

## **The objective of the project and characteristics of the planned research**

Economists were entering the twenty-first century with the illusory euphoria, with the hope of increasing integration of financial markets, faster and more effective use of information and effective forecasting of economic phenomena using sophisticated statistical, econometric and artificial intelligence models. The global financial crisis that began in mid-2008, dismissed the myth of economically secure regions of the world, countries and companies. We are witnessing unprecedented events, such as lowering the US credit rating from AAA to AA + for the first time in the history of this country, or the collapse of many global enterprises, often with an impeccable economic reputation. **The aim of this project is to develop the trajectories of life and the trajectories of the bankruptcy of firms with the use of synthetic measures representing the economic and financial situation of companies.** In a study author intends to develop several types of trajectories of development of "healthy" companies and to identify the course of the typical trajectories of crisis in companies at risk of bankruptcy. This will allow evaluation of the usefulness of early warning models that aim to capture the early symptoms of the deteriorating economic situation of the company.

In the planned project, the author refers to the problem of effectiveness of economic analysis of enterprises in assessing their financial condition in the era of globalization, widespread uncertainty, risk and extremely rapid changes in the business environment. **The new analytical approach, proposed by the author, is to use economic forecasting models to capture the early symptoms of a crisis in long-term (15 years), while a standard forecast applies to annual or two-year period.** Developed typical 10-15 years of life trajectories of companies will allow identification of early signs of negative changes taking place in the company.

Bankruptcy of enterprises do not constitute a central element of any known economic theory. The economic literature distinguishes a number of models of growth and development of companies. But still it lacks theoretical models describing the factors affecting the bankruptcy of organizations. **Identification of early symptoms** that may herald the risk of the collapse of the company (based on the trajectory of life) can be authoritative basis for constructing a system to support decision-making by the management company.

The author hopes that the cause and effect system developed by him will set new directions for assessing the financial situation of enterprises and will increase the effectiveness of forecasts concerning the development and fall of firms.

**This project is dedicated to the research issue of "life" and bankruptcy of enterprises.** This issue is very important in terms of both economic theory and economic practice. The current global financial crisis has proven that even the best international companies should continually monitor the financial situation of their own and the companies they cooperate with. The globalization process has led to a complex network of relationships in the business environment. In the market economy, it means increased complexity and uncertainty of developments affecting the financial condition of business entities. No company, even during times of prosperity, can be certain of their future. The author therefore hopes that the subject of this planned research will be of interest not only to students and researchers in the field of economic sciences, but also to business practitioners.