

SCIENTIFIC ADVISOR'S REFERENCE

Program:	Master in Corporate Finance
Student:	Dmitrii Kondratev
Title of thesis:	Network analysis in risk assessment: a case of the Russian stock market

Justification of the topic choice. Accuracy in defining the aim and objectives of the thesis. Justification of the topic choice; accuracy in defining the aim and tasks of the thesis; originality of the topic and the extent to which it was covered; alignment of the thesis' topic, aim and objectives.

There is a bulk of literature on network analysis and its application in many fields. Fewer studies are devoted to the use of networks in finance and particularly – in stock market analysis and investment decisions. In this thesis Kondratev D. investigated the network theory tools in finance, applied for assessment risks resulting from high correlation of stocks. This topic is not studied on the Russian market yet, therefore the author makes a theoretical contribution to this area of research, as well as the paper bears important practical implications.

The goal of the research is clearly defined - to discover how network theory can be applied to stock markets and used for shock magnitude prediction. A number of objectives stated are consistent with the goal. The topic is fully covered by the thesis content.

Structure and logic of the text flow. Logic of research; full scope of the thesis; alignment of thesis' structural parts, i.e. theoretical and empirical parts.

The structure is logical. The first part contains a literature review, an overview of network theory and its relation to the current issues in corporate finance. The student analyzes possible applications of network theory tools in finance and potential benefits of such applications. Hypotheses for empirical research are developed in this part of the paper. Hypothesis one states that integration will increase the amount of original shock that is received from partner. Hypotheses two and three state that diversification will decrease the amount of original shock received and that the effect of diversification will decrease at higher levels of it. In chapter 2 the first part of empirical study is conducted. Network theory is applied to the Russian stock market. The author provides data description and its preliminary transformation, presents the network developed. The application of the network is demonstrated in the chapter 3 on examples, based on the networks.

Research hypotheses are tested with the regression analysis. Estimation results, conclusions and managerial implications of analysis are provided.

Quality of analytical approach and quality of offered solution to the research objectives. Adequacy of objectives coverage; ability to formulate and convey the research problem; ability to offer options for its solution; application of the latest trends in relevant research are for the set objectives.

The quality of the thesis content could be evaluated as high. The thesis definitely has a research nature and contains practical implications. Goal and objectives are covered and fulfilled thoroughly. Research question and hypothesis are defined properly. The author uses relevant methodology – network analysis and regression analysis. The complex methodology used, its successful application to the stock market analysis, conclusions made demonstrated high analytical skills of the author. In general the quality of analytical approach could be evaluated as high.

Quality of data gathering and description. Quality of selecting research tools and methods; data validity adequacy; adequacy of used data for chosen research tools and methods; completeness and relevance of the list of references.

Data are valid and relevant. The methodology, research tools and methods are relevant for this research, processing the data collected. The student made substantial efforts to data collection and processing. The list of references is relevant, complete and contains very recent reputable papers in this field of studies.

<p>Scientific aspect of the thesis. Independent scientific thinking in solving the set problem/objectives; the extent to which the student contributed to selecting and justifying the research model (conceptual and/or quantitative), developing methodology/approach to set objectives.</p>
<p>The author demonstrated the scientific thinking in solving research problem, the thesis is conducted independently. The author applied existing methodology and adapted it for finance studies. Research hypotheses were supported. Empirical findings are substantiated and have references to existing studies.</p>
<p>Practical/applied nature of research. Extent to which the theoretical background is related to the international or Russian managerial practice; development of applied recommendations; justification and interpretation of the empirical/applied results.</p>
<p>Empirical results are interpreted properly. Models that explain returns of partner companies through initial shock magnitude, integration, and diversification were developed. Practical recommendations are based on empirical findings. The author concluded, that the results of this research are more appropriate for financial managers than traders, and substantiated his view providing several examples of potential use of networks.</p>
<p>Quality of thesis layout. Layout fulfils the requirements of the Regulations for master thesis preparation and defence, correct layout of tables, figures, references.</p>
<p>The layout of the thesis meets the requirements for master thesis preparation.</p>

The Master thesis of Dmitrii Kondratev meets the requirements for master thesis of MCF program thus the author of the thesis can be awarded the required degree.

Date
13.06.2015

Scientific Advisor:
Asc. Prof. Yulia Ilina

