Applied Stochastic Models in Business and Industry / Volume 17, Issue 1 / pp. 57-67

Research Article

WILEY

Advertisemen

Financial analysis using Bayesian networks

Jozef Gemela 🔀

First published: 26 February 2001 https://doi.org/10.1002/asmb.422 Citations: 24

Abstract

This paper illustrates opportunities of using probabilistic Bayesian networks in fundamental financial analysis. In it, we will present an application based on construction of a Bayesian network from a database of financial reports collected for the years 1993–1997. We will focus on one sector of the Czech economy — engineering — presenting examples that use the constructed Bayesian network in the sector financial analysis and financial analysis of individual enterprises. Copyright © 2001 John Wiley & Sons, Ltd.

REFERENCES

1 Jensen FV. Introduction to Bayesian Network. UCL Press: London, 1996.

Google Scholar

2 Heckerman D, Geiger D, Chickering DM. Learning Bayesian networks: the combination of knowledge and statistical data. Technical Report MSR-TR-94-09. Microsoft Research, Advanced Technology Division, Microsoft Corporation, Redmond, WA 98052.

Google Scholar

3 Gemela J. A Bayesian approach to learning Bayesian networks. Technical Report LISp-97-01, Laboratory for Intelligent Systems, Prague University of Economics, 1997.

Google Scholar

4 Lam W, Bacchus F. Learning Bayesian belief networks: an approach based on the MDL principle. *Computational Intelligence* 1994; **10**(3).



5 Danos P, Imhoff EA. Introduction to Financial Accounting. Irwin: Homewood, IL, 1992.
<u>Google Scholar</u>
6 Hermanson RH, Edwards J, Maher MW. <i>Accounting Principles</i> . Irwin: Homewood, IL, 1992.
<u>Google Scholar</u>
7 Gemela J. Financial analysis using Bayesian networks. Diploma Thesis, Prague University of Economics,
Prague, 1997.
<u>Google Scholar</u>
8 Hajek P, Havranek T, Jirousek R. <i>Uncertain Information Processing in Expert Systems</i> . CRC Press: Boca Raton, FL, 1992.
<u>Google Scholar</u>
Citing Literature

ABOUT WILEY ONLINE LIBRARY

Privacy Policy Terms of Use About Cookies Manage Cookies Accessibility Wiley Research DE&I Statement and Publishing Policies Developing World Access

HELP & SUPPORT

Contact Us Training and Support DMCA & Reporting Piracy

OPPORTUNITIES

Subscription Agents Advertisers & Corporate Partners

CONNECT WITH WILEY

The Wiley Network Wiley Press Room

Copyright © 1999-2025 John Wiley & Sons, Inc or related companies. All rights reserved, including rights for text and data mining and training of artificial intelligence technologies or similar technologies.

