



Hochschule für  
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Berlin School of Economics and Law

## **Master Thesis-Summary**

**The impact of the capital structure on the growth of startups**

**Zerina Ntemiri**

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Supervisors:

**Mr. Sebastian Block**

**&**

**Prof. Dr. Martin Uzik**

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More and more countries valuing the contribution of the small enterprises in the unemployment reduction, the boost of the GDP growth and the development of the innovation are making steps forward in order to support entrepreneurs to create and develop their own company. Easier access to capital, educated labor force, international markets and establishment of pro-innovation regulatory and policy are some factors which the government can improve in order to reduce some of the obstacles that entrepreneurs and small firms encounter (Mandel 2017, p. 21)

Unfortunately, because of the above-mentioned obstacles not all innovation firms, startups from now on, represent a success story. Studies have shown that more than half of the new formed companies will fail in their first 5 years of operation (Santarelli and Vivarelli 2007, p. 467). The access and the structure of the required capitals are two of the factors which affect the future of the company.

Yet, much of what we know about the growth or the failure of the startups comes from studies run on well-established companies- the shortage of data on the first years of operation makes it difficult for researchers to investigate further the reason behind the success or the failure. Therefore, this study considers that there is an apparent demand to understand the complexity of the startups' growth and how it interacts with other characteristics of the company. More specifically, this study will contribute in the literature of explaining the impact of the capital structure on the growth of the startups. Understanding how the capital structure affect the expansion of the young innovative firms is apparently the major question on the entrepreneurial finance. However, given the complexity of the growth, we recognized the need of taking into consideration more determining factors which will allow the study to deliver more comprehensive results. Therefore, six other factors are included in the empirical analysis, namely size, age, liquidity, solvency, research and development (R&D) expenditures, and finally one environmental factor represented by the GDP growth. Finally, the main research question of this study is as follows:

*Does the capital structure affect the startups' growth?*

The data is consisted by public traded startups which are younger than 10 years old. The studying period is between 2016 and 2018 and all computations are conducted on RStudio and Microsoft Excel.

Startups development can be categorized in 5 stages: Seed Stage, Startup Stage, Growth Stage, Later Stage and Steady Stage. Due to the lack of available financial data from startups in their first four stages of development, this study works only on startups which have already reached the later stage of development and chosen to raise new capital equity through an IPO, and therefore published disclosed financial statements. The first step towards collecting the data was doing research in the Google of articles, which refers to public-listed startups and unicorns. Afterwards, using the list of collected firms, another piece of research was done to obtain peers in the industry through Infront Analytics, a website which contains valuation and financial information for companies. Furthermore, information with regards to international peers was also revealed. For example, two of HelloFresh's peers are Delivery Hero and Lancaster Colony Corporation. However, the method of inserting companies that are peers of startups in the sample contains the great risk of including firms that may not be eligible to be called startups. With the purpose of avoiding this risk, the study has included some characteristics in the list that help with defining a company as a startup. In order to do so, it was followed the same method as the ESM (2018, p. 15). The first characteristic to qualify a company as a startup is total years of operation. All companies, in order to be included in the study, should have operated their business for less than 10 years by 2018. For instance, the Lancaster Colony Corporation was excluded from the sample as has operated in the sector for more than 50 years. The second quality is that their products or services should be based on innovation and groundbreaking technology. The third characteristic mentioned in the ESM (2018, p. 15) was attempts by a company to increase their sales or number of employees. However, this is not easily tracked, and for this reason the study only adopted the first two characteristics, age and innovation. Once the end sample was finalized, the financial data required for the companies were collected from Bloomberg and the World Bank for 2016 to 2018.

The results indicate that the leverage, measured by the total liabilities to total assets ratio, have a weak positive significant impact on the assets growth of the startups. The possible

interpretation of that outcome is that when the venture desire to boost the performance and growth must increase its indebtedness and acquire more debt. However, much attention should also be paid on the weak relation of these two variables, which reveals that startups should add degrees of liabilities in a moderate way. Regarding the other variables, liquidity and size present a positive relationship, whereas age is seen to have negative impact on growth. The rest of the independent variables are statistically insignificant.

Unfortunately, the paper does have some limitations. The results have to be taken with caution and not be generalizable, as the size of the sample is considerably small and the date period short. With reference to the financial measure, the dearth of complete data for some potential variables related to capital structure, such as short- and long-term debt, prevent this study to give more comprehensive results. Moreover, it is advisable that data of the research should be taken for a complete economic cycle so that results can be compared on the different phases of the cycle. Unfortunately, this paper could not implement this advice.

Eventually, some recommendations for future work are:

1. Larger sample, including private startups as well.
2. Bigger time span, including sub-samples according to the economic cycle.
3. Include more variables related to capital structure.
4. Relate the growth to the available finance sources.
5. Include industry dummy variables