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Insurance market penetration and economic growth in Eurozone countries: Time series evidence on causality

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Abstract

This paper examines the causal relationship between insurance market penetration and per capita economic growth in 19 Eurozone countries for the period 1980–2014. We use three different indicators of insurance market penetration (IMP), namely life insurance penetration, non-life insurance penetration, and total (both life and non-life) insurance penetration. We particularly emphasize on whether Granger causality exists between these variables both ways, one way, or not at all. Our empirical results perceive both unidirectional and bidirectional causality between IMP and per capita economic growth. However, these results are mostly non-uniform across the Eurozone countries during this selected period. The policy implication is that the economic policies should recognize the differences in the insurance market and per capita economic growth in order to maintain sustainable growth in the Eurozone.

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Keywords: IMP; Per capita economic growth; Granger causality; Eurozone countries

JEL codes: L96; O32; O33; O43

Introduction

In the previous years, both policy makers and academicians have increasingly paid attention to the linkage[1] between financial development and economic growth (Adeniyi, Oyinlola, Omisakin & Egwaikhide, 2015; Adu, Marbuah & Mensah, 2013; Ahmed, 2016; Beck, Levine & Loayza, 2000; Levine, 2003; Rault, Sova, Sova & Caporale, 2014; Samargandi, Fidrmuc & Ghosh, 2015; Zhang, Wang & Wang, 2012). Financial development is

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[1] Pagano (1993) summarizes that financial development promotes economic growth via three paths: channel more savings to investment, raise marginal productivity of capital and encourage savings.

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commonly defined in terms of aggregate size of the financial sector, its sectorial composition, and a range of attributes of its individual sub-sectors that determine their effectiveness in meeting the various economic agents' requirements to enhance their wealth. Key financial institutions include the central bank, commercial banks, merchant banks, saving institutions, mortgage entities, pension funds, stock markets, and other financial market institutions (Zaman, Izhar, Khan & Ahmad, 2012). Consequently, financial development-growth linkage represents all activities undertaken by the above-mentioned financial institutions and their relationship with economic growth (see, *inter alia*, Ang, 2008; Demetriades and Hussein, 1996; Hassan, Sanchez & Yu, 2011; IMF, 2005; Levine, 1997; Peia and Roszbach, 2015; Thornton, 1994).

While there is extensive research on financial development-economic growth nexus (see, *inter alia*, Christopoulos and Tsionas, 2004; Levine, 2005; Levine, Loayza & Beck, 2000), the existing literature provides constricted coverage for the insurance market activities and its connotation with economic growth.[2] However in reality, like other financial services such as banks and stock markets, insurance market activities[3] play a key role in economic growth (Outreville, 1996; Pradhan, Arvin & Norman, 2015). We provide the following justification to highlight the importance of insurance market activities towards the economic growth. *First*, through financial transfers and indemnification activities, insurance services foster and enhance the economic growth (see, *inter alia*, Ward & Zurbruegg, 2000); and *second*, life insurance products encourage long-term savings and the reinvestment of substantial funds in public and private sector projects (see, *inter alia*, Beck & Webb, 2003), which is again growth-enhancing. Furthermore, there are likely to be different effects on economic growth from life and non-life insurance markets given that the two types of insurance activities protect households and corporations from diverse kinds of risk. Precisely, life insurance companies encourage long-term investments over short-term investments as is the case for non-life insurance companies. Hence, life and non-life insurance activities affect economic growth in diverse ways. In contrast, compared to the demand-following theory, the demand of life and non-life insurance markets may be endorsed by providing more capital and merging risk with the development of local economy (see, *inter alia*, Browne & Kim, 1993; Liu & Chiu, 2012; Liu, He, Yue & Wang, 2014; Outreville, 1990).

Given the importance of insurance market towards economic growth, this study makes an attempt to examine the causal nexus between the two in order to establish the actual fact; that is, "*how do insurance market activities cause per capita economic growth*?" To this purpose, we put different specifications of insurance market activities and study their impact on per capita economic growth. The main moto is to analyze whether the insurance market activities promote economic growth or it is the economic growth that promotes the insurance market activities. The focus of this paper is on Eurozone[4] countries during the period 1980–2014. The choice of this *group* is mostly due to "territorial efficiency". The argument is that this group has smaller countries, having more homogenous population and smaller territories to control, have better institutions and are more prone to reach political consensus (see, for instance, Robinson, 1960). The prominence of this territory effects has undeniably been highlighted by the new economic geography approach (see, for instance, Krugman, 1991). While it postulates the importance of increasing returns to scale and hence a priori bestows an advantage to large countries, it also takes into account the location, structure and density of "economic activity" (usually higher in smaller countries) [see, for instance, Alouini, 2009].

The results of this investigation can be used in a number of ways. *First*, the importance of a more developed insurance sector will be emphasized for the policymakers in each of the Eurozone countries. The importance of the insurance sector is underlined by the fact that it relates directly to economic growth (and therefore prosperity) of a country. *Second*, the eminence of insurance sector within the economic system of a country should act as inducement for the insurance sector itself to promote and enhance their activities. *Third*, the development of insurance sector

[2]The following earlier studies provide the linkage between insurance market and economic growth: Adams, Andersson, Andersson, and Lindmark (2009), Arena (2008), Chen, Lee, and Lee (2012), Boon (2005), Curak, Loncar, and Poposki (2009), Haiss and Sumegi (2008), Han, Li, Moshirian, and Tian (2010), Horng, Chang, and Wu (2012), and Lee, Huang, and Yin (2013).

[3]Additionally, unlike other financial services, there is relatively fewer empirical research on the relationship between insurance market and economic growth. In fact, it can be said that this subject (the insurance-growth linkage) has hardly ever been explored in great depth (see, *inter alia*, Vadlamannati, 2008).

[4]Eurozone is an economic group, which was set up in 1957, when the Treaty of Rome created the European Economic Community. This group is a subset of European Union that have fully incorporated the euro as their sole national currency. Currently, Eurozone includes 19 member countries, namely Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain (see, *inter alia*, Pegkas, 2015). The choice of this group, for our empirical investigation, is mostly due to lack of literature in this study area, and subsequent data availability in the insurance market.