# MALAYSIA BUSINESS CYCLE COMPOSITE INDICATORS (MBCCI)



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DEPARTMENT OF STATISTICS, MALAYSIA
19 MAY 2015
BEIJING, CHINA

# PRESENTATION OUTLINE



A. INTRODUCTION

B. COMPILATION AND COMPONENTS

C. METHODOLOGY TO IDENTIFY CYCLE

D. HOW IS USED & DISSEMINATED AND WHO IS THE MAIN USERS

E. ISSUE AND CHALLENGES

# A. INTRODUCTION

# A. INTRODUCTION



The Composite Indexes in the MBCCI consists of:

- Leading Index (LI)
- Coincident Index (CI)
- Lagging Index (LG)

Diffusion Indexes (DI):

- Helps to determine turning points of business cycle reference period

# B. COMPILATION AND COMPONENTS



i. **SELECTION CRITERIA**

ii. **COMPILATION METHOD**

iii. **LIST OF COMPONENTS**

# B. COMPILATION AND COMPONENTS



## i. SELECTION CRITERIA

Selection of each component is based on the guideline in the Business Cycle Indicators Handbook, The Conference Board, United States, namely:

- Conformity to business cycle
- Consisten timing
- Economic significance
- Statistical adequacy
- Smoothness
- Promptness

# B. COMPILATION AND COMPONENTS



## ii. COMPILATION METHOD

- Composite Indexes

  Adopted The Conference Board's (TCB) approach

- Diffusion Index

  Adopted the Economic And Social Research Institute's (ESRI), Japan approach

# B. COMPILATION AND COMPONENTS



## iii. LIST OF COMPONENTS

| Leading Index | Coincident Index | Lagging Index |
|---|---|---|
| 1. Real Money Supply, M1<br>2. Bursa Malaysia Industrial Index<br>3. Real Imports of Semi Conductors<br>4. Real Imports of Other Basic Precious & Other Non-ferrous Metal<br>5. Number of Housing Units Approved<br>6. Expected Sales Value, Mfg<br>7. Number of New Companies Registered | 1. Total Employment, Mfg<br>2. Real Salaries & Wages, Mfg<br>3. Industrial Production Index<br>4. Real Contributions, EPF<br>5. Capacity Utilisation, Mfg<br>6. Volume Index of Retail Trade | 1. Unit Labour Cost, Mfg<br>2. Number of Investment Projects Approved<br>3. Number of New Vehicles Registered<br>4. Exports of Natural Gas & Crude Oil<br>5. CPI for Services |

# C. METHODOLOGY TO IDENTIFY CYCLE

# C. METHODOLOGY TO IDENTIFY CYCLE



| Growth Cycle Reference Period | Business/Classical Cycle Reference Period |
|---|---|
| ❖ Trend estimation by using the Hodrick Prescott (HP) Filter method | ❖ Fluctuation (expantions and contractions) in the levels of aggregate economic activity |
| ❖ The determination of growth cycle peak and trough is generated through the deviation of the index from its long term trend | ❖ The phase of business/classical cycle recession is determined by declining of the level of Coincident Index (CI) for at least 6 months successively |
| ❖ Thus, Department establish the growth cycle reference period | |

# D. HOW IS USED & DISSEMINATED AND WHO IS THE MAIN USERS



i. **LEAD/LAG ANALYSIS**

ii. **DATA DISSEMINATION**

iii. **THE MAIN USERS**

# I. LEAD LAG ANALYSIS



## LEAD/LAG TABLE FOR LEADING INDEX (LI)

| Growth Cycle Reference Period | | Leading Index (LI) | |
|---|---|---|---|
| Peak | Trough | Peak | Trough |
| Jan-92 | Jan-93 | Jul-91<br>-6 | Oct-92<br>-3 |
| Jan-98 | Jan-99 | Jan-97<br>-12 | Aug-98<br>-5 |
| Aug-00 | Feb-02 | Aug-00<br>0 | Aug-01<br>-6 |
| Apr-04 | Nov-05 | Mar-04<br>-1 | Apr-06<br>5 |
| Jan-08 | Mar-09 | Dec-07<br>-1 | Jan-09<br>-2 |
| Mar-12 | Sep-12 | Dec-10<br>-15 | Sep-12<br>0 |
| Average (lead/lag) | | -6 | -2 |
| Overall (lead/lag) | | -4 | |

# I. LEAD LAG ANALYSIS



## LEAD/LAG TABLE FOR LEADING INDEX (LI)

| Business Cycle Reference Period | | Leading Index (LI) | |
|---|---|---|---|
| Peak | Trough | Peak | Trough |
| Dis-97 | Nov-98 | Jan-97<br>-11 | Ogos-98<br>-3 |
| Feb-01 | Feb-02 | Ogo-00<br>-6 | Apr-01<br>-10 |
| Jan-08 | Mac-09 | Dis-07<br>-1 | Jan-09<br>-2 |
| Average (lead/lag) | | -6 | -5 |
| Overall (lead/lag) | | -6 | |

# II. DATA DISSEMINATION



The MBCCI disseminated via Department website (www.statistics.gov.my):

- Statistical released
- Free download of full publication

# III. THE MAIN USERS



The main users of MBCCI:

- Central Bank of Malaysia (BNM)
- Economic Planning Unit
- Ministry of Finance

# E. ISSUE AND CHALLENGES

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- It is difficult to obtain a quality indicators that reflect the overall economic activity
  - The limited indicators
  - The issue of obsolete indicators
- Continue review the existing components as well as the potential components
- To develop the business cycle clock for Malaysia

# THANK YOU



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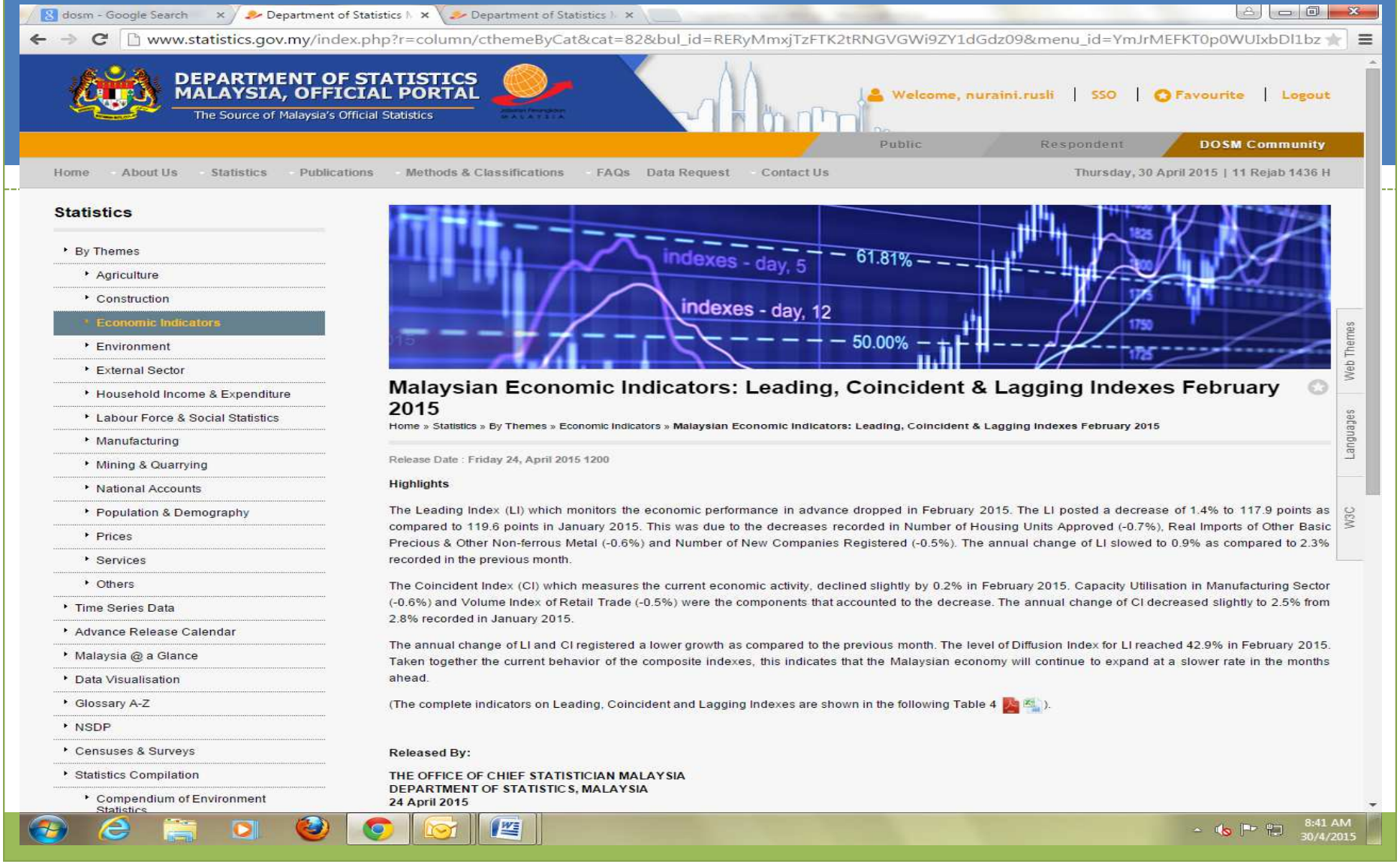
# www.statistics.gov.my

# STATISTICAL RELEASED