

عنوان مقاله:

Predicting financial statement fraud using fuzzy neural networks

محل انتشار:

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خلاصه مقاله:

Fraud is a common phenomenon in business, and according to Section ۲۴ of the Iranian Auditing Standards, it is the fraudulent act of one or more managers, employees, or third parties to derive unfair advantage and any intentional or unlawful conduct. Financial statements are a means of transmitting confidential management information about the financial position of a company to shareholders and other stakeholders. In this paper, by reviewing the literature, ۶ indicators of current ratio, debt ratio, inventory turnover ratio, sales growth index, total asset turnover ratio, and capital return ratio as input and detection of financial fraud as output are considered for the fuzzy neural network. The database was compiled for ۱۰ companies in the period from ۲۰۱۰ to ۲۰۱۸ after clearing and normalizing qualitatively between ۱ to ۵ discrete numbers with very low or very high meanings, respectively. The fuzzy neural network model with ۱۶۱ nodes, ۴۴۸ linear parameters, ۳۶ nonlinear parameters, and ۶۴ fuzzy laws with two methods of accuracy approximation of mean squared error and root mean squared error has been set to zero and ۰.۰۰۰۰۰۰۱ respectively. This neural network can be used for prediction

کلمات کلیدی:

Financial statement, Fraud, fuzzy neural network

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