## Forecasting Free Cash Flow of an Industrial Enterprise Using Fuzzy Set Tools

Authors : Elena Tkachenko, Elena Rogova, Daria Koval

**Abstract :** The paper examines the ways of cash flows forecasting in the dynamic external environment. The so-called new reality in economy lowers the predictability of the companies' performance indicators due to the lack of long-term steady trends in external conditions of development and fast changes in the markets. The traditional methods based on the trend analysis lead to a very high error of approximation. The macroeconomic situation for the last 10 years is defined by continuous consequences of financial crisis and arising of another one. In these conditions, the instruments of forecasting on the basis of fuzzy sets show good results. The fuzzy sets based models turn out to lower the error of approximation to acceptable level and to provide the companies with reliable cash flows estimation that helps to reach the financial stability. In the paper, the applicability of the model of cash flows forecasting based on fuzzy logic was analyzed.

Keywords : cash flow, industrial enterprise, forecasting, fuzzy sets

**Conference Title :** ICBEFMS 2018 : International Conference on Business, Economics, Finance and Management Sciences **Conference Location :** Los Angeles, United States

Conference Dates : October 30-31, 2018