

## The Nexus between the Demand for Life Insurance and Institutional Factors in Europe: New Evidence from a Panel Data Approach<sup>1</sup>

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The life insurance industry has grown considerably since the early 1990s. The disparities between the sizes of this industry in different European countries are the starting point of our research.

The life insurance consumption and its influence factors are a research topic that has received great attention in the existing literature. In recent years, few studies deepened cross-disciplinary studies, examining the influence of institutional variables on the life insurance demand. Previous works on this issue have focused specifically on financial, socio-demographic, and economic aspects influencing the life insurance industry (Zietz (2003), Truett and Truett, 1990; Outreville, 1996; Hwang and Gao, 2003; Li et al., 2007). The results are mixed, in part due to the different degree of development of the life insurance markets.

According to Beck and Webb (2003) life insurance demand can be measured using several proxies (*life insurance penetration*, *life insurance density*, *life insurance in private savings* or *ratio of life insurance in force to GDP*). Because we use cross-country analysis, we choose the life insurance density as the dependent variable, because we do not need to adjust for levels of economic development (Nesterova, 2008).

For a sample of 32 European countries, we investigate life insurance demand in relation to institutional factors, considering the socio-demographic and economic determinants as control variables. Our effort contributes to the literature by analysing the influence of institutional factors on

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life insurance, which, until recently, has not been sufficiently addressed due to lack of databases in this field. Current availability of data from Worldwide Governance Indicators provides the appropriate framework for this analysis. Legislative gaps and the lack of confidence in the judicial and financial system can affect individual perceptions on life insurance. We prove that the quality of institutions at the country level boosted the life insurance industry, but the roles of these determinants are different for transition and emerging economies relative to the developed ones.

In order to assess the influence of institutional variables to life insurance density, we apply a panel data analysis. Considering the fact that our sample is not an exhaustive one and after running appropriate panel estimation tests, the model was re-specified in the GLS form with random effects. We emphasize that a sound insurance market is based on high regulation quality and rule of law. We also prove that for the whole sample the consumption is higher in countries with a high level of GDP per capita, and with a higher percentage of people with tertiary education.

Because our database is formed by developed and transition and emerging countries we intend to see if there are any differences between those two categories. By introducing a dummy variable for transition and emerging economies we show that the positive impact of institutional factors on the development of life insurance market is diminished in these countries. For the transition and emerging markets we find a positive relation between life insurance density, the income distribution and the level of urbanisation.

*Keywords:* institutional factors, European countries, life insurance demand, panel data

#### References

- Beck, T., Webb, I. (2003). "Economic, Demographic and Institutional Determinants of Life Insurance Consumption". *The World Bank Economic Review*, 17(1), 51-88.
- Hwang, T., Gao, S. (2003). "The Determinants of Demand for Life Insurance in an Emerging Economy- the Case of China". *Managerial Finance*, 29(5/6), 82-96.
- Li, D., Moshirian, F., Nguyen, P., Wee, T. (2007). "The demand for life insurance in OECD Countries". *Journal of Risk and Insurance*, 74(3), 637–652.
- Outreville, J.F. (1996). "Life insurance markets in developing countries". *Journal of Risk and Insurance*, 63(2), 263–278.
- Nesterova, D. (2008), "Determinants of the Demand for Life Insurance: Evidence from Selected CIS and CEE Countries", *National University "Kyiv-Mohyla Academy"*, 1-49.
- Truett, D.B., Truett, L.J. (1990). „The demand for life insurance in Mexico and the United States: A comparative study”. *Journal of Risk and Insurance*, 57, 321–328.
- Zietz, E.N. (2003). "An examination of the demand for life insurance". *Risk Management and Insurance Review*, 6, 159–191.