Forecasting Malaysian Business Cycle Movement: Empirical Evidence from Composite Leading Indicator

Shirly Siew-Ling Wong¹, Shazali Abu Mansor², Chin-Hong Puah³ and Venus Khim-Sen Liew⁴

Department of Economics, Faculty of Economics and Business, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia.
¹shirlywong87@hotmail.com, ²mhzazali@feb.unimas.my, ³chpuah@feb.unimas.my, ⁴ksliew@feb.unimas.my.

Abstract

Early detection of a turning point in a business cycle is crucial, as information about the changing phases in business cycles enables policy makers, the business community, and investors to cope better with unexpected events brought about by economic and business situations. The Malaysian economy is fortunate to own a publicly accessible composite of leading indicator (CLI) that is presumed capable of tracing the business cycle movement and thus contributes to the creation of an early signaling tool for short-term economic forecasting. Certainly, the usefulness of this CLI in monitoring the contemporary economic and business condition in Malaysia will be empirically appealing to the nation. Even though the present study can display the ability of the Malaysian CLI to trace the business cycle and offers advanced detection of business cycle turning points, the evidence of diminishing lead times foreseen by the CLI significantly weaken the fundamental function of a leading index as an early tool to signal economic vulnerability.

Keywords: Business Cycle, Composite Leading Indicator, Early Signaling Tool

1. Introduction

For many decades, economists have sought to summarize the visual evidence of cyclical oscillation in economic series in some way to learn the characteristics of such cycles in real macroeconomic settings. In respect to the vastly classical text of Burns and Mitchell (1946), existence of various business cycle conceptions indeed shared a single objective, that is, to strengthen insight into the underlying thoughts behind recurring ups and downs in economic activity. Even though the cyclical fluctuations in economic activity hardly follow a predictable periodic pattern, as the size and magnitude of expansion and contraction deviate across periods, each turning point in the business cycle presents certain crucial information that offers future indication on the changing phases of the economy. Moreover, development in leading indicator analysis persuasively suggests that combinations of sets of leading series to form a unique composite index is generally better than any single series in explaining the cyclical movement.

Undeniably, attempts to track the business cycle may be undertaken under a composite leading indicator (CLI) since business cycles are widely characterized as broad-based co-movement among a set of economic series, which in turn reflect the future state of the economy. As a result, the leading indicator approach pioneered by the National Bureau of Economic Research (NBER) has been in the forefront of business cycle forecasting, as the leading feature of an indicator exhibits certain forecasting ability to foreshadow the changing economic scenario in the near future. Kozlowski (1980, p. 3) acknowledged that leading indicators have had a long history of usefulness in short-term economic forecasting for a national economy. Since the pioneering work of Mitchell and Burns (1938) and Burns and Mitchell (1946), interest in leading indicator analysis has grown among the national