, Pembuatan	Baru
8	Indeks Kuantiti Perdagangan Runcit	Baru

Bil.	Komponen	Status
	Indeks Susulan	
1	Kadar Faedah Wang Panggilan 7-hari	Dikeluarkan
2	Lebih Pinjaman Benar Sektor Swasta	Dikeluarkan
3	Bilangan Projek Pelaburan Diluluskan	Dikekalkan
4	Bilangan Majikan Gagal Mencarum KWSP (Songsang)	Dikeluarkan
5	Bilangan Kenderaan Baru Didaftar	Dikekalkan
6	Kos Seunit Buruh, Pembuatan	Baru
7	Eksport Gas Asli & Minyak Mentah	Baru
8	IHP Perkhidmatan	Baru

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.

NOTA KETERANGAN

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, Jadual 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.

Jadual 1: Tempoh Rujukan Kitaran Perniagaan Malaysia

Bilangan	Kitaran Rujukan			Kitaran (bulan)		
	Kawah	Puncak	Kawah	Pengembangan	Penguncupan	Kitaran Penuh
Kitaran Pertama	-	Jul-74	Feb-75	-	7	-
Kitaran Kedua	Feb-75	Jan-85	Jan-86	119	12	131
Kitaran Ketiga	Jan-86	Dis-97	Nov-98	143	11	154
Kitaran Keempat	Nov-98	Feb-01	Feb-02	27	12	39
Kitaran Kelima	Feb-02	Jan-08	Mac-09	71	14	85
Purata				90	11	101

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, Jadual 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.

NOTA KETERANGAN

Jadual 2: Tempoh Rujukan Kitaran Pertumbuhan Malaysia

Bilangan	Kitaran Rujukan			Kitaran (bulan)		
	Kawah	Puncak	Kawah	Menaik	Menurun	Kitaran Penuh
Kitaran Pertama	Feb-73	Mei-74	Mac-75	15	10	25
Kitaran Kedua	Mac-75	Nov-76	Jul-77	20	8	28
Kitaran Ketiga	Jul-77	Jul-81	Nov-82	48	16	64
Kitaran Keempat	Nov-82	Jan-85	Jan-87	26	24	50
Kitaran Kelima	Jan-87	Okt-88	Apr-90	21	18	39
Kitaran Keenam	Apr-90	Jan-92	Jan-93	21	12	33
Kitaran Ketujuh	Jan-93	Jan-98	Jan-99	60	12	72
Kitaran Kelapan	Jan-99	Ogo-00	Feb-02	19	18	37
Kitaran Kesembilan	Feb-02	Apr-04	Nov-05	26	19	45
Kitaran Kesepuluh	Nov-05	Jan-08	Mac-09	26	14	40
Kitaran Kesebelas	Mac-09	Jul-11	Jul-12	28	12	40
Kitaran Keduabelas	Jul-12	Mac-15	-	32	-	-
Purata				28	15	43

6.0 KEKANGAN PENUNJUK EKONOMI MALAYSIA

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

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

EXPLANATORY NOTES

1.0 INTRODUCTION

- 1.1 *The publication of Malaysian Economic Indicators presents current economic information with the purpose of monitoring the economic situation of the country. It consists of Leading, Coincident and Lagging for Composite and Diffusion Indexes which published on the monthly basis.*
- 1.2 *Since this is a recompiling publication of Malaysian Economic Indicators, the past series were also revised using the new series of components.*

2.0 OBJECTIVES

The main objectives of Malaysian Economic Indicators are to monitor Malaysian economic performance on a monthly basis and to assists 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 Industrial 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.

EXPLANATORY NOTES

4.2 *The selected time series data are seasonally adjusted to remove the seasonal influences of the data series.*

4.3 *The recompilation of Malaysian Economic Indicators has resulted to the change of the composite index components as shown below:*

No.	Components	Remarks
	Leading Index	
1	Real Money Supply, M1	Maintained
2	Bursa Malaysia Industrial Index	Maintained
3	Real Total Trade: Eight Major Trading Partners	Excluded
4	CPI for Services, Growth Rate (Inverted)	Excluded
5	Industrial Material Price Index, Growth Rate	Excluded
6	Ratio of Price to Unit Labour Cost, Manufacturing	Excluded
7	Number of Housing Units Approved	Maintained
8	Number of New Companies Registered	Maintained
9	Real Imports of Semi Conductors	New
10	Real Imports of Other Basic Precious and Other Non-ferrous Metal	New
11	Expected Sales Value, Manufacturing	New

No.	Components	Remarks
	Coincident Index	
1	Industrial Production Index	Maintained
2	Real Gross Imports	Excluded
3	Real Salaries & Wages, Manufacturing	Maintained
4	Total Employment, Manufacturing	Maintained
5	Real Sales, Manufacturing	Excluded
6	Real Contributions, EPF	Maintained
7	Capacity Utilisation, Manufacturing	New
8	Volume Index of Retail Trade	New

No.	Components	Remarks
	Lagging Index	
1	7-day Call Money, Rate	Excluded
2	Real Excess Lending to Private Sector	Excluded
3	Number of Investment Projects Approved	Maintained
4	Number of Defaulters, EPF (Inverted)	Excluded
5	Number of New Vehicles Registered	Maintained
6	Unit Labour Cost, Manufacturing	New
7	Exports of Natural Gas & Crude Oil	New
8	CPI for Services	New

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.

EXPLANATORY NOTES

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, Table 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.

Table 1: Malaysian Business Cycles Reference Periods

Number	Reference Cycles			Cycles (month)		
	Trough	Peak	Trough	Expansion	Contraction	Full Cycle
First Cycle	-	Jul-74	Feb-75	-	7	-
Second Cycle	Feb-75	Jan-85	Jan-86	119	12	131
Third Cycle	Jan-86	Dec-97	Nov-98	143	11	154
Fourth Cycle	Nov-98	Feb-01	Feb-02	27	12	39
Fifth Cycle	Feb-02	Jan-08	Mar-09	71	14	85
Average				90	11	101

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, Table 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

Table 2: Malaysian Growth Cycles Reference Periods

Number	Reference Cycles			Cycles (month)		
	Trough	Peak	Trough	Upswing	Downswing	Full Cycle
First Cycle	Feb-73	May-74	Mar-75	15	10	25
Second Cycle	Mar-75	Nov-76	Jul-77	20	8	28
Third Cycle	Jul-77	Jul-81	Nov-82	48	16	64
Fourth Cycle	Nov-82	Jan-85	Jan-87	26	24	50
Fifth Cycle	Jan-87	Oct-88	Apr-90	21	18	39
Sixth Cycle	Apr-90	Jan-92	Jan-93	21	12	33
Seventh Cycle	Jan-93	Jan-98	Jan-99	60	12	72
Eighth Cycle	Jan-99	Aug-00	Feb-02	19	18	37
Nineth Cycle	Feb-02	Apr-04	Nov-05	26	19	45
Tenth Cycle	Nov-05	Jan-08	Mar-09	26	14	40
Eleventh Cycle	Mar-09	Jul-11	Jul-12	28	12	40
Twelfth Cycle	Jul-12	Mar-15	-	32	-	-
Average				28	15	43

6.0 LIMITATION OF MALAYSIAN ECONOMIC INDICATORS

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

- i. 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.
- ii. 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).
- iii. The economic indicators unable to take into account the internal or/and external shock to the economy.

**JADUAL TARIKH PENGELUARAN PENERBITAN
PENUNJUK EKONOMI MALAYSIA
INDEKS PELOPOR, SERENTAK & SUSULAN, 2016**

*SCHEDULE OF RELEASE DATES FOR PUBLICATION OF
MALAYSIAN ECONOMIC INDICATORS
LEADING, COINCIDENT & LAGGING INDEXES, 2016*

Bulan Rujukan <i>Reference Month</i>	Tarikh Penerbitan <i>Publication Date</i>
Januari <i>January</i>	TLD 25 Mac 2016 <i>NLT 25 March 2016</i>
Februari <i>February</i>	TLD 25 April 2016 <i>NLT 25 April 2016</i>
Mac <i>March</i>	TLD 25 Mei 2016 <i>NLT 25 May 2016</i>
April <i>April</i>	TLD 25 Jun 2016 <i>NLT 25 June 2016</i>
Mei <i>May</i>	TLD 23 Julai 2016 <i>NLT 23 July 2016</i>
Jun <i>June</i>	TLD 25 Ogos 2016 <i>NLT 25 August 2016</i>
Julai <i>July</i>	TLD 24 September 2016 <i>NLT 24 September 2016</i>
Ogos <i>August</i>	TLD 25 Oktober 2016 <i>NLT 25 October 2016</i>
September <i>September</i>	TLD 25 November 2016 <i>NLT 25 November 2016</i>
Oktober <i>October</i>	TLD 24 Disember 2016 <i>NLT 24 December 2016</i>
November <i>November</i>	TLD 25 Januari 2017 <i>NLT 25 January 2017</i>
Disember <i>December</i>	TLD 25 Februari 2017 <i>NLT 25 February 2017</i>

Nota : TLD Tidak lewat daripada
Note : NLT Not later than