

REFEREE'S REVIEW

Program:	Master in Corporate Finance
Student:	Iuliia Bogacheva
Title of thesis:	Investigation of real options' interactions: Case of petroleum industry project

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.	5	4	3	2
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.	5	4	3	2
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.	5	4	3	2
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.	5	4	3	2
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.	5	4	3	2
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.	5	4	3	2
Quality of thesis layout. Layout fulfils the requirements of the Regulations for master thesis preparation and defense, correct layout of tables, figures, references.	5	4	3	2

Each item above is evaluated on the following scale, as applicable: 5 = the thesis meets all the requirements, 4 = the thesis meets almost all the requirements, 3 = a lot of the requirements are not met in the thesis, 2 = the thesis does not meet the requirements.

Additional comments:

The thesis under review discusses real option concept application to upstream oil & gas projects valuation with an emphasis on different types of options embedded into the project simultaneously and their combined effect on project value.

The first chapter covers theoretical basics of real options analysis and provides a good overview of the concept, its' limitations and existing research in the area. The second part is equally thorough with respect to real options implications to oil and gas industry, however the description of the project itself is a bit too simplistic: there's hardly such thing as "average" undeveloped oil field in Russia now, and it is worth mentioning in the text that the real analysis performed by a company would require additional inputs and would imply different set and characteristics of real options.

However this theoretical project required extensive data collection and analysis, which was properly performed, explained and documented in the research. All model inputs are relevant and properly discussed, however a section in the third chapter related to oil and gas market, demand perspective, global market analysis looks excessive and not directly related to the research itself.

What would also be advisable in case of any industry, especially that so regulated, is more attention to technological and legal issues: very often the upstream project will have very limited flexibility due to legal constraints (licence terms and conditions on all stages, including production stage when production must fall within range set by the licence terms) or technical limitations (decrease in productivity in one year compared to the planned one may put the whole project at risk due to dramatic increase in future costs associated with re-establishing production of wells).

Overall the research offers a good basis for both theoretical and practical development: as indicated in the last section, proposed methodology may be modified to meet specific project limitations and assumptions in any industry, as well as can be a starting point for theoretical research on other real options' combinations.

The layout meets the requirements of the Regulations for master thesis preparation and defense, text is well structured, reader-friendly and clear.

Master thesis of Iuliia Bogacheva meets the requirements of master in Corporate Finance program, and according to the reviewer's opinion deserves an "excellent" grade (ECTS grade A), thus the author can be given the desired degree.

Date 5th June 2017



Referee:

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