

Report on Bachelor / Master Thesis

Institute of Economic Studies, Faculty of Social Sciences, Charles University

Student:	Ing. Hengrui Zhang
Advisor:	Prof. Ing. Evžen Kočenda, M.A., Ph.D., DSc.
Title of the thesis:	Measuring the Corporate Investment Value

OVERALL ASSESSMENT (provided in English, Czech, or Slovak):

Please provide a short summary of the thesis, your assessment of each of the four key categories, and an overall evaluation and suggested questions for the discussion. The minimum length of the report is 300 words.

Short summary

The master's thesis is a brilliant example of an otherwise standard Company Valuation topic. The author chooses a leading Japanese company Nintendo, doing business in the video game industry. He strictly distinguishes between market and investment valuations of the entity that can differ significantly. The main analytical conclusion can be seen in the finding that market valuation, as measured by stock prices, underestimates Nintendo's intrinsic value, which thus appears to be a prospective target for investing. No less valuable is the author's ability to demonstrate his skills in applying advanced valuation techniques, such as Monte Carlo simulation and real options approach.

Contribution

The thesis will certainly be attractive to the reader who is a fan of the world of the video game industry and, within it, with one of its key representatives, the Nintendo company. It is remarkable with what understanding the author pays attention to individual aspects of corporate life. Be it the strengths and weaknesses of the development strategy, cash flow statements, financial ratios or, last but not least, corporate social activities. This descriptive part creates a perfect background for the following analytical exercise. It is evident that the author has familiarized himself with the subject of his study in great detail.

Methods

The thesis has a logical structure. In its first part, the applied valuation techniques are briefly described. First, the standard ones, based on variables such as discounted cash flow or weighted average cost of capital. They are then followed by a description of more sophisticated methods (Monte Carlo, real options), which, although it does not go into greater depth, is nevertheless sufficient for the needs of the subsequent application part. The exposition would be more elucidating if some key numerical information (for example firm's value, market capitalization) are not presented in absolute values in Japanese yen. This is especially true when figuring out the value of real options, in this case the growth option. It would be interesting to know what is the percentage contribution of this real options to the firm's value.

To my knowledge, the calculation of real options is rather a supplement to the traditional DCF approach, rather than an alternative one. The value of the Nintendo entity with and without real options should be directly compared. The thesis gives the impression that these are two competing valuation techniques.

Literature

The author communicates sufficiently with relevant literature which is quoted in a proper way. I'm a bit missing the experience of other authors with applied advanced methods, their possible weaknesses.

Manuscript form

The thesis is written in very good English. The author has adopted a jargon used by professional analyses in the given area. On the formal side, the thesis can hardly be criticised.

Overall evaluation

The master's thesis is an excellent example of the application of the company valuation subject. The author organically combines a number of empirical facts with standard and advanced valuation

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techniques. In my view, the thesis fulfills the requirements for a master's thesis at IES, Faculty of Social Sciences, Charles University. I recommend it for the defense and suggest a grade A. The results of the Turnitin analysis do not indicate significant text similarity with other available sources.

Suggested questions for the discussion during the defense

Both Monte Carlo simulation and the option pricing Black-Scholes formula use a normal probability distribution, which is known to underestimate the empirical probability of events from the left and right ends (problem of thin tails). How far this circumstance might affect the robustness of the conclusions? How much is Nintendo's value changed (expressed as a percentage) after the growth option is factored in? And would it be possible to consider some other real options in the given context?

SUMMARY OF POINTS AWARDED (for details, see below):

CATEGORY	POINTS
<i>Contribution</i> (max. 30 points)	28
<i>Methods</i> (max. 30 points)	30
<i>Literature</i> (max. 20 points)	15
<i>Manuscript Form</i> (max. 20 points)	20
TOTAL POINTS (max. 100 points)	93
GRADE (A – B – C – D – E – F)	A

NAME OF THE REFEREE:

DATE OF EVALUATION:

Referee Signature

EXPLANATION OF CATEGORIES AND SCALE:

CONTRIBUTION: *The author presents original ideas on the topic demonstrating critical thinking and ability to draw conclusions based on the knowledge of relevant theory and empirics. There is a distinct value added of the thesis.*

METHODS: *The tools used are relevant to the research question being investigated, and adequate to the author's level of studies. The thesis topic is comprehensively analyzed.*

LITERATURE REVIEW: *The thesis demonstrates author's full understanding and command of recent literature. The author quotes relevant literature in a proper way.*

MANUSCRIPT FORM: *The thesis is well structured. The student uses appropriate language and style, including academic format for graphs and tables. The text effectively refers to graphs and tables and disposes with a complete bibliography.*

Overall grading:

TOTAL	GRADE
91 – 100	A
81 - 90	B
71 - 80	C
61 – 70	D
51 – 60	E
0 – 50	F