Trends, Sources and Amounts of Financing for Micro-enterprises in Latvia

Anatolijs Prohorovs\textsuperscript{a}, Ilona Beizitere\textsuperscript{a,*}

\textsuperscript{a}Riga International School of Economics and Business Administration (RISEBA), 3 Meža Street, Riga LV-1048, Latvia

Abstract

The current article examines the tendencies, amounts and sources of financing for the whole population of micro- enterprises (MEs) in one country. The changes in the amounts and the structure of ME financing with regard to the three main sources – bank loans, leasing and factoring – are analysed and compared with the respective data on all enterprises in Latvia in 2013 and 2014. The authors have established that in 2014 bank loans, leasing and factoring constituted about 89% of ME financing from formal external sources. In 2014, bank loans constituted about 67.5% of ME financing from external formal sources. The authors have proposed a hypothesis about the sensitivity of bank loans for MEs to negative macro-economic changes.

\textcopyright 2015 The Authors. Published by Elsevier Ltd.

Peer-review under responsibility of Kaunas University of Technology, School of Economics and Business.

Keywords: micro- enterprises; small business; financing structure; financing sources; bank loans

JEL code: G21, G23, G28, L25, M13

Introduction

Micro- enterprises are the most widespread type of companies. In 2012, the share of MEs constituted 92.2% of the total number of enterprises in Europe (Wymenga et al., 2012); in Latvia it constituted more than 89% (Lursoft, 2015). Notwithstanding the fact that the share of MEs in the total number of enterprises is so large, researchers rarely view the problems of ME financing apart from those of small enterprises (SEs) or small and medium-sized enterprises (SMEs), though according to Ang (1991), SEs are too heterogeneous to be viewed in one and the same category. Wright et al. (2015) find that a comprehensive survey of SMEs and convincing data on SME financing are lacking. Researchers from the Kauffman Foundation (2013) also consider that data collection and analysis should be improved.

\* Corresponding author. Tel.: +371 29544764
E-mail address: anatolijs.prohorovs@gmail.com

1877-0428 © 2015 The Authors. Published by Elsevier Ltd.

Peer-review under responsibility of Kaunas University of Technology, School of Economics and Business.

Electronic copy available at: http://ssrn.com/abstract=2601572
and more thorough research on the amounts and the structure of the financing and availability of bank loans for new businesses should be conducted. Cumming et al. (2014) consider it essential for analysis of the funding of new businesses to include as many countries in the research as possible. The OECD (2015a) has also noted the lack of accurate data on instruments of SME financing, maintaining that the absence of such information limits the opportunity to assess and project policy on this issue. In our view, the scarcity of research on ME financing can be attributed to the underestimation of the importance and role of MEs in the economy as well as to the difficulty of obtaining reliable data on ME financing. In order to obtain more accurate data, it is necessary to investigate not only individually selected MEs but also the entire population of MEs.

We have managed to collect and process data on all external sources of financing for all enterprises in Latvia as well as for MEs in 2013 and 2014. We analysed the changes in the amounts and structure of financing for all MEs and compared them with the respective changes for all types of enterprises in Latvia in 2014, comparing them with 2013. This enabled us to more accurately define the tendencies of ME financing and to make an assumption about the impact of the slowdown of economic growth in Europe, the conflict in Ukraine and the Russian embargo of 2014 on the changes in the structure of ME financing. On the basis of the data obtained, we have proposed a hypothesis about the sensitivity of bank loans for MEs to negative macro-economic changes.

1. Literature review

Access to financing is considered to be one of the main problems of small businesses (Gellatly et al., 2003; Lahiri, 2012; Kraemer-Eis & Lang, 2014; EC 2014). Pelly and Kraemer-Eis (2012) hold the view that even at a time of economic boom, the smallest enterprises often experience difficulties in securing financing. According to Van der Wijst (1989), Ang (1992), and Uzzi and Gillespie (1999), the financing of small companies differs from the financing of large companies. Kraemer-Eis and Lang (2014) consider that access to financing creates more problems for SMEs than for large enterprises. OECD (2015a) researchers note that bank loans currently remain the main source of external financing for small businesses and that commercial bank loans are considered to be the main source of external financing for 33% of SMEs in the European Union. This view has been confirmed by Kraemer-Eis et al. (2014). Robb and Robinson (2010) find that even new companies rely on bank funding. They maintain that the extensive use of bank loans as seed capital makes them exceedingly sensitive to changes in the funding policy of banks. Casey and O’Toole (2014) hold the view that there is a great degree of reliance on traditional bank lending and too little confidence in alternative means of financing among enterprises in the euro area. Pelly and Kraemer-Eis (2012) maintain that the smaller and newer a company is, the more funding problems it faces. Casey and O’Toole (2014) hold the same view. Pelly and Kraemer-Eis (2012) consider that during a crisis, it is even more difficult for SMEs to find financial resources. Survey data from the ECB (2015) show that credit conditions for SMEs remain tight and access to bank loans is still problematic for European MEs and SMEs. Kraemer-Eis et al. (2014) hold the view that countries with a highly developed capital market and financial services for enterprises have greater opportunities to substitute bank loans with alternative means of.

2. Data and methodology

A characteristic feature of our research is the fact that we have investigated the financing of all MEs in Latvia, that is, our research is based on complete rather than selected data. This allowed us to avoid sectoral, regional and other influences (except the influence of the specific features of the country). In order to acquire data on the number of MEs, we used data from annual financial reports of all enterprises of Latvia. From the total amount of data, we excluded companies from the financial sector. We included only those enterprises in the category of MEs to which the recommendation of the European Commission (2003) applied. We excluded self-employed persons, individual merchants and farms and fisheries from the number of MEs. We obtained data on the amounts of lending to all enterprises and MEs from the Financial and Capital Market Commission of Latvia (FCMC). We obtained data on the amounts of leasing and factoring from the Latvian Leasing Association (LLA), the participants of which constitute 97% of the market. In order to obtain data on the amount of public support, we identified all institutions providing public financial support (the Joint Stock Company Development Financial Institution Altum (Altum), the Latvian Guarantee Agency (LGA) and the Rural Development Fund (RDF)), collected and processed these data and estimated
the share of financing which had been granted to MEs. To do this, we verified the data recorded in the Register of Enterprises (Lursoft, 2015) on each enterprise which had received financing from this source in order to ascertain whether it complied with the criteria of MEs. In order to find out the amounts of financing granted by non-bank institutions, we carried out a survey and obtained data on the six main market participants and compared these data with general data from the Central Statistical Bureau of Latvia (CSB). As the data from the CSB do not include information on ME financing by non-bank institutions, we attributed to them the proportion which we used in calculating ME financing from the financing of the six main market participants. We verified the data obtained by using an expert assessment of a compliance of the amount, based on in-depth interviews with industry experts (with 12 professionals), including specialists from the Latvian Non-Banking Creditors Association (which comprises 20 institutions).

We obtained data on ME financing and the financing of all enterprises from venture capital funds (VCFs) by analysing data on the investments of each of the six VCFs of Latvia (Prohorovs et al., 2015).

We established the share of ME financing in the total amount of leasing and factoring on the basis of the proportion of bank loans to MEs of the total amount of bank loans to all enterprises, introducing lower coefficients. As leasing is used to fund real estate, cars and commercial vehicles and industrial equipment and we had data on the structure of ME financing, we introduced a correction coefficient, lower by 25%, only for industrial equipment.

We ascertained data on ME financing by factoring using the same method which we used for ascertaining data on ME financing by leasing, but this time we introduced a correction coefficient lower by 30% for the total amount of factoring advanced to MEs. We assessed the data obtained on ME financing by leasing and factoring with the help of experts. We consider that the data obtained and the methodology used allow us to state that the error in estimating the total amounts of ME financing by non-bank institutions, leasing and factoring is not more than 10%, and that the error in estimating the total amounts of ME financing by all six sources of financing is not more than 1%.

3. Research and discussion

3.1. Amounts of ME financing

We have estimated the amounts of financing for all enterprises and MEs from external formal sources of financing in Latvia in 2013 and 2014. The data of our research are presented in Table 1.

| Year | Type of enterprise, share of MEs, proportion of ME financing of the total amount of financing | 2013 | 2014 | Changes (%) |
|------|------------------------------------------------------------------------------------------------|------|------|-------------|
| 2013 | All enterprises                                                                                  | 2 486.9 | 1 919.0 | -22.8       |
| 2014 | MEs                                                                                             | 694.7  | 546.1 | -21.4       |
|      | ME proportion (%)                                                                              | 27.9  | 28.5 | 0.6 (percentage points) |

Source: Developed by the authors based on data from the FCMC, the LLA, the CSB, Lursoft, Altum, the LGA, the RDF, a survey of VCFs and the LGA, interviews with non-bank credit institutions, experts; authors’ calculation.

As we can see in Table 1, in 2014, the amounts of financing for all enterprises decreased by 22.8%, while the amounts of ME financing decreased by 21.4%. In 2014, the share of ME financing in the total amount of financing from external formal sources increased insignificantly (by 0.6 percentage points), amounting to 28.5%. In 2014, the increase in the proportion of ME financing and the slower decrease rate of the amounts of ME financing in comparison with the financing amounts for all enterprises can be explained by the growth in the use of such financial sources as leasing, factoring, institutions of public financial support for small businesses, non-bank credit institutions and VCFs, and a substantial decrease in bank loans (minus 33.6%).

We can also see in Table 1 that the other five sources of financing could not compensate for the considerable decrease in bank loans for MEs and for all enterprises. Kraemer-Eis et al. (2014) hold the view that countries which have a highly developed capital market and financial services for enterprises have greater opportunities to substitute bank loans with alternative means of financing which give them certain advantages based on the diversity of forms
and possibilities of funding. We agree with the opinion of Kraemer-Eis et al. (2014) and our research demonstrates that several kinds of financial services are underdeveloped in Latvia. On the basis of our research, we reject the view that in 2014 MEs’ demand for bank loans fell considerably. Survey data from the ECB (2015) demonstrate that credit conditions for SMEs remain tight and access to bank loans is still problematic for European MEs and SMEs. Pelly and Kraemer-Eis (2012) consider that during a crisis it is even more difficult for SMEs to find financial resources. On the basis of these views and our research, we have come to the conclusion that the substantial fall in the amounts of bank loans to enterprises in Latvia was caused by the reaction of banks to the slowdown of economic growth in Europe, the conflict in Ukraine and the Russian embargo in 2014.

3.2. The structure of ME financing

Kraemer-Eis and Lang (2014) note that an important element of financing for SMEs is not only traditional bank loans but also the use of leasing and factoring as financing instruments. Our data confirm the views of Kraemer-Eis and Lang (2014). Moreover, as we can see in Table 2, notwithstanding the considerable fall in bank loans, their share in the total amount of ME financing dominates, constituting 67.5% in 2014. This figure exceeds the bank loans to all enterprises by one percentage point.

Table 2. The distribution of bank loans, leasing, factoring and other external formal financing sources for enterprises and MEs in Latvia in 2013 and 2014 (percentage)

| Type of enterprise / form of financing | All enterprises in 2013 | All enterprises in 2014 | MEs in 2013 | MEs in 2014 |
|--------------------------------------|------------------------|------------------------|-------------|-------------|
| Bank loans                           | 77.2                   | 66.5                   | 80.0        | 67.5        |
| Leasing                              | 15.7                   | 23.2                   | 10.1        | 17.3        |
| Factoring                            | 4.3                    | 6.0                    | 3.1         | 4.2         |
| Other external formal financing sources | 2.8                    | 4.4                    | 6.8         | 11.0        |

Source: Developed by the authors based on data from the FCMC, the LLA, the CSB, Altum, the LGA, the RDF, a survey of VCFs and the LGA, interviews with non-bank credit institutions, experts; authors’ calculation.

As we can see in Table 2, the second largest source of ME financing (and of all enterprises) is leasing. OECD (2015a) researchers have come to the conclusion that leasing occupies a prominent place among financing sources for SMEs. Research conducted by Oxford Economics (2011) on the use of leasing by European SMEs emphasises the wide use of leasing by large SMEs (more than 50% of medium-sized enterprises, compared to 40% of SEs and about 30% of MEs). They attribute this proportion to the limited access of MEs to external financing. We can see that the ME share of leasing is 5.9 percentage points (34%) lower than the share of all enterprises. Therefore our data correlate with the data of Oxford Economics (2011). Haiss and Kichler (2009) and Milenkovic-Kerkovic and Dencic-Mihajlov (2012) consider that the popularity of leasing in countries with a transition economy can be explained by SMEs’ limited access to bank loans due to the absence of collateral and the lack of operating experience. Oxford Economics (2011) notes the positive tendency of SMEs to resort to leasing. The share of factoring in the total amount of ME financing (and in the financing of all enterprises) increased in 2014 and constituted 4.2%. The OECD (2015a) finds that factoring may be exceedingly advantageous for SMEs which face difficulties in obtaining bank loans. Obviously, it was the considerable decrease in bank loans in 2014 that gave rise to the substantial changes in the structure of ME financing (and the structure of financing for all enterprises) in Latvia as the structural changes in bank loans, leasing and factoring for MEs and all enterprises in Latvia coincide.

3.3. Institutions of public financial support, non-bank credit institutions and VCFs as sources of ME financing

ME financing by institutions of public financial support, non-bank credit institutions and venture capital funds in Latvia is presented in Table 3.
As we can see in Table 3, in 2014, institutions of public financial support, non-bank credit institutions and VCFs increased their share in ME financing (and in the financing of all enterprises). The greatest changes in the structure of ME financing occurred due to the aid granted to small businesses by institutions of public financial support. This source of financing grew by 10.5%. In absolute figures, public financial support granted to MEs increased by EUR 4.2 million in 2014 (public support for all enterprises increased by EUR 3.7 million). This means that the amounts of increase in ME financing by institutions of public financial support, non-bank institutions and VCFs were insignificant (about EUR 1-4 million from each source of financing), while the share of these sources of financing increased due to a sharp decrease in bank loans in 2014.

We agree with the opinion of the OECD (2015b) that such sources of corporate funding as credit unions are still underdeveloped in Latvia. A new financing source – the peer-to-peer lending platform "Mintos" – has appeared in Latvia and started to provide loans for businesses in 2015. We agree with the view of Casey and O’Toole (2014) that there is a high degree of reliance on traditional bank lending and too little confidence in alternative means of financing among enterprises in the euro area.

Table 3. ME financing by institutions of public financial support, non-bank credit institutions and venture capital funds in Latvia (percentage)

| Types of enterprises, year / form of financing | All enterprises in 2013 | All enterprises in 2014 | MEs in 2013 | MEs in 2014 |
|-----------------------------------------------|------------------------|------------------------|-------------|-------------|
| Institutions of public financial support      | 2.3                    | 3.2                    | 5.7         | 8.1         |
| Non-bank credit institutions                   | 0.3                    | 0.6                    | 0.7         | 1.7         |
| Venture capital funds                          | 0.2                    | 0.5                    | 0.4         | 1.2         |

Source: Developed by the authors based on data from Altum, the LGA, the RDF, a survey of VCFs and the LGA, interviews with non-bank credit institutions, experts; authors’ calculation.

For all external formal sources of financing in 2013-2014, we have analysed the amounts, the structure and the changes in ME financing in Latvia. The research was based on an analysis of the complete data on all sources of financing and all MEs (and all enterprises in general), which guarantees a high degree of reliability for the research results obtained for a certain country (Latvia).

We have established that in 2014, the amounts of financing for all MEs in Latvia decreased by 21.4%. We have also established that the only reason for the fall in ME financing in 2014 was the decrease in bank loans to MEs of 33.6%. The other five sources of ME financing increased the amounts of financing, but due to the large share of bank loans in ME financing they were able to compensate only for one third of the decreasing ME financing from external formal sources. We consider that the sharp fall in the amounts of bank loans can be explained, among other things, by the slowdown of economic growth in Europe, the impact of the conflict in Ukraine and the Russian embargo of 2014 on Latvia’s economic activity. We consider that our results confirm our hypothesis on the sensitivity of bank loans for MEs to negative macro-economic changes. Our data correlate with the data of Robb and Robinson (2010) and the data of Pelly and Kraemer-Eis (2012). On the basis of our earlier research (Prohorovs, 2014; Prohorovs & Fainglozs, 2014), we consider that MEs have not fully managed to compensate for the decrease in financing in 2014 from informal sources of financing. Our view correlates with that of Casey and O’Toole (2014). Though the share of bank loans, leasing and factoring in ME financing in Latvia in 2014 decreased to 89%, this is nonetheless a high indicator, which implies that alternative sources of ME financing are underdeveloped in Latvia.

Comparing the structure of ME financing with that of all enterprises, we see that in 2013 and 2014, the share of leasing and factoring in ME financing was substantially lower than the share in all enterprises, which corresponds to the view expressed by Oxford Economics (2011). The share of institutions of public financial support, non-bank credit institutions and VCFs in ME financing in 2013 and 2014 is 2-2.8 times higher than that of all enterprises.

Our results are important not only because we have managed to define some tendencies, sources and amounts of ME financing, including those observed in the period of negative macro-economic changes in Latvia, but also because, for the first time, we performed a segmentation of the ME financing market according to external formal sources of financing. Applying the method of investigating all enterprises of one country, we have established a starting point...
for the research of changes in the structure of ME funding sources, both within one country and among various countries. Future researchers of this issue will be able to compare their data with ours. The data presented here may also be taken into account by associations of industry such as the Association of Commercial Banks, the Venture Capital Association, the Association of Business Angels, and the Chamber of Commerce. The results of the study can be used by politicians, public administration institutions and other bodies responsible for the development and support of MEs and small businesses.

References

Ang, J. S. (1991). Small Business Uniqueness and the Theory of Financial Management. Journal of Small Business Finance, Vol.1, Iss.1, 11-13.
Ang, J. S. (1992). On the Theory of Finance for Privately Held Firms. Journal of Small Business Finance, Vol.1, Iss.3, pp. 185-203.
Casey, E. & O’Toole, C. (2014). Bank-lending Constraints, Trade Credit and Alternative Financing During the Financial Crisis: Evidence from European SMEs. Journal of Corporate Finance, Volume 27, August 2014, pp.173-193.
Cumming, D., Johan, S. & Zhang, M. (2014). The Economic Impact of Entrepreneurship: Comparing International Datasets. Corporate Governance: An International Review, Volume 22, Issue 2, pp.162-178.
European Commission (2003). 2003/361/EC. Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (notified under document number C (2003) 1422). Official Journal of the European Union.
European Commission (2014). Survey on the Access to Finance of Enterprises (SAFE) Analytical Report 2014; Written by Sophie Doove, Petra Gibcus, Ton Kwaak, Lia Snuit, Tommy Span; November 2014. http://ec.europa.eu/growth/access-to-finance/data-surveys/safe/index_en.htm
European Central Bank (ECB) (2015). The Euro Area Bank Lending Survey. First quarter of 2015. April 2015
Gellatly, G., Riding, A. & Thornhill, S. (2003). Growth History, Knowledge Intensity and Capital Structure in Small Firms. Statistics Canada, Catalogue no. 11F0027ME — No. 006
Haiss, P. & Kichler, E. (2009). Leasing, Credit and Economic Growth. Evidence for Central and South Eastern Europe. El Working Papers / Europainstitut, 80. Europainstitut, WU Vienna University of Economics and Business, Vienna. http://epub.wu.ac.at/420/
Kaufmann Foundation (2013). 2013 State of Entrepreneurship Address: Financing Entrepreneurial Growth. February 5, 2013. Ewing Marion Kaufmann Foundation Research Paper. http://ssrn.com/abstract=2212743
Kraemer-Eis, H., Battazzi, F., Charrier, R., Natoli, M., Squilloni, M. (2014). Institutional Non-bank Lending and the Role of Debt Funds. EIF Working Paper 2014/25. http://www.eif.org/news_centre/publications/eif_wp_25.pdf
Kraemer-Eis, H. & Lang, F. (2014). The Importance of Leasing for SME Financing. World Leasing Yearbook 2014, Euromoney, January 2014, pp.18-23.
Lahiri, R. (2012). Problems and Prospects of Micro, Small and Medium Enterprises (MSMEs) in India in the Era of Globalization. In the International Conference on Interplay of Economics, Politics and Society for Inclusive Growth Organized by Royal College of Thimphu, Bhutan.(October 15 and 16, 2012). http://www.rtc.bt/conference/2012
Lursoft IT, Ltd. (2015). Statistics of Commercial Register. https://www.lursoft.lv/en/statistics.
Milenkovic-Kerkovic T. & Dencic-Mihajlov K. (2012). Factoring in the Changing Environment: Legal and Financial Aspects, Procedia – Social and Behavioral Science, Vol. 44, pp. 428-435.
OECD (2015a). New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments. http://www.oecd.org/industry/smes/New-Approaches-SME-full-report.pdf
OECD (2015b). Economic Surveys: Latvia 2015. OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264228467-en
Oxford Economics (2011). The Use of Leasing Amongst European SMEs, Executive Summary. Report prepared for Leaseurope, November 2011
Pelly, R. & Prohorovs, A. (2014). Improving the Funding Landscape for Entrepreneurs. SME Centre Policy Brief – SMEs in the Single Market, Lisbon Council Policy Brief Vol VI, No. 3, 2012
Prohorovs, A. (2014). Quantitative and Qualitative Analysis of the Informal Venture Capital in Latvia. Journal Economics and Rural Development, Vol. 10 No 1. pp. 47-68, ISSN 1822-3346 / e ISSN 2345-0347
Prohorovs, A. & Fainglozs, L. (2014). Problems of Data Collection, Processing and Use of Informal Venture Capital. Procedia - Social and Behavioral Sciences, Issue 150C, pp. 87 – 95, ISSN 1877-0428, Elsevier
Prohorovs, A., Jakusonoka, I. & Beiziterite, L. (2015). Is Venture Capital the Source of Financing for Micro-enterprises? Proceedings of the 2015 International Conference Economic Science for Rural Development, Jelgava, LLU ESAF, 23-24 April 2015, pp. 176-185.
Robb, A. & Robinson, D. (2010). The Capital Structure Decisions of New Firms. National Bureau of Economic Research, 2010, Working Paper 16272. http://www.nber.org/papers/w16272
Uzzi, B. & Gillespie J. (1999). Interfirm Relationships and the Firm’s Financial Capital Structure: The Case of the Middle Market. Research in the Sociology of Organizations, vol. 16, pp. 107-126.
Wijst, D. van der. (1989). Financial Structure in Small Business: Theory, Tests and Applications. Berlin: Springer-Verlag, Chapter 5. Determinants from the practice of small business finance, pp. 83-93.
Wright, M., Roper, S., Hart, M. & Carter, S. (2015). Joining the Dots: Building the Evidence Base for SME Growth Policy, International Small Business Journal, 2015, Vol. 33(1), 3–11.
Wymenga, P., Spanikova, V., Barker, A., Konings, J. & Canton, E. (2012). EU SMEs in 2012: at the Crossroads, Annual Report on Small and Medium-sized Enterprises in the EU, 2011/12. ECORYS, Rotterdam, September 2012