



## Overview Business Cycle Indicators (BCI)



- First Day
  - Overview of BCI
  - Malaysia BCI
  - Time series Decomposition
  - Seasonal Adjustment
- Second Day
  - Indicators selection
  - The Composite Index
  - The Diffusion Index

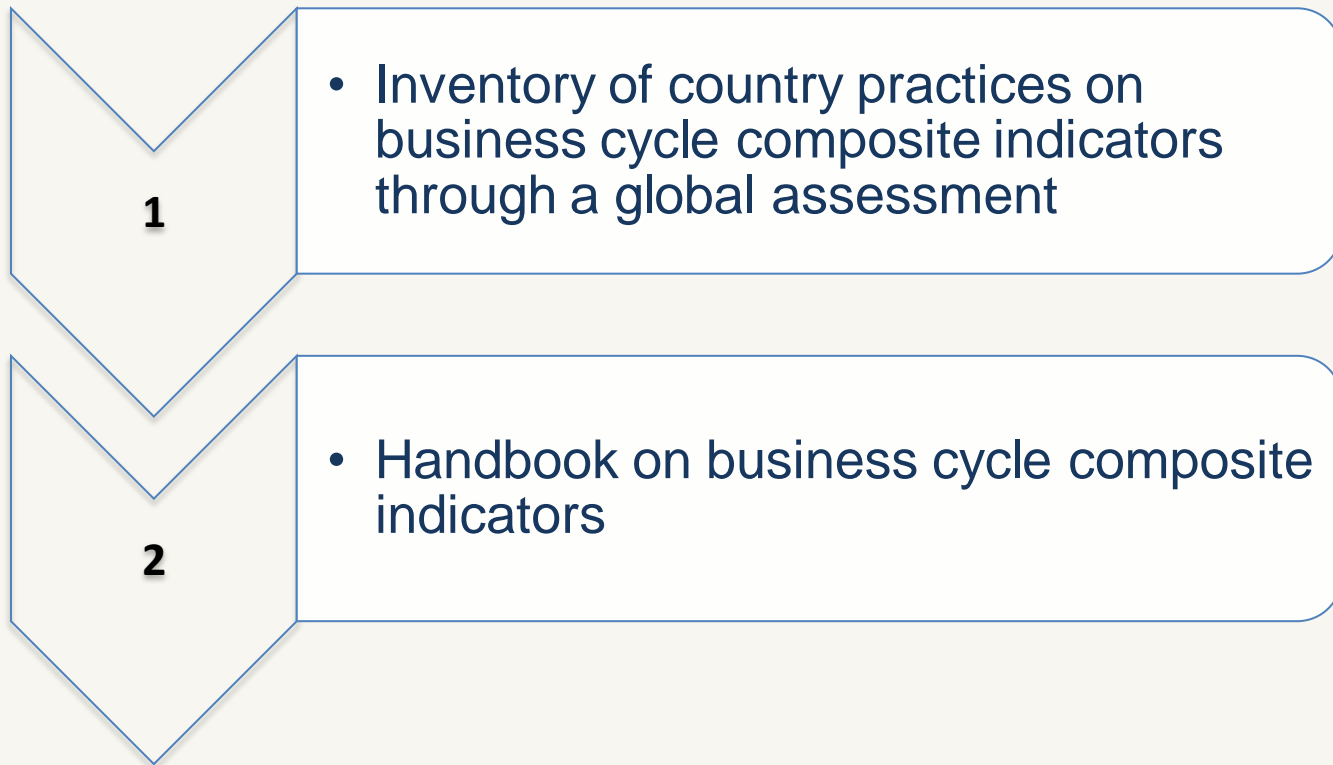


# Introduction



- The 42 Statistical Commission Meeting has recommended programme of work on short-term economic statistics:
- Programme of work on
  - rapid estimates
  - business cycle composite indicators
  - tendency surveys
  - data template and analytical indicators

Two keys deliverable on business cycle composite indicators





## Why country should we have business cycle indicators?

- Business cycles are recurrent and it provides significant impact on the medium/long term national policies/agenda
- Precautionary measures to minimised the impacts



# Introduction



- What is your country practices in determining the date of economic recession or economic recovery?



# Introduction

## Business Cycle recession dates for USA, Japan and Malaysia

USA	JAPAN	MALAYSIA
Dec 07 – June 09	Feb 08 – Mar 09	Mar 08 – Dec 09
Mar 01 – Nov 01	Aug 00 – Apr 03	Mar 02 – Feb 03
Jul 90 – Mar 91	Mar 97 – Jul 99	Jan 98 – Nov 98
Jul 81 - Nov 82	Apr 92 – Feb 94	Jan 85 – Feb 86
		Jul 94 – Feb 75
Source: NBER	Source: ECRI	Source: MEI



## 2. Impact of Economic Recession: Malaysia Experiences







## 2. Impact of Economic Recession: Malaysia Experiences



### Sources of Malaysia's Economic Recessions

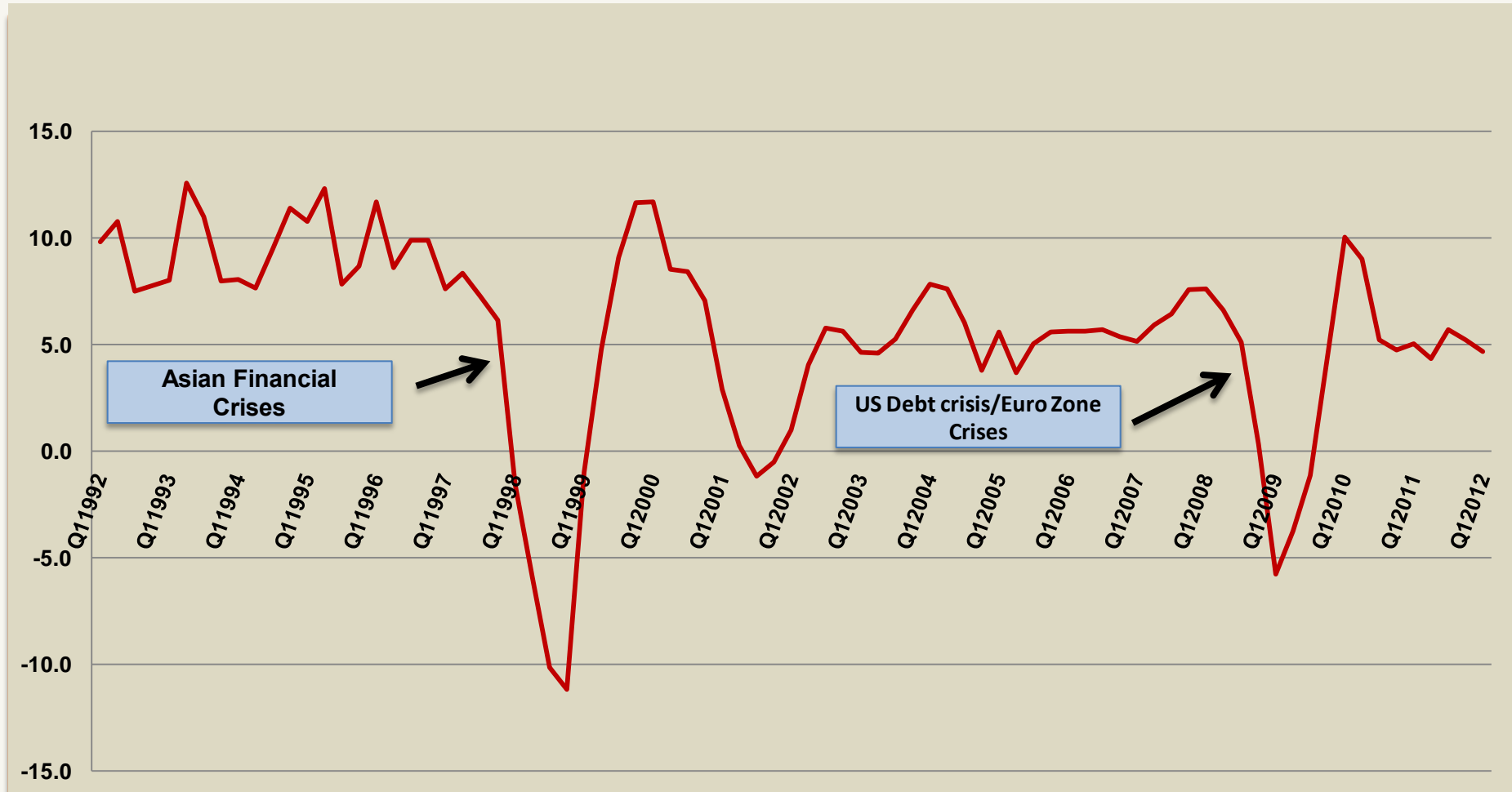
Sources/ Event	Reference Dates	Per capita GNI/ Real GDP
World Energy Crisis	July 74 to Feb 75	<ul style="list-style-type: none"><li>• 1975 (-0.3%)</li><li>• 1975 (0.8%)</li></ul>
Global Economic Recession	Jan 85 to Feb 86	<ul style="list-style-type: none"><li>• 1985 (-4.2%)</li><li>• 1985 (-1.0%)</li></ul>
Asian Financial Crises	Jan 98 to Nov 98	<ul style="list-style-type: none"><li>• 1998 (-7.6%)</li><li>• 1998 (-7.4%)</li></ul>
Global Economic Slowdown	Mar 02 Feb Mar 03	<ul style="list-style-type: none"><li>• 2001 (-1.0%)</li><li>• 2001 (-1.0%)</li></ul>
US Debt crisis/Euro Zone Crises	Mar 08 to Dec 09	<ul style="list-style-type: none"><li>• 2009 (-0.7%)</li><li>• 2009 (-1.6%)</li></ul>



## 2. Impact of Economic Recession: Malaysia Experiences



### Economic Recessions and GDP growth





## 2. Impact of Economic Recession: Malaysia Experiences

### Effect to Labour Markets

Sources/ Event	Reference Dates	Unemployment Rate (% of Labour Force)
Global Economic Recession	Jan 85 to Feb 86	<ul style="list-style-type: none"><li>• 1985 (5.6%)</li><li>• 1986 (7.4%)</li></ul>
Asian Financial Crises	Jan 98 to Nov 98	<ul style="list-style-type: none"><li>• 1998 (3.2%)</li><li>• 1999 (3.4%)</li></ul>
Global Economic Slowdown	Mar 02 Feb Mar 03	<ul style="list-style-type: none"><li>• 2002 (3.5%)</li><li>• 2003 (3.6%)</li></ul>
US Debt crisis/Euro Zone Crises	Mar 08 to Dec 09	<ul style="list-style-type: none"><li>• 2009 (3.3%)</li><li>• 2010 (3.7%)</li></ul>



## 2. Impact of Economic Recession: Malaysia Experiences

### Effect to Financial Markets

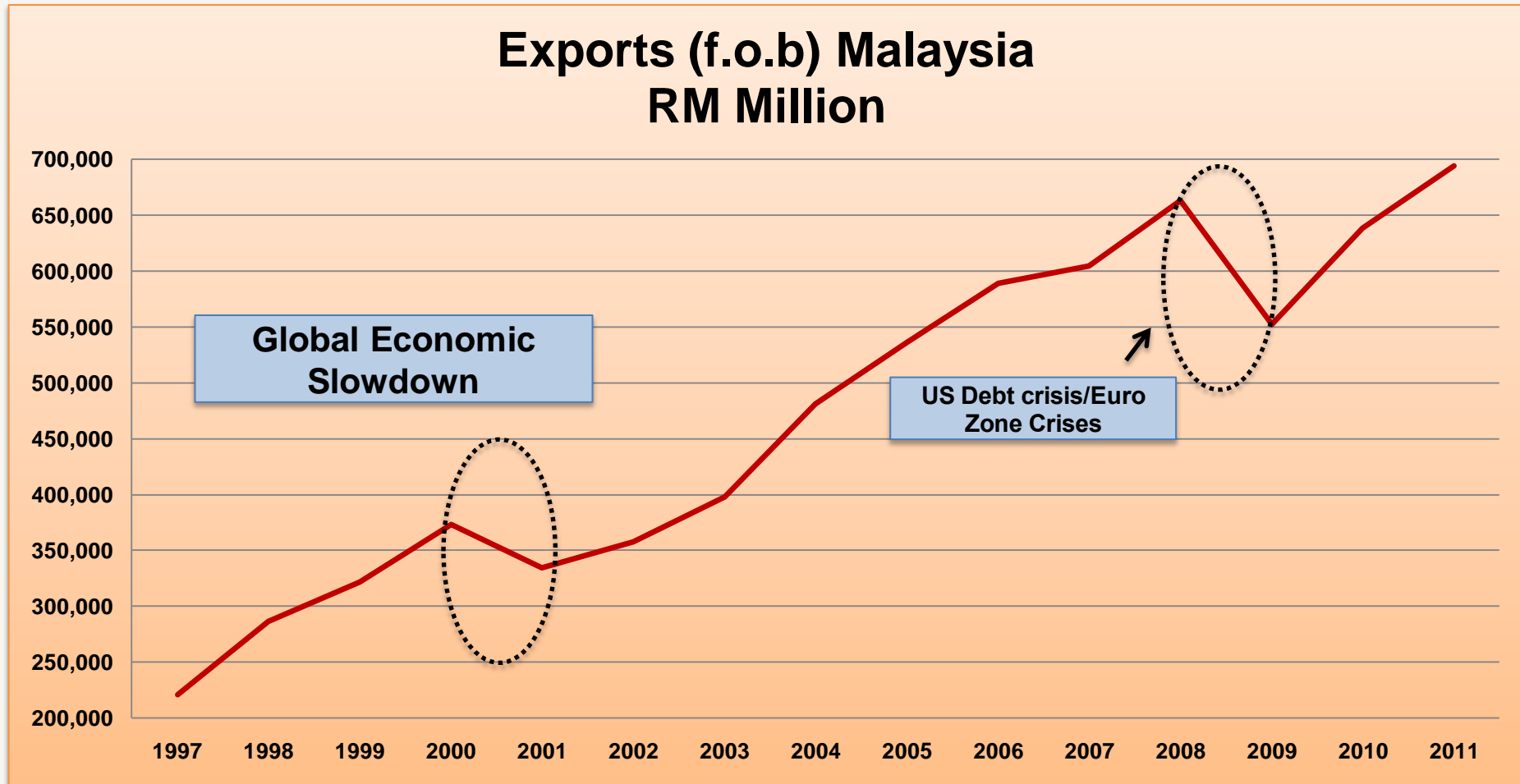
#### Bursa Malaysia Monthly Industrial Index, Closing (1970 = 100)





## 2. Impact of Economic Recession: Malaysia Experiences

Effect to External Markets





### Effect to Income Distribution: Malaysia Gini Coefficients

Year	Gini Coefficient
1970 <sup>a</sup>	0.513
1974 <sup>a</sup>	0.530
1976 <sup>a</sup>	0.557
1979	0.505
1984	0.483
1987 <sup>a</sup>	0.456
1989 <sup>b</sup>	0.442
1992	0.459
1995	0.456
1997	0.459
1999	0.443
2002	0.461
2004	0.462
2007	0.441
2009	0.441

❖ *The Gini coefficient (G) is a measure of income concentration derived from the Lorenz Curve.*

❖ *The value of the Gini coefficient ranges from 0 to 1 where 0 denotes complete equality of income share and 1 represents total inequality of income share.*

Note:

<sup>a</sup> refers to Peninsular Malaysia only

<sup>b</sup> Starting 1989, data is based on Malaysian citizens

Source:

- 1) Post Enumeration Survey of 1970 Population and Housing Census (reference 1970)
- 2) Household Income Surveys
- 3) Statistical Compilations



## 2. Impact of Economic Recession: Malaysia Experiences

# Malaysia Mean Monthly Gross Household Income

Mean Monthly Gross Household Income by Strata, Malaysia : 1970 - 2009

	1970 <sup>a</sup>	1974 <sup>a</sup>	1976	1979	1984	1987	1989 <sup>b</sup>	1992	1995	1997	1999	2002	2004	2007	2009
Malaysia	264	362	505	678	1098	1083	1169	1563	2020	2606	2472	3011	3249	3686	4025
Strata															
Urban	428	570	843	1045	1573	1488	1606	2050	2589	3357	3103	3652	3956	4356	4705
Rural	200	269	385	523	842	881	957	1009	1326	1704	1718	1729	1875	2283	2545

Note:

<sup>a</sup> refers to Peninsular Malaysia only

<sup>b</sup> Starting 1989, data is based on Malaysian citizens

Source:

- 1) Post Enumeration Survey of 1970 Population and Housing Census (reference 1970)
- 2) Agriculture Census 1977 (reference 1976)
- 3) Statistical Compilations
- 4) Household Income Surveys



### Malaysia Incidence of Poverty

- ❖ The calculation of poverty rates involves all households having monthly gross income below Poverty Line Income (PLI).
- ❖ The calculation of the Incidence of Poverty (IP):

$$IP = \frac{\text{Number of households with income below the PLI}}{\text{Total number of households}} \times 100$$

Incidence of Poverty by Strata, Malaysia : 1970 - 2009

	1970 <sup>a</sup>	1976	1979	1984	1987	1989 <sup>b</sup>	1992	1995	1997	1999 <sup>c</sup>	2002	2004	2007	2009
Malaysia	49.3	37.7	37.4	20.7	19.4	16.5	12.4	8.7	6.1	8.5	6.0	5.7	3.6	3.8
Strata														
Urban	21.3	15.4	17.5	8.5	8.5	7.1	4.7	3.6	2.1	3.3	2.3	2.5	2.0	1.7
Rural	58.7	45.7	45.8	27.3	24.8	21.1	21.2	14.9	10.9	14.8	13.5	11.9	7.1	8.4

Note:

<sup>a</sup> refers to Peninsular Malaysia only

<sup>b</sup> Starting 1989, data is based on Malaysian citizens

<sup>c</sup> From 1999 onwards, calculation of poverty is based on 2005 Methodology

Source:

1) Post Enumeration Survey of 1970 Population and Housing Census (reference 1970)

2) Household Income Surveys

3) Statistical Compilations





# THANK YOU

**Abd Latib Talib**  
[latib@stats.gov.my](mailto:latib@stats.gov.my)  
**Economic Indicators Division**  
**Department of Statistics Malaysia**