**IS VENTURE CAPITAL THE SOURCE OF FINANCING FOR MICRO-ENTERPRISES?**

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**Abstract.** The current article examines the issue of financing the micro-enterprises of Latvia by venture capital funds. It considers the number of applications submitted by enterprises to venture capital funds, the number of investments and the amount of financing granted to enterprises in general and to micro-enterprises in particular. These indicators are compared with the indicators of micro-enterprise financing by commercial banks. The main research methodology is based on questionnaires, interviews, a survey and descriptive statistics. The research results demonstrate that venture capital is not a popular and available financial instrument for micro-enterprises. Nevertheless in 2013-2014, the share of micro-enterprises constituted 81.8% of the number and 60.4% of the amount of venture fund investments. But the sum of venture capital fund investments in micro-enterprises constituted about one percent in 2013 and about two percent in 2014 of the total amount of micro-enterprise financing by banks in Latvia.

**Key words:** venture capital, micro-enterprises, small business, financing.

**JEL code:** G21, G24, G28, G32, L25, M13

**Introduction**

The majority of new enterprises are micro-enterprises (Central Statistical Bureau, 2014). According to the World Bank, micro-enterprises (hereinafter referred to as MEs) in Latvia are the most rapidly growing segment of the economy (in terms of the number) (Financial Sector Assessment..., 2012). By the end of 2013, the number of commercial MEs in Latvia was 72,881 or 85% of the total number of commercial companies†. The main reason for MEs discontinuing their activities is lack of funding. Lack of funding may be caused by an inadequate amount of equity capital and by lack of opportunities to attract subsequent financing. Mainly because of their small size, MEs have a slim chance to issue bonds or to be listed on a stock exchange at the beginning of their activities. As a result, MEs are forced to rely on such sources of financing

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† Commercial companies are economically active enterprises excluding self-employed persons, individual merchants, peasant and fishermen’s farms (Central Statistical Bureau..., 2014)
as state or regional financial instruments, bank financing, non-bank lending and informal investors, which do not belong to the category of venture capital. MEs may also try to attract venture capital from venture capital funds (hereinafter referred to as VCFs) or informal venture capital (financing from business angels). As the sources of financing MEs are scarce and there is an urgent need for ME financing, we consider that it is important to demonstrate the role of VCFs in financing MEs. For this reason, we have analysed the data of ME applications for financing to all six VCFs of Latvia as well as the number of applications and the amount of financing granted to MEs. As according to the data at our disposal, bank financing is currently the main source of ME financing, we have identified a volume of bank funding for MEs in Latvia. We have compared the data of VCF financing with the data of bank financing for MEs in order to identify a specificity and a share of VCFs in funding ME in Latvia.

**Brief literature review**

There are some authors who have examined the issues of ME financing. The majority of authors consider that lack of availability to finance is a major impediment to the growth of micro, small, and medium enterprises (e.g. Wright M., et al., 2015; International Finance Corporation, 2013). Researchers and various institutions analyse different sources of ME financing. Thus, the World Bank regards that credit unions have a better ability than commercial banks to serve the growing number of MEs (Financial Sector Assessment..., 2012). For example, Joanna Duda (2013) is of the opinion that most commercial banks do not supply sufficient crediting to MEs. Due to the high risk posed by MEs, banks require three years of credit histories and collateral to 120%-150% of the credit value. The high costs of bank credits are another barrier to small and medium sized enterprises. The credits offered to MEs bring in higher interest than those available to small and medium-sized enterprises. Some micro-entrepreneurs try to compensate for the scarcity of capital by borrowing from natural persons (Duda J., 2013). The World Bank considers that the commercial banks of Latvia lack the products as well as strategic interest in financing MEs (Financial Sector Assessment..., 2012). Christopher J. Green and some other specialists hold the view that the growth of MEs is mainly hindered by lack of access to finance. They note that the financial services provided have been changing in the last 50 years and in particular provision mechanisms have shifted from credit schemes to financial services, including micro-finance (Green C. J., Kirkpatrick C. H., Murinde V., 2006).

A. Prohorovs regards that informal venture capital in a number of Central and Eastern Europe countries including Latvia has not been sufficiently developed and in the majority of instances it cannot be an essential source of ME financing (Prohorovs A., 2014a). Besides, the existing data about the number of informal private investors in some countries including Latvia have been largely overstated (Prohorovs A., Fainglozs L., 2014).

A number of researchers note that a ME may be established for various reasons. For example, it has been marked that sometimes the purpose of establishing a ME may be
attributed to a wish for additional income or a desire to maintain the customary living standard (Cabinet of Ministers..., 2009). S. Parth and some other researchers consider that the objective of establishing a ME may be the wish to create an enterprise which has the potential for rapid growth (e.g. Tewari P. S., Skilling D., Kumar P., Wu Z., 2013). In A. Prohorovs’ and I. Jakusonoka’s (2012) opinion, new innovative MEs having the potential for rapid growth are consistent with the paradigm of innovative development of the country. That is why this type of MEs needs specific forms of financing including venture capital (Prohorovs A., Jakusonoka I., 2012).

A. Reid and P. Nightingale (2011) consider that new innovative companies are interested both in bank financing and VCF financing. In the opinion of Parth S. Tewari and other researchers, the main issue in this connection is that government policies should focus on enabling high potential enterprises to grow rather than merely increasing the number of companies (Tewari P. S., Skilling D., Kumar P., Wu Z., 2013). A. Reid and P. Nightingale hold the view that the rapid growth of new enterprises in emerging sectors makes them particularly vulnerable to market failures due to asymmetric information, uncertainty, lack of collateral for R&D intensive companies, absence of reputation and lack of historical relationships with banks, market uncertainty (Reid, A. and Nightingale, P. (eds.), 2011).

**Data and methodology**

The authors used the following methodology for conducting the research and obtaining the processed data. All data refer to the Republic of Latvia. The quantifying indicators of MEs for 2013-2014 have been obtained from the data base of the Central Statistical Bureau of Latvia and Lursoft IT, Ltd. The data of the Latvian Guarantee Agency (hereinafter referred to as LGA), the Association of Commercial Banks of Latvia, the Financial and Capital Market Commission of Latvia (hereinafter referred to as FCMC) have been also used. The data on the number of enterprise applications submitted to VCFs, as well as on the number of VCF investments in MEs and other enterprises were received from all six VCFs which participated in the investment cycle in 2013 -2014. The data were obtained from a special survey, conducted with the help of the LGA on each VCF separately and then generalised by the authors of the present article. We attributed to MEs only those enterprises which comply with the European definition of micro-sized enterprises (Europe Commission, 2003). In the research, we used the data only on those MEs which are commercial companies, namely economically active enterprises excluding self-employed persons, individual merchants, peasant and fishermen's farms (Central Statistical Bureau..., 2014). In order to list all VCFs registered in Latvia, we had interviews with the board members of the Latvian Venture Capital Association and LGA (acting as a fund-of-funds investing in VC funds targeting SMEs). The data on the investments of the Corporate Venture Capital Fund of Lattelecom, Ltd. were not included in the research, as the main challenge of corporate venture capital funds is usually the acquisition of technology companies in order to obtain advanced technologies. The data on private equity (PE) fund financing were not
included in the research either, as the PE funds usually finance other types of enterprises which do not belong to MEs. The main research methodology was based on descriptive statistics, questionnaires, a survey and interviews.

**Research results and discussion**

The data obtained in the research and reflected in Table 1 demonstrate that in 2014 in comparison with 2013, the number of applications for financing increased by almost 50%, and what is more, the number of MEs which were granted funding doubled.

<table>
<thead>
<tr>
<th>Projects and micro-enterprise funding considered by venture capital funds in Latvia in 2013–2014*</th>
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<tr>
<td>Applications (by enterprises)</td>
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<tr>
<td>Financed enterprises</td>
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<tr>
<td>Including micro-enterprises (of the total number of all financed enterprises)</td>
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<tr>
<td>Micro-enterprises financed by VCFs of the total number of enterprises which have been granted VCF financing, %</td>
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</tbody>
</table>

* The data summary includes the data on six venture capital funds (Imprimatur Capital Seed Fund, Imprimatur Capital Technology Venture fund, Fly Cap, Expansion, ZGI 3 and BatlCap).

Source: Developed by the authors based on the authors’ survey obtained on venture capital funds in Latvia

Table 1 indicates that in the period of 2013–2014, the total sum of VCF investments in MEs increased 2.5 times. The total number of VCF investments in MEs increased from 45.4% to 69.7%. In order to balance potential specific fluctuations between 2013 and 2014, the average data on the listed indicators for two years have been also included in the table. As a result, we may come to the conclusion that in 2013-2014 the share of VCF investments in MEs in Latvia amounted to 60.4% of the total sum of VCF investments. We consider that this proportion shows that MEs are not discriminated by the VC funds because of the small size of these enterprises but, on the contrary, the VC funds prioritise them for investments.

In 2013, 72,881 commercial MEs (Central Statistical Bureau..., 2014) were active in Latvia. Within the period of two years, 1.5% of Latvian MEs turned for financing to the VCFs. According to Nikolaos Daskalakis as to equity financing, companies rely heavily on their own funds, they do not wish to raise new equity from sources outside their companies (venture capital, business angels and so on) (Daskalakis N., 2010).

Out of the commercial MEs which applied to VCFs for financing 7.1% received it. This is a very high indicator testifying to the fact that only those MEs were granted VCFs financing...
which met their requirements and had high quality projects. However, international practice shows that not more than 0.5% of ME applications are granted VCF financing. Therefore the fact that fourteen times more applications have been granted financing in international practice may point either to the low quality of project selection by the VC funds in Latvia or to an insufficient number of projects to be financed and invested in (pursuant to the provisions of European co-financing) in a short term. It has to be noted that VC funds usually finance new innovative companies having the potential for rapid growth (e.g. Kitsing M., 2013; Prohorovs A., 2014b). We consider that the majority of MEs in Latvia do not aim at turning into innovative enterprises having the potential for rapid growth. This is the main reason why they cannot be considered for VC fund financing. It means that the potential of VC fund financing may be limited due to the aforementioned reason, namely, due to the lack of a sufficient amount of deals (e.g. Groh A., 2010; Prohorovs A., 2013). Among the factors limiting the flow of deals, we can mention the low level of innovations in the country (Prohorovs A., Pavlyuk D., 2013) and lack of private and foreign VC funds in the market specialising in financing the early stages of enterprise development (e.g. Fraser S., Bhaumik S., Wright M., 2015; Prohorovs, 2014b). The flow of deals may be low due to the underdeveloped institution of informal investors and business angels (e.g. Mason C., Botelho T., Harrison R., 2013), insufficient public support in pre-seed and seed stages of company development and some other reasons.

In order to compare the ratio of VCF investments to bank investments in MEs, we have used the data on bank corporate financing of MEs. In 2013, the total sum of ME financing by banks in Latvia constituted EUR 586.9m, but in 2014, it was EUR 341.6m, and the total sum of corporate crediting was accordingly EUR 1 965m (in 2013) and EUR 1 231.9m (in 2014) (Association of Commercial Banks..., 2014; Financial and Capital Market..., 2014)*.

On the basis of these data, we calculated that the share of MEs in the total bank corporate crediting in 2013–2014 constituted 29.1% (Figure 1). Comparing these data with the data of VCF investments in Latvia, we found that the share of MEs in the portfolio of VCFs amounted to twice the sum of bank financing (Figure 1).

* In order to adjust the data for 2013 and 2014, the funding of the State-owned JSC "Latvian Development Finance Institution Altum" was added to bank financing, as in 2013, Altum funding was included in the total sum of bank financing.
Though in 2013-2014, VCF investments amounted only to 0.5% of the bank corporate financing, the share of VCFs in financing MEs in comparison with bank financing increased twice and amounted to almost one percent. Obviously for this reason, the Ministry of Economics of Latvia plans to increase MEs financing with the support of venture capital investments to 29% of MEs financing needs in 2016-2020, i.e., to EUR 65–118m. (Ministry of Economics..., 2014). Comparing the project of the Ministry of Economics with VCF investments in MEs in 2013–2014, we see a substantial increase. However, in order to increase the share of VC in financing MEs to the planned 29%, it is necessary to substantially expand the number of ME applications (proceeding from the fact that in 2013, 72 881 commercial MEs functioned in Latvia, and only about 1.5% of them applied for VCF financing). Probably, the current venture financing instruments of state support do not suit MEs, which explains the small number of applications for VCF investments in Latvia.

### Average sums of financing one enterprise and one micro-enterprise by VCFs and banks in Latvia in 2013–2014

<table>
<thead>
<tr>
<th>Type of organisation</th>
<th>Commercial banks</th>
<th>Venture capital funds</th>
</tr>
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<tbody>
<tr>
<td>Average sum for financing all enterprises, EUR</td>
<td>257 830</td>
<td>201 985</td>
</tr>
<tr>
<td>Average sum for financing micro-enterprises, EUR</td>
<td>148 571</td>
<td>133 415</td>
</tr>
</tbody>
</table>

The data in Table 2 show that the average sum of bank corporate crediting exceeds the VCF financing by 27.6%. However, if we compare the indicators of micro-enterprises, we see that the difference amounts only to 11.4%. Disregarding the size of the enterprise, the amounts of VC fund and bank financing granted to one enterprise converge in the end. The average sum of ME crediting by banks of EUR 148.6 thousand may be explained by the fact that the banks do not have mass products for MEs, among them the so called micro-credits. Nikolaos
Daskalakis also acknowledges that companies are faced with restricted access to debt financing. They would have preferred to make more use of the borrowing, especially long-term debt. Thereby it demonstrates a gap in the long-term financing needs of the companies (Daskalakis N., 2010). Parmendra Sharma and Neelesh Gounder, on the basis of questionnaires distributed to 77 MEs, show that 97% of the surveyed enterprises indicated that banks were a very important source of funds for the operation and growth of their businesses. Nevertheless, 90% of the enterprises having secured a bank loan indicated that they would have preferred to borrow from other lenders than a bank. They were of the opinion that banks should establish a specialised internal micro-finance unit for management of ME and small enterprise financing (Sharma P., Gounder N., 2012).

In order to establish qualitative MEs indicators in the national economy of Latvia, we compared the volume of MEs assets with the total assets of the commercial companies in Latvia. According to our calculations, with MEs assets of 12077.9 million euros as at the end of year 2013 (based on collected data by LURSOFT, 2015), the share of MEs assets amounted to 31.7%. To proceed, the share of MEs assets taken against the total assets of Latvian companies was compared by bank and VCF financing to MEs and commercial companies. It turned out that the share of bank financing of MEs was smaller by 8%, and VCFs financing was larger by 90.5% (in relation to the share of MEs assets in the total assets of commercial companies of Latvia).

Hence, we could draw a conclusion that in absolute figures the banks had not only decreased their financing to Latvian MEs, but they were also far from the average financing per asset unit. It was estimated that the average value of assets of commercial ME was 138.7 thousand euros and established that the average bank loan (148.6 thousand euros) to ME exceeded the average asset value of ME. According to research calculations, the share of bank financing in ME’s assets amounted to 2.7% or 3.7 thousand euros per Latvian ME. The acquired data demonstrate that the majority of ME bank loans are granted to larger MEs. It substantiates our conclusion that it is necessary to stimulate the banks to finance MEs or activate the avenues of non-banking financing, including micro-lending.

The share of VCFs financing taken against the assets of Latvian MEs confirms the significant role (and to a certain extent – the role compensating for the deficit of other financing instruments) of VCFs in financing MEs. Moreover, it has to be taken into account that VCFs finance the companies with a fast growth potential, i.e. companies of better quality and high importance for the economic development of the state.

The presented data prove that smaller MEs are the first to be left without adequate financing, including recently established innovative MEs without sufficient collateral and turnover which, as a rule, are being financed by their owners, informal investors, venture capital and other non-banking financing instruments.

The acquired data enable us to draw a conclusion of the importance and necessity to develop various venture capital instruments, including VCF.
Conclusions and recommendations

We have examined whether VC funds are a financing instrument for micro-enterprises. We have analysed new data on the number of applications submitted for financing, the number of commercial MEs which have received VCF investments, the share of MEs in the total number of projects financed by VCFs. We have also analysed the data on corporate credits and ME financing by banks and have compared the data on ME financing by VCFs with the data on bank financing.

We have shown that VCFs are not a large-scale and popular source of ME financing in Latvia in comparison with bank financing. The share of VCF financing constitutes only 0.5% of bank corporate financing in Latvia. However, comparing the ME financing by banks with ME financing by VC funds, the share of VCFs has doubled and reached almost one percent. We can conclude that MEs are not discriminated by VC funds because of the small size of the enterprises but, on the contrary, the VC funds prioritise them for investments.

Only 1.5% of the total number of commercial MEs has applied to VCFs for financing. We assume that the majority of MEs in Latvia do not aim at turning into innovative enterprises having the potential for rapid growth, this being the reason why they cannot be considered for financing by VC funds. It means that the potential of VCF financing may be limited due to the lack of a flow of deals including the underdeveloped institution of informal investors and business angels and insufficient public support in pre-seed and seed stages of company development.

The average amount of ME financing by banks and by VCF almost does not differ – bank financing exceeds VCF financing only by 11%. The average sum of ME crediting by banks of EUR 148.6 thousand may be explained by the fact that the banks do not have mass products for MEs, including the so called micro-credits.

Considering the fact that in absolute figures the share of ME financing by VCFs constitutes slightly less than 1%, the governmental and public institutions should pass appropriate measures for increasing the share of venture capital in MEs financing.

These factors must be taken into account by public institutions and politicians responsible for determining the choice of financial instruments for MEs.

The results obtained in the research are based on data generated in the last two years which may be insufficient for drawing the final conclusions. Besides, all VCFs of Latvia are hybrid funds. Four out of six funds analysed are fully subsidised by the state. Therefore the conclusions made in our research may be insufficient for application in other countries of Central and Eastern Europe and emerging markets.

The data obtained by us will be useful for state institutions and politicians in making well-grounded decisions on the financial instruments for micro-enterprises and public support to venture capital. The model offered by the authors of the research will make it possible in the future to expand the geography of research to other countries in order to verify the conclusions made by the authors.
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Bibliography


