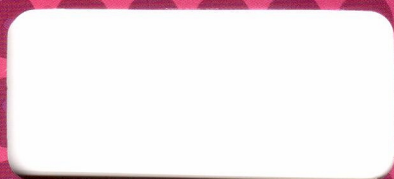




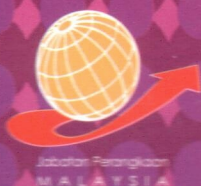
MALAYSIA

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

*MALAYSIAN ECONOMIC INDICATORS
LEADING, COINCIDENT & LAGGING INDEXES*



2012



JABATAN PERANGKAAN MALAYSIA
DEPARTMENT OF STATISTICS, MALAYSIA

PENUNJUK EKONOMI MALAYSIA

INDEKS PELOPOR, SERENTAK & SUSULAN

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JABATAN PERANGKAAN MALAYSIA

DEPARTMENT OF STATISTICS, MALAYSIA

Penunjuk Ekonomi Malaysia

Indeks Pelopor, Serentak & Susulan

A P R I L 2 0 1 2

Malaysian Economic Indicators

Leading, Coincident & Lagging Indexes

Intisari

Indeks Pelopor (IP) yang memantau prestasi ekonomi ke hadapan menurun 0.5% pada April 2012. IP menyusut kepada 112.2 mata daripada 112.8 mata yang dicatat pada bulan sebelumnya. Dua komponen utama yang menyumbang kepada penurunan ialah Import Benar Logam Asas Berharga dan Logam Bukan Ferus Lain dan Jangkaan Nilai Jualan di Sektor Pembuatan, masing-masing merekodkan negatif 0.3%. Perubahan tahunan IP pada April 2012 perlahan kepada 2.1% berbanding 2.2% pada bulan sebelumnya.

Indeks Serentak (IS), yang mengukur aktiviti ekonomi semasa juga menurun sebanyak 1.9% pada April 2012. Komponen yang menyumbang kepada

penurunan ialah Indeks Kuantiti Perdagangan Runcit (-0.7%), Indeks Pengeluaran Perindustrian (-0.6%), Gaji dan Upah Benar di Sektor Pembuatan (-0.5%) dan Jumlah Guna Tenaga di Sektor Pembuatan (-0.3%). Perubahan tahunan IS mencatatkan pertumbuhan yang perlahan kepada 1.8% pada April 2012 berbanding 3.4% pada bulan sebelumnya.

IP mencatatkan pertumbuhan tahunan yang perlahan pada bulan rujukan. Walau bagaimanapun, IP kekal melebihi arah aliran jangka panjang seperti yang ditunjukkan dalam Carta 2A. Ini menandakan bahawa ekonomi Malaysia akan kekal positif dalam tempoh terdekat.

Highlights

The Leading Index (LI) which monitors the economic performance in advance decreased 0.5% in April 2012. The LI declined to 112.2 points from 112.8 points recorded in the previous month. Two main components that contributed to the decrease were Real Imports of Other Basic Precious and Other Non-ferrous Metal and Expected Sales Value in Manufacturing Sector which respectively recorded negative 0.3%. The annual change of the LI in April 2012 slowed to 2.1% from 2.2% in the previous month.

The Coincident Index (CI), which measures the current economic activity also dropped by 1.9% in April 2012. The components that contributed to the

decrease were Volume Index of Retail Trade (-0.7%), Industrial Production Index (-0.6%), Real Salaries & Wages in Manufacturing Sector (-0.5%) and Total Employment in Manufacturing Sector (-0.3%). The annual change of the CI recorded a slower growth of 1.8% in April 2012 as against 3.4% in the previous month.

The annual change of the LI slowed in the reference month. However, the LI remain above its long term trend as shown in Chart 2A. This implies that the Malaysian economy is likely to remain positive 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 2012 <i>February 2012</i>	Mac 2012 <i>March 2012</i>	April 2012 <i>April 2012</i>
1. Penawaran Wang Benar, M1 <i>Real Money Supply, M1</i>	0.0	0.1	0.1
2. Indeks Perusahaan Bursa Malaysia <i>Bursa Malaysia Industrial Index</i>	0.0	-0.1	-0.1
3. Import Benar Semi Konduktor <i>Real Imports of Semi Conductors</i>	0.5	-0.4	0.0
4. Import Benar Logam Asas Berharga dan Logam Bukan Ferus Lain <i>Real Imports of Other Basic Precious and Other Non-ferrous Metal</i>	0.7	-0.3	-0.3
5. Bilangan Unit Kediaman yang Diluluskan Pembinaan <i>Number of Housing Units Approved</i>	0.0	0.1	0.2
6. Jangkaan Nilai Jualan, Pembuatan <i>Expected Sales Value, Manufacturing</i>	-0.1	0.1	-0.3
7. Bilangan Syarikat Baru Didaftarkan <i>Number of New Companies Registered</i>	0.6	0.0	-0.1
Perubahan Peratusan <i>Percentage Change</i>	1.7	-0.5	-0.5

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*

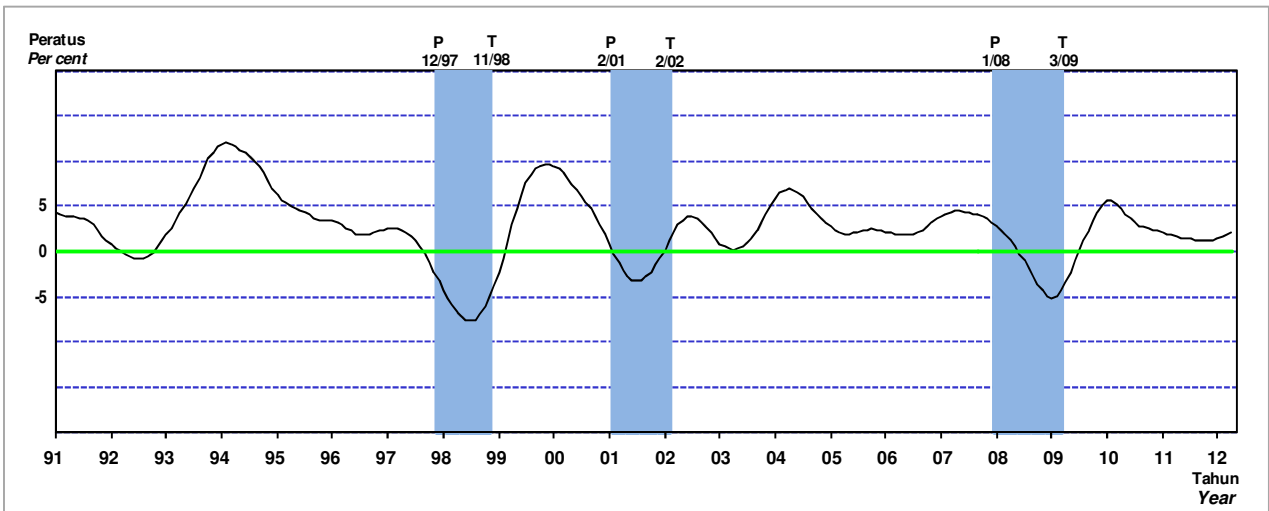
Komponen Indeks Serentak <i>Coincident Index Components</i>	Februari 2012 <i>February 2012</i>	Mac 2012 <i>March 2012</i>	April 2012 <i>April 2012</i>
1. Jumlah Guna Tenaga, Pembuatan <i>Total Employment, Manufacturing</i>	0.6	0.0	-0.3
2. Gaji & Upah Benar, Pembuatan <i>Real Salaries & Wages, Manufacturing</i>	0.0	0.3	-0.5
3. Indeks Pengeluaran Perindustrian <i>Industrial Production Index</i>	0.0	-0.1	-0.6
4. Nilai Caruman Benar, KWSP <i>Real Contributions, EPF</i>	0.9	-0.1	0.2
5. Kapasiti Penggunaan, Pembuatan <i>Capacity Utilisation, Manufacturing</i>	1.4	0.2	0.0
6. Indeks Kuantiti Perdagangan Runcit <i>Volume Index of Retail Trade</i>	0.7	0.5	-0.7
Perubahan Peratusan <i>Percentage Change</i>	3.6	0.8	-1.9

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>	Februari 2012 <i>February 2012</i>	Mac 2012 <i>March 2012</i>	April 2012 <i>April 2012</i>
1. Kos Seunit Buruh, Pembuatan <i>Unit Labour Cost, Manufacturing</i>	-0.2	0.3	-0.1
2. Bilangan Projek Pelaburan Baru Diluluskan <i>Number of Investment Projects Approved</i>	-0.1	0.6	-0.1
3. Bilangan Kenderaan Baru Didaftarkan <i>Number of New Vehicles Registered</i>	0.2	-0.1	0.5
4. Eksport Gas Asli & Minyak Mentah <i>Exports of Natural Gas & Crude Oil</i>	0.0	0.0	0.6
5. IHP Perkhidmatan <i>CPI for Services</i>	0.1	0.3	0.4
Perubahan Peratusan <i>Percentage Change</i>	0.0	1.1	1.3

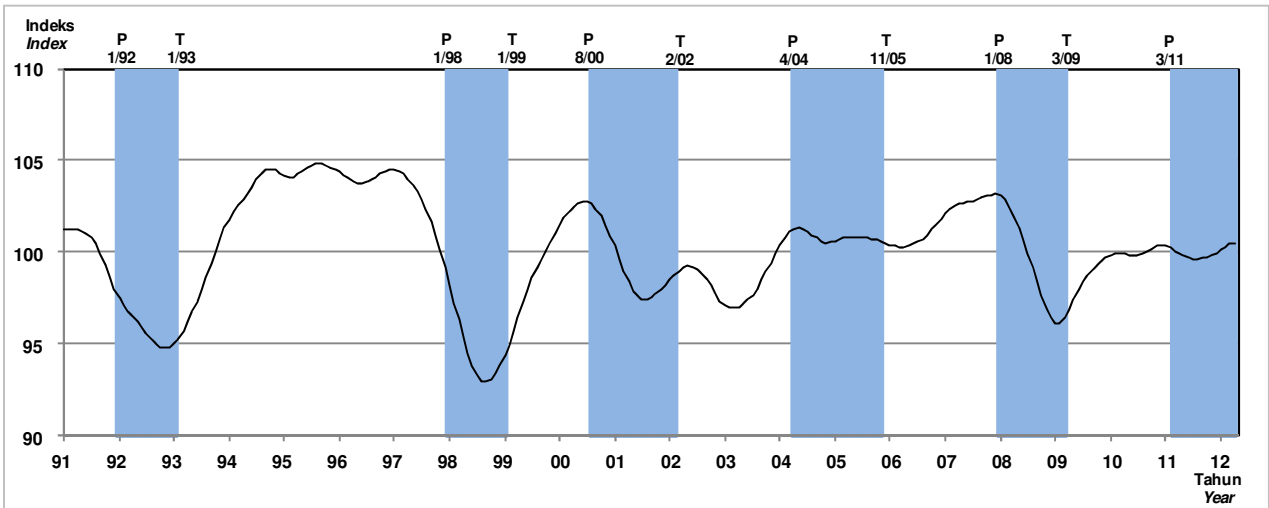
Carta 1: Kadar Pertumbuhan bagi Indeks Pelopor (Terlicin) dan Kitaran Perniagaan

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



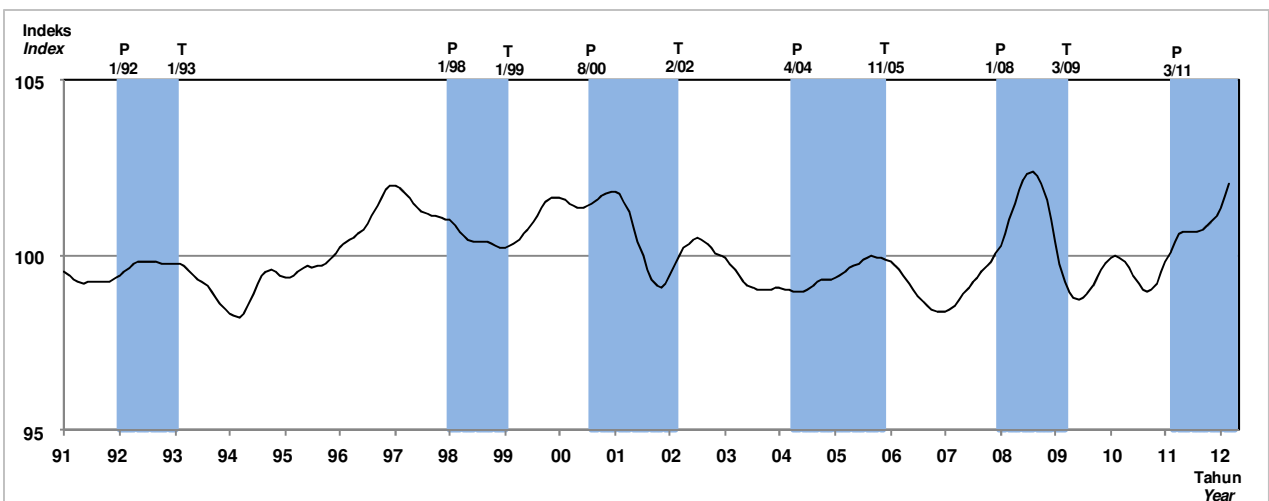
Carta 2A: Indeks Komposit Pelopor dan Aktiviti Ekonomi (Arah Aliran Jangka Panjang=100)

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



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

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



Nota/Note :

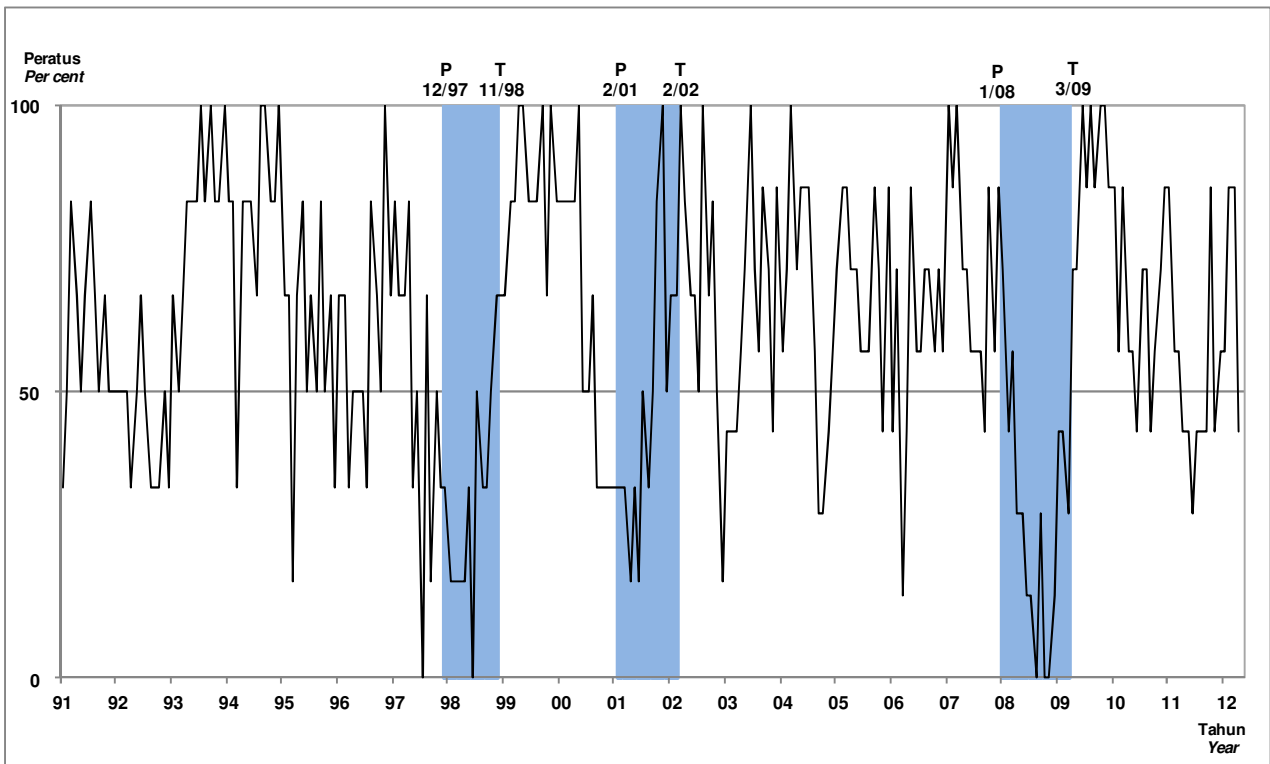
Kawasan berlorek adalah kemelesetan kitaran perniagaan (Carta 1) dan kemelesetan kitaran pertumbuhan (Carta 2A dan 2B) di Malaysia.

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

P Puncak/Peak **T** Kawah/Trough

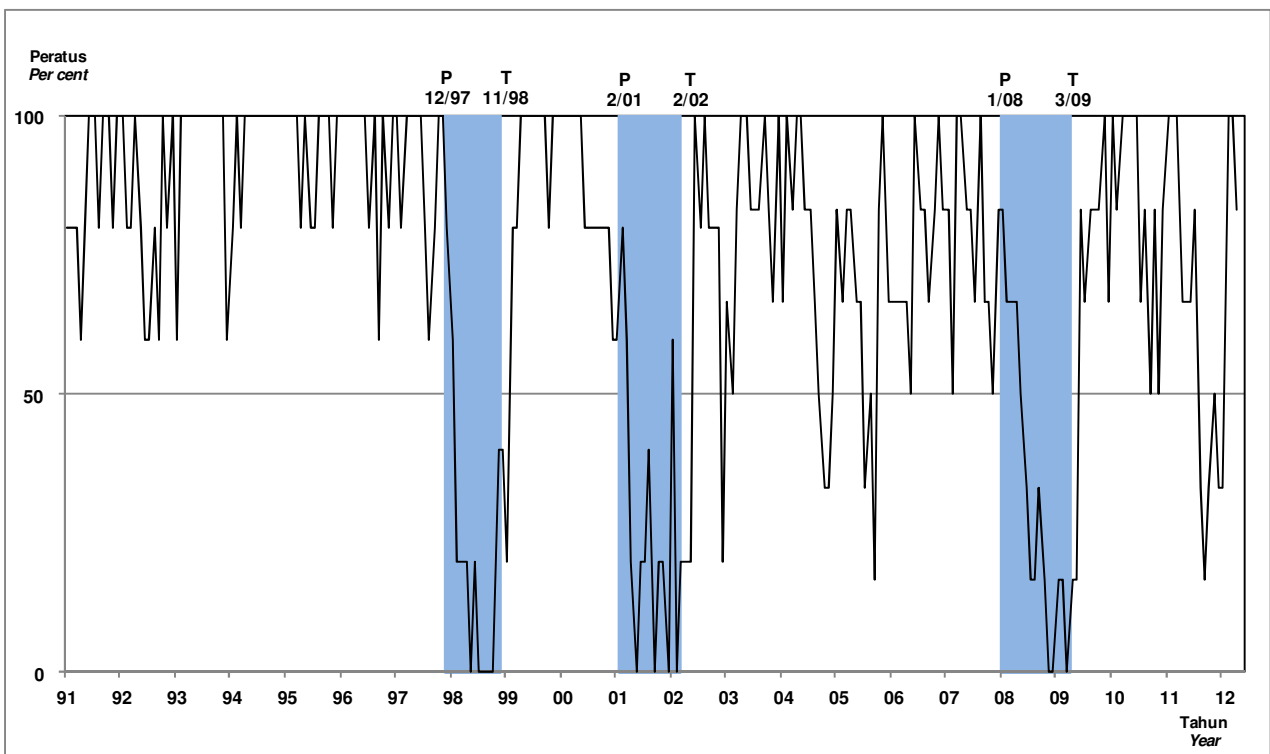
Carta 3 : Indeks Difusi Pelopor dan Kitaran Perniagaan

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 <i>Composite Index</i>						Indeks Difusi <i>Diffusion Index</i>	
	Indeks Pelopor (IP) <i>Leading Index (LI)</i>		Indeks Serentak (IS) <i>Coincident Index (CI)</i>		Indeks Susulan (ISL) <i>Lagging Index (LG)</i>		Indeks Pelopor (IP) <i>Leading Index (LI)</i>	Indeks Serentak (IS) <i>Coincident Index (CI)</i>
	Perubahan 2005=100		Perubahan 2005=100		Perubahan 2005=100		Peratus (%)	Peratus (%)
	Tahunan <i>Annual Change</i> (%)	Tahunan <i>Annual Change</i> (%)	Tahunan <i>Annual Change</i> (%)	Tahunan <i>Annual Change</i> (%)	Tahunan <i>Annual Change</i> (%)	Tahunan <i>Annual Change</i> (%)	Per cent (%)	Per cent (%)
1992 Jan.	68.5	1.9	62.2	9.6	58.3	4.1	50.0	100.0
Feb.	67.7	-0.5	61.7	7.7	58.6	3.7	50.0	80.0
Mac	68.5	0.3	61.8	8.7	58.9	4.5	50.0	80.0
April	68.2	-0.1	62.3	8.3	58.8	5.4	33.3	100.0
Mei	68.5	-0.5	62.4	7.4	59.5	4.7	50.0	80.0
Jun	68.7	0.3	62.5	6.7	60.0	6.4	66.7	60.0
Julai	68.6	-1.6	63.4	7.2	59.9	5.1	50.0	60.0
Ogos	68.1	-1.8	63.2	6.3	59.5	3.0	33.3	80.0
Sept.	68.1	-1.4	62.7	4.7	60.4	5.6	33.3	60.0
Okt.	68.7	-1.0	64.2	6.2	61.0	5.5	33.3	100.0
Nov.	68.7	2.4	63.9	5.2	60.6	5.5	50.0	80.0
Dis.	68.8	1.5	64.4	6.1	60.5	4.6	33.3	100.0
1993 Jan.	69.5	1.4	64.3	3.5	61.1	4.8	66.7	60.0
Feb.	69.9	3.2	66.5	7.8	61.7	5.4	50.0	100.0
Mac	69.4	1.2	66.2	7.2	61.9	5.1	66.7	100.0
April	72.0	5.6	67.3	8.0	62.2	5.8	83.3	100.0
Mei	72.3	5.6	67.6	8.5	62.4	4.9	83.3	100.0
Jun	72.2	5.0	68.4	9.4	61.4	2.2	83.3	100.0
Julai	72.8	6.0	68.8	8.6	62.6	4.4	100.0	100.0
Ogos	73.2	7.5	68.9	8.9	62.4	5.0	83.3	100.0
Sept.	75.2	10.5	69.6	10.9	63.2	4.7	100.0	100.0
Okt.	76.0	10.6	69.9	8.9	63.2	3.6	83.3	100.0
Nov.	75.8	10.4	70.6	10.5	63.1	4.1	83.3	100.0
Dis.	77.8	13.0	69.5	8.0	63.2	4.5	100.0	60.0
1994 Jan.	78.1	12.5	71.2	10.6	63.3	3.6	83.3	80.0
Feb.	78.8	12.8	71.1	7.0	64.1	3.8	83.3	100.0
Mac	77.2	11.2	71.5	8.0	63.7	2.9	33.3	80.0
April	80.7	12.1	72.6	7.9	63.8	2.7	83.3	100.0
Mei	78.7	8.8	72.7	7.5	64.3	3.2	83.3	100.0
Jun	80.4	11.4	73.5	7.4	64.0	4.3	83.3	100.0
Julai	80.0	9.9	73.4	6.6	65.5	4.6	66.7	100.0
Ogos	81.9	11.8	74.4	8.1	66.3	6.2	100.0	100.0
Sept.	82.8	10.1	75.1	7.9	66.5	5.1	100.0	100.0
Okt.	82.6	8.8	75.1	7.4	67.0	5.9	83.3	100.0
Nov.	82.1	8.3	75.7	7.3	66.9	5.9	83.3	100.0
Dis.	82.7	6.3	76.3	9.8	67.1	6.2	100.0	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 (%)
1995 Jan.	81.6	4.5	76.8	8.0	67.8	7.1	66.7	100.0
Feb.	82.9	5.3	77.4	8.8	66.9	4.4	66.7	100.0
Mac	82.0	6.2	77.0	7.7	67.2	5.6	16.7	100.0
April	83.0	2.8	77.8	7.2	68.4	7.1	66.7	80.0
Mei	83.7	6.3	79.2	9.0	68.2	6.0	83.3	100.0
Jun	84.0	4.6	79.0	7.4	69.7	9.0	50.0	80.0
Julai	84.8	6.1	79.2	7.9	69.8	6.6	66.7	80.0
Ogos	84.5	3.2	79.7	7.2	69.0	4.1	50.0	100.0
Sept.	85.1	2.8	80.2	6.8	69.8	5.0	83.3	100.0
Okt.	84.2	1.8	80.5	7.2	69.9	4.4	50.0	100.0
Nov.	85.0	3.4	81.1	7.1	70.4	5.3	66.7	80.0
Dis.	84.6	2.4	81.2	6.3	70.7	5.3	33.3	100.0
1996 Jan.	86.1	5.5	82.3	7.0	71.5	5.4	66.7	100.0
Feb.	84.8	2.3	81.9	5.7	71.5	7.0	66.7	100.0
Mac	85.0	3.7	83.5	8.5	72.3	7.5	33.3	100.0
April	85.9	3.6	83.5	7.3	72.5	6.0	50.0	100.0
Mei	85.2	1.8	83.8	5.8	72.5	6.4	50.0	100.0
Jun	84.9	1.0	83.6	5.8	73.7	5.7	50.0	100.0
Julai	86.0	1.4	84.6	6.9	72.7	4.2	33.3	80.0
Ogos	86.4	2.2	84.6	6.1	73.8	6.9	83.3	100.0
Sept.	86.2	1.2	84.8	5.7	74.0	6.1	66.7	60.0
Okt.	86.8	3.2	85.4	6.1	75.2	7.6	50.0	100.0
Nov.	87.7	3.2	85.1	4.9	75.1	6.6	100.0	80.0
Dis.	86.4	2.1	85.7	5.6	76.1	7.7	66.7	100.0
1997 Jan.	89.0	3.3	86.9	5.7	76.6	7.2	83.3	100.0
Feb.	86.5	2.0	85.7	4.6	76.2	6.5	66.7	80.0
Mac	88.4	4.1	86.8	3.9	76.9	6.4	66.7	100.0
April	87.1	1.4	87.0	4.1	77.0	6.2	83.3	100.0
Mei	87.0	2.1	87.2	4.0	76.8	5.9	33.3	100.0
Jun	87.4	2.9	87.2	4.4	77.3	4.9	50.0	100.0
Julai	86.5	0.5	87.5	3.4	77.2	6.1	0.0	80.0
Ogos	86.4	0.0	87.9	3.9	77.6	5.2	66.7	80.0
Sept.	86.4	0.2	87.9	3.6	77.7	4.9	16.7	80.0
Okt.	86.0	-1.0	88.1	3.2	78.4	4.3	50.0	100.0
Nov.	84.3	-3.9	88.1	3.6	78.6	4.7	33.3	100.0
Dis.	84.7	-2.0	88.2	2.9	78.3	3.0	33.3	80.0

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

Tempoh Period	Indeks Komposit <i>Composite Index</i>						Indeks Difusi <i>Diffusion Index</i>	
	Indeks Pelopor (IP) <i>Leading Index (LI)</i>		Indeks Serentak (IS) <i>Coincident Index (CI)</i>		Indeks Susulan (ISL) <i>Lagging Index (LG)</i>		Indeks Pelopor (IP) <i>Leading Index (LI)</i>	Indeks Serentak (IS) <i>Coincident Index (CI)</i>
	2005=100	Perubahan Tahunan <i>Annual Change</i> (%)	2005=100	Perubahan Tahunan <i>Annual Change</i> (%)	2005=100	Perubahan Tahunan <i>Annual Change</i> (%)	Peratus (%) <i>Per cent (%)</i>	Peratus (%) <i>Per cent (%)</i>
1998 Jan.	82.5	-7.3	87.4	0.5	78.6	2.6	16.7	60.0
Feb.	83.2	-3.9	86.9	1.5	80.5	5.6	16.7	20.0
Mac	82.3	-6.9	86.6	-0.2	79.6	3.4	16.7	20.0
April	80.9	-7.2	85.9	-1.3	79.0	2.6	16.7	20.0
Mei	80.7	-7.3	85.0	-2.5	79.4	3.4	33.3	0.0
Jun	79.9	-8.6	84.8	-2.8	80.1	3.6	0.0	20.0
Julai	79.8	-7.8	84.3	-3.6	80.2	3.8	50.0	0.0
Ogos	78.9	-8.7	83.8	-4.7	79.7	2.8	33.3	0.0
Sept.	79.6	-7.8	83.9	-4.5	81.2	4.5	33.3	0.0
Okt.	79.8	-7.2	83.8	-4.9	81.4	3.8	50.0	0.0
Nov.	80.5	-4.4	83.6	-5.1	81.3	3.4	66.7	40.0
Dis.	81.9	-3.3	84.0	-4.8	81.3	3.8	66.7	40.0
1999 Jan.	81.2	-1.5	83.6	-4.3	81.9	4.2	66.7	20.0
Feb.	81.6	-1.9	84.6	-2.7	81.2	0.9	83.3	80.0
Mac	81.5	-1.0	86.2	-0.5	82.2	3.3	83.3	80.0
April	84.2	4.1	87.7	2.1	82.8	4.8	100.0	100.0
Mei	84.8	5.2	87.7	3.2	83.2	4.8	100.0	100.0
Jun	85.7	7.3	88.7	4.6	82.8	3.4	83.3	100.0
Julai	86.7	8.7	89.3	5.9	83.8	4.5	83.3	100.0
Ogos	86.2	9.2	89.5	6.8	83.7	5.0	83.3	100.0
Sept.	87.0	9.2	90.2	7.5	84.6	4.2	100.0	100.0
Okt.	86.7	8.6	90.1	7.4	85.0	4.5	66.7	80.0
Nov.	87.3	8.4	91.1	9.0	85.3	4.9	100.0	100.0
Dis.	90.2	10.1	91.9	9.3	86.5	6.4	83.3	100.0
2000 Jan.	88.0	8.3	92.0	10.0	85.3	4.2	83.3	100.0
Feb.	90.0	10.3	93.2	10.3	86.6	6.6	83.3	100.0
Mac	90.2	10.7	93.3	8.3	86.7	5.4	83.3	100.0
April	90.5	7.5	93.1	6.2	86.5	4.5	83.3	100.0
Mei	90.7	7.0	94.8	8.1	86.6	4.1	100.0	100.0
Jun	90.5	5.6	95.8	8.0	86.5	4.5	50.0	80.0
Julai	90.9	4.8	95.4	6.8	87.5	4.4	50.0	80.0
Ogos	91.8	6.5	96.5	7.8	87.3	4.2	66.7	80.0
Sept.	90.6	4.2	96.6	7.1	87.9	3.9	33.3	80.0
Okt.	90.7	4.6	96.2	6.8	88.2	3.7	33.3	80.0
Nov.	90.5	3.7	97.0	6.4	88.4	3.7	33.3	80.0
Dis.	90.1	-0.1	96.4	4.9	88.6	2.5	33.3	60.0

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 (%)
2001 Jan.	89.8	2.1	96.7	5.2	88.9	4.1	33.3	80.0
Feb.	90.1	0.2	97.2	4.2	90.0	4.0	33.3	80.0
Mac	88.4	-2.0	97.2	4.1	89.5	3.3	33.3	60.0
April	87.8	-3.0	95.9	3.0	89.7	3.7	16.7	20.0
Mei	87.8	-3.2	95.1	0.4	90.5	4.4	33.3	20.0
Jun	88.3	-2.4	94.2	-1.6	88.5	2.3	16.7	20.0
Julai	88.2	-2.9	94.0	-1.5	89.5	2.3	50.0	20.0
Ogos	88.0	-4.1	94.0	-2.6	89.3	2.3	33.3	40.0
Sept.	88.4	-2.4	93.6	-3.1	89.2	1.4	50.0	0.0
Okt.	89.0	-1.8	94.0	-2.2	88.9	0.8	83.3	20.0
Nov.	89.9	-0.7	93.3	-3.8	88.8	0.4	100.0	20.0
Dis.	89.2	-1.0	92.2	-4.3	88.9	0.3	50.0	0.0
2002 Jan.	90.4	0.6	93.0	-3.9	88.6	-0.3	66.7	60.0
Feb.	89.9	-0.3	91.3	-6.0	90.2	0.3	66.7	0.0
Mac	90.9	2.8	92.6	-4.7	90.8	1.5	100.0	20.0
April	91.7	4.5	92.7	-3.3	92.5	3.1	83.3	20.0
Mei	91.5	4.1	92.9	-2.4	90.9	0.4	66.7	20.0
Jun	91.2	3.3	94.4	0.2	91.0	2.8	66.7	100.0
Julai	91.8	4.1	94.4	0.5	92.4	3.2	50.0	80.0
Ogos	91.9	4.5	94.5	0.5	93.0	4.2	100.0	100.0
Sept.	91.4	3.4	94.3	0.7	92.7	3.9	66.7	80.0
Okt.	91.8	3.1	94.1	0.1	93.5	5.1	83.3	80.0
Nov.	91.9	2.3	93.9	0.6	92.2	3.9	50.0	80.0
Dis.	88.9	-0.3	93.1	0.9	90.9	2.3	16.7	20.0
2003 Jan.	91.0	0.7	94.7	1.9	94.2	6.3	42.9	66.7
Feb.	91.4	1.6	94.0	2.9	94.2	4.4	42.9	83.3
Mac	90.8	0.0	94.5	2.0	93.0	2.4	42.9	83.3
April	91.5	-0.2	95.1	2.6	93.5	1.1	57.1	100.0
Mei	92.0	0.6	94.9	2.1	93.8	3.2	71.4	100.0
Jun	92.1	1.0	95.3	0.9	92.8	2.0	100.0	83.3
Julai	92.8	1.0	96.1	1.7	94.1	1.8	71.4	83.3
Ogos	92.2	0.4	95.9	1.5	93.5	0.5	57.1	83.3
Sept.	94.0	2.8	96.2	2.0	94.3	1.8	85.7	100.0
Okt.	94.8	3.4	96.3	2.3	94.2	0.7	71.4	83.3
Nov.	94.5	2.8	96.0	2.2	94.3	2.3	42.9	66.7
Dis.	95.7	7.6	97.7	5.0	94.6	4.1	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 <i>Composite Index</i>						Indeks Difusi <i>Diffusion Index</i>	
	Indeks Pelopor (IP) <i>Leading Index (LI)</i>		Indeks Serentak (IS) <i>Coincident Index (CI)</i>		Indeks Susulan (ISL) <i>Lagging Index (LG)</i>		Indeks Pelopor (IP) <i>Leading Index (LI)</i>	Indeks Serentak (IS) <i>Coincident Index (CI)</i>
	2005=100	Perubahan Tahunan <i>Annual Change</i> (%)	2005=100	Perubahan Tahunan <i>Annual Change</i> (%)	2005=100	Perubahan Tahunan <i>Annual Change</i> (%)	Peratus (%) <i>Per cent (%)</i>	Peratus (%) <i>Per cent (%)</i>
2004 Jan.	95.7	5.2	97.6	3.1	95.2	1.0	57.1	66.7
Feb.	96.7	5.8	97.9	4.1	96.1	2.0	71.4	100.0
Mac	98.7	8.6	98.4	4.2	94.9	2.0	100.0	83.3
April	97.8	7.0	99.2	4.3	96.1	2.7	71.4	100.0
Mei	97.5	5.9	98.1	3.4	96.0	2.3	85.7	100.0
Jun	98.5	7.0	98.9	3.8	95.7	3.1	85.7	100.0
Julai	98.0	5.6	98.4	2.5	96.2	2.3	85.7	83.3
Ogos	98.0	6.3	98.4	2.6	96.6	3.2	57.1	66.7
Sept.	98.5	4.8	98.4	2.3	97.3	3.1	28.6	50.0
Okt.	97.5	2.8	98.5	2.4	97.6	3.6	28.6	50.0
Nov.	97.5	3.2	97.5	1.6	98.3	4.2	42.9	33.3
Dis.	98.8	3.2	99.4	1.7	98.0	3.5	57.1	50.0
2005 Jan.	98.6	3.0	99.4	1.8	97.5	2.4	71.4	66.7
Feb.	99.8	3.2	98.9	1.0	99.0	3.1	85.7	66.7
Mac	99.5	0.8	100.1	1.7	98.0	3.2	85.7	83.3
April	99.4	1.6	99.7	0.5	99.5	3.6	71.4	83.3
Mei	99.9	2.5	99.0	0.9	99.9	4.1	71.4	66.7
Jun	99.7	1.1	99.9	1.0	100.0	4.5	57.1	66.7
Julai	100.4	2.4	99.5	1.1	99.5	3.4	57.1	50.0
Ogos	100.3	2.3	100.2	1.8	100.6	4.1	57.1	50.0
Sept.	100.9	2.4	100.6	2.2	101.3	4.2	85.7	33.3
Okt.	101.0	3.6	100.9	2.4	101.5	4.0	71.4	66.7
Nov.	99.3	1.9	100.8	3.3	101.4	3.1	42.9	100.0
Dis.	101.2	2.5	101.1	1.7	101.8	3.9	85.7	66.7
2006 Jan.	100.5	2.0	101.3	1.9	101.5	4.1	42.9	83.3
Feb.	102.1	2.4	102.0	3.2	102.3	3.3	71.4	66.7
Mac	100.7	1.2	102.9	2.9	102.7	4.8	14.3	50.0
April	100.7	1.3	103.1	3.4	102.4	2.9	42.9	66.7
Mei	101.6	1.8	103.6	4.6	103.2	3.3	85.7	50.0
Jun	102.3	2.6	104.6	4.7	102.1	2.1	57.1	100.0
Julai	101.7	1.3	105.2	5.7	102.5	3.1	57.1	83.3
Ogos	103.2	2.9	105.9	5.7	102.8	2.2	71.4	83.3
Sept.	102.4	1.5	106.1	5.5	103.1	1.8	71.4	66.7
Okt.	102.9	1.9	105.9	5.0	103.1	1.6	57.1	83.3
Nov.	104.3	5.0	108.1	7.3	103.6	2.2	71.4	100.0
Dis.	104.2	2.9	107.2	6.0	103.2	1.4	57.1	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	2005=100	2005=100	Perubahan Tahunan Annual Change (%)	Perubahan Tahunan Annual Change (%)	Perubahan Tahunan Annual Change (%)	Peratus (%) Per cent (%)	Peratus (%) Per cent (%)
2007 Jan.	105.3	106.8	104.1	4.8	5.4	2.6	100.0	83.3
Feb.	105.6	105.9	104.1	3.4	3.8	1.8	85.7	50.0
Mac	106.3	109.7	103.4	5.6	6.6	0.7	100.0	100.0
April	105.6	109.1	105.1	4.9	5.8	2.7	71.4	100.0
Mei	106.7	109.5	105.3	5.0	5.7	2.1	71.4	83.3
Jun	106.1	108.8	106.3	3.7	4.0	4.2	57.1	83.3
Julai	107.1	109.1	106.3	5.4	3.7	3.7	57.1	66.7
Ogos	106.6	109.4	106.7	3.3	3.4	3.8	57.1	100.0
Sept.	106.6	109.6	106.7	4.1	3.3	3.4	42.9	66.7
Okt.	108.0	109.5	108.0	5.0	3.4	4.7	85.7	66.7
Nov.	107.3	110.4	108.2	2.9	2.2	4.5	57.1	66.7
Dis.	108.6	111.5	108.4	4.3	4.1	5.1	85.7	100.0
2008 Jan.	108.6	113.2	109.5	3.1	5.9	5.2	71.4	100.0
Feb.	108.0	112.0	109.7	2.3	5.7	5.3	42.9	83.3
Mac	107.7	111.3	109.0	1.3	1.4	5.4	57.1	66.7
April	107.9	111.9	111.8	2.2	2.5	6.3	28.6	83.3
Mei	107.4	110.8	112.3	0.6	1.2	6.6	28.6	50.0
Jun	106.2	109.8	113.4	0.1	1.0	6.6	14.3	33.3
Julai	105.4	110.3	113.3	-1.7	1.1	6.6	14.3	16.7
Ogos	104.4	106.4	113.1	-2.0	-2.8	6.0	0.0	16.7
Sept.	105.4	106.6	115.1	-1.1	-2.7	7.8	28.6	33.3
Okt.	104.1	105.7	113.6	-3.6	-3.5	5.2	0.0	16.7
Nov.	103.2	104.2	115.4	-3.9	-5.6	6.6	0.0	0.0
Dis.	101.3	101.3	115.2	-6.8	-9.2	6.2	14.3	0.0
2009 Jan.	101.3	98.8	113.7	-6.7	-12.7	3.8	42.9	16.7
Feb.	101.8	100.6	114.0	-5.7	-10.2	3.9	42.9	16.7
Mac	102.2	98.5	114.0	-5.1	-11.5	4.6	28.6	0.0
April	104.3	99.6	111.7	-3.3	-11.0	-0.1	71.4	16.7
Mei	104.5	101.0	113.1	-2.7	-8.8	0.7	71.4	16.7
Jun	105.5	101.9	113.3	-0.6	-7.2	-0.1	100.0	83.3
Julai	106.5	102.8	113.8	1.0	-6.8	0.4	85.7	66.7
Ogos	106.3	103.5	114.5	1.8	-2.7	1.2	100.0	83.3
Sept.	105.9	103.5	114.4	0.4	-2.9	-0.6	85.7	83.3
Okt.	106.5	105.1	115.2	2.3	-0.6	1.4	100.0	83.3
Nov.	108.1	105.3	115.5	4.7	1.0	0.1	100.0	100.0
Dis.	108.0	105.2	116.7	6.6	3.8	1.3	85.7	66.7

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

Tempoh Period	Indeks Komposit <i>Composite Index</i>						Indeks Difusi <i>Diffusion Index</i>	
	Indeks Pelopor (IP) <i>Leading Index (LI)</i>		Indeks Serentak (IS) <i>Coincident Index (CI)</i>		Indeks Susulan (ISL) <i>Lagging Index (LG)</i>		Indeks Pelopor (IP) <i>Leading Index (LI)</i>	Indeks Serentak (IS) <i>Coincident Index (CI)</i>
	2005=100	Perubahan Tahunan <i>Annual Change</i> (%)	2005=100	Perubahan Tahunan <i>Annual Change</i> (%)	2005=100	Perubahan Tahunan <i>Annual Change</i> (%)	Peratus (%) <i>Per cent (%)</i>	Peratus (%) <i>Per cent (%)</i>
2010 Jan.	107.4	5.9	107.3	8.7	116.8	2.8	85.7	100.0
Feb.	107.9	5.9	108.4	7.8	117.7	3.3	57.1	83.3
Mac	109.7	7.3	109.7	11.4	118.3	3.8	85.7	100.0
April	108.3	3.8	109.8	10.3	118.6	6.1	57.1	100.0
Mei	108.4	3.7	110.9	9.9	118.2	4.5	57.1	100.0
Jun	108.4	2.8	111.0	8.9	119.0	5.0	42.9	100.0
Julai	108.3	1.7	109.3	6.4	118.1	3.7	71.4	66.7
Ogos	109.4	2.9	110.2	6.5	119.1	4.0	71.4	83.3
Sept.	109.2	3.2	110.6	6.9	118.5	3.6	42.9	50.0
Okt.	109.4	2.7	111.2	5.8	118.1	2.5	57.1	83.3
Nov.	109.9	1.7	111.8	6.3	119.0	3.0	71.4	50.0
Dis.	111.2	3.0	112.1	6.6	119.3	2.3	85.7	83.3
2011 Jan.	110.8	3.2	113.5	5.7	122.1	4.5	85.7	100.0
Feb.	110.1	2.1	113.6	4.8	120.6	2.4	57.1	100.0
Mac	110.4	0.6	114.7	4.6	121.5	2.7	57.1	100.0
April	109.9	1.5	114.2	4.0	124.8	5.3	42.9	66.7
Mei	110.1	1.6	113.3	2.1	123.2	4.2	42.9	66.7
Jun	110.3	1.8	114.1	2.8	124.2	4.4	28.6	66.7
Julai	110.2	1.8	115.3	5.4	124.4	5.4	42.9	83.3
Ogos	110.5	1.0	113.5	3.0	124.6	4.7	42.9	33.3
Sept.	110.5	1.2	113.2	2.3	123.8	4.5	42.9	16.7
Okt.	111.8	2.2	113.1	1.6	125.3	6.2	85.7	33.3
Nov.	110.6	0.7	113.7	1.7	126.2	6.1	42.9	50.0
Dis.	111.2	0.0	113.7	1.4	126.4	5.9	57.1	33.3
2012 Jan.	111.4	0.5	113.5	0.1	127.0	3.9	57.1	33.3
Feb.	113.4	2.9	117.7	3.6	127.0	5.3	85.7	100.0
Mac	112.8	2.2	118.6	3.4	128.4	5.7	85.7	100.0
April	112.2	2.1	116.3	1.8	130.1	4.2	42.9	83.3

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	Mac-11	-	24	-	-
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 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 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	Mar-11	-	24	-	-
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, 2012**

*SCHEDULE OF RELEASE DATES FOR PUBLICATION OF
MALAYSIAN ECONOMIC INDICATORS
LEADING, COINCIDENT & LAGGING INDEXES, 2012*

Bulan Rujukan <i>Reference Month</i>	Tarikh Penerbitan <i>Publication Date</i>
Januari <i>January</i>	TLD 23 Mac 2012 <i>NLT 23 March 2012</i>
Februari <i>February</i>	TLD 24 April 2012 <i>NLT 24 April 2012</i>
Mac <i>March</i>	TLD 24 Mei 2012 <i>NLT 24 May 2012</i>
April <i>April</i>	TLD 22 Jun 2012 <i>NLT 22 June 2012</i>
Mei <i>May</i>	TLD 23 Julai 2012 <i>NLT 23 July 2012</i>
Jun <i>June</i>	TLD 24 Ogos 2012 <i>NLT 24 August 2012</i>
Julai <i>July</i>	TLD 21 September 2012 <i>NLT 21 September 2012</i>
Ogos <i>August</i>	TLD 25 Oktober 2012 <i>NLT 25 October 2012</i>
September <i>September</i>	TLD 23 November 2012 <i>NLT 23 November 2012</i>
Oktober <i>October</i>	TLD 21 Disember 2012 <i>NLT 21 December 2012</i>
November <i>November</i>	TLD 24 Januari 2013 <i>NLT 24 January 2013</i>
Disember <i>December</i>	TLD 22 Februari 2013 <i>NLT 22 February 2013</i>

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