Earnings of Startups in Different Stages of Development

Veronika JURICKOVA * and Elena GREGOVA

University of Žilina, Žilina, Slovakia; veronika.galgankova@fpedas.uniza.sk; elena.gregova@fpedas.uniza.sk
* Correspondence: veronika.galgankova@fpedas.uniza.sk

Abstract: It is very difficult to find new place in economy for startups. They represent a new stream of thinking and have the potential not only strengthen innovative capacity of the economy, but also to significantly increase its competitiveness, create new jobs in high value-added sectors. Even a small amount of ambitious and successful initiatives can do it through new technology or management innovations. Finding finance is significant for these companies and the use of earnings management is one way to attract new investors. The reason for the choice of the topic is the author's interest in the issue and the possibilities of its further elaboration and expansion. The aim of the article is to summarize the financial possibilities of start-up companies in different phases of their life cycle of start-up companies. The analysis and comparison method were used in the writing, which deeper examines the individual alternatives of financing the company and at the same time highlights the pros and cons. The advantage of this article is a summary of the options which companies can use to gain financial opportunities. The conclusion summarizes the various alternatives that start-ups can use and highlights the best financing options.

Keywords: startup; financing; earnings; life cycle of startup

JEL Classification: H32; M21; P32

1. Introduction

Startup refers to a newly created project or start-up company often at the stage of creating a business plan. For the first time, the term became popular in the time of Internet fever between 1996 and 2001, when many online businesses of this type were established overseas, especially in Silicon Valley. It is experiencing its renaissance nowadays, when it is used to refer to any new project that has been launched. Startup can be created in any industry, but most often they are technology or Internet businesses. They are defined by low start-up costs, greater business risk compared to mainstream businesses, potentially higher returns if startup becomes a regular business. An enterprise ceases to be a startup when it becomes profitable or a merger or acquisition object.

One of the founders of Warby Parker Neil Blumenthal described start-up as a company trying to solve a problem whose solution is not obvious and whose success is not guaranteed. By definition, the confidence in these firms is very low (Robehmed 2013).

Another well-known definition was given by Eric Ries in his book The Lean Startup. He claimed that start-up is a human-made institution that serves to create a new product or service under conditions of uncertainty. As this definition suggests, Eric Ries in his book stresses that the principle of start-up is an innovation for which creative people are essential able to work in uncertainty and team. A team of people who want to lead a functioning start-up must be constantly modern, innovative and open to new opportunities and ideas. The customer buys not just products are important, which the customer initially buys, but also the experience, feelings and experiences that the company can do to provide (Ries 2011).

According to Steve Blank, the start-up business model of a formed organization is created to search for repeatable and scalable business models. The main business goals can be revenue, profits, users, or clicks mouse. The goal of startup can be almost anything you and yours are on investors agreed. Star up may not be primarily profit oriented, but to make the business model repeatable and capable of further development. First of all, it is necessary for the project to be able to spread to other areas for the purpose of obtaining a solid market position, but also expansion into new markets. All of this is needed mainly because of providing new, ideally stable resources (Blank and Dorf 2012).

Start-up is a new business with high growth rate. It can provoke global transformation of the whole industry. It is the possibility to improve the skills of experts from a variety of industries, from technicians and scientists to marketers and marketing workers to commercialize radically new ideas. Start-up also brings a great deal of innovation and can reach global dimensions (Senor and Singer 2009)

The initial definition of start-up in Slovakia was given by a document under the title "Concept for support of start-ups and development of start-up ecosystem in the Slovak Republic", which was established in 2015 as a common vision Ministry of Finance of the Slovak Republic, Ministry of Economy of the Slovak Republic and Ministry education, science, research and sport of the SR. According to this document startups are business initiatives with high growth and innovation potential. they can support economic growth in the long term and also attract foreign investment. They also help to develop high value-added industries, regional and global competitiveness and employment creation of skilled labor force. They are an important part of country building process which aim is to create image of an innovative economy.

KPMG in its annual, thematic focus publications, defines start-up as a young company that uses new and innovative technology, destroys current business models and has a positive influence for global growth.

Start-up distinguishes yourself from other companies in general by being innovative company with a scalable business model. It is a company that is located in the opening phases of business is associated with high growth potential. On the other hand, it is also associated with a high risk of failure.

Venture capital impacts the development of new firms. Venture capital is related to a variety of professionalization measures, for example human resource policies, the adoption of stock option plans, the hiring of a marketing VP (Hellmann 2002).

Behavioral financing examines investor decision-making and the impact of psychology on financial decision-making by professionals. On this basis, it is possible to use the fuzzy logic method, which is useful for solving problems of financial management and problems of financial decision-making. The method is also applicable in financial management, especially when human influence and the occurrence of language variables are necessary (Valaskova et al. 2019).

Maurya (2012) divides start-up companies throughout their life cycle into three stages. The first stage is the Problem/Solution Fit. This stage investigates whether the market even has a problem that needs to be solved. In this case, the idea is not the most important element. It is important to assign the solution to the associated problem, as well as to see if the start-up wants to develop something that the customers/users need. The second stage is Product/Market Fit. It answers the question of whether the implemented idea is really what the users need. The third phase is Scale. It consists of expansion and growth of start-up companies, which leads to an increase in the number of employees, to an increased market shares or to higher income. After the second phase, the main aim of entrepreneur is to spread the business.

2. Methodology

The article is focused on the evaluation of financial possibilities of startup companies in various stages of their development. In this article, analysis method was applied, individual phases of the company life cycle were investigated together with specific possibilities how startups could be financed. The analysis used information from scientific articles contained in the Web of Science Core Collection, conference articles, books as well as publications and articles from various economic journals. The reason why this topic is discussed is timelessness – our goal is to focus on research objectives in this area in the future. The start-up community in the Slovak Republic is not very developed and it is necessary to raise awarenessof the issue. The contribution of the paper lies in the overall evaluation of the individual financing alternatives as well as the determination of the advantages and disadvantages of these options.

3. Results

Startups need a large inflow of funds right from the start for supporting product development and later marketing. At this stage they have nothing to guarantee, and so they are for the bank as a loan applicant completely unsatisfactory. Startup works in conditions of uncertainty and risk, it comes up with something new and does not know if it is on the market will work or how the situation develops. Therefore, they are much more appropriate alternative financing options with which the founder does not risk lose; personal property. As startups are unconventional in their life cycle, they are also unconventional forms of financing. There are already several options for how it can startup to get the necessary finance, at different stages of development. Every development phase is associated with a different level of risk and groups are identified according to investors and funding opportunities. The financial health of a company is important for raising funds. An overview of the company is also provided by absolute indicators obtained from the financial statements (Bartosova and Kral 2016).

3.1. Life cycle of start-up

The start-up finance cycle is linked to the business idea development cycle. Investors purposefully differentiate the different phases of the startup and consider the size and risk of the investment accordingly. Startups go through several rounds or phases of funding. They raise capital from venture capitalists (VCs) because banks are not usually willing to provide high-risk loans. Capital is therefore collected in several rounds and is provided based on the following assessment: probability of success, credibility of the concept, growth of customer base and others.

The life cycle of organizations is understood in five phases: establishment, growth, stabilization, crisis and extinction. Startups, however, differ from traditional companies in many aspects and therefore cannot be used this classic life cycle. Generally, we can divide the startup life cycle into three main phases, which are the deployment phase, the seed phase and the creation phase.

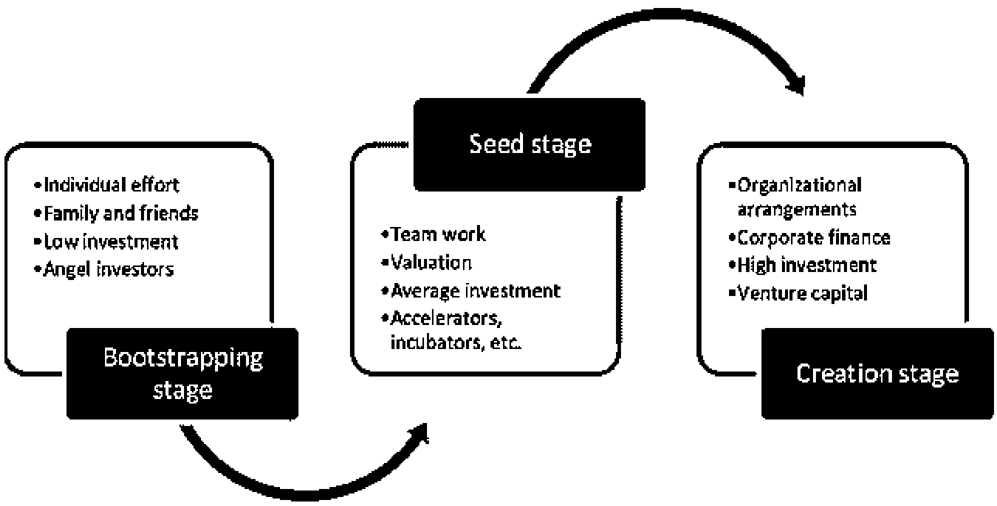

Figure 1. Start-up life cycle (Kawamorita and Salamzadeh 2015).

In bootstrapping stage, the entrepreneur stimulates some important business activities to turn the first idea into a business. In stage of seed there is important to start with team work, development, coming into market, finding new investors. The last stage - creation means that company sells its product, take on new employees. For some company, corporate financing is the best choice (Kawamorita and Salamzadeh 2015).

Many experts come up with their own interpretation of start-up lifecycle. It is worth to mention model of the six phases of the life cycle according to Max Marmer, founder of Startup Genome. Six phases are called discovery, validation, effectiveness, scalability, maintenance and sales or recovery:

- discovery is the first phase and is represented by an innovation, it is the idea that underlies the entire start-up. Beside stock this phase also consists of something that is called the minimum viable product (MVP). This means that a new product is pared down to a minimal version. After figuring out if the product goes well with the public, the set of features can be completed.
- Validation is known as the second phase and it is the connection from hypothetical product or process to real product, process. Therefore, the proposed innovation must be feasible. If startup proves that it can be innovative in practice, then there is the possibility to focus on efficiency of production or service.
- Effectiveness is the phase when advice from specialists and studies are very evaluated. It is important to perform market studies and also ask for advice at a good investor.
- Scalability phase means fast and easy business growth across the world. All the principles and functions of the company should therefore be easily transferable and feasible. After that it is possible to hire and train new employees.
- Maintenance deals with the long-term sustainable growth of the company, mastering the market threats and successful expansion to other countries.
- The last phase is defined by Sales. If start-up works properly and has a promising future ahead, the founders could sell this business and earn quite interesting amount of money. In a dynamic market environment, it is then necessary again follow the development and constantly innovate your products or services (Unconvention 2018). Steady development of every company is ensured by harmonization and synchronization of all its activities. For the company that offers products is necessary not only to determine the key parameters of sales channels, but ensure high profitability of every product, because this affects profitability of the whole enterprise (Shpak et al. 2016).

Company life cycle is mostly depending on the development of a product or service as start-up brings something new. Life cycles from multiple sources resemble each other. What is more important in case of start-ups is the speed at which different phases take place and alternate each other. Not each life cycle of start-up companies is always successful and can quickly end with the termination or go bankrupt. Due to great globalcompetitiveness and complexity of individual companies, it is currently very difficult to predict the risk of bankruptcy (Kovacova and Kliestik 2017).

3.2. Forms of start-up financing

It is very important for every company to attract investors when launching the business, but also keep them interested during whole life cycle. Start-ups also seek funds that can provide them external opportunities. There is a relationship between efficiency of investments and the quality of accounting information, which can be measured by earnings management practices. Chief financial officers believe that earnings management can influence investors and increase value of their companies (Jong and Mertens 2013). Companies try to manage earnings in order to increase their price. But for private equity funds it could be very costly (Sosnowski 2018). For investors business performance is very significant. The term economic profit is used in economic theory to determine business performance. The Economic Value-Added indicator is used to measure this economic profit (Salaga et al. 2015).

Family, Friends and Fools (FFF) are the people who take the greatest risk by investing in a particular entrepreneur's idea. FFF belongs to a special category as start-ups receive financial support in the form of pocket money from them. Moreover, they do not expect anything in return. Angels are usually professional investors who generally invest their own money to enable an entrepreneur to create the first versions of their product. This type of investor usually does not require any entrepreneur to participate in the management of the company, as this will be done by investors who enter the game later. They do not ask for a chair on the board or proper attention (Olah 2017).

Business angels. Entrepreneurs, mostly former, who have enough financial resources and experience and want to pass them on to junior entrepreneurs. They invest in the medium to long term. EBAN, European Business Angels Network, brought the survey of angel investors and their investments in startups in Europe. Investments from business investors increased by 8.7% in 2013 compared to 2012. Not all countries of the European Union are included in the survey, and so the data are not entirely accurate, only approximate. In 2013, there were 271 000 business angels. United Kingdom is the country with the largest network of business angels, Slovakia was not included in the report. The highest percentage of investment from angels goes to start-ups in the start-up phase, up to 54%, 22% of the investment goes into the seed phase (European Business Angels Network 2019).

Venture capital funds. Venture capital is used for financing the beginning of the company, its development, expansion. Hazardous capital is primarily a partnership between an entrepreneur and an investor. This investment is not a one-off provision of funds but several years process (Slovak business agency (Slovak Business Agency 2018).

Venture capital takes two basic forms - the seed capital funds provide to young people a promising project without sufficient resources. The second form is risk investment. It is used by companies that have already started to implement the project, but lack additional funding. In addition to funding, they also need experts to advise companies (Zaborsky 2001).

Seed financing, which is used to finance prototype development new product financing of market research and processing business plan, management team, business creation. It is the most risky investment, bringing profit after 7 to 12 years, required return on investors is 80 to 100%. Only 1 - 2% of businesses are dedicated to it providing venture capital.

Start-up capital is to finance the start-up of a business or a limited business. It is assumed that there is a product or service management team and the results of market research are known. Production is being prepared and sales are evaluated. An investor can facilitate market entry and shorten the period until a business becomes profitable. The return required by the investor is 35 - 50% (40 - 70%), the payback period is 5 - 10 years. Approximately 5% of venture capital firms are involved.

Initial development financing means that funded is a company that operates only to a limited extent, currently not making a profit. but has the potential to achieve it. the future is expected to develop such an enterprise. It does not receive a bank loan because it has no possibility to guarantee it. Certain predictions Given a more certain prediction of investment results, funding is less risky. The investor requires a return of approximately 30% (30-40%), the expected return is 4 to 7 years.

Bridging (mezzanine) financing is a resource that stands at the interface between equity entry and credit. It is used to temporarily finance acquisitions and other special operations before the transaction is otherwise financed in the long-term (Frenakova 2011).

For startups there are also several different ways to get the necessary financial resources. These may be public resources, for example in the form of grants, subsidies and funds from the state or the European Union. The state sphere represents, for example Slovak business agency, which provides a micro - loan program called Innovation and Technology Fund. The European Union is represented by the JEREMIE Fund, the distribution of which is carried out by private undertakings.

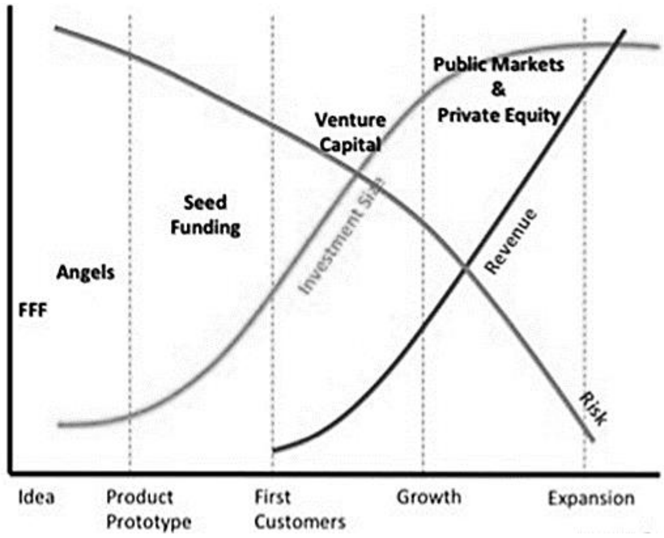

Figure 2. Phases of financing in company's lifecycle (Kiska 2014).

Crowdfunding is one of the alternative forms of funding that connects those who have the money to borrow or invest with those who need the funds to finance a project. Crowdfunding campaigns work on the principle of collecting smaller individual contributions from higher number of people, crowd, mostly through the Internet. Projects are usually aimed at financing relatively smaller targets, but there are exceptions.

4. Conclusion

This paper explains and conceptualizes start-ups by elaborating their lifecycle. General lifecycle includes three main stages, which are bootstrapping stage, seed stage, and creation stage. A lot of authors explain their own phases of lifecycle. In this article we focused on six phases - discovery, validation, effectiveness, scalability, maintenance and sales. Investors are very important for startup because they provide financial possibilities during whole life cycle. The choice of individual financing and possibilities for startup companies depend on the individual company and it is also important to consider at which stage of the life cycle the company is. For the different stages of development, specific opportunities how to obtain funds are preferable. In the future we might elaborate each above-mentioned financing possibility in details and study its usage in different countries. We would like to stress that comparison of financing available in various countries is still missing.

Acknowledgements: The paper is an output of the science project VEGA: 1/0210/19 Research of innovative attributes of quantitative and qualitative fundaments of the opportunistic earnings modelling.

References

Bartosova, Viera, and Kral Pavol. 2016. A Methodological Framework of Financial Analysis Results Objectification in the Slovak Republic. Paper presented at the 3rd International Conference on Business and Economics, Malaysia, September 21–23, pp. 189–197. Available online: https://www.futureacademy.org.uk/files/images/upload/17_Beci2016.pdf (accessed on 10 December 2019).

Blank Steve and Dorf Bob. 2012. The Startup owner´s manual. California: K&S Ranch Press.

European Business Angels Network. 2019. Available online: http://www.eban.org (accessed on 9 December 2019).

Frenakova Magdalena. 2011. *Venture capital a rozvojovy capitalpre vas biznis*. Slovakia: Trend Holding

Hellman Thomas, and Puri Manju. 2002. Venture Capital and the Professionalization of Star-Up Firms: Empirical Evidence. *The Journal of Finance*: 57, 169–198. https://doi.org/10.1111/1540-6261.00419

Jong Abe, and Mertens Gerard. 2013. How does earnings management influence investor's perceptions of firm value? Survey evidence from financial analysts. *Review of Accounting Studies*: 19, 606–627. https://doi.org/10.1007/s11142-013-9250-y.

Kawamorita Hiroko, and Salamzadeh Aidin. 2015. Startup Companies: Life Cycle and Challenges. Paper presented at the 4th International Conference on Employment, Education and Entrepreneurship (EEE), Belgrade, Serbia. Available online: https://ssrn.com/abstract=2628861 (accessed on 10 December 2019).

Kiska Andrej. 2014. The Startup Investment Cycle. Available online: https://medium.com/cee-startups-venture-capital/the-startup-investment-cycle-7e3c4fd75b2f (accessed on 10 December 2019).

Koncepcia pre podporu startupov a rozvoj startupového ekosystému v Slovenskej republike. 2015. Available online: https://www.mhsr.sk/uploads/files/pTlqvAqi.pdf (accessed on 13 December 2019).

Kovacova Maria, and Kliestik Tomas. 2017. Logit and Probit application for the prediction of bankruptcy in Slovak companies. Equilibrium. *Quarterly Journal of Economics and Economic Policy*: 12, 775–791. https://doi.org/10.24136/eq.v12i4.40.

Matuskova Rachel. 2015. Basic topics in practice and research of Startups. Podnikiatelske modely a podnikatelske strategie startupov I. No. 1. Bratislava: Ekonom. Available online: https://fpm.euba.sk/www_write/files/katedry/km/zbornik-podnikatelske-modely-2015.pdf (accessed on 5 December 2019).

Maurya Ash. 2012. *Running Lean: Iterate from Plan A to a Plan That Works*. California: O'Reilly & Associates.

Olah Judit, Karmazin Gyorgy, Mate Domician, Grabara Janusz, and Popp Jozsef. (2017). The effect of acquisition moves on income, pre-tax profits and future strategy of logistics firms. *Journal of International Studies*: 10, 233–245. http://doi.org/ 10.14254/2071-8330.2017/10-4/18.

Ries Eric. 2011. *The lean startup*. New York: Random House USA Inc.

Risk capital funds provide support for young but ambitious firms. Available online: http://www.etrend.sk/trend-archiv/rok-/cislo-M%C3%A1j/fondyrizikoveho-kapitalu-poskytuju-podporu-mladym-ale-ambicioznymfirmam.html (accessed on 5 December 2019).

Robehmed Natalie. 2013. What Is A Startup? Available online: https://www.forbes.com/sites/natalierobehmed/2013/12/16/what-is-a-startup/#5556f8684044 (accessed on 13 December 2019).

Salaga Jakub, Bartosova Viera, and Kicova, Eva. 2015. Economic Value Added as a measurement tool of financial performance. *Procedia Economics and Finance*: 26, 484–489. https://doi.org/10.1016/S2212-5671(15)00877-1.

Shpak Nestor, Kyrylych Tamara, and Greblikaite Jolita. 2016. Diversification Models of Sales Activity for Steady Development of an Enterprise. *Sustainability*: 8. https://doi.org/10.3390/su8040393.

Senor Dan, and Singer Saul. 2009. *Start-Up Nation*. Praque: Aligier.

Slovak Business Agency. 2018. Analýza start-upov na Slovensku. Available online: http://www.sbagency.sk/sites/default/files/5_analyza_start-upov_na_slovensku.pdf (accessed on 10 December 2019).

Sosnowski Tomasz. 2018. Earnings Management in the Private Equity Divestment Process on Warsaw Stock Exchange. *Quarterly Journal of Economics and Economic Policy*: 13, 689–705. https://doi.org/10.24136/eq.2018.033.

Startup Ecosystem Survey Slovakia. 2016. Available online: https://assets.kpmg/content/dam/kpmg/pdf/2016/06/startup-ecosystem-survey-slovakia-2016.pdf (accessed on 11 December 2019).

Startup freak. What does Series-A, Series-B, Series-C funding mean in Startups. 2018. Available online: https://startupfreak.com/what-does-series-a-series-b-series-c-funding-mean-in-startups/ (accessed on 9 December 2019).

Unconvention. 2018. Hints to master the 6 stages of startups. Available online: https://www.unconvention.eu/tips-for-startups/ (accessed on 10 December 2019).

Valaskova Katarina, Bartosova Viera, and Kubala Pavol. 2019. Behavioural Aspects of the Financial Decision-Making. *Organizacija*: 52, 22–32. https://doi.org/10.2478/orga-2019-0003.

Zaborsky Jan. 2001. Fondy rizikoveho kapitalu poskytuju podporu mladym, ale ambicioznym firmam. Available online: https://www.etrend.sk/trend-archiv/rok-/cislo-M%C3%A1j/fondy-rizikoveho-kapitalu-poskytuju-podporu-mladym-ale-ambicioznym-firmam.html (accessed on 9 December 2019).