



Malaysia Business Cycle Indicators



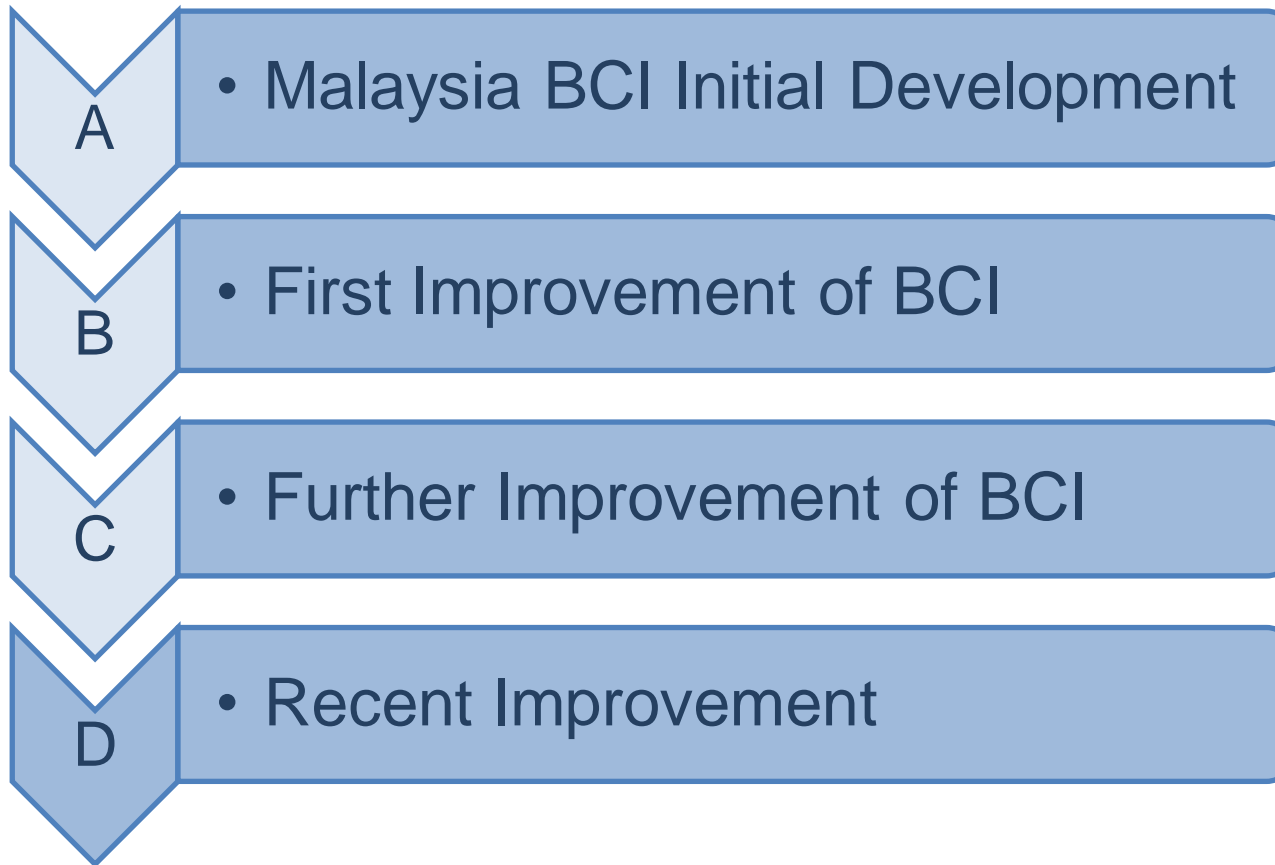
Outline



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



Outline





1. Malaysia BCI: Initial Development

- The project of BCI was started in September 1993.
- With technical Assistance of Center for International Business Cycle Research (CIBCR), Columbia University, New York (late Prof Geoferry Moore and late Prof Victor Zarnowitz)
- The Project is funded by United Nation Development Programme (UNDP).



1. Malaysia BCI: Initial Development

- Review more than 60 monthly and quarterly time series

In 1995 first set of BCI was developed comprises of two composite indexes: the Coincident Index and the Leading Index using the methodology known as Moore-Shiskin (with trend adjustment)

- It was used internally: Department of Statistics and shared with Economic Planning Unit (EPU) for comments

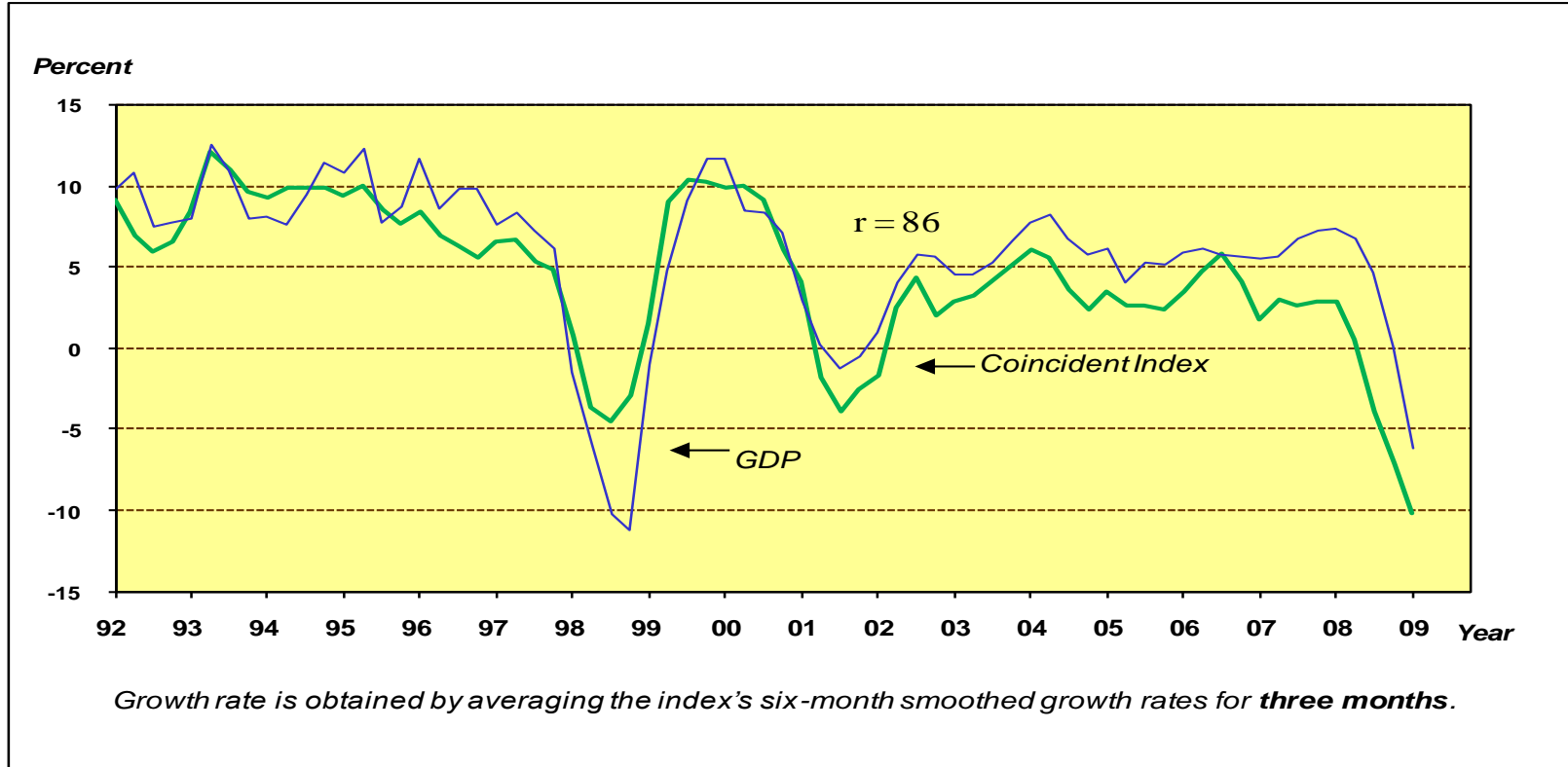


- Composite Coincident Index (Five components)
 - Industrial Production Index
 - Real Gross Imports
 - Real Salaries and Wages (Manufacturing)
 - Total Employment (Manufacturing)
 - Real Sales (Manufacturing)



A. Malaysia BCI: Initial Development

- Composite Coincident Index (Five components)





- Composite Leading Index (Seven Components)
 - Real Money Supply M1
 - Kuala Lumpur Industrial Share Price Index
 - CIBCR's Eleven Countries Leading Index
 - CPI for services (inverted), Growth rate
 - Industrial Material Price Index, Growth rate
 - Ratio, Price to unit Labour cost, Manufacturing
 - Housing Permits, Residential



A. Malaysia BCI: Initial Development



- During the Asian Financial Crises, EPU noticed the usefulness of the BCI especially to create public awareness (to avoid public panic)
- DOSM was asked to improve the BCI performance before made to public
 - Review the existing components
 - Generate the lagging indexes



B. Malaysia BCI: First Improvement



- Three set of composite indexes were developed with reviewed components

The Coincident Index (Six components)

The Leading Index (Eight components)

The Lagging Index (Five components)



- Composite Coincident Index (Six components)
 - Industrial Production Index
 - Real Gross Imports
 - Real Salaries and Wages (Manufacturing)
 - Total Employment (Manufacturing)
 - Real Sales (Manufacturing)
 - Real Contribution, Employment Provident Fund (EPF)



- Composite Leading Index (Seven Components)
 - Real Money Supply M1
 - Kuala Lumpur Industrial Share Price Index
 - ~~CIBCR's Eleven Countries Leading Index~~
 - Real Total Tradeed, Eight Major trading partners (USA, Singapore, Japan, China, Thailand, Korea, Taiwan, HK)
 - CPI for services (inverted), Growth rate
 - Industrial Material Price Index, Growth rate
 - Ratio, Price to unit Labour cost, Manufacturing
 - Housing Permits, Residential
 - New Companies Registered



- Composite Lagging Index (Five Components)
 - 7-day call money, rate (inverted)
 - Real Excess Lending to private
 - Investment project approved, number
 - Number of Defaulters, EPF (inverted)
 - New vehicles registered



C. Malaysia BCI: Further Improvement



- In 2008, DOSM started to review the overall performance of BCI
 - A. The Methodology
 - B. Components
 - C. Supplements Indexes



A. The Methodology

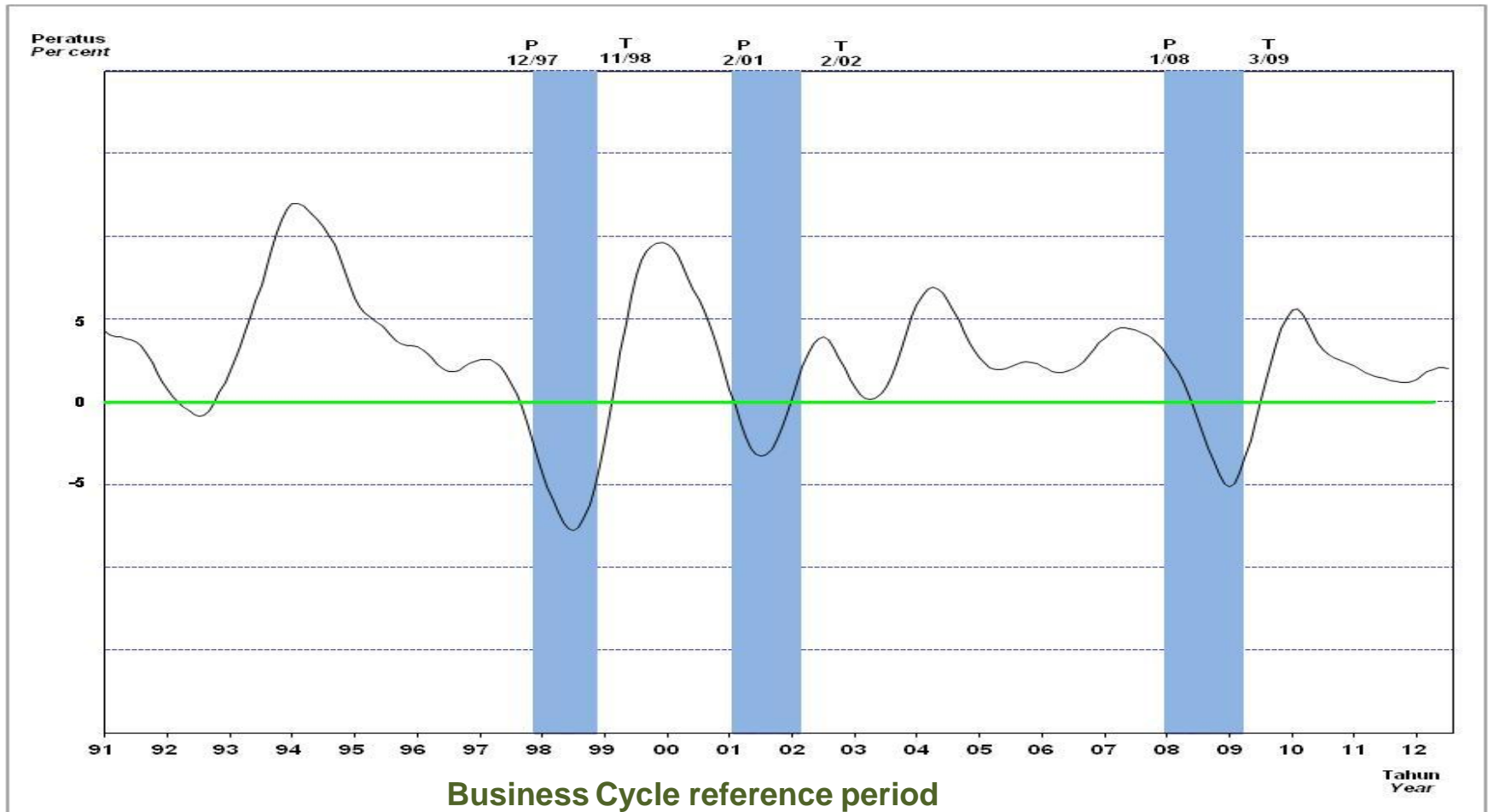
- Used the methodology recommended as in Conference Board
 - without trend adjustment
 - Standardized weight



C. Malaysia BCI: Further Improvement



B. Review the whole components of CI and LI Establish the reference cycle

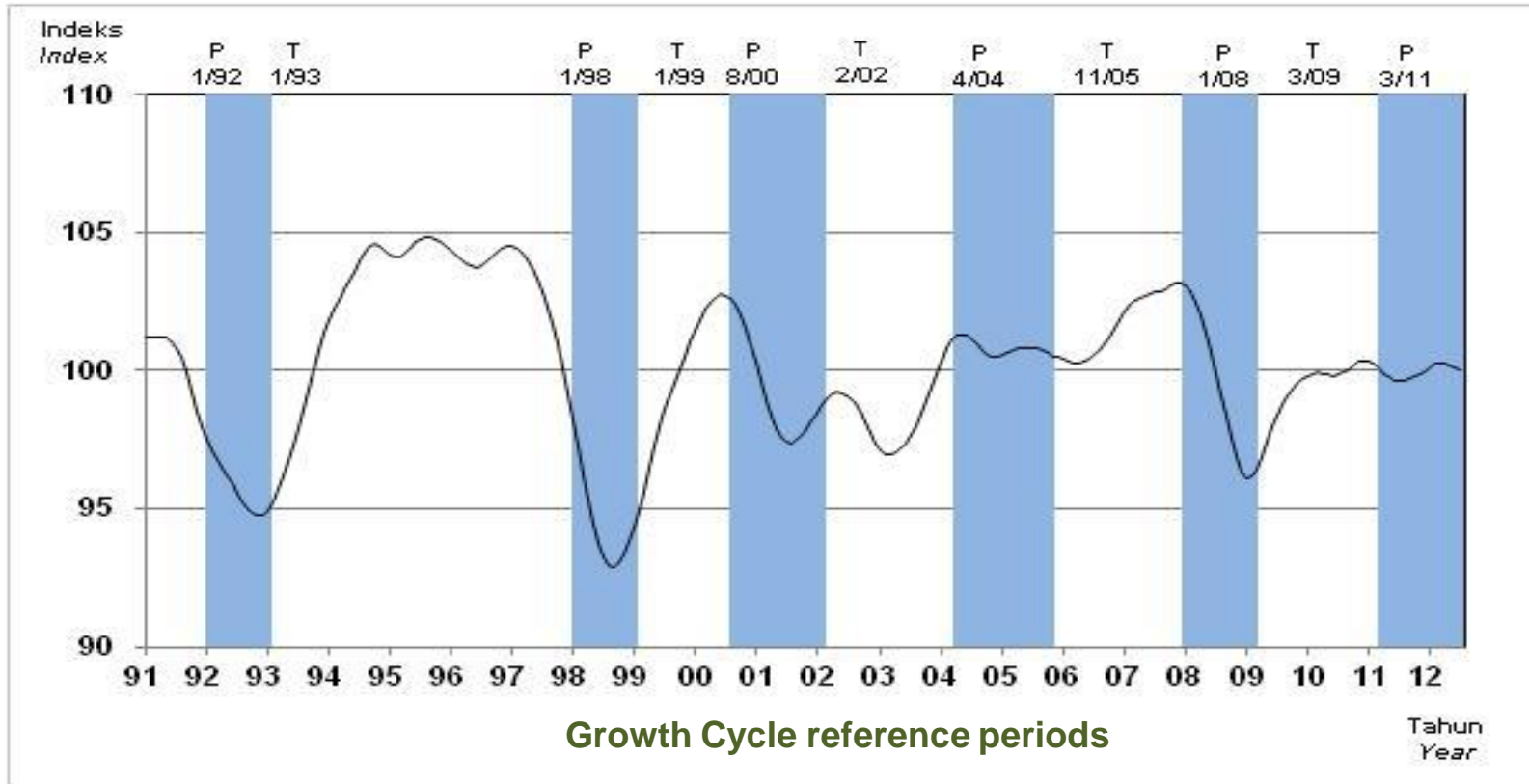




C. Malaysia BCI: Further Improvement



B. Review the whole components of CI and LI
Establish the reference cycle





C. Supplements Indexes

- Diffusion Indexes
 - Leading Diffusion Index
 - Coincident Diffusion Index

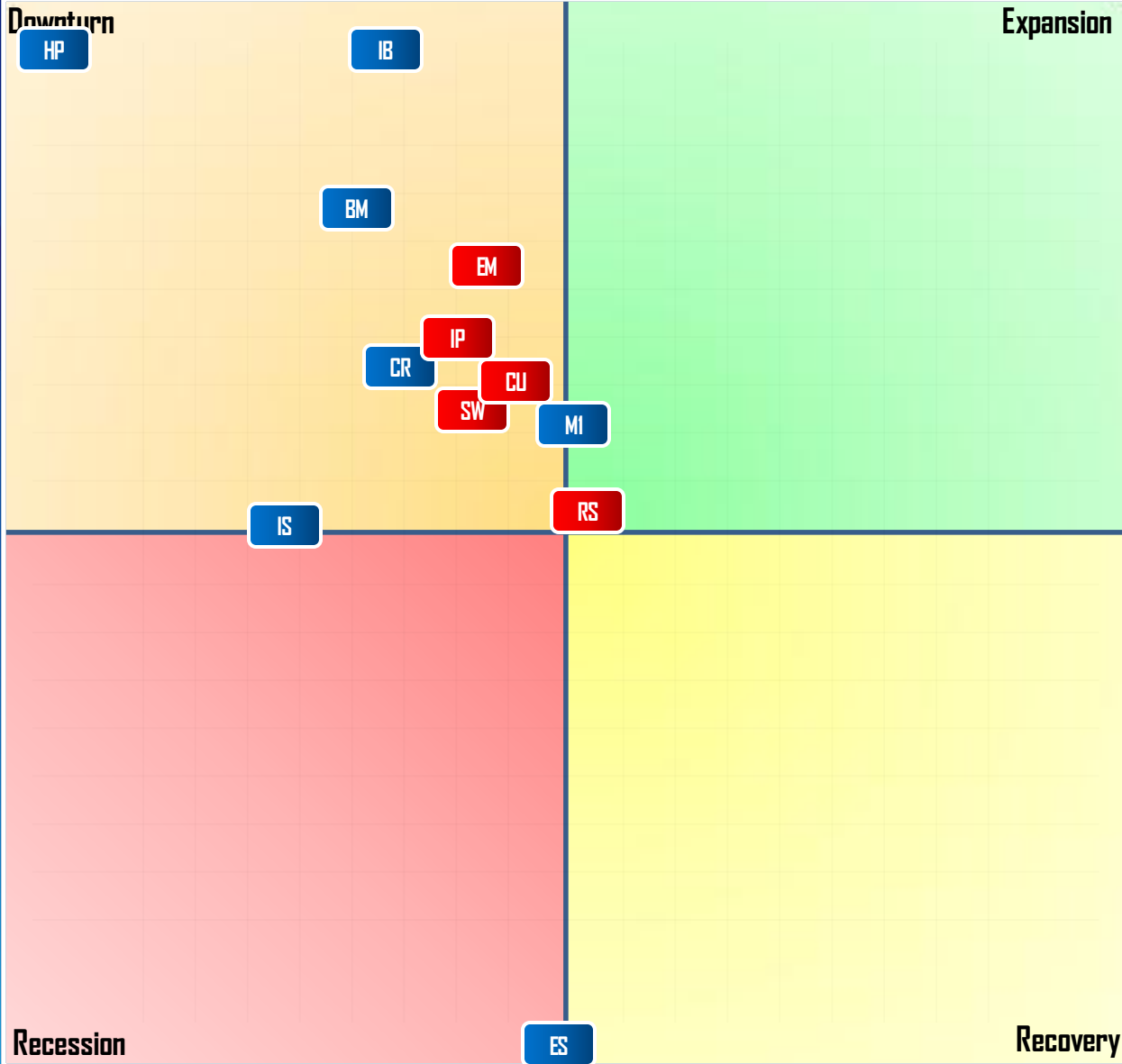


D. Malaysia BCI: Recent Improvement

Business Cycle Clock

Downturn

Expansion



Recession

Recovery

MALAYSIA BUSINESS CYCLE CLOCK

MAY 2008

COINCIDENT INDEX
LEADING INDEX

RS	Retail Sales Index
IP	Industrial Production Index
EM	Employment, Mfg
SW	Real Salaries & Wages, Mfg
CU	Capacity Utilization, Mfg
MI	Real Money Supply, MI
HP	Housing Permits, Approved
IS	Real Imports, Semiconductors
CR	New Company Registered
IB	Real Imports of Basic Precious
BM	Bursa Malaysia, Industrial
ES	Expected Sales, Mfg





THANK YOU

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