

Comparative Analysis of the Performance of Fundamentalist, Technical and Hybrid Strategies by a Set of Simulated Scenarios

William Dias

Department of Strategic Planning
Federal Institute of Education, Science and Technology of Tocantins- IFTO
Palmas - TO, Brazil
william.dias@ifto.edu.br

Guilherme Vaccaro

Business and Polytechnic Department
Universidade do Vale do Rio Sinos - UNISINOS
São Leopoldo - RS, Brazil
guilhermevaccaro@gmail.com

Abstract

The objective of this study is to compare the performance of three strategies for decision making on investments: A Fundamentalist one, based on the Book-to-Market indicator; a technical one, that uses Moving Averages - arithmetic and exponential, and a hybrid one that combines the criteria established for the first two. To achieve this goal, a computer simulation was performed with data from BM & FBOVESPA from January 2010 to December 2014. The shares were classified into groups by similarity so that two shares of the same group could not make up the portfolio at the same time. The results of the three strategies were compared and Fundamentalist strategy showed significantly better performance in all simulated scenarios (at 0.05). However, only one type of the hybrid strategy was tested.

Keywords

Technical analysis, Fundamental analysis, Hybrid analysis, Scenario simulation.

Biographies

William de Sousa Dias is Master in Production and Systems Engineering from Vale do Rio Sinos University. Has a Specialization in Project Management (2013). Graduated in Economic Sciences from the Federal University of Tocantins (2010). He works as an economist at the Federal Institute of Education, Science and Technology of Tocantins and Assistant Professor in the School of Production Engineering at the Catholic University of Tocantins.

Guilherme Luís Roehé Vaccaro is an CNPq PQ level 2 (productivity in research grant), Ph.D. in Computer Science (UFRGS, 2001), Master in Production Engineering (UFRGS, 1997), Bachelor in Applied and Computational Mathematics (UFRGS, 1993). Held a senior post-doctoral internship at Sungkyunkwan University, South Korea, at the Semiconductor Research Institute (2011). Professor at the Universidade do Vale do Rio dos Sinos (UNISINOS) since 2005, carrying out teaching and research both at Undergraduate and Graduate levels, at the Business School and at the Polytechnic School. Member of the Graduate Programs in Production and Systems Engineering and in Business and Management, focusing on Modeling and Simulation, Multivariate Analysis Methods, Management, and Production Management, with special interest in Healthcare Services Management. Professor at the Catholic University of Rio Grande do Sul (PUC-RS) between 1995 and 2005. Reviewer of journals as International Journal of Production Research, Production, Product and Production, Online Production, and of national and international conferences in the areas of Administration, Engineering Production and Computing.