Diploma thesis assessment

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Topic: Application of the Real Option Methods in Baidu Company Valuation

The diploma dissertation is devoted to the application of the real option method in valuation of the internet company. Value of company is one of the crucial problem in the financial decision-making and management. However, flexibility as a significant aspect is often neglected. It is known that flexibility creates value. So, the topic of the dissertation is up to date, difficult in methodological procedure application and well stated.

The objective of diploma dissertation given by the author is to employ the application of real options method in exploring the value of Baidu, one Chinese internet company.

The first methodical part includes the description of the real option valuation method and procedure. Here is presented a comparison of financial and real option. Furthermore, we can find categorization of real option types due to flexibility types including formulas of payoff functions. Author has explained valuation procedure of the binomial and Black-Scholes model.

There is in the second part description and financial analysis of the Baidu internet company. The SWOT and Porter analysis is applied and especially development and comparison of profitability, leverage and liquidity explained by horizontal-vertical method.

The most important is computation of a flexible value of Baidu Company applying real option method. The value of underlying asset derived from FCFF and cost of capital estimation of the random geometric Brown process. The author is modelling the value due to flexibility level in the four scenarios: basic, middle, optimistic, and pessimistic one. She has investigated following flexibility options: expand, contract and multiple hybrid option composed from expand and contract option. The results are compared and correctly discussed and interpreted. The passive and flexibility value is distinguished and analysed.

The diploma dissertation shows capabilities of the student work out difficult topic in the excellent level. She has combined knowledge of corporate finance, valuation methods and real option method together. Results can serve as rich analytical source of valuation of internet company value under different assumptions. Author has confirmed capability to explain and solve comprehensively complex financial problem. The graphical presentation of input data and results are suitably used as well.
So, because all substantial and formal conditions are fulfilled, I recommend the
diploma dissertation to the defence.

Ostrava, dated 11th May 2015

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