Diploma thesis of the student Bc. Peng Bo concentrates on the market risks measurement of a company operating in the traffic transportation sector. Risk management and measurement is one of the crucial topics for management of a company, whose financial outcomes are influenced by changes in market variables. That is why the topic for the diploma thesis can be considered as an appropriate with respect to the level of the study degree and current problems solved within the financial management of a company.

The goal of the diploma thesis – as declared in the introduction – is the application of the CorporateMetrics methodology in the Air China Company. As it is apparent from the results, the goal of the diploma thesis was fulfilled.

Diploma thesis is in accordance with the diploma thesis assignment divided into five main chapters, where the chapter fourth – the application part – is the most important part of the diploma thesis.

Second chapter concentrates primarily on the description of the CorporateMetrics methodology and its application when quantifying market risk of a company. Besides this, author describes here mathematical background necessary for the calculations, particularly stochastic models for predicating random variables and their statistical verification etc.

Chapter three is focused on the rough description of the Air China Company including history, SWOT analysis, and main competitors.

The most important part of the diploma thesis is the chapter fourth.

Here the author quantifies the risk of the company by applying CorporateMetrics methodology on company’s net income. There are two variables defined (exchange rate, jet fuel costs) which are considered as a random and having impact on net income of the company. There are parameters of selected models derived tested; the models are subsequently used for prediction over the period 2014 and 2015. The other revenue and costs components of the Income statement are considered to be deterministic.

On the basis of the simulation results, there are probability distribution function of net income constructed and main statistics calculated. Furthermore, Earnings at Risk and Expected Shortfall measures for chosen significance levels are calculated. Results of the calculation are graphically presented in tables and charts and commented in an appropriate manner.

Overall summary

On the basis of procedure and the results it is obvious that the main objective of the diploma thesis was fulfilled. The author of the thesis proved to be able to solve given financial issue, which is the main assumption for the recommendation of the diploma thesis for defence.

Ostrava, 9th May 2015

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