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A study on effective factors of insurance companies' solvency via panel data model

Ghadir Mahdavi

Corresponding Author: Associate Professor, ECO College of insurance, Allameh Tabataba'i University, Tehran , Iran, Email: <u>mahdavi@atu.ac.ir</u>

Jalaloddin Moniri

Co-author: MS in actuarial science ECO College of insurance, Allameh Tabataba'i University, Tehran , Iran, Email: *jalalmoniri1991@gmail.com*

Abstract: The aim of this research is to assess the insurance companies' solvency defined as the capability of insurance companies to cover the exposed risks, by Panel data model.

We use the financial balance sheet data of Iranian insurance companies and obtain the effect of equity capital to total assets ratio, net premium divided by equity capital, return on asset, Herfindahl index, stock plus real estate value divided by total assets and, log of total assets as independent variables on the solvency ratio as dependent variable, by using panel data model.

The results show that the effect of net premium divided by equity capital and the log of total assets are positively associated with solvency ratio and the variable of stock plus real estate divided by total assets is negatively associated with solvency ratio.

The effects of independent variables of equity capital to total assets ratio, the return on assets and the Herfindahl index on insurer solvency are insignificant.

Keywords: Insurance regulation, Insurer, solvency, Panel data. **JEL Classification:** G22, C01, C23.