

Development of Banking Sector & Per-Capita Economic Growth : The G-20 Experience

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Abstract

This research paper investigates the long-run relationship between development of banking sector and the per-capita economic growth in G-20 countries for the period 1961-2013. Using cointegration and Granger causalities, the study finds the presence of both bidirectional and unidirectional causality between development of banking sector and per capita economic growth. In some occasions, per capita economic growth leads to development of banking sector; lending support of demand following hypothesis of finance growth nexus. On other occasions, it is development of banking sector that determines the level of per capita economic growth, lending support of supply leading hypothesis of finance growth nexus. The policy implication of this study is that the economic policies should recognize the differences in the development of banking sector and the per-capita economic growth in order to maintain sustainable development in the G-20 countries.

I. Introduction

A KEY FACTOR in economic growth is the development of financial systems (Ductor and Grechyna, 2015; Zaman, Izhar, Khan and Ahmad, 2012). Undeniably, the stage of development and the depth of the financial sector are key elements that differentiate developing and developed countries (Naceur, Cherif and Kandil, 2014). There are three specific ways in which financial development can affect economic growth: first, it can increase the marginal productivity of capital by collecting information to evaluate

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- the relationships between development of banking sector and macroeconomic factors such as gross domestic product, foreign direct investment, and many more (see, for instance, Pradhan, Arvin, Norman and Hall, 2014a, Pradhan, Tripathy, Chatterjee, Zaki and Mukhopadhyay, 2014b; Beck and Levine, 2004).
- 3 Banking sector, like other financial services, has fully grown in quantitative importance as an integral part of the general development of the financial sector, with the emphasis more recently pitching to banking activities (Festic, Kavkler and Repina, 2011).
 - 4 The weighted average of DCB, DCF, DCP and PCO. The weights are assigned on the basis of principal component analysis.
 - 5 All these variables were converted into their natural logarithms for estimation purposes.
 - 6 The inclusion of European Union, the twentieth member, brings double-counting of four countries: France, Germany, Italy, and the United Kingdom.
 - 7 The VAR model follows the estimation process of Holtz- Eakin, Newey and Rosen. (1988) and Arellano and Bond (1991).
 - 8 AIC stands for Akaike information criterion (Akaike, 1974).
 - 9 DoBS is a representative for four banking sector indicators such as DCB, DCF, DCP, PCO, and BSI. The notations of these variables are available in Table I.
 - 10 The appropriate number of differencing where a particular time series variable reaches stationary is called the order of integration. For instance, if a time series 'Y' becomes stationary after being differenced 'd' times, we can say that 'Y' is integrated of order 'd' and denoted by "Y ~ I (d)" (see, Yang, Niu and Li, 2014; Al-Yousif, 2002).
 - 11 When the two time series variables are non-stationary in their levels and integrated of order one [I (1)], they can be cointegrated as well, provided if there is at least one linear combinations among these two variables and that is stationary (see, for instance, Engle and Granger, 1987).
 - 12 PP stands for Philips and Perron test (Phillips and Perron, 1988)
 - 13 IPS stands for Im-Pesaran-Shin test (Im, Pesaran and Shin, 2003).
 - 14 We test the robustness of the empirical results. However, these test results are not reported here due to space constraints.
 - 15 The test of robustness of the empirical results are not reported here due to space constraints.
 - 16 It is with respect to DCB, DCF, DCP, PCO and BSI

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