CAPITAL STRUCTURE AND VENTURE CAPITAL

Patricia, Becsky-Nagy, Erika, Karászi
University of Debrecen, Faculty of Economics and Business, Institute of Accounting and Finance, Debrecen, Hungary
becsky.nagy.patricia@econ.unideb.hu
kari0104@gmail.com

Abstract: Venture capital significantly changes the capital structure of the portfolio company at the time of the investment. Venture capitalists contribute to the company's success through their active involvement in the management and their added value appears in the increase of the value of the equity. At the same time with taking active role in the management, agency problem occurs, that complicates the cooperation and the success of exit. In this article we search the answer for the question whether the preferred equity, that are commonly used in the US for bridging the agency problem, are used and able to help Hungarian venture capitalists to manage agency problems. On the other hand we examined how the venture capital affect capital structure, how the venture capitalists value added appear in the capital structure. During the evaluation of the three case studies, we came to the conclusion, that the venture capital investments have positive effect on the liabilities of the enterprises, as the capital structure indexes show. However, the investors need the ownership, which help them to step up resolutely, when things change for the worse, and companies need the expertise, which the investors bring with their personal assistance. The investor's new attitude also has positive effect on a mature company, which has an experienced leader, because he can show another aspect, as a person who come from outside.

During the examination of the capital structure, we cannot disregard the events of the company’s environment, which have effects on the firm. The investor’s decisions also appear different ways. Because of this, every venture capital investment is different, just as the capital structure of the firms, in which they invest.

Keywords: venture capital; value added, capital structure

JEL classification: G24

1. Theoretical background of capital structure
For newly founded innovative firms there are few available external funding sources, as start-ups are too young for debt financing, but at the same time the internal sources provided by the founders are not enough to ensure the company’s growth. In the early stages usually there are serious problems as a result of the lack of the managerial skills of the inventor-entrepreneur. In the literature these problems are the so called capital gap and knowledge gap (Makra – Rácz, 2006, Nagy 2004). This finance gap should be bridged by venture capital, but sometimes it fails, and does not lead to success. In the capital structure of a company the venture capital increases the equity capital, in case the new owners of the equity carry out by raising the capital. The personal involvement of the investors enables the company to react more quickly to the unexpected changes of the environment, than companies that have a higher proportion of debt in the capital structure (Karsai, 2012). The IFRS brought significant change in financial reporting for most companies, as using it indicates more requirements in the field of planning, data and information system installation, companies’ valuation by investors, customers, shareholders, analysts, rating agencies, or managing the balance sheet and the performance of the company. (Orbán, 2013)
Finding the optimal capital structure is critical for all companies. This question is important not only because of the income maximisation, but also because it impacts the competitiveness of the organisations. Many theories were born in this topic, but none could define the optimal capital structure (Herczeg, 2014b). Herczeg (2014a) in her study demonstrates that in the process of developing a company’s capital structure none of the theoretical models can be used entirely. According to Myers (2001) the theories about optimal capital structure have differences in terms of the emphasis and the interpretation of role of taxes, informational differences and the agency costs. Capital structure theories highlights the importance of these factors, as they have a direct impact on the proportion of internal and external funding sources, however the financing is still an open question. Those economic problems and incentives that affect the theories about taxes, information and agency costs are clearly appear in the financing strategies. Myers (2001) in his study emphasised the present value, because investors invest and develop the human capital in order to generate cash flows in the future. Investment is realised through taking personal risk, working hard and by the utilization of special human capital. A general financing theory should model the investment into human capital and into equity capital.

According to the first theorem of Modigliani and Miller (1958) the value of a firm is unaffected by the capital structure of the firm, so it does not matter whether the firm is financed by equity capital or debt. According to Béza et al. (2007) the companies’ ability of generating income is determined by their assets and not by the structure of liabilities, that’s why the financing decisions about the capital structure do not determine the value of the firm. At the same time the financers of the company share the returns produced by the assets. Therefore the assets’ expected return equals to the costs of funders that is the weighted average cost of capital (WACC). But in terms of the equity capital it is absolutely not indifferent how high the weight of the external capital is in the capital structure (Béza et al., 2007). The second theorem of Modigliani and Miller explains this statement, which applies to the equity return of those companies that involve debt in their capital structure (Modigliani and Miller, 1958). The higher the proportion of the debt in the capital structure is, the higher the equity cost will be, because the equity investors has higher risks in gaining their dividend, as they follow the creditors in the liquidation order. Therefore the growth of the credit is directly proportional to the risk of the investors, that leads to higher expected return that causes the higher cost of equity (Béza et al., 2007). The theorem assumes perfect information, homogeneous expectations and excludes tax considerations. If taxes are also taken into consideration, then the capital structure is better if the external sources’ proportion is higher. The best situation is if the firm is financed by debt entirely, because the interest on debt is tax deductible and decreases the cost of debt (Szerb, 2006). Most companies do not finance their investments by their own resources because of the tax savings. At the same time the sole-debt financing is also difficult because the creditors set limits to the credit (Modigliani– Miller, 1963).

According to the current mainstream theories the capital structure should be defined by an optimal equity-debt ratio (Szerb, 2006). The optimal equity-debt ratio is where the benefits from the tax savings are equal to the marginal bankruptcy costs (Béza et al., 2007). The pecking order theory created by Myers and Majluf (1984) says that the funding sources are ranked according to their cost and the internal sources are the most favourable followed by the debt and at least favourable is equity financing (Szerb, 2006). Venture capital is the most expensive form of finance, because of the high risk and high transaction costs that occur as a result of the active involvement of the investors (Béza et al., 2007).

It is a common feature in all theorems that neither of them deals particularly with venture capital and other types of private equity financing (Szerb, 2006).

2. Venture capital in capital structure
The opportunity of venture capital financing is studied by Cumming (2005) in his study, in which he examines the well-known statement that the optimal form of venture capital financing is the convertible preferred equity.

According to theoretical researches (Berglöf, 1994; Bergemann – Hege, 1998; Casamatta, 2003; Cestone, 2000; Cornelli – Yosha, 2003; Marx, 1998; Schmidt, 2003; Trester, 1998) the optimal form of venture capital is investing in convertible preferred equity that was confirmed by empirical researches (Kaplan – Strömberg, 2003; Bergemann – Hege, 1998). This statement is true primarily for venture capital funds in the US, as there the tax law drives the venture capital investors and entrepreneurs to this direction. According to other researches about Canadian companies these features are not prevailed in taxation (Sandler, 2001). In Cumming’s opinion (2005) that is the reason why it is worth examining whether the convertible preferred equity is really the optimal form of venture capital financing in venture capital industry or not.

Convertible preferred equity can be optimal by offering higher insurance for venture capitalists in case of bankruptcy, transferring risks from investors to entrepreneurs (Cumming, 2005). In case of an unsuccessful investment losses can be reduced and in case the company performs badly it provides an opportunity for the venture capitalists to take control over the company. The same happens in case the management does not perform well.

In case of a successful investment investors who own convertible preferred equity can enjoy the benefits derived from growing company value. Further benefit of convertible preferred equity is that it helps handling agency problems (Becsky – Fazekas, 2015b). Compared to common equity, convertible preferred equity reduces the dilution of ownership structure, furthermore, compared to a bank credit it enables the company to raise higher funds, as venture capitalists become owners of the company. Another benefit of convertible preferred equity is that it restrains aspirations of window dressing, and provides projects with positive NPV to be financed in the future.

Finally, convertible preferred equity facilitates liquidating illiquid assets, and mitigates the problems in connection to the selling of the company, particularly if we take into consideration the incentives of tripartite agreements (Cumming, 2005).

Other types of securities can also be optimal, because investments in companies are all different (Gompers, 1995), and in different syndicated investment forms agency problem appears differently (Lerner, 1994). Monitoring activity implemented through active participation in the company’s management can also be different depending on the expectancies in connection with the agency problem. Therefore it would be surprising to expect that all the companies apply the same assurances independently from the expected agency problem. Furthermore, all the previous academic researches consequently repeat the statement that the only optimal security is the convertible preferred equity.

Cumming (2005) in his research examined 3083 Canadian companies from the venture capital point of view in the period of 1991 and 2000. During his research he observed different types of venture capital investments in different types of companies. The most common financing method was the common equity, followed by simple debt and convertible debt (including mixes of straight debt and warrants). Convertible preferred equity is ranked only to the fourth place in the hierarchy of venture capital financing methods of Canadian companies. The mix of debt and common equity, preferred equity and other combinations of finance also occurred.

Cumming (2005) in his study determined two important statements. Firstly, a concrete optimal venture capital financing method does not exist, though according to some studies (Cestone 2000; Marx, 1998; Kaplan – Strömberg, 2003) the American practice can easily be considered as one. Besides the US this is a much rarely used financing method.

In the Hungarian venture capital market in cases of investments to private limited companies mainly preferred equity was applied by the investors (28 of 32 investments), where they took active role in managing the companies. At the same time exits were rarely
realized through initial public offerings due to the undeveloped capital market (Becsky – Fazekas, 2015a). There are other rarely applied methods of exits, like selling to financial investors, other venture capitalists or managerial buyouts (Becskyné – Biczók, 2006). Secondly there is a connection between the chosen type of source and the type of the financed company that leads to the conclusion that the agency problem occurs differently depending on the nature of the financed company. One of the most important results of the study is that for seed stage enterprises venture capitalists more willing to provide preferred equity and convertible preferred equity. This equals to the assumption that preferred equity mitigates agency problems. Investors are not willing to finance seed staged companies by debt, convertible debt or the mix of debt and equity. That is consistent with the statement that debt is less available for companies at the first stages. It was also found that high-tech companies are preferred to be financed by convertible preferred equity that is consistent with the statement of the theoretical studies (Cestone, 2000; Marx, 1998). By summarizing Cumming (2005) study we can concluded that there is not a single optimal form of finance, the chosen security depends on the transaction, and the answer for the agency problem differs in every transaction.

3. Case studies form Hungary
We examined the statement of Cumming (2005) – i.e. there is no optimal form of venture finance, and that convertible preferred equities are wide-spread and popular mainly in the USA and in the circle of high-tech firms – through Hungarian-founded enterprises, which were financed by venture capital. The three companies, of which we analysed the capital structure were the Cryo Management Ltd., the Waberer's International Inc., and the LogMeIn Ltd. These case studies are suitable for illustrating what happens in the liabilities of the balance sheet, when the firms get venture capital, but we cannot draw a comprehensive and general conclusion from them.

3.1 Cryo Management
The Cryo Management Ltd. was founded in 2010. The enterprise works in the biotechnology industry, within the field of natural science, technological research and development. The Cryo Management Ltd. did R&D activity in the area of human infertility and animal propagation at the same time, and manufactured and sold useful equipment based on this. The OTP Venture Capital Fund I. managed by the PortfoLion Inc. invested into the enterprise. The Fund invested 220 million HUF in January of 2011. A big part of the invested amount (212 990 thousand HUF) was placed into capital surplus, which value increased from 22 318 thousand HUF to 235 308 thousand HUF. The remained 7 010 thousand HUF were placed into subscribed capital, which increased from 13 010 thousand HUF to 20 020 thousand HUF. With the rise of subscribe capital, the OTP Venture Capital Fund I. gained 35,01% ownership. During the period of the investment, the enterprise went through spectacular development, considering the business practice, the organisation and also the achievement. It realized significant increase in the staff numbers and in the sales returns too, already in the first year of the investment. In 2012, the Swedish biotechnological company, VitroLife AB bought the firm for 5 million euro, obtaining overall majority and this way Cryo Management Ltd. became the first company that could realize a successful exit within the JEREMIE investments (Fazekas, 2014). The sale meant 69% internal return for the Fund (I1). Summarizing, the Cryo Management Ltd. received seed stage capital, in the form of subscribed capital increase and capital surplus increase. In this way, the capital fund obtained quite a big ownership, which helped to mitigate the agency problems.
3.2 Waberer’s

The Waberer’s International Inc. works in the field of property management, vehicle repairing, informatics, and mainly international goods transportation. This appears in the company’s assets, in the staff numbers, in the sales return and also in the expenditure (Waberer’s, 2014). The Waberer’s International Inc. obtained venture capital in 2004. Its name was Volán Tefu Inc. at that time, but later the company changed its name to Waberer’s Holding Inc. after the AIG new Europe Fund gained ownership. The firms, which were acquired earlier by the Volán Tefu, became the part of the Holding, and Volán Tefu Inc. worked as their parent company and as the leader of the Holding (I8). The AIG New Europe Fund invested almost 2 billion HUF, a part of this amount (243 544 thousand HUF) was placed into subscribed capital, the other part of the amount (1 262 939 thousand HUF) was placed into capital surplus. The Fund had the 21,3% of the subscribed capital, which increased to 1 143 576 thousand HUF through the investment (Waberer’s, 2014). In addition to the ownership, the investor delegated two members to the Waberer’s board of directors from its Hungarian agency. Through that, it undertook an active participation in the leadership of the company (I8). With the new capital, the enterprise wanted to finance the international expansion, primarily in Poland, in the Ukraine, in Romania, in Slovenia and in Croatia. The AIG New Europe Fund’s plans were the increase of the ownership, and to go public in 3-6 years (I8). Finally, the exit was in 2011 because of the economic crisis, but the company did not go public, in contrast with its plans. The AIG’s shares were bought by another venture capital investor, called Mid Europa Partners, which increased its capital at the same time, thus, it gained 49,05% ownership (I8, I10). The subscribed capital was increased with 228 704 thousand HUF, the capital surplus was increased with 4 405 413 thousand HUF (Waberer’s, 2012). In this year, the company changed its name to Waberer’s International Inc. (I10). Summarizing, the Waberer’s International Inc. also received the venture capital in the form of subscribe capital increase and capital surplus increase, but this firm was in its maturity stage at the time of the investment. To mitigate the agency problems, the venture capital fund delegated two person to the management of the enterprise, as an extra step to the ownership.

3.3 LogMeIn

The main activity of the third examined firm, the LogMeIn Ltd. is information-technology consultation. In part of that, it develops software, which makes the connection to far-away computers possible, and allows managing them. These help the personal mobility and increase business efficiency (Logmein, 2010a). In 2004, three American venture capital investors – the 3TS Capital Partners, the Prism Venture Capital Partners and the Integral Capital Partners – invested altogether 10 million USD (I2). The 3TS Capital invested 3.3 million USD, and gained 13.22% ownership (I6). The condition was that the LogMeIn had to move to the USA, so the headquarters were transferred from Budapest to Woburn, Massachusetts. Development is still working in Budapest (I2). With this step, the investors secured the appropriate control over the company’s management, and also the possibility to step in, if it is necessary. The next capital injection was in 2005, when the Polaris Venture Partners joined to the other three investors, and the firm got 10 million USD again. The last investment was in 2007 by the Intel Capital, which meant 10 million USD again for the LogMeIn (I3). The Intel Capital gained 4% ownership (I7). The capital was provided for the firm in form of convertible preferred equities, which were shown in the company’s consolidated annual report. The exit was executed through IPO in July of 2009 on the Nasdaq (I4). The Integral Capital Partners, the Polaris Venture Partners and the Intel Capital executed a partial exit, but the Prism Venture Capital Partners did not sell its shares (I6). The 3TS Capital executed a full exit, and realized 8.5-times profit (I6). At the time of the IPO, 7.67 million pieces of shares were floated, at a quotation of 16 USD/piece, which meant about 83 million USD net profit after the deduction of subscription costs. Counting with the exchange rate of that time (193,27 HUF/USD), it means about 16 billion.
HUF. The preferred equities of the venture capital investors were automatically converted to 12360523 pieces of common shares. The owners, who earlier had convertible preferred equities, got a number of votes equal to the number of their common shares (Logmein, 2010b). Summarizing, the LogMeIn Ltd. received seed stage capital from its American investors, in the form of convertible preferred equities. Their stipulation was that the firm had to move to the USA, so they could keep business contact easily. That was the extra step to mitigate the agency problems.

4. In conclusion
During our analysis we found that the investors can provide venture capital to firms in different ways. Convertible preferred equities are involved in Hungarian company’s financing. We can observe it in the case of LogMeIn, which received the venture capital in this form, and the investor claimed the firm to move to the USA. This example supports the statement of Cumming (2005) and other researcher, that is, the convertible preferred equities has significant role in the venture capital financing in the US market. The case studies also verify the statement, that high-tech firms are often financed in this way. However the case of the LogMeIn Ltd. does not verify the statement that seed-stage firms are less likely to be financed by convertible preferred equity, because the enterprise received the capital injection in this period of its life, and the investment was successful, because investors could realize high profit at time of the IPO.

The other two case studies also verified the statement of Cumming (2005), that firms outside the USA are rarely financed by convertible preferred equities. The Cryo Management Ltd. and the Waberer’s Inc. also received capital injection – from European and Hungarian investors – through the increase of subscribed capital and the capital surplus. So the Waberer’s is belong to the exception – on the basis of Becsky – Fazekas (2015a) – considering the venture capital financing of the Hungarian stock companies, which work in private. The cause of that probably is that the stock market is much more developed in the USA, than in Europe, especially in Hungary. On the basis of the examined case studies we can see, that this form of venture capital financing is applicable easily in any stages of company’s life cycle, because Cryo Management Ltd. received seed-stage capital, while the Waberer’s Inc. received the capital in maturity stage. We can see also, that there is no preferred form of activity, because Cryo Management works in the field of health science, while the Waberer’s works in the field of transportation. However, it is true, that the investors give a significant amount of capital to the firms in both ways, increasing their capital strength, in addition, they obtain ownership and influence. The investor of the Cryo Management Ltd. chose the most frequent form of exit, so it sold its ownership to a professional investor, while in the case of the Waberer’s Inc., the investor decided to sell its ownership to another venture capital investor, which is – according to Becskyné – Biczók (2006) – a less preferred method. It was because of the pressure of the economic crisis.

During the analysis of the liabilities of the three companies, we also found, that the personal assistance of the investor is also contributes to the increase of the company’s own wealth. Its effect can be seen in the net profit of the firm. During the period of the investment some decision could be necessary, which have unfavourable effects on the capital structure on short-term, but because of these decisions the operation of the companies will be more effective, and they can make long-term advantages from them.

It is important too, that in the case of long-term investments, the changes in the economic situation can be a obstructing force in the growth of the company’s value, and can hinder the investors in the fulfilment of a successful exit.

During the evaluation of the three case studies, we came to the conclusion, that the venture capital investments have positive effect on the liabilities of the enterprises, the capital structure indexes show that. However, the investors need the ownership, which help them to step up resolutely, when things change for the worse, and companies need
the expertise, which the investors bring with their personal assistance. Through that, they can reach, that the invested capital works well, its value increase, and they can realize a high profit at the time of exit. The investors’ expertise is the added value, which has important role especially in the case of starting enterprises, because the creator of the product not necessary can sale this product and manage the firm adequately. However, the investor’s new attitude also has positive effect on a mature company, which has an experienced leader, because he can show another aspect, as a person who come from outside.

During the examination of the capital structure, we cannot disregard the events of the company’s environment, which have effects on the firm. The investor’s decisions also appear different ways. Because of this, every venture capital investment is different, just as the capital structure of the firms, in which they invest.

An additional research direction has also emerged in this study. We argue that, such as (Máté, 2009) determined, the role of financial institutions to reduce information asymmetries increases. Hence, further researches, in accordance with the impact of venture capital on SMES’ performance, could be more fruitful.

References


I3: http://www.crunchbase.com/organization/logmein, downloaded: 30/10/2014