Towards a Usable Set of Leading Indicators for Hong Kong

William Chow

Economics and Business Facilitation Unit, Financial Secretary’s Office

Hong Kong Special Administrative Region Government, HONG KONG, CHINA

william_chow@fso.gov.hk

This article considers the prospect of compiling leading economic indicators (LEI) that would help predict the Hong Kong economy, especially the turning points. While the pursuit of forecasting accuracy is comprehensible from both an intellectual and practical point of view, the most important role of LEI should be to shorten the recognition lag and implementation lag so that timely and effective policies can be better managed. In fact, forecasting in the context of LEI requires knowing a priori future values of the components which, in general, would not be possible without relying on other forecasting models. Thus, we will not emphasize out-of-sample accuracy of the compiled LEIs, but will focus on the timeliness of the warning signals. The component variables are selected using a combination of time domain and frequency domain analysis. Time disaggregation and seasonal adjustment are applied to the chosen variables, when appropriate, to yield smoothed monthly series. Three different approaches of compilation – the Conference Board type, a Dynamic Factor model, and a Neural Network model – are assessed using the dataset. Our results showed that the Neural Network specification delivers relatively the most precise and reliable signals as compared to the other two approaches.

Keywords: leading indicators, neural network model, Hong Kong

1 The views and analysis expressed in the paper are those of the author and do not necessarily represent the views of the Economic Analysis and Business Facilitation Unit.