

RISK MANAGEMENT OF VULNERABILITY THROUGH FUZZY COGNITIVE MAP

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ABSTRACT

Risk management has been one of the vital concerns for financial institutes. This paper introduced concepts of “vulnerability” and “recoverability” to construct a fuzzy cognitive mapping (FCM) for risk management. Aside from exploring the exposures types and the degree of impact attributing to each of such exposures for financial institutes in Taiwan, it was also used to find out the factors affecting the exposure of financial institutes and the relations among the factors. The result of the analysis shows that organizational culture, risk appetite, and internal audit are the most crucial factors affecting the vulnerability of financial institutes. This research provides an exposure assessment system and recommendation to carry out a healthier financial institution management. It also expands financial research into a new field that enriches the vision for financial risk assessment.

KEYWORDS: Risk Management, Fuzzy Cognitive Map, Vulnerability

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