SCORING OF EXCHANGE ASSETS ON THE BASIS OF FUZZY BAYESIAN CLASSIFICATION

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The article presents the scoring system of exchange assets. The examples are shares of the Russian companies. The system is founded on a rational combination of expert judgments and on a Bayesian approach to the analysis of the fundamental financial multiples of the companies activity that is given in the form of a set. The article shows the linguistic analysis procedures of the multiples distributions, the forming and the estimating the fuzzy Bayesian classifier parameters of the shares investment quality. The article represents the scoring of the Russian shares as the results.

Literature

1. V. V. Kruglov and etc. Fuzzy logic and artificial neural networks: The manual [Text] / V. V. Kruglov, M. I. Dli, R. Yu. Golunov – M.: Publishing house of Physical and mathematical literature, 2001. – 224 p
2. L. V. Labunets. Randomization of Multidimensional Distributions in the Mahalanobis Metric [Text] / L. V. Labunets // Journal of Communications Technology and Electronics. – 2000. – V. 45. - N 10. – p. 1093 - 1104.
3. L. V. Labunets and ect. Fuzzy-set analysis of the Moscow market of outdoor advertising [Text] / L. V. Labunets, N. L. Lebedeva, M. Y. Chizhov // Audit and financial analysis. – 2014, № 2. – p. 139 - 148.
4. A. O. Nedosekin. Stock management in vague terms [Text] / A. O. Nedosekin - St. Petersburg: Sesame, - 2003. - 200 p. Mode of access: http://sedok.narod.ru/index.html
5. S. Osowski Neural networks to Information Processing [Text] / S. Osowski – Warszawa: Warsaw University of Technology Publishing House, 2006. – 344 p.
6. A. M. Shurigin. Applied Stochastics: robustness assessment, forecast [Text] / A. M. Shurigin. – Moscow: Finance and Statistics, 2000. – 224 p.
7. Box G. E. P., Cox D. R. An analysis of transformation // Journal of the Royal Statistical Society. Series B (Methodological). 1964, V. 26, № 2, p. 211 – 252.
8. Scott D. W. Multivariate Density Estimation: Theory, Practice, and Visualization. – N.-Y.: John Wiley & Sons, Inc, 1992. – 317 p.

Keywords