عنوان مقاله:

Modelling the Cognitive Financial Group Interconnected Risk Network

محل انتشار:

مجله آنالیز غیر خطی و کاربردها, دوره 11, شماره 1 (سال: 1399)

تعداد صفحات اصل مقاله: 16

نویسندگان:

- - - *Department of Mathematics, Faculty of Mathematics, Statistics & Computer Science, Semnan University, Iran*

- - - *Department of Mathematics, Faculty of Mathematics, Statistics & Computer Science, Semnan University, Iran*

- - - *Institute for Mathematical Research, University Putra Malaysia, Serdang, Selangor, Malaysia*

خلاصه مقاله:

In this paper, the new methodology of interconnection network among the various corporations which are the members of a single financial group is studied and developed. For the first time, each company is observed individually and the cognitive risk factors of each are monitored by new introduced indexes. The risk contagion effect on the main node of the holding is calculated respectively. The new indexes help the management to monitor the entire financial group performance. Also guide the main node of the holdings to make appropriate decisions relating to any investment, profit returning and risk of the financial group nodes. It is shown, if a company defaults to meet its obligations, how much this will affect the other companies of the network and the main node of the holding. With the use of new developed methodological indexes, the topology of the financial group network is displayed graphically for the first time and the mathematical structure is developed as well. Finally, the illustrative results are apparent in a new .introduced software which is coded and tested with real data and the results show high accuracy

کلمات کلیدی:

Financial Group, contagion, Risk Management, exposure

لینک ثابت مقاله در پایگاه سیویلیکا: