

The popular scientific character of this description applies both to its language as well as its content.

Introduction

The general understanding of the term „default” is surprisingly close to its legal definition i.e. a court declaring a firm to be insolvent. In economic research, however, „insolvency” is a much broader term. It should be interpreted as a continued state in which a company is unable to duly settle its liabilities, regardless of a potential court ruling or its absence. Interestingly, some events, e.g. a takeover by another company that actually helps avoid insolvency may also be viewed by economists as a „default”.

Successful prediction of „economic default” would have a high value to all stakeholders of a company, including its employees, customers, suppliers, banks, bond and shareholders. Acting upon a justified conviction of imminent problems, they would surely take great care deciding whether to enter into a contractual relation with the troubled entity. In practice, however, there exist a great deal of difficulties in forecasting instances of default. Furthermore, there is a lack of a comprehensive theory describing the process of a financial situation worsening until the irreversible state. Publishing financial data, which comprises key information about corporate financial health, significantly lags the end of a period the data refers to. What is more, non-listed firms publish such data only in a general form. Lack of market valuation of equity and debt for the non-listed firms limits information sources available for forecasting default even further.

It is worth noting that default forecasting data availability is most limited for the non-listed firms, which constitute the most populous group of companies in the economy, employ the largest share of labour and engage the largest number of customers and suppliers. Financial data disclosure and audit limitations increase the risk of „hiding” a difficult situation through financial data manipulation.

Furthermore, as „economic default” is, as we have already noted, a gradual process, what is interesting in practice is actually not a forecast of a binomial state “occurs versus does not occur”, but forecasting the actual „dynamics” of a financial situation. The situation worsening „today” may result in limitations to settling liabilities „tomorrow”. Hence, there is a need for a multi-period judgment of „economic insolvency” likelihood.

Difficulties in effective forecasting also pertain to the listed firms. Arbitrary choice of input variables featuring in the insolvency forecasting models, the need for rebuilding the model each time there is a change of the underlying company population e.g. from the non-listed to listed firms, from developed to emerging economies, and frequently limited forecasting power of the model used show how far we are from understanding insolvency, i.e. how it starts and how it develops through time.

Our approach

Due to the abovementioned difficulties, including the limitations in access to relevant data, we intend to integrate a wide range of information i.e. financial corporate data, firm's competitive position and its market's attractiveness as well as macroeconomic data. We aim both to pay special attention to the analysis of the input dynamics on the "dynamics" of the insolvency process as well as to use observations of "profit management" i.e. manipulating the reported profit in order to conceal a worrying financial situation. Occurrence of such “management” would constitute an important signal of underlying financial difficulty build-up.

We intend to forecast the probability of default using a multi-period econometric model whose results will be tested „out-of-sample”. Our main goal will not be, however, the very maximisation of the model's forecasting power, but the observation of how different data types e.g. financial corporate data, firm's strategic position, macroeconomic data, either on a static or dynamic basis, as well as the length of sustaining a default “threat”, help predict the financial troubles of a company. In other words, it will not be the predictive power that will be our most important research area but the information capacity of data used. Thanks to this approach we expect to open a new research field which may eventually lead to the foundations of a comprehensive bankruptcy theory. Only such a theory would secure higher prediction rate on a consistent basis.

In the economic literature there have been some attempts undertaken to measure information capacity in the context of bankruptcy. An orderly, comprehensive analysis of various different data sets, including information about the strategic positioning of a company in particular, should be regarded as novel both in theory and practice.

The research team is composed of economists, financiers and an econometrician. They combine a multi-year experience in analysing the questions of debt, corporate competitive (strategic) position, profit quality (profit “management”), as well as creating complex theoretical systems. Preparations for this research have included e.g. international research experience (Singapore Risk Management Institute), publications on issues of default forecasting and an abundant literature review of about 100 items.