Estimation of the Public Debt Threshold of Malaysia

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Abstract
Public debt becomes an essential global issue where a country has a tendency to seek alternative to borrow abroad in order to cushion any severe negative impact due to economic shocks. This is due to the assumption that a country can run into deficit in current year with the expectation that it will turn into surplus in the future. Malaysia as one of the emerging economies experienced decreasing trend of public debt of GDP in the 1990s, but in the 2000s, the scenario has changed and settled at 55\% of GDP in 2015. This study adopts Threshold Regression method to determine the public debt threshold from 1991:Q1-2014:Q4 and to estimate the impact of the different debt levels on the economic growth in the long-run. There is a positive impact of debt on growth when public debt is below 41\% of GDP and marginal impact when the debt level between 41\%-53\% of GDP. However, there is a detrimental impact on growth when public debt exceeds 53\% of GDP. Therefore, policy developed should address in managing optimal level of public debt position and the quality of the debt.

Keywords: Public debt; Threshold; Growth
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1. Introduction
Debt is unavoidable and is viewed as a tool to mitigates the adverse impacts of economic shock. In the inter-temporal perspective, a country may runs into deficit that leads to accumulation of debt in the circumstances where occurrence of economic shock with the aims to cushion the negative impacts of the shock. This is with the assumption that the country will experience surplus in the near future in view of the recovering of the economy. Nevertheless, the debt level of most of the countries are showing growing trend and can be detrimental to the economic growth of the countries. Reinhart and Rogoff (2010) indicate that the threshold of the public debt is 90\% of GDP where countries may experience economic growth when the public debt level is below 90\% of GDP. However, economic growth of the countries may deteriorate when the public debt exceeds 90\% of GDP. Therefore, economic growth of the countries may deteriorate when the public debt of the countries exceed the 90\% of GDP threshold. Thus, the implication of the debt on the economic growth may differ.
Malaysia is one of the fast growing countries in the Southeast Asia region. Malaysia recorded tremendous gross domestic product (GDP) growth in the 1990s with average 9.2\% from 1990 until 1997 (World Economic Outlook, IMF). The economic growth declines drastically due to the Asian Financial crisis in 1997. The government has implemented various prudent fiscal and monetary policies to ensure rapid recovery and resilience towards potential economic crisis. The economic growth of Malaysia maintains at the range 4-5\% from 2011 to 2014 and recorded around 4.9\% in 2015 (World Economic Outlook, IMF).