THE FINANCIAL LITERACY OF SMES IN THE SOUTHERN ALFÖLD REGION

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These days, studies of financial literacy are a very hot topic. However, the vast majority of analyses focus on the general population, while we still have very little exact information at our disposal regarding the financial literacy of enterprises. The lack of development observable in the area of financial literacy – which can be viewed as part of the business culture as a whole – may significantly obstruct the operation, growth and investments of enterprises. Among other reasons, this is why the question of characterising the financial literacy of small and medium-sized enterprises is such an extraordinarily interesting one, as it is debatable whether the sector has a definable level of financial literacy at all. In this study, we begin with a review of the prevalent definitions of financial literacy, before going on to present the findings of an empirical survey of enterprises in the Southern Alföld region employing at least two people, which we carried out with the co-operation of the Hungarian Central Statistical Office (KSH). This paper presents the survey's statistical population, the sampling procedure, the applied analytical methodology, and the findings from the surveyed block regarding financial literacy. The most important finding of our research is that while the overall picture of financial literacy among SMEs in Southern Alföld is somewhat more favourable than our preliminary expectations indicated, there is still room for educational and development programmes aimed at improving the standard of financial literacy.

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1. INTRODUCTION

Despite the fact that examinations of financial literacy among the general populace in Hungary have occupied the forefront of interest in recent years, with the proliferation of home-grown research in this area recognised as a welcome development (e.g. *Huzdik* et al., 2014; *Botos* et al., 2012; *Béres* et al., 2012), there is still a serious dearth of precise information about the financial literacy of enterprises. Empirical surveys among both the general population (*Atkinson–Messy*, 2012) and small and medium-sized enterprises (*Czakó* et al., 2011) reveal a comparatively low level of application of financial knowledge. The deficit in financial literacy – which can be viewed as part of the business culture as a whole – may significantly obstruct the operation, growth and investments of enterprises. Among other reasons, this is why the question of characterising the financial literacy of enterprises is such an extraordinarily interesting one, as it is debatable whether the sector has a definable level of financial literacy at all. In this study, we begin with a review of the prevalent definitions of financial literacy, before going on to present the findings of an empirical survey.

Lending a practical topicality to examination of the issues discussed here is the assertion in the government's latest SME Strategy that "entrepreneurs' financial grounding is inadequate, while a wide circle of SMEs do not possess the sufficient financial knowledge and management culture to be able to effectively utilise the resources at their disposal. The demand side is characterised by a lack of competence in financing matters on the part of entrepreneurs, which can primarily be traced back to the lack of opportunities for appropriate training or continuous study and orientation. In the absence of training and study, orientation through a system of financing opportunities that is already complex and difficult to comprehend is an all but impossible task. As a consequence of this, not only is access to financing a problem, but its efficient utilisation as well." (MNE, 2013, pp. 38–39.).

2. THE CONCEPT OF FINANCIAL LITERACY

In the case of one-person businesses, the financial literacy of the individual entrepreneur is primarily determined by the financial literacy and intelligence of the individual as an ordinary citizen (*Avlijaš* et al., 2014). Consequently, we will begin by reviewing the main approaches adopted with respect to individuals.

2.1. The financial proficiency of individuals

The concept of financial literacy is defined in an OECD study thus: "Financial literacy is a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing." (*Atkinson–Messy*, 2012, p. 14.). The concept was born in the early 1900s, although it existed previously under other names.

An interpretation similar to the above definition can be found in a paper by Indian researchers, which states that "financial literacy is the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being" (*Suganya* et al., 2013, p. 99). This definition emphasises that financial literacy goes beyond mere financial knowledge to include skills as well.

Another important element of the definition is the creation of an individual's own financial equilibrium.

Dutch scholars place the emphasis on knowledge and understanding, rather than the use of financial assets. In their view, financial literacy means the knowledge and understanding of complex financial products (*Mak–Braspenning*, 2012, p. 307.).

Having scrutinised several hundred research studies, Remund takes the view that financial literacy is a measure of the understanding of key financial concepts. The definition includes the skill and self-confidence that enables individuals to control their own personal financial affairs (*Cude*, 2010, p. 272.).

In another article, *Plakalovic* cites a definition of the financial literacy concept that includes decision-making ability as an important component. Personal financial literacy also includes the ability to choose among various alternative financial decisions, as well as the ability to communicate. In this way the individual is able to plan and react appropriately to events in life that may affect their everyday financial decisions, including overall economic processes (*Plakalovic*, 2012, p. 136.).

In his study, *Remund* notes that numerous definitions of financial literacy have been coined since 2000, and that these definitions fall into five main categories (*Remund*, 2010).

1. *Knowledge of financial concepts*: the most fundamental skill is the ability to manage money, for which an individual first requires knowledge about the use of money.
2. *Ability to communicate about financial concepts*: a knowledge-based definition expanded to include decision-making capability.
3. *Aptitude in managing personal finances*: including keeping track of cash resources and payment obligations, how to open a savings account, etc. People need to be able to plan their future needs, to be able to compare competing offers, e.g. in the area of health or life insurance.
4. *Skill in making appropriate financial decisions*: a factor stressed the most in most concepts of financial literacy. In some interpretations, this means a capacity for critical thinking; the ability to weigh the benefits and disadvantages of a given decision.
5. *Confidence to plan effectively for future financial needs*. Most researchers agree on the need for understanding and knowledge of financial planning and investment.

The above list includes capabilities that pertain to both the short and long term. Some people are able to plan without making immediate decisions, while others make immediate decisions without planning (*Remund*, 2010, p. 282).

In some of the aforementioned research studies, the concept of financial literacy is based on financial knowledge. Other studies attempt to construct a definition from several components, also including decision-making ability and self-confidence. *Huston* surveyed a total of 71 studies, of which more than 50 were unable to define the concept of financial literacy. The remaining cases contained definitions giving shape to eight different meanings. Almost half of the analysed studies made no marked distinction between financial knowledge and financial literacy. The imprecise definition of the concept explains why financial literacy cannot be defined in simple terms (*Huston*, 2010). There are nevertheless several thematic areas that are common to the various definitions: banking services, savings and investments, lending, pensions and insurance, inflation, diversification, compound interest.
Although the aforementioned studies agree on several points in defining the elements of financial literacy, a precise definition of the concept is impossible based on what has been discussed so far.

International research has targeted a variety of specific groups for analysis: *Servon* and *Kaestner* looked at consumers in the low and middle-income brackets (*Servon–Kaestner*, 2008), while *Coates*, *Marais* and *Weil* surveyed the financial qualifications of the management of companies listed on the New York Stock Exchange (*Coates* et al., 2007). Others have examined women in employment (*Mathivanan–Mohanaranjani*, 2013).

"Similarly to the varying definitions of the concept, numerous methods have been employed to measure financial literacy. In their study, *Hung* and co-authors (2009) identified two classification criteria in the course of analysing various research studies. According to the first, the standard of financial literacy can be tested based on self-assessment and performance measures, while the second classification criterion holds that financial literacy may appear in various specific areas of finance (savings, investment, credit, calculating ability). Naturally the two classification criteria are not mutually exclusive." (*Béres* et al., 2013, p. 3.)

In an international survey (*Atkinson–Messy*, 2012), Hungary scored highly on financial knowledge, indicating a good standard of theoretical awareness. In terms of practical application and financial behaviour, however, its results were poor.

2.2. The financial proficiency of entrepreneurs

Now we turn to the question of what level of financial intelligence is characteristic of enterprises employing at least two people. What is sure is that we can take definitions of financial literacy as they apply to individuals as our starting point. At the same time, the question in this case is whether we should approach an enterprise's financial proficiency from the point of view of the financial literacy and intelligence of a given individual, or by examining the financial decisions, awareness and consequences of the enterprise itself. In surveys of the general populace, financial literacy is taken to mean the ability to make well-informed and effective decisions related to the use and management of money – skills which can be extended to enterprises as well. *Brown* and co-authors (2006) define the financial literacy of entrepreneurs along similar lines. According to *Czakó*, *Husz* and *Szántó* (2011), when probing the financial literacy of SMEs it is worth measuring not only skills and knowledge, but also the extent to which available financial opportunities are exploited. It is also interesting to explore the nature of the relationship between financial literacy and the entrepreneurial culture, and how much the former can be regarded as part of the latter. In addition, the nature and depth of knowledge the entrepreneur must possess is not obvious, nor the extent to which he or she can rely upon employees or an accountant in terms of financial information. Whose financial literacy actually has to be examined? Is it the manager's, or the organisation's "collective" knowledge, including the available knowledge of the employees? Although our investigation can be considered the first step in examining enterprises' financial literacy, the task of finding a reassuring response to the above problems still awaits.

In contrast to the extensive body of research examining the financial literacy of individuals, international findings with regard to enterprises are comparatively hard to come by (*Dahmen* et al., 2014; *Vacher*, 2014). Among the reasons for this, the fact that we are dealing with organisations no doubt plays a part, increasing the complexity of the problem. For the most part, existing studies either concentrate on microenterprises or contain the results of some kind of enterprise assistance programme.

Among international findings we could mention the study by *Brown* and co-authors (2006). Based on a survey of 147 start-up enterprises, the study found an overall weak level of financial preparedness, which has an impact on the success or failure of these businesses.

In terms of developing an entrepreneur's financial literacy, *Drexler* and co-authors (2014) regard the teaching of simple financial heuristics as more effective than the transfer of standard financial and accounting knowledge.

Hussain and co-authors (2008) likewise call attention to the central role of financial knowledge, finding that shortcomings in financial training exercise a negative influence on the efficiency and profitability of small enterprises.

Prominent among studies carried out in Hungary is the survey by *Czakó*, *Husz* and *Szántó* (2011) on the financial literacy of enterprises. This relies on a representative national sample of 1,200 businesses. The authors ascertained that the owners of SMEs are frequently also employees; business and personal assets are thus not always clearly differentiated. The business risks of SMEs are generally higher as they are active in only one sector, which tends to be more labour-intensive than capital or resource-intensive, as a result of which they do not have assets that can be utilised as collateral. Often these are young enterprises without a substantial business history, unknown on the wider market. Their bookkeeping is not always reliable, and consequently they often find it harder to access funding from a weak bargaining position. Leading to further difficulties is the habit of many entrepreneurs to treat revenues as personal income, without setting aside the sums required later to cover taxes, utility bills and other overheads. In addition, entrepreneurs are not always able to interpret contractual terms and conditions correctly, so that problems may arise from mutual misunderstandings between parties. With regard to access to funding, it is worth highlighting the motives behind the acquisition of equity and external capital. With regard to the involvement of external capital, insufficient credit demand is traditionally explained by the low level of investment following a recession and the need to restore liquidity, or sometimes by the situation where economic players are already close to their limits of efficiency (*Bodnár*, *Kovalszky* and *Kreiszné*, 2014). In the case of Hungarian SMEs, *Czakó*, *Husz* and *Szántó* (2011) are much more inclined to highlight strong aversion to credit and growth, since owners who judge an enterprise's situation to be uncertain only dare take small risks. The authors stress that "the lack of foresight and attachment to traditions that reject modern know-how, witnessed primarily in the SME sector, may impede the spread of modern business organisation and management solutions," thereby also stifling innovation. According to *Bethlendi* and *Végh* (2014), the impact of all this can easily be traced in the low level of investment in proportion to equity among micro and small enterprises, as well as in the unfavourable rate of bankruptcy. The same authors also highlight the option of taking advantage of venture capital funds linked to the JEREMIE programme and other EU financing opportunities – assuming that an enterprise is able to demonstrate major growth potential. On the other hand, *Karsai* (2014) emphasises the stagnation and slow decline in investments on the venture capital and private equity market in both Hungary and East-Central Europe as a whole. Enterprises' foreign currency exposure may stem from supplier-customer relationships (transaction and economic exposure), or the mode of involvement of external capital (foreign currency-based credit, borrowing abroad) (*Madura*, 2008). The region's external trade is traditionally directed at the EU-28 member countries (and within this the euro zone), and this has been further reinforced by the high level of foreign currency borrowing from the first decade of the new millennium (*Bodnár*, 2006). In the decade preceding the financial crisis, the currencies of East-Central Europe moved closely in step with the euro and the Swiss franc, making management of the exchange rate risk insignificant. After the summer of 2008, this historically synchronised movement temporarily ceased and only stabilised after a significant wave of depreciation, only for a still more dramatic process to take shape in 2011 with the strengthening of the Swiss franc (*Kiss–Schuszter*, 2014a; *Kiss–Kosztopulosz*, 2013; *Kiss–Schuszter*, 2014b). It is understandable that processes on the foreign currency market, even with knowledge of the appropriate hedging techniques, may have presented a challenge to enterprises through the prospect of rising forward prices and rising option fees in the wake of growth in volatility; however, in the case of a reticent SME sector – at least when it comes to financial products – which faced a surge in the costs of borrowing and even simple import costs, the effect was a deterioration of profit-generating capacity. In this respect, the various elements of the Growth Credit Programme, by providing both refinancing and new loans, serve to restore long-term forint-based lending and improve investment activity (*Balog* et al., 2014).

3. THE FINANCIAL LITERACY OF SMES IN THE SOUTHERN ALFÖLD REGION AS REFLECTED IN A SURVEY

In our empirical study, we surveyed the financial literacy of a representative sample of enterprises in the Southern Alföld region employing at least two people. We excluded one-person enterprises from our investigation since our aim was to focus on the culture of the organisation itself.

In our survey we endeavoured to answer questions such as: Whom do enterprises rely upon for investment advice? Are they aware of the content of inflation reports? Are they able to separate the assets of the business from those of the family? Do they hold insurance policies? Do they make use of electronic banking services? What is their attitude to borrowing? And what sources of information do they generally rely upon in the course of operation?

3.1. Sampling procedure

The number of active enterprises in Southern Alföld was 73,000 in 2012, some 5,000 less than the previous year. Given that the survey's target group was enterprises employing at least two people, the statistical population of the target group according to Central Statistical Office (KSH) data comprised 19,975 small and medium-sized enterprises. A representative sample of the target group was assembled with the help of the KSH, which conducted an online poll in the summer of 2014. Enterprises received the questionnaire through the statistics office, and were given two weeks to complete it. The questionnaire, which had to be filled out by economic, financial and HR decision-makers, was returned by a total of 605 SMEs. Given that the willingness to respond (the proportion of returned questionnaires) was 10%, the distribution of enterprises by workforce size category in the sample did not reflect the proportions in the statistical population, thus obliging us to weight the sample. This does not cause problems in the analysis since – in the case of stratified sampling – it is the proportions within the statistical population, not the sample, which we must work with. The value of the weight variable in the case of a given group is simply the ratio of the group's proportion within the statistical population to its proportion within the sample. By applying the weight variable, the composition of the statistical population can be reproduced.

3.2. Methodology

Processing of the questionnaires begins with a descriptive statistical analysis. After the descriptive statistics, we primarily applied chi-square tests in accordance with the measuring level of the variables. The demonstration of a significant relationship between the variables in the course of the survey merely signifies that the two variables cannot be regarded as independent of each other. Since statistical explanatory models are examined on a mathematical basis, a variable shown as one cause or another is not necessarily a cause in reality. If the relationship is significant (p-value of <0.05), association rules may be laid down based on conditional distributions and residuals. We investigated the connection with respect to the dimensions of workforce size and age group (length of enterprise's operation).

3.3. About the sample

Some 59% of the enterprises included in the sample employed 2–4 people, while 21% employed 5–9 and 17% employed 10–49 people. This means that 97% of respondent enterprises counted less than 50 employees.
A total of 27% of the examined enterprises belonged in the age group of 0–5 years. Some 17% of questioned enterprises listed themselves in the 6–10 age group and 16% in the 11–15 age category, while the proportion of enterprises aged 16–20 was 21%. The questionnaire revealed that 19% of enterprises were aged 21 years or older.

4. RESULTS

4.1. Investment advice

The first question focused on the willingness of enterprises to take risks, as well as to share the risk of investments: "If you invest HUF 1 million on the advice of three of your friends, which of the three's advice will you follow?" The greatest proportion of enterprises (34.9%) said they would listen to the advice of the friend who has made the greatest profit in the past year, ignoring the fact that we cannot predict future yields based on past ones. Some 20% of respondents said they would follow the advice of the friend who offers a low-yield, low-risk investment. Only one respondent would follow the advice of the friend whose investment has brought the highest profit in the past month. Some 23% of enterprises would share the risk among the three investment options. Every fifth respondent was unable to decide among the alternative pieces of investment advice.

If we look at this same question taking into account the various **age categories** of enterprises, then we can reveal significant discrepancies (p-value of <0.01). Among enterprises aged 0–10 years, there was a significantly higher probability (51%) of finding respondents who would follow the advice of a friend whose decisions have resulted in the greatest profit over the past year, in contrast to the other age groups (27%). Among the various age groups, there were scarcely any enterprises that said they would rely on advice from a friend whose decision has resulted in the greatest profit in the past month.

If we examine the enterprises by **workforce size categories**, we find similarly significant discrepancies in responses to this question (p-value of 0.029). Some 43.2% of enterprises employing 2–4 people would follow the advice of their friend whose investment has brought the greatest profit in the past year. In the case of companies employing 50 or more people, 50% said they would invest in all three alternative offers.

4.2. Funds for investment

The next question related to funding available for investments: "To what extent would you make use of the following sources of funding for an investment essential for the future of your company?" The sources were: equity, credit, EU subsidies or venture capital. We applied a five-point Likert scale for enterprises to provide their responses.

Half of enterprises would prefer to make use of equity, while 20% would not. Some 59% of the enterprises questioned would rather not take advantage of loans. Besides this, 81.4% of respondents said they would prefer not to use venture capital for their future investments.

Subsidies available from the European Union were seen as a potential external source of funding by 66% of enterprises.

Regarding this question, we found significant discrepancies in the attitude to credit depending on the size of workforce (p-value of 0.04). In terms of workforce size, a greater proportion (62%) of smaller enterprises (employing 2–9 people) rejected the credit option as a source of funding for development compared to larger enterprises (40%).

4.3. Inflation

One of the key questions of research into financial literacy relates to inflation: "Imagine your savings have earned 1% interest in a year, while annual inflation was 2%. How much do you think your money can buy after one year?" The possible responses were: more than the money on my account today; exactly the same as today; less than today; or I cannot decide.

Table 1
Breakdown of enterprises' responses to inflation question (%)

Value of savings	Total
Less than today*	83.4
Exactly the same as today	3.9
More than today	2.2
Cannot decide	10.4
Total	***100.0***

Source: author's calculation

More than 83% of enterprises responded correctly to this question. One in ten surveyed enterprises was unable to choose among the possible answers provided.

4.4. Trust

The next question related to trust: "Please rank the following in order of whose advice you trust the most with respect to your enterprise, where 1 represents the one you trust the most, and 5 the one you trust the least: accountant; lawyer; financial service providers; associate / business partner; spouse / companion / family member."

The greatest number of enterprises ranked accountants in first place, with lawyers ranking second. Trust in the advice of family members ranked third on the list. Based on a Friedman test and related post hoc test, we can compare the assessment of partners in pairs. Application of this test is justified because the likelihood of committing a type I error grows in parallel with the increase in the number of comparisons, while this procedure manages this problem by correcting the p-value. We can state that trust in financial service providers is considerably weaker than faith in accountants (p-value of 0.01) and lawyers (p-value of 0.049). Although there are differences in the assessment of accountants, lawyers and family in the sample, this is not open to generalisations.

Table 2
Ranking of trust in partners

Rank	Partner
1.	accountant
2.	lawyer
3.	family
4.	business partner
5.	financial service providers

Source:author's calculation

As regards age groups, we can say that younger enterprises display less trust in lawyers (10.6%), while 26.1% of firms aged over 21 have complete trust in lawyers.

4.5. Insurance

Next we asked enterprises to tell us about their insurance policies as follows: "My enterprise holds the following insurance (you may mark more than one)." The possible responses were: liability insurance; staff accident insurance; fire, water and storm damage; motor fleet insurance; other (open response). The most frequently mentioned type of insurance was liability insurance. Half of companies also had insurance against fire, water and storm damage. Fewer had accident insurance in respect of their work colleagues. Types of insurance mentioned under the "other" category included property insurance, building insurance, inventory insurance and environmental insurance. The proportion of enterprises with no insurance at all was negligible *(Table 3).*

Table 3
Types of insurance mentioned (%)

Insurance type	Proportion of mentions
Liability insurance	76
Staff accident insurance	33
Fire, water and storm damage	58
Motor fleet insurance	54

Source: author's calculation

With regard to insurance, we found a significant connection between insurance and the age group of the enterprise. Among younger enterprises (0–5 years), fewer hold liability insurance (60%) than in the group of enterprises aged 6 years or older (80%) (p-value of <0.01).

With respect to staff accident insurance, a similarly significant difference was observed as a function of age group (p-value of <0.01). Fewer younger enterprises tend to hold insurance of this kind (22.9%), while this proportion rises to 54.2% among firms aged 21 or over. In the case of insurance against fire, water and storm damage and motor fleet insurance, 40.7% of younger enterprises answered in the affirmative, while this proportion was 60% at enterprises aged 6 and over (p-value of <0.01).

There is no marked relationship between liability insurance and the size of an enterprise's workforce. Some 70.6% of larger enterprises are insured against fire, water and storm damage, while 50.3% of small enterprises are not. Among enterprises employing 2–4 people, there is a greater chance we will encounter firms which do not hold this kind of insurance.

Other types of insurance taken out by enterprises which were mentioned by respondents included building insurance, life insurance, environmental insurance, home insurance, agricultural and crop insurance, flight insurance, breakdown insurance, property and professional liability insurance, etc.

4.6. Business and family assets

Next we asked enterprises whether they would ever use company assets to resolve their family's financial problems: "If you or a close family member were to experience temporary financial difficulties, is it conceivable that you would use a portion of the enterprise's assets to resolve the problem?"

Some 56% of enterprises said they would not mix business and personal financial affairs, while 8% answered in the negative because they questioned the legality of such a solution. Every fifth respondent said they would use the enterprise's money to resolve family problems. Among these, enterprises that said family is more important than anything were roughly equal in number to respondents who said they would only choose this route if a personal financial crisis were to occur for some unforeseeable reason. Some 10% of respondents were unable to decide how they would behave in such a situation.

Irrespective of the age of the enterprise, most respondents expressed the view that personal and company finances should not be mixed. However, 17.1% of younger enterprises in the 0–5 age group said they would use the enterprise's assets to help their families as this is the most important thing, while only 3.9% of enterprises aged 16–20 agreed with this sentiment.

At larger companies it is increasingly unlikely that the respondent and the owner are one and the same; it therefore seems surprising that we found no significant connection between use of the enterprise's assets and the size of the workforce.

4.7. New investments

The next question in the survey related to new investments: "When would you set about implementing a new investment?" The answer most frequently given (69%) was: "If continuous cash generation at the enterprise permits it." Besides this, 7.5% of enterprises said the launch of a new investment would be dependent on the previous year's profits, 5.7% on access to credit, and 10% on whether they were able to set money aside for the purpose.

The launch of a new investment likewise had no relation to the age or size of the enterprise.

4.8. Sources of news about tenders

Next we questioned enterprises regarding their sources of information about tender opportunities: "Where do you learn most frequently about tender opportunities?" The possible answers were as follows: from the websites or news communications of institutions inviting tenders; from the news communications of business chambers; with the help of a tender monitoring website, service or colleague; from acquaintances in our network of contacts; we are not interested in tender opportunities; other (open response).

Close to one third of enterprises (31%) learned of tender opportunities with the help of a tender monitoring website, service or colleague. Some 23% of respondents gathered information about tenders from acquaintances based on their network of contacts. Every fifth respondent said they rely on websites or news communications of institutions inviting tenders, while every tenth respondent learned of tenders from the communications of business chambers. The proportion of enterprises informed through business chambers was 5% in the case of enterprises aged 0–5 years, while older enterprises relied more on chambers as a news source (10%). Only a negligible proportion of enterprises (less than 1%) said they gather information about tenders from newsletters or from their own tender writer.

The source of information about tender opportunities was not dependent on the enterprise's workforce size.

4.9. Banking services

We questioned enterprises about their use of banking services thus: "Beyond management of an account, which of the following banking services does your enterprise use? (You may mark more than one.)" The possible responses were: mobile banking (not services accessible with a smartphone); internet banking (services accessible with a smartphone or through the internet); private banking services; other (open response).

Table 4
Banking services used by enterprises, as proportion of responses (%)

Banking service	Use it	Don't use it	Total
Mobile banking	20.2	79.8	100.0
Internet banking	83.8	16.2	100.0
Private banking services	10.2	89.8	100.0

Source: author's calculation

A significant proportion of enterprises (83.8%) cited banking services accessible with a smartphone or through the internet. Every fifth respondent cited mobile banking. Use of private banking services was the lowest (10.2%).

4.10. Credit and investment

In contrast to question 4.2 regarding possible methods of financing, with the next question we asked enterprises for their general opinion about taking out credit to finance developments: "What is your general opinion about development of an enterprise financed from credit?" We applied a six-point Likert scale for enterprises to provide their responses, where "1 = I would not borrow to finance my enterprise's development" and "6 = borrowing is a good tool for the development of an enterprise."

Half of respondents said they would rather not take out credit (choosing points 1–3 on the scale). Of these, half said they would not borrow at all.

The rejection of credit also features in the aforementioned study by Czakó and co-authors (2011). Underlying attitudes the authors identified include, for example, the shame of falling into debt; the view that we should only spend what we already have in hand; that we should cover investments from money already accumulated; that self-sufficiency is the most important thing; and that whoever borrows loses their independence.

Of enterprises that took a positive view of using credit to cover expansion in their business (choosing points 4–6 on the scale), only one in five wholly agreed that borrowing is a good tool for the development of an enterprise, while 47% of responses can only be regarded as moderately positive in this regard.

With the help of a rank correlation, we were able to determine that larger enterprises took a somewhat more positive attitude to taking out credit (r=0.13; p-value=0.02).

4.11. External sources of information

The last two questions in the questionnaire on financial literacy related to external sources of information. The first of these asked: "In managing your company, to what extent do you rely on the following information on a day-to-day level? (1 = not at all; 5 = completely)" We were curious about evaluation of the following information: production indicators; financial indicators; indicators of the macroeconomic environment.

Enterprises use financial indicators most often on a daily basis (56%), and indicators of the macroeconomic environment the least often. In utilising financial indicators, it is unfortunately typical of Hungarian enterprises – even by international comparison – that when evaluating investments, for example, they seldom apply the methodologically most solid and reliable indicators, such as the net present value indicator (Andor and co-authors 2011).

Examining Spearman's rank correlation coefficient, we can see that the older an enterprise or the larger its size, the greater the likelihood that it uses production and macroeconomic indicators in its daily management (the p-value in each case was lower than 0.035).

The last question relating to financial literacy was: "What external data sources do you rely upon in managing your company? (You may mark more than one.)" The possible responses were: the Central Statistical Office (KSH); the National Tax and Customs Administration (NAV); commercial banks; I do not use external data sources; other (open response).

Some 42% of enterprises cited the Central Statistical Office. Every third respondent indicated the National Tax and Customs Administration. A quarter of enterprises said they rely on information from commercial banks, while 38.7% – by their own admission – do not make use of external sources of data in the management of their firms. A total of 31 enterprises named other external sources of information, of which the most frequently cited was the stock exchange (6 mentions). Also mentioned were the Association of Tax Consultants, company information portals, the opinions of market partners, professional bodies and trade journals.

Table 5
Frequency of mentions of external data sources (%)

External data source	Use it	Don't use it	Total
KSH	42.0	58.0	100.0
NAV	38.7	61.3	100.0
Commercial banks	25.9	74.1	100.0
Other external data sources	61.3	38.7	100.0

Source: author's calculation

5. SUMMARY

In our study we attempted to throw light on the concept of financial literacy as it relates to organisations, as well as the problems associated with measuring it, before going on to present the initial findings of a survey of enterprises in the Southern Alföld region employing at least two people. We established that enterprises generally would not rely on credit or venture capital to fund their future investments, and that they would tend to initiate new investments only when continuous cash generation at the enterprise permits it.

A greater number of enterprises would use business assets to alleviate their family's financial problems than those who would not.

Among banking services, the use of internet banking is typical, while use of mobile banking and private banking services is less widespread.

The most important finding of our research is that while the overall picture of financial literacy among small and medium-sized enterprises in Southern Alföld is somewhat more favourable than our preliminary expectations indicated, there is still room for educational and development programmes aimed at improving the standard of financial literacy.

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