



OECD Eurasia
Competitiveness Programme



**SECTOR COMPETITIVENESS STRATEGY
FOR UKRAINE – PHASE III**

Measure and Strengthen SME Financial Literacy in the Agribusiness Sector in Ukraine

Project Summary
Working Group on Access to Finance for Agribusiness
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KEY FINDINGS

The initial findings of the OECD Survey to Measure SME Financial Literacy in the Agribusiness Sector of Ukraine show that while agribusiness SMEs have satisfactory levels of general financial knowledge, the smallest and youngest of these have the lowest levels of understanding financial concepts.

Although agribusiness SMEs report using different financing options, in practice, internal funds and retained earnings remain as the main sources for financing working capital and fixed assets. This is mainly due to a lack of trust in the formal financial sector, as well as a number of supply-side challenges for accessing finance.

The majority of survey respondents make financial decisions, such as for the purchase of financial products and services, only after consulting product-specific information and general advice, rather than after consulting a bank. No other business support services are currently available for agribusiness SMEs in Ukraine.

The survey could not assess the practices of agribusiness SMEs in terms of separating personal finances from those of the firm, as the large majority of respondents refused to answer related questions. Further consultations are needed to make conclusions on the impact of business practices in accessing different sources of finance.

The findings show that a targeted financial literacy strategy for agribusiness SMEs may have a positive impact on ability to access finance. In addition, building trust with the financial sector may also prove beneficial for increasing the financial supply. The provision of business support services targeting SMEs could also increase the ability and chances of SMEs to obtain financing from banks and other available sources.

The OECD recommends introducing a number of targeted policy actions aimed at improving the level of SME financial literacy of agribusiness SMEs as part of a wider national strategy of financial education. More specifically, these recommendations include:

- (1) focus on the smallest and youngest agribusiness SMEs;
- (2) foster the use of more diversified financial products and services;
- (3) develop programmes to further support the understanding of legal and regulatory matters of SME financing;
- (4) legally obligate banks to provide due information and advice; and
- (5) improve access to finance through service cooperatives.

ANALYSIS

Assessing the knowledge of basic financial principles

1. The survey shows that agribusiness SME managers demonstrate a satisfactory level of financial literacy as assessed by questions related to basic financial principles. Indeed, 64% of all respondents correctly answered all questions testing levels of financial literacy.

2. However, the survey highlights that the knowledge of basic financial principles is the lowest among the smallest (100-500 ha of land) and the youngest (0-10 years of establishment) agribusiness SMEs. Respectively, 61% and 40% of respondents correctly answered questions testing knowledge of basic financial principles, while these figures increase up to 74% for owners of large agribusinesses (1000-2000 ha of land) and 68% for businesses established for more than 15 years. Indeed, larger and longer established businesses tend to have more experience in handling financial matters and decisions, and experienced finance specialists within the firm (chief financial officers, accountants and financial advisors) often provide financial advice internally. Therefore, priority actions should target small and young agribusiness SMEs in order to be most effective.

Assessing financial practices of agribusiness SMEs

3. A large majority of Ukrainian agribusiness SMEs report having knowledge of a wide range of financial products and services. This knowledge covers basic financial products such as bank loans (98% of all respondents) and sophisticated financial products such as swaps (61% of all respondents) and forward contracting (81% of all respondents).

4. However, the use of simple products is much higher than the use of more sophisticated financing solutions. For example, 90% of respondents use current bank accounts and 86% report having used them in the past; 80% report currently using and having used leasing solutions. In comparison, only 45% of respondents report currently using swaps and 54% having used this instrument in the past.

5. The reported high levels of knowledge and use of financial products and services are unexpected findings of this survey, namely given an overall low level of financial literacy among the population (USAID, 2010) and a decreasing level of banking penetration in Ukraine: in 2010, there were 2.3 commercial bank branches per 100,000 adults, while in 2013 only 0.9 (World Bank, n.d.). This is a much lower level than in other countries of the region. For example, in Moldova the level of banking penetration was 10.4 bank branches per 100,000 adults in 2010 and 12 in 2013; and in Poland – 32 and 32.5 respectively (idem).

6. Even though a large majority of respondents report knowing and using a wide range of financial products and services, the main source of short- and long-term finance remains to be drawn from internal funds and retained earnings.

7. The survey shows that the operating liquidity of respondents is mainly financed from internal funds or retained earnings. For instance, 23% of respondents finance between 76% and 100% of their working capital from this source, and 22% of respondents cover between 51% and 76% of their operating liquidity from this source. At the same time, only 30% of respondents report borrowing from banks to cover between 26% and 50% of their working capital. Also, a large majority of respondents do not use any alternative sources of finance: 40% of respondents do not use any bank lending, 65% do not borrow from

non-bank financial institutions¹, 72% make no purchases on credit from suppliers and do not take advances from customers, and 89% of respondents do not use any other source of finance for their working capital².

8. Similar to working capital, the long-term needs of respondents for property, plant and equipment are mainly covered by internal funds and retained earnings. For instance, 14% of respondents cover between 76% and 100% of fixed assets, 20% of surveyed SME directors report financing between 51% and 75%, and 41% of respondents finance between 26% and 50% of their fixed assets from internal funds or retained earnings. At the same time, a large majority of respondents use no external sources of finance to purchase fixed assets: 46% of respondents do not use any bank lending, 68% do not borrow from non-bank financial institutions³, 89% do not use owner's contribution or issued new equity and 92% of respondents do not use any other source of finance for their working capital⁴.

9. The results of this survey can be explained by supply and demand-side challenges of SME access to finance in Ukraine.

10. On the supply side, access to finance remains one of the most important constraints, especially for SMEs. In 2012, Ukraine had the highest share (76%) of companies reporting credit constraints in Eastern Europe and the Caucasus, up from only 50% in 2008.⁵ Up to 75% of agribusiness companies report poor access to finance as a key barrier to further expansion and investment (IFC, 2011). In the 2013-14 Global Competitiveness Report, 16.7% of respondents in Ukraine identified access to finance as the number one obstacle to doing business (in a single choice survey), up from 15.3% in 2012-13, and ahead of corruption and inefficient public administration. As a result, internal self-financing in the form of retained earnings and personal savings remain the most prominent sources of SME funding (OECD, forthcoming) which is confirmed by the survey results.

11. Due to lack of collateral and high collateral requirements, which can range from 100% to 200% of the loan's value, and the perceived high risk of agricultural lending, agribusiness SMEs have very limited access to bank lending and trade/supplier finance. About half of the producers sell 80-100% of their new harvest immediately to finance their working capital (IFC, 2011).

12. Finally, the current macroeconomic and financial situation in Ukraine further constrains access to finance supply challenges for agribusiness SMEs: liquidity issues in the banking system, political uncertainties and external risks which arose in 2014 have adversely affected the accessibility of financial resources (OECD, forthcoming).

13. On the demand-side, there is a high level of distrust towards the financial sector, resulting in a very limited use of financial products and services by the population. In a 2010 USAID survey of public opinion on pension reform⁶, only 15% of respondents trusted private banks, followed by 11% for insurance companies, 6% for investment funds, and 5% for non-state pension funds. Moreover, the USAID Financial Sector Development Project (2010) portrays the average Ukrainian financial services consumer as overestimating his/her level of financial literacy, using mainly simple bank services, being largely

¹ Including microfinance institutions, credit cooperatives, credit unions or finance companies.

² Including moneylenders, friends, relatives, another type of business or personal savings.

³ Including microfinance institutions, credit cooperatives, credit unions or finance companies.

⁴ Including moneylenders, friends, relatives, another type of business or personal savings.

⁵ Data from BEEPS V (2011-14), the fifth wave of the Business Environment and Enterprise Performance Survey, administered by the EBRD and the World Bank (dataset available at <http://ebrd-beeps.com/>). Credit constrained firms reported needing a bank loan, but either decided not to apply for one or had their loan application rejected. The Eastern Europe and Caucasus region comprises Ukraine, Moldova, Belarus, Georgia, Armenia and Azerbaijan.

⁶ USAID/CMP/FINREP, "Pension Reform in Ukraine: Public Opinion Survey 2010," July 2010, p. 20.

unaware of his/her consumer rights, and distrusting financial institutions (USAID, 2010). In this context, businesses tend to use internal funds and retained earnings rather than banks and other financial options, which limit the possibilities to reinvest in the firm and increase the sector competitiveness.

Assessing skills and practices of SME management

14. The survey shows that in terms of financial management and reporting practices, 55% of respondents have an in-house specialist to manage their finances, and understand the importance of financial planning. Indeed, 50% of respondents report having a written financial plan for cash flow management, 57% for investment in equipment and machines and 48% for investment towards business expansion.

15. Nevertheless, agribusiness SMEs insufficiently use professional advice in order to make informed financial decisions. Indeed, product-specific information and general advice (82% and 64% respectively) have the highest impacts on decisions to purchase financial products and services, compared to only 34% for professional advice. Hence, this finding further illustrates the distrust towards the Ukrainian financial sector and the limited internal capacities of smaller companies to diversify their sources of finance.

16. Finally, the survey shows that the separation of business and personal finances is a sensitive field of financial management behaviour for most respondents. Questions specifically related to this topic were indeed considered as too sensitive by the respondents as the majority refused to answer.

17. Understanding financial management and reporting practices is important as these are essential to deliver clear and reliable information on business performance both to the entrepreneurs themselves, and also to investors and creditors.

Conclusion

18. Overall, the survey results show that respondent agribusiness SMEs have a sound understanding of general business financial management principles. However, financial literacy gaps are mainly due to the limited use of diversified financial options by entrepreneurs, as well as their lack of understanding of investors' and bankers' concerns and requirements. In addition to this, agribusiness SMEs in Ukraine face a number of important supply-side challenges for access to finance, which do not allow them to increase and diversify their use of financial products and services. Banks perceive agricultural lending as risky, especially for SMEs; as a result they apply credit rationing and hedge themselves with high collateral requirements. A difficult macroeconomic and financial situation in Ukraine puts an additional constraint on access to finance.

THE WAY FORWARD: RECOMMENDATIONS

Develop targeted efforts to enhance the level of SME financial literacy

19. The survey provides a general picture of financial practices, skills and knowledge of agribusiness SMEs in Ukraine. Sound financial management practices and a clear understanding of the legal and regulatory matters impacting their finances are crucial to ensure business development, and sustain the competitiveness of the agribusiness sector. Therefore, the OECD recommends introducing a number of targeted policy actions aimed at improving the level of SME financial literacy within a wider national strategy of financial education. Specifically, the main policy actions include:

Action 1: Prioritise small and young SMEs

20. It is recommended that efforts should be targeted and prioritised towards young and small SMEs. Indeed, these businesses are the most vulnerable in terms of access to credit, while their knowledge of basic financial principles is comparatively the lowest.

Action 2: Develop measures that foster the use of diversified financial products and services

21. The survey highlighted that the main sources of finance for the majority of agribusiness SMEs are internal funds and retained earnings, even though a wide range of financial products is known. It is therefore recommended to take actions for supporting agribusiness SMEs to access a wider range of financing options, and thus raising their awareness about the benefits of different products and services.

Action 3: Develop programmes to further support the understanding of legal and regulatory matters of SME financing

22. Transparent, reliable and accurate financial information is crucial to sustain the competitiveness of agribusiness SMEs. It is therefore recommended to develop state programmes that enhance the understanding of legal and regulatory matters of SME financing, with a pilot in agribusiness sector.

Action 4: Legally obligate banks to provide due information and advice to farmers and/ or cooperatives while selling financial instruments

23. Banks should have an obligation to provide consumers with sufficient information to make informed decisions about buying financial products. This information should be up-to-date and cover (i) risks and benefits related to financial products and services, (ii) all types of costs (e.g. entry and exit costs, commissions, management charges etc.), (iii) detailed characteristics of products, (iv) detailed information of taxation applied, (v) post-sale arrangements and cooling-off period.

Action 5: Improve access to finance through service cooperatives

24. Service cooperatives can be instrumental in improving the access to finance of agribusiness SMEs. From the supply side, the generalisation of service cooperatives can improve the credit profile of small and medium farms thus making them more creditworthy for banks. From the demand side, service cooperatives can provide support in business management, and strengthen their understanding of legal and regulatory issues. Service cooperatives can help to improve the use of financial products and services by small and medium farmers contributing to building their trust in financial institutions.

25. Namely, the generalisation of service cooperatives can help small-scale farmers and agricultural SMEs to correct market failures impacting their competitiveness, and improve their bargaining power and

access to finance. Agricultural cooperatives are currently underdeveloped in Ukraine due to a lack of trust and understanding of potential benefits by farmers, tax disincentives for cooperative members and limited start-up capital. The Government of Ukraine can take a number of policy actions (Figure 1) to foster the development of agricultural cooperatives, namely, to further develop the legal framework regulating cooperatives, to create favourable tax conditions for cooperative members, to raise awareness about the benefits of cooperatives and to provide targeted financial support for cooperatives. The experience of OECD countries shows that farmers' understanding of market mechanisms fosters them to join cooperatives, and enables cooperatives to fully thrive.

Figure 1. OECD recommendations to generalise agribusiness service cooperatives in Ukraine

Further develop the legal framework regulating the cooperatives	<ul style="list-style-type: none"> Review and amend the laws and regulations governing cooperatives, based on economic and legal considerations Bring together representatives of the Ministry of Agrarian Policy and Food, farmers' associations, regional state administrations to discuss necessary changes to laws, regulations and government support programmes
Create favourable tax conditions for members of cooperatives	<ul style="list-style-type: none"> Review the Tax Code and the legislation on cooperatives to ensure that cooperatives are not subject to undue or excessive taxation Ensure that cooperatives are exempt from VAT, Retail Sales Tax and tax on accounting profits Harmonize the Tax Code with the legislation on cooperatives
Raise awareness about the benefits of cooperative structure amongst small and medium farmers	<ul style="list-style-type: none"> Develop communications materials for cooperative members and managers, including guidelines with technical details Encourage exchanges of information and experiences between functioning cooperatives
Provide targeted financial support to foster the development of agricultural cooperatives	<ul style="list-style-type: none"> Provide start-up funds for the purchase of machinery and equipment, access to credit and leasing systems (conditional on the ability of cooperatives to co-finance the programme costs) Develop targeted financial instruments for cooperatives
Strengthen skills development programmes for cooperatives	<ul style="list-style-type: none"> Establish training programmes to provide cooperative managers and members with specialist skills and technical training Promote linkages between R&D institutes and cooperatives Facilitate exchanges of knowledge and experience between cooperatives in Ukraine and OECD countries through peer-to-peer capacity building/ exchange programmes
Encourage input suppliers, processing facilities and retailers to use cooperatives as an intermediary to engage with small-scale farms	<ul style="list-style-type: none"> Encourage pro-active behaviour from large-scale processors towards cooperatives (support in collection and delivery of output, renting of equipment, quality assurance, technical assistance) Strengthen the contract security system Improve flexibility in quality assurance systems for processors and retailers

Source: OECD analysis

BIBLIOGRAPHY

- Atkinson A. and Messy, F-A. (2012), Measuring Financial Literacy: Results of the OECD/ International Network on Financial Education (INFE) Pilot Study”, OECD Working Papers on Finance, Insurance and Private Pensions, No. 15, OECD Publishing.
Available at: <http://dx.doi.org/10.1787/5k9csfs90fr4-en> .
- Andoh, F.K., Nunoo, J. (2011), Sustaining Small and Medium Enterprises through Financial Service Utilization: Does Financial Literacy Matter?
- IFC (2011), Investment Climate in Ukraine as Seen by Private Business, IFC Ukraine Investment Climate Project Report.
- OECD (forthcoming), Policy Framework for Investment, 2015 Edition, OECD Publishing, Paris.
- OECD (2005), Improving Financial Literacy. Analysis of Issues and Policies, OECD Publishing, Paris.
Available at: http://www.keepeek.com/Digital-Asset-Management/oecd/finance-and-investment/improving-financial-literacy_9789264012578-en#page3 .
- OECD (2012), Competitiveness and Private Sector Development: Ukraine Sector Competitiveness Strategy, OECD Publishing, Paris.
- OECD/INFE (2013), Toolkit to measure Financial Literacy and Financial Inclusion: Guidance, Code Questionnaire and Supplementary Questions, OECD Publishing, Paris.
- USAID (2010), Financial Literacy and Awareness in Ukraine: Facts and Findings, 2nd edition, USAID, Kyiv.
- USAID/CMP/FINREP (2010), Pension Reform in Ukraine: Public Opinion Survey 2010.
- World Bank (n.d), “Data”, webpage, <http://data.worldbank.org/> (accessed 12 October 2015).

ANNEX 1: OECD SURVEY TO MEASURE SME FINANCIAL LITERACY IN AGRIBUSINESS SECTOR IN UKRAINE

FOREWORD

Unlocking access to finance is one of the main challenges to improve the competitiveness of the agribusiness sector in Ukraine and to attract foreign and domestic investment. Commercial banks in Ukraine are reluctant to lend to SMEs in this sector and hedge themselves against the lending risks by raising either the interest rate applied to loans or collateral requirements. As a result, despite accounting for more than half of the country's agricultural output, SMEs do not receive enough credit to finance working capital and investments. Indeed, agriculture accounts for 10% of the country's GDP but loans to agriculture are only 5% of the total.

In 2012, within the framework of the SCS project, the OECD Eurasia Competitiveness Programme issued a policy handbook (OECD, 2012) recommending the design and implementation of a credit guarantee scheme for agribusiness SMEs in Ukraine, to reduce lending risk and facilitate access to finance. The instrument is a commitment, issued by a guaranteeing agency, to reimburse a lender for all or part of a loan in the case of default.

The credit guarantee scheme aims at increasing the supply of credit, however demand-side challenges also limit the financing opportunities of entrepreneurs. This often includes a lack of knowledge about financing options, and a lack of understanding of investors' and bankers' concerns and needs.

The OECD therefore recommends that the Government of Ukraine implement a financial education strategy, to provide agribusiness SMEs with the knowledge of financial instruments and the skills to manage their business finances. To develop a successful financial education strategy, policy-makers need efficient measurement tools to identify gaps and to prepare targeted policies.

In this context, to respond to this need and to complement other existing initiatives focusing on financial literacy measurement for different groups of population, the OECD developed a specific survey methodology to broadly assess the SME financial literacy at a limited cost, allowing policy-makers to regularly monitor the impact of their policies. The OECD will run this assessment for the first time, but upon its successful completion, this tool will be transferred to the government of Ukraine. It could be used to carry out regular surveys to measure the progress in implementation of the SME financial education strategy.

The survey methodology is structured around 26 questions, of which two questions are related to agricultural sector, as well as detailed methodological instructions. The questionnaire may be used in other sectors of the economy to measure the SME financial literacy; sector-specific questions could be added as needed.

INTRODUCTION

The present survey questionnaire and methodological instructions have been developed by the OECD to help policy makers to gather the data necessary for

1. an initial assessment of SME⁷ financial literacy which will provide baseline data for a wider national strategy of financial education;
2. a regular measure of SME financial literacy in agribusiness and other sectors to identify change over time; and
3. international comparisons of the level of SME financial literacy in agribusiness and other sectors of economy.

More specifically, regarding the measurement of SME financial literacy, this questionnaire will enable the public authorities and other organisations:

- to assess the level of understanding of general business-related financial notions of the person responsible for taking finance-related decisions within the SME;
- to gauge their level of knowledge and use of financial products and services, identifying incentives behind their choices and barriers to access to finance;
- to measure the impact of the education and gender on the above;
- to examine differences between regions and typologies of SMEs (size of the land, number of employees, annual turnover, type of production, age, *etc.*);
- to compare perception and real knowledge when it comes to SME financial literacy in agribusiness sector.

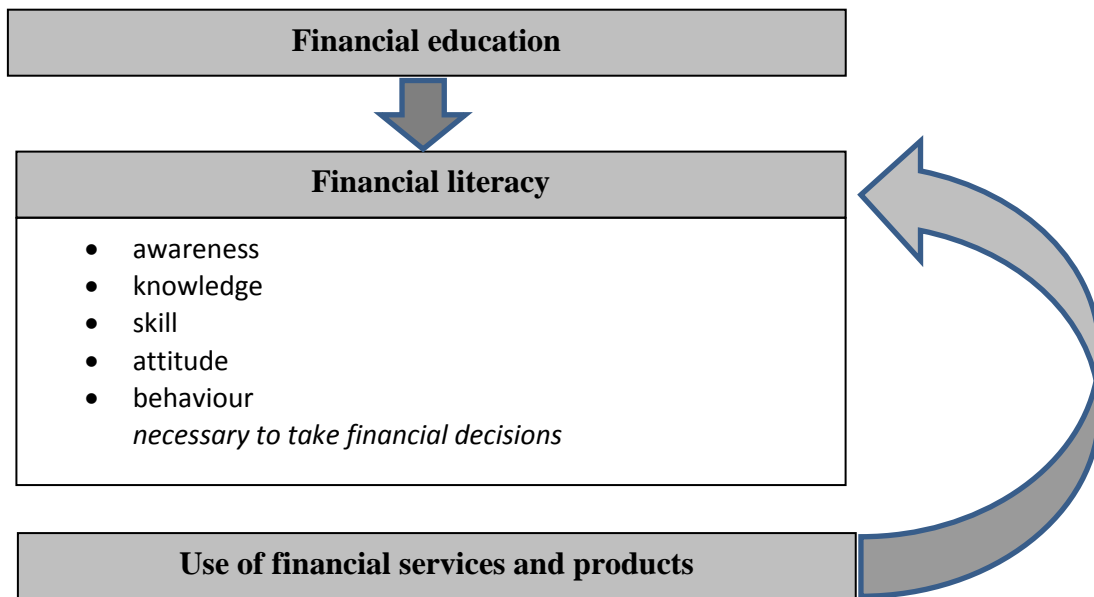
Definition of SME financial education

For the purpose of this measurement exercise and based on the definition of financial literacy of individuals, we define **SME financial literacy as a combination of knowledge, skills and practice of financial products, concepts, risks and regulatory and legal matters to take the most appropriate finance-related decisions at every stage of SME life-cycle to ensure further business development, growth and profit generation of the firm.**

Schematically, the relation between financial education, financial literacy and use of financial products and services can be represented as follows:

⁷ The financial literacy of agribusiness SME means the level of financial literacy (defined here below) of the person responsible for taking finance-related decisions on behalf of the SME, in the case of Ukraine, the financial literacy of a SME director.

Figure 2: Schematic representation of the links between financial education and financial literacy



The survey questionnaire is based on the definition here above and is structured around **key building blocks** such as:

- Basic SME management competencies;
- Knowledge and effective use of financial services and products which range from basic (bank accounts and loans) to more sophisticated (futures, swaps *etc.*), as well as an understanding of financial institution requirements that they will have to fulfil in order to have access to financial products and services;
- Efficient management of different types of funding (formal and informal);
- Understanding of basic accounting principles and formal financial recordkeeping;
- Separation of personal and firm assets and liabilities;
- Financial risk management skills (insurance, hedging *etc.*).

METHODOLOGY

Data Collection Process

The SME Financial Literacy Questionnaire will be used to collect information about SME financial literacy in agribusiness sector in Ukraine, but this methodology can also be used to evaluate the SME financial literacy in other countries and sectors; in this case country and sector specific adjustments should be made.

The data collection process is defined as follows:

- Target: the survey will focus on directors of Ukrainian agribusiness SMEs of the size ranging from 100 ha to 2000 ha.
- Modality: the interviews should be personal interviews.

Sampling methodology

The population is composed of 11 004 agribusiness SMEs between 100 ha and 2000 ha in 22 regions and the City of Kyiv⁸. This population excludes 1 426 SMEs located in Donetsk and Luhansk regions, Crimea and Sevastopol⁹ because of limited access to these regions. The commissioning body responsible for carrying out the survey will ensure that the composition of the sample is representative of the total population in the regions where the survey will be implemented.

The population of agribusiness SMEs taken for this survey is stratified according to the criteria of the size of the land to study each of these sub-groups in more details. The total population is split into 3 groups¹⁰:

	100 – 500 ha	500,1-1000 ha	1000,1-2000 ha	Total
Number of SMEs	6 437	2 335	2 232	11 004
Share in the total population	59%	21%	20%	100%

The total **sample size** is composed of specific samples for each of the three strata. Every stratum is computed based on the sampling theory and takes into account the margin error. We have computed different sample sizes needed to ensure a certain level of accuracy with 90% or 95% confidence intervals (**Fig. 3**). Following the sampling methodology of the World Bank Enterprise Survey¹¹, the sample size has been calculated applying a simplified method. Indeed, as the present survey is composed of multiple indicators which are proportions (for instance percentage of SMEs using some financial products and services), the sample size can be reduced as the variance (σ^2) of the population is bounded (assuming a maximum variance of 0.5, the minimum level of accuracy is secured).

⁸ 2013 data provided by the Ministry of Agrarian Policy and Food of Ukraine. Further in the text, the "national" level means data collected in these 22 regions and the City of Kyiv.

⁹ Idem.

¹⁰ Idem.

¹¹ World Bank (2014), *World Bank Enterprise Survey Methodology*, <http://www.enterprisesurveys.org/Methodology>.

The margin error is calculated based on the following formula:

$$\text{Margin of error} = z_{\alpha/2} * (\sigma/\sqrt{n})$$

- α is a level of confidence and $z_{\alpha/2}$ is a critical value for margin of error: a 90% level of confidence has $\alpha = 0.10$ and critical value of $z_{\alpha/2} = 1.645$; a 95% level of confidence has $\alpha = 0.05$ and critical value of $z_{\alpha/2} = 1.96$.
- σ is the standard deviation of the population that we are examining. A percentage p of SMEs respond X or Y . Based on that the variance of this response will be $(p \times (1-p)) = \sigma^2$. It is maximum only when $p=50\%$, which maximises the margin of error.
- n is the sample size.

Figure 3: Sample size required with 90% or 95% confidence intervals with a maximum variance for a large population size.

Size of the sample	90% confidence interval	95% confidence interval
25	16.5 %	19.6 %
50	11.6 %	13.9 %
75	9.5 %	11.3 %
100	8.2 %	9.8 %
125	7.4 %	8.8 %
150	6.7 %	8.0 %
170	6.3%	7.5%
175	6.2 %	7.4 %
200	5.8 %	6.9 %
225	5.5 %	6.5 %
250	5.2 %	6.2 %
275	5.0 %	5.9 %
300	4.7 %	5.7 %
325	4.6 %	5.4 %
350	4.4 %	5.2 %
375	4.2 %	5.1 %
400	4.1 %	4.9 %
425	4.0 %	4.8 %
450	3.9 %	4.6 %
475	3.8 %	4.5 %
500	3.7 %	4.4 %

525	3.6 %	4.3 %
750	3.0 %	3.6 %
1,000	2.6 %	3.1 %
2,500	1.6 %	2.0 %
5,000	1.2 %	1.4 %
10,000	0.8 %	1.0 %

Based on this computation, we suggest taking a simple random sample of 100 per stratum (the total number of surveyed firms will be 300), which provide a below 10% margin error with a 95% confidence interval. This will allow carrying out a more nuanced analysis by strata.

That being said, to analyse the data at a national level, the results will have to be weighted to reflect the share of each strata in the population. The sample at the national level will then include the equivalent of 170 firms¹² (i.e. the sample of each strata weighted by its respective share in the population).

Commissioning the fieldwork

The implementation of the survey will be commissioned to a surveying agency in Ukraine identified based on a tender selection process.

Data handling and preparation for analysis

The survey responses are coded in order to simplify the data collection and analysis.

Two questions in the survey questionnaire are specific to the agribusiness sector: **QD3-A** and **QD6-A**. These can be replaced by other sector-specific questions if this survey is used to measure the financial literacy of SMEs in other sectors.

All survey questions are organised into three main categories which will contribute to appropriate weighting of the questions and analysis:

1. **Descriptive factors** will enable the classification of the data on financial literacy of SMEs in categories by size of the land, number of employees, annual turnover, type of production, age, etc.;
2. **Assessment of financial literacy** based on the definition here above.

In this survey the following components of the financial literacy of SMEs will be assessed:

- 1) Knowledge, skill and practice to manage efficiently the financial resources of the firm and to take the most appropriate finance-related decisions which include

¹² Each of the three strata by ha includes 100 firms, weighted respectively at 59%, 21% and 20%. The accuracy of the results at the national level will then rely on a sample-equivalent of $100 + (21\% + 20\%) / 59\% \times 100 = 170$, i.e. a 7,5% margin error with a 95% confidence interval.

- Financial mathematics assessed based on questions **QT1**;
- Knowledge and effective use of financial products and services assessed based on questions **QF2, QF3**;
- Skills and practice of SME management and decision-making, including management and planning of SME financial cycles, assessed based on questions **QF4, QF5, QP1, QP2, QP4**;

2) Understanding of legal and regulatory matters impacting SME finances which include

- Understanding of basic accounting principles and formal financial recordkeeping assessed based on questions **QP1, QP3 QP4, QT2**;
- Separation of personal and firm assets and liabilities assessed based on questions **QP5, QP6, QP7, QP8**.

In addition to this, this survey will help to measure and analyse respondents' financial awareness, *i.e.* their understanding of gaps in terms of SME financial literacy. For instance, a respondent who is conscious of his / her lack of knowledge regarding compound interest rate will be more inclined to look for some advice or information before investing or taking a loan than a respondent who is self-confident but has an erroneous understanding of financial products and services. This latter behaviour is thus more dangerous for a potential consumer of financial services and products. To assess the financial awareness, the replies to **QF1** will be analysed and compared with the financial knowledge score to see if the respondent over or underestimates his/ her financial knowledge.

After the survey, the commissioned agency will be responsible for the normalisation of the results at a national level, providing appropriate proportional weights to different groups of the respondents.

SURVEY QUESTIONNAIRE

<u>Questions</u>	<u>Data coding instructions</u>	<u>Comments</u>	<u>Analysis to be carried out based on the information received via this questionnaire</u>
<p>INTERVIEWER: BEGIN BY INTRODUCING YOURSELF AND THE SURVEY USING PRE-DETERMINED TEXT:</p> <p><i>Good morning (afternoon, evening)! My name is ____, International Marketing Group. We are conducting a survey of managers of agribusiness enterprises and farmers in order to measure the literacy and usage of different financial tools.</i></p> <p>VERIFY RESPONDENT'S IDENTITY (FIRST, LAST NAME AND THE POSITION IN THE FIRM <SPELL OUT THE NAME OF THE FIRM>); THEN</p> <p><i>READ OUT: I would like to start by asking you a few background questions, so that we can put the main part of the survey into context.</i></p>			
<p><i>QDi) Interviewer to record gender</i></p> <p>a) Male b) Female</p>	<p>Variable name: QDi</p> <p>Label: Gender</p> <p>Values: 1 Male 0 Female</p>	<p>Typology of the question: descriptive</p>	
<p><i>QDii) Interviewer to record the name of the company</i></p>	<p>Variable name: QDii</p>		

<i>(without asking the respondent, provided in the list of selected respondents)</i>	Label: Name		
<p>QDiii) Interviewer to record the region of Ukraine where the company is located.</p> <ul style="list-style-type: none"> a) Cherkasy region b) Chernihiv region c) Chernivtsi region d) Dnipropetrovsk region e) Ivano-Frankivsk region f) Kharkiv region g) Kherson region h) Khmelnytskyi region i) Kyiv region j) Kirovograd region k) Lviv region l) Mukolaiv region m) Odesa region n) Poltava region o) Rivne region p) Sumy region r) Ternopil region s) Vinnytsia region t) Volyn region u) Zakarpattia region w) Zaporizhia region v) Zhytomyr region x) City of Kyiv 	<p>Variable name: QDiii Label: Region</p> <ul style="list-style-type: none"> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 	<p>Typology of the question: descriptive</p>	

<p><u>ASK ALL</u></p> <p>QD1¹³) Please could you tell me what is your firm's current legal status?</p> <p>a) Sole proprietorship b) Partnership c) Limited partnership d) Shareholding company with non-traded shares or shares traded privately e) Shareholding company with shares trade in the stock market f) <i>Don't know</i> g) <i>Refused</i></p>	<p>Variable name: QD1; Label: Legal status</p> <p>Values: 1 2 3 4 5 -97 -99</p>	<p>Typology of the question: descriptive</p>	<p>The legal status provides information about the company's ownership and financial decision making. Also, it shows the degree of its financial sophistication (for instance, if the firm trades its shares on the stock market).</p>
<p><u>ASK ALL</u></p> <p>QD2¹⁴) What percentage of your firm is owned by each of the following:</p> <p>a) Private domestic individuals</p>	<p>Variable name: QD2; Label: Firm Ownership</p>	<p>Typology of the question: descriptive</p>	

¹³ The formulation of this question is based on B.1 Question of the World Bank Enterprise Survey.

¹⁴ The formulation of this question is based on B.2 Question of the World Bank Enterprise Survey.

b) Private foreign individuals c) Domestic companies or organisations d) Foreign companies or organisations e) Other f) <i>Don't know</i> g) <i>Refused</i> INTERVIEWER: CHECK THAT TOTAL SUMS TO 100% (UNLESS RESPONDENT DOES NOT KNOW OR REFUSE TO ANSWER)	% % % % % -97 -99		
<u>ASK ALL</u> QD3-A¹⁵) What is the size of the land used by the firm? a) 100-500 ha b) 500-1000 ha c) 1000-2000 ha d) <i>Don't know</i> e) <i>Refused</i>	Variable name: QD3; Label: Land size 1 2 3 -97 -99	Typology of the question: descriptive This split by size is based on the categorisation of agribusiness SME statistics provided by the Ministry of Agrarian Policy and Food.	
<u>ASK ALL</u> QD4) When did your firm start its operations?	Variable name: QD4; Label: Age	Typology of the questions: descriptive	Depending on its age, agribusiness SMEs might be

¹⁵ The information of the size of the land of the SME is expected to be available in the data provided by Ukrainian authorities for initial selection of SMEs to be surveyed. However, a specific question on the size of the land will help to verify these data which can be out-of-date.

<p>a) 0-2 years ago b) 3-5 years ago c) 6-10 years ago d) 11-15 years ago d) more than 15 years ago e) <i>Don't know</i> f) <i>Refused</i></p>	<p>of the firm</p> <p>1 2 3 4 5 -97 -99</p>	<p>The age thresholds are based on the available statistical thresholds of French SME default rates by age (statistical data provided by Altares).</p>	<p>more or less dependent on external finance: extensive evidence shows that young start-ups are more dependent on external finance than established businesses with more experienced managers. The response to this question will help us to analyse financial literacy levels by firm age and to see if specific policy measures should be developed to target young SMEs.</p>
<p><u>ASK ALL</u></p> <p>QD5) How many employees work in your firm including yourself? Please provide us the number of full-time equivalent employees (for example, if 12 seasonal workers work each 1 month a year, please count it as 1 additional employee).</p>	<p>Variable name: QD5; Label: Number of</p>	<p>Typology of the questions: descriptive</p> <p>Our main</p>	<p>This</p>

<p>a) 1 b) 2-5 c) 5-10 d) 10-50 e) 50-250 f) More than 250 g) <i>Don't know</i> h) <i>Refused</i></p>	<p>employees</p> <p>1 2 3 4 5 6 -97 -99</p>	<p>criteria for the definition of agribusiness SME is land size (from 100 ha to 2000 ha). In addition to this, we will also take into account the number-of-employees categorisation which is usually used to define micro, small, medium and large enterprises in other sectors of the economy. According to the Code of Commercial Procedure of Ukraine (16.01.2003 г. № 436-VI.), different categories of enterprises are defined based on the number of employees and annual total amount of sales during one reporting year: - micro-enterprises</p>	<p>characteristic will be used to analyse the sophistication of business and financial decision making: larger companies in terms of number of employees tend to have better processes and higher labour specialisation which might have an impact on financial literacy (for instance, they are more likely to have a professional accountant).</p>
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	<p>count less than 10 employees and the total amount of sales of less than 2 Million Euros;</p> <p>- small enterprises</p> <p>count less than 50 employees and an annual total amount of sales of less than 10 Million Euros;</p> <p>- large enterprises</p> <p>count more than 250 employees and an annual total amount of sales of more than 50 Million Euros.</p> <p>We have also separated 3 sub-groups of</p> <p>(i) unipersonal SMEs, (ii) SME of 2-5 persons and (iii) 5-10 persons for a finer analysis.</p>
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<p><u>ASK ALL</u></p> <p>QD6-A) What kind of agricultural products does your firm produce and/ or process?</p> <p>Crop output:</p> <p>a) wheat and crops b) sugar beet c) sunflower seed d) potatoes and vegetables e) fruits, berries and grapes f) maize</p> <p>Livestock product:</p> <p>g) cattle and poultry h) milk/ dairy i) eggs j) wool k) other</p>	<p>Variable name: QD6; Label: Products</p> <p>1 2 3 4 5 6</p> <p>7 8 9 10 11</p>	<p>Typology of the questions: descriptive</p> <p>This classification is based on the categories of the State Statistics of Ukraine¹⁶ and the FAO¹⁷.</p>	<p>Different types of production condition the level of investment and income. Some stocks can also be considered as collateral by banks (like wheat and crops, unlike perishable outputs like milk or eggs). So we will consider financial literacy from the point of view of the SME's specialisation.</p>
<p><u>ASK ALL</u></p> <p>QD7¹⁸) In fiscal year 2013, what were this establishment's total annual sales (in UAH) for all products and services?</p>	<p>Variable name: QD7;</p>	<p>Typology of the questions: descriptive</p>	<p>We will analyse the link between the</p>

¹⁶ Statistical Yearbook of Ukraine for 2010 and the Site of the State Statistics Service of Ukraine <http://www.ukrstat.gov.ua/> accessed 13 August 2014.

¹⁷ FAOSTAT (2013), FAO Statistical Databases, <http://faostat.fao.org>, accessed 13 August 2014.

¹⁸ The formulation of this question is based on D.2 Question of the World Bank Enterprise Survey, the answers are developed by the OECD.

<p>a) less than UAH 150.000 b) between UAH 150.000 and 1.000.000 c) between UAH 1.000.000 and 3.000.000 d) between UAH 3.000.000 and 5.000.000 e) between UAH 5.000.000 and 20.000.000 f) more than UAH 20.000.000 g) <i>Don't know</i> h) <i>Refused</i></p>	<p>Label: Sales</p> <p>1 2 3 4 5 6 -97 -99</p>	<p>The categorisation of sale amounts is based on art. 291 of the Tax Code of Ukraine which defines the categories of legal persons (based on revenue and number of employees) which can use a simplified process of taxation, financial accounting and reporting and a fixed tax rate. This categorisation serves as a basis for thresholds in this survey, however it is important to note that agribusiness SMEs can chose between taxation rules applicable to other sectors of economy and a simplified fixed</p> <p>total amount of sales and the level of financial literacy of the person responsible for financial decision-making.</p>
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		agricultural taxation.	
<p><u>ASK ALL</u></p> <p>QD8¹⁹) In fiscal year 2013, what percentage of this establishment's sales were:</p> <p>a) national sales b) indirect exports (sold domestically to third party that exports products) c) direct exports d) <i>Don't know</i> e) <i>Refused</i></p> <p>INTERVIEWER: IF THE RESPONDENT PROVIDES YOU WITH THE %, CHECK THAT TOTAL SUMS TO 100%.</p> <p>IF THE RESPONDENT CANNOT PROVIDE YOU WITH %, ASK FOR THE VALUE, CALCULATE THE % AND CHECK THAT TOTAL SUMS TO 100% (UNLESS RESPONDENT DOES NOT KNOW OR REFUSE TO ANSWER)</p>	<p>Variable name: QD8; Label: Export</p> <p>% % % -97 -99</p>	<p>Typology of the questions: descriptive</p>	<p>Exporting firms need to comply with cross-border trade rules and obligations and to use means of payment different from cash. Also, cross—border trade implies the management of foreign exchange risk. We will therefore analyse the link between the share of exports and the level of financial literacy of agribusiness SMEs.</p>

¹⁹ The formulation of this question is based on D.3 Question of the World Bank Enterprise Survey.

<i>READ OUT:</i> Now I am going to move on to ask you some questions about financial products and services.	<u>Data coding instructions</u>	<u>Comments</u>	<u>Analysis to be carried out based on the information received via this questionnaire</u>
<p><u>ASK ALL</u></p> <p>QF1) But first, could you please tell me how you assess your financial knowledge (financial concepts, financial products and services)?</p> <p>a) Very good b) Fair c) Average d) Poor e) Very poor f) <i>Don't know</i> g) <i>Refused</i></p>	<p>Variable name: QF1; Label: Perception</p> <p>1 2 3 4 5 -97 -99</p>	<p>Typology of the questions: explanatory</p>	<p>The results of numerous international surveys of individual financial literacy show that an important share of respondents over-estimate their level of financial literacy when the results of their perceived level of financial literacy are compared with the results of the financial literacy tests. We will therefore cross-analyse the perception of the financial literacy of SME finance decision makers with their real competence tested by specific financial mathematics questions (QT1-QT4).</p>

GUIDANCE ON PRODUCT QUESTIONS (IN TABLE ON FOLLOWING PAGE):

Order of questions:

I) QF2_a should be asked of every product, and used to create a filter for the list of products for the following 2 questions.

II) QF2_b should then be asked of all relevant products using the filter. Do not ask the respondent if they hold a particular product if they have already said they have not heard of it.

*III) QF3_c should then be asked of all relevant products using the filter from QF2_a. Do not ask the respondent if they have chosen a particular product if they have already said they have not heard of it. This question is asking about recent product choice, **irrespective** of current product holdings*

		<u>ASK ALL respondents filtering products on OF2 a=Yes</u>	<u>ASK ALL respondents filtering products on OC1 a=Yes</u>	Variable names: QF2_a_ /QF2_b_ / QF2_c_;	Typology of the questions: descriptive	The reply to this question will allow us to analyse the knowledge and present and past use of financial products and services which range from basic to sophisticated structured products.
	QF2 ²⁰ _a) Please can you tell me whether you know of this type of financial products and services?	QF2_b) and now can you tell me whether your firm currently holds any of these types of products?	QF2_c) and has your firm ever held these financial products (whether or not the firm still holds them)?	Labels: Know [followed by product]; Currently hold []; Held before [].		
Insurance (any type: agricultural or other type of professional insurance)	<u>1</u>	<u>1</u>	<u>1</u>	For each question, create one variable for each product using the appropriate suffix, plus one variable for 'don't know', another for 'refused' and one for 'none of the above'. Note that a missing value (no value at all) will then reflect those for whom the		
Leasing	<u>2</u>	<u>2</u>	<u>2</u>			
Bank loan	<u>3</u>	<u>3</u>	<u>3</u>			
Loan from a non-bank	<u>4</u>	<u>4</u>	<u>4</u>			

²⁰ This question is an adjusted version of the QC1 question from the OECD/INFE Toolkit.

financial institution (which can include microfinance institutions, credit cooperatives, credit unions, or finance companies)				<p>question was not relevant.</p> <p>For example, the first question will have one variable named QF2_a_1 and labelled 'Know of Insurance'. This variable will take the value 0 if respondent says No, and 1 if respondent says Yes.</p>		
<Current> bank account	<u>5</u>	<u>5</u>	<u>5</u>			
Savings account	<u>6</u>	<u>6</u>	<u>6</u>			
Microfinance loan	<u>7</u>	<u>7</u>	<u>7</u>			
Currency exchange (spot)	<u>8</u>	<u>8</u>	<u>8</u>			
Factoring/ Forfaiting	<u>9</u>	<u>9</u>	<u>9</u>			
Warehouse receipts financing /Repurchase agreements	<u>10</u>	<u>10</u>	<u>10</u>			
Forward contracting / Futures	<u>11</u>	<u>11</u>	<u>11</u>			
Swaps	<u>12</u>	<u>12</u>	<u>12</u>			
<i>Don't know response given to the question as a whole</i>	<u>97</u>	<u>97</u>	<u>97</u>			
<i>Refused to respond to the question as a whole</i>	<u>99</u>	<u>99</u>	<u>99</u>			

<p><u>ASK ALL THOSE WHO ANSWERED YES TO QF2 a ABOUT BANK LOAN BUT NO TO QF2 b AND TO QF2 c ABOUT BANK LOAN. READ OUT ALL THE REPLIES:</u></p> <p>QF3²¹) What is the main reason why this firm has never had any bank loan?</p> <p>a) No need for a loan - firm had sufficient capital</p> <p>b) Application procedures were complex</p> <p>c) I don't understand how loans work</p> <p>d) Interest rates were not favorable</p> <p>e) Collateral requirements were too high</p> <p>f) Did not think it would be approved</p> <p>g) It is necessary to make informal payments to get bank loans</p> <p>h) Amount of loan and maturity were insufficient</p> <p>i) My firm is planning to apply for a bank loan</p> <p>j) Lack of trust in banks and other financial institutions</p> <p>k) <i>Don't know</i></p> <p>l) <i>Refused</i></p>	<p>Variable name: QF3; Label: Bank loan</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>-97</p> <p>-99</p>	<p>Typology of the questions: explanatory</p>	<p>The answers to this question will help us to analyze the main barrier to basic financial services: perception because of lack of information; need / utility; cost of banking services etc.</p>
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²¹ The formulation of this question is based on K.17 Question of World Bank Enterprise Survey with slight modifications.

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<p><u>ASK ALL THOSE WHO ANSWERED YES TO ANY QF2 b or QF2 c QUESTIONS:</u></p> <p>QF4²²) Which source of information has the most impact on your decisions to purchase financial services and products for your firm?</p> <p><i>Note to agency: DO NOT READ OUT</i></p> <p><i>INTERVIEWER: WAIT FOR RESPONSE. READ OUT LIST IF NECESSARY. CODEALL.</i></p> <p>1 Professional advice</p> <p>a) My firm’s banker or financial counsellor b) Firm’s accountant or CFO (internal or external) c) Recommendations from independent financial advisor or broker</p> <p>2 Product-specific information</p> <p>d) Unsolicited information / Advertising e) Information picked up in a bank branch f) Dedicated research to find relevant information</p>	<p>Variable names: QF4_</p> <p>Labels: Information impact on decision: [].</p> <p>This is multi-coded. Create a single 0, 1 variable for each category. For example QF4_1 Professional advice: My firm’s banker.</p> <p>This variable will take the value 0 if respondent says ‘No’, and 1 if respondent says ‘Yes’.</p>	<p>Typology of the questions: descriptive</p>	<p>These answers will help us to identify the most used and potentially the most efficient channel of information to target financial decision makers of Ukrainian agricultural SMEs.</p>
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²² This question is an adjusted version of the QC3 question from the OECD/INFE Toolkit.

<p>g) Information from the sales staff of the firm providing the products</p> <p>3 General advice</p> <p>h) Best buy guidance (newspaper, specialized publication, internet, etc.)</p> <p>i) Advice of friends/ relatives (not working in the financial services industry)</p> <p>j) Advice of friends/ relatives (working in the financial services industry)</p> <p>k) Advice of colleagues</p> <p>l) Advice of other owners or managers of agribusinesses, agribusiness professional networks, professional organisations or associations</p> <p>7 Other</p> <p>m) Don't know</p> <p>n) <i>Not applicable (no recent choice)</i></p> <p>o) <i>Refused</i></p>			
<p><i>READ OUT:</i> Now I am going to ask you a question on loans decision</p>	<p><u>Data coding instructions</u></p>	<p><u>Comments</u></p>	<p><u>Analysis to be carried out based on the information received via this questionnaire</u></p>
<p><u>ASK ALL</u></p> <p>QF5) Do you require help from an external source such as bank or financial advisor in order to make decisions about loans?</p> <p>a) No, do not require external help and can make decisions about loans independently</p> <p>b) Yes, do require external help and cannot make</p>	<p>Variable name: QK3;</p> <p>Label: External help</p> <p>1</p>	<p>Typology of the questions:</p> <p>explanatory</p>	

decisions about loans independently	2		
i) <i>Don't know</i>			
j) <i>Refused</i>	-97		
	-99		

<i>READ OUT: Now I am going to ask you some questions about the management of your firm's finances</i>	<i>Data coding instructions</i>	<i>Comments</i>	<i>Analysis to be carried out based on the information received via this questionnaire</i>
<p><u>ASK ALL</u></p> <p>QP1_a²³) Over fiscal year 2013, please estimate the proportion of this establishment's working capital that was financed from each of the following sources:</p> <p>a) Internal funds or retained earnings</p> <p>b) Borrowed from banks (private and/ or state-owned)</p> <p>c) Borrowed from non-bank financial institutions (which may include microfinance institutions, credit cooperatives, credit unions, or finance companies)</p> <p>d) Purchases on credit from suppliers and advances from customers</p> <p>e) Other (moneylenders, friends, relatives, another business or personal savings etc.)</p> <p>f) <i>Don't know</i></p>	<p>Variable name: QP1_a;</p> <p>Label: Source of Finance</p> <p>%</p> <p>%</p> <p>%</p> <p>%</p> <p>%</p>	<p>Typology of the questions:</p> <p>explanatory</p>	<p>The answers to this question can provide valuable information about the use of (i) internal and/ or external, (ii) formal and/ or informal sources of finance.</p>

²³ The formulation of this question is based on K.3 Question of the World Bank Enterprise Survey.

<p><i>j) Refused</i></p> <p>INTERVIEWER: IF THE RESPONDENT PROVIDES YOU WITH THE %, CHECK THAT TOTAL SUMS TO 100%.</p> <p>IF THE RESPONDENT CANNOT PROVIDE YOU WITH %, ASK FOR THE VALUE, CALCULATE THE % AND CHECK THAT TOTAL SUMS TO 100% (UNLESS RESPONDENT DOES NOT KNOW OR REFUSE TO ANSWER)</p> <p>QP1_b²⁴) Over fiscal year 2013, please estimate the proportion of this establishment's total purchase of fixed assets that was financed from each of the following sources:</p> <p>a) No purchase of fixed assets in 2013 b) Internal funds of retained earnings c) Owners' contribution or issued new equity shares d) Borrowed from banks: private and state-owned e) Borrowed from non-bank financial institutions which include microfinance institutions, credit cooperatives, credit unions, or finance companies business and/ or professional activities f) Purchases on credit from suppliers and advances from customers j) Other (moneylenders, friends, relatives, etc.)</p>	<p>-97 -99</p> <p>Variable name: QP1_b; Label: Source of Finance</p> <p>% % % % %</p>		
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²⁴ The formulation of this question is based on K.5 Question of the World Bank Enterprise Survey.

<p>h) <i>Don't know</i> i) <i>Refused</i></p> <p>INTERVIEWER: IF THE RESPONDENT PROVIDES YOU WITH THE %, CHECK THAT TOTAL SUMS TO 100%.</p> <p>IF THE RESPONDENT CANNOT PROVIDE YOU WITH %, ASK FOR THE VALUE, CALCULATE THE % AND CHECK THAT TOTAL SUMS TO 100% (UNLESS RESPONDENT DOES NOT KNOW OR REFUSE TO ANSWER)</p>	<p>%</p> <p>%</p> <p>-97</p> <p>-99</p>		
<p><u>ASK ALL</u></p> <p>QP2) Who is responsible for your firm's bookkeeping?</p> <p>a) Myself b) A member of my family, a relative or a friend c) A colleague from my firm (not a finance specialist) d) In-house accountant e) In-house CFO f) External accountant or an external accounting firm g) No financial records kept in our firm h) Other i) <i>Don't know</i></p>	<p>Variable name: QP2; Label: Bookkeeping</p> <p>1 2 3 4 5 6 7 8 -97</p>	<p>Typology of the questions: descriptive</p>	<p>Formal professional bookkeeping enables the firm to better-monitor its assets and liabilities as well as its cash flow and income/expenses and to take better informed financial decisions. Formal financial statements can be required by banks to obtain a loan or other financial products / services. The reply to this question will provide us with information on the percentage of agribusiness SMEs with professional bookkeeping and</p>

j) <i>Refused</i>	-99		its link to financial literacy.
<p><u>ASK ALL</u></p> <p>QP3) Are your firm's financial statements subject to regular external audit?</p> <p>a) Yes, once a year b) Yes, once in three years c) No h) Other i) <i>Don't know</i> j) <i>Refused</i></p>	<p>Variable name: QP3; Label: Audit and control</p> <p>1 2 0 3 -97 -99</p>	<p>Typology of the questions: descriptive</p> <p>According to the Ukrainian legislation, statutory audit is mandatory only for Open Joint-Stock Agricompanies. Nevertheless, agribusinesses of other legal statuses can optionally initiate an external audit or control on demand. The answers to this question will be analysed using the answers to question QD1 and separating the companies who legal status oblige them to undergo legal audit who sign up for an audit on their own initiative.</p>	<p>External audit and control provides a guarantee that the financial statements are sound and accurate to potential investors and/ or lenders.</p>
<p><u>ASK ALL</u></p> <p>QP4) Does your firm have a written finance plan for the following</p>	<p>Variable name: QP4; Label: Finance Plan</p>	<p>Typology of the questions: explanatory</p>	<p>The response to this question can help us to understand</p>

<p>A. cash flow management</p> <p>a) Yes 1</p> <p>b) No 0</p> <p>d) I don't understand what that means 2</p> <p>h) Irrelevant reply 3</p> <p>i) <i>Don't know</i> -97</p> <p>j) <i>Refused</i> -99</p> <p>B. investment in equipment, machines</p> <p>a) Yes 1</p> <p>b) No 0</p> <p>d) I don't understand what that means 2</p> <p>h) Irrelevant reply 3</p> <p>i) <i>Don't know</i> -97</p> <p>j) <i>Refused</i> -99</p> <p>C. investment for business expansion: acquisition of land, property, processing facilities etc.</p> <p>a) Yes 1</p> <p>b) No 0</p> <p>d) I don't understand what that means 2</p> <p>h) Irrelevant reply 3</p> <p>i) <i>Don't know</i> -97</p> <p>j) <i>Refused</i> -99</p>			<p>whether the SME engages in:</p> <p>a. short-term financial planning (day-to-day operations of cash management); b. planning of financial resources for up to 5 years In order to increase or upgrade production capacities; c. has a longer-term vision of potential business expansion.</p>
<p><u>ASK ALL</u></p>			

<p>QP5) Have you ever invested your own savings into your company?</p> <p>a) Yes, currently b) Yes, previously, but not anymore c) No i) <i>Don't know</i> j) <i>Refused</i></p>	<p>Variable name: QP5; Label: personal and business finances</p> <p>1 2 3 -97 -99</p>	<p>Typology of the questions: explanatory</p>	
<p><u>ASK IF QP5 is a) Yes, currently</u></p> <p>QP6) If yes currently, “what percentage of total investment in the company?”</p> <p>a) <25% b) 25-50% c) 50-75% d) 75-100% i) <i>Don't know</i> j) <i>Refused</i></p>	<p>Variable name: QP6; Label: personal and business finances</p> <p>1 2 3 4) -97 -99</p>	<p>Typology of the questions: explanatory</p>	
<p><u>ASK IF QP5 is b. Yes, previously, but not anymore</u></p>			

<p>QP7) If yes previously, but not anymore, “why not?”</p> <p>a) Lost part or all of initial savings invested b) Did not make any return on investment c) Do not like to mix personal finances with business i) <i>Don't know</i> j) <i>Refused</i></p>	<p>Variable name: QP7; Label: personal and business finances</p> <p>1 2 3 -97 -99</p>	<p>Typology of the questions: explanatory</p>	
<u>ASK IF QP5 is c. No</u>			
<p>QP8) If no, “why do you not invest your own savings into your company?”</p> <p>a) Do not have savings b) Do not want to take risk of losing personal savings c) Do not like to mix personal finances with business i) <i>Don't know</i> j) <i>Refused</i></p>	<p>Variable name: QP8; Label: personal and business finances</p> <p>1 2 3 -97 -99</p>	<p>Typology of the questions: explanatory</p>	

<p><u>ASK ALL</u></p> <p><i>INTERVIEWER: READ QUESTION AGAIN IF ASKED</i></p> <p>QT1²⁵) I would like to know whether you think the following statements are true or false:</p> <p>a) True b) False c) <i>Don't know</i> d) <i>Refused</i></p> <p>a) An investment with a high return is likely to be high risk</p> <p>b) High inflation means that the cost of living is rising rapidly</p> <p>c) It is less likely that you will lose all your money if you save it in more than one place</p>	<p>Variable name: QT1_ Label: convictions Correct response=True in each case</p> <p>1</p> <p>2</p> <p>-97</p> <p>-99</p> <p>Variable labels take the following suffixes:</p> <p>_1</p> <p>_2</p> <p>_3</p>	<p>Typology of the questions: assessment of financial literacy</p>	
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²⁵ This question is based on QK5 question from the OECD/INFE Toolkit.

<p><u>ASK ALL</u></p> <p><i>INTERVIEWER: READ QUESTION AGAIN IF ASKED</i></p> <p>QT2) (ACC) What is a balance sheet?</p> <p>a) It is a financial snapshot, taken at a point in time, of the firm's assets and liabilities</p> <p>b) It is a record of flow of financial resources over time</p> <p>c) It is a record of operating results of a firm over time</p> <p>d) Other</p> <p>e) <i>Don't know</i></p> <p>f) <i>Refused</i></p>	<p>Variable name: QT2 Label: accounting</p> <p>Correct response=" It is a financial snapshot, taken at a point in time, of the firm's assets and liabilities"</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>-97</p> <p>-99</p>	<p>Typology of the questions: assessment of financial literacy</p>	<p>Tests the understanding of basic accounting notions.</p>
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<p><i>READ OUT:</i> I would now like to ask you a few more questions about yourself.</p>			
<p><i>ASK everyone the questions in this section, if used</i></p>			
<p>QD8²⁶) Please could you tell me how old you are, currently?</p>	<p>Variable name: QD8</p>	<p>Typology of the questions: descriptive</p>	

²⁶ This question is based on QD3 question from the OECD/INFE Toolkit.

<p>RECORD AGE --- a) <i>Refused</i></p>	<p>Label: Age -99</p>		
<p>IF REFUSED AT QD3 (or not asked) Ask: QD8_a²⁷⁾ Would you {instead} tell me which of these age bands you fall into?</p> <p>a) 18-19 b) 20-29 c) 30-39 d) 40-49 e) 50-59 f) 60-69 g) 70-79 h) 79+ i) <i>Refused</i></p>	<p>Variable name: QD8_a Label: Age bands</p> <p>1 2 3 4 5 6 7 -99</p>		
<p><u>Note to agency: if the respondent is a student, code current education level. This question relates to highest level of schooling, rather than highest qualification</u></p> <p>QD9²⁸⁾ What is the highest educational level that you have attained?</p>	<p>Variable name: QD9 Label: Educational level</p>	<p>Typology of the questions: descriptive</p>	

²⁷ Idem.

²⁸ This question is based on QD4 question from the OECD/INFE Toolkit.

READ OUT THE LIST, stop and mark the first that applies

Note to agency: the interviewers may need some indication as to which professional qualifications are equivalent to these academic levels of education.

- | | | | |
|---|------------|--|--|
| a) University-level education | 1 | | |
| b) Technical/vocational education beyond secondary school level | 2 | | |
| c) Complete secondary school | 3 | | |
| d) Some secondary school | 4 | | |
| e) Complete primary school | 5 | | |
| f) Some primary school | 6 | | |
| g) No formal education | 7 | | |
| h) <i>Refused</i> | -99 | | |

BIBLIOGRAPHY

Aggarwal, N., Gupta, M., Singh, S. (2014), "Financial Literacy among Farmers: Empirical Evidence from Punjab", *Pacific Business Review International*, Volume 6, Issue 7, January 2014.

Andoh, F.K., Nunoo, J. (2011), "Sustaining Small and Medium Enterprises through Financial Service Utilization: Does Financial Literacy Matter?"

Atkinson A. and Messy, F-A. (2012), *Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study*", OECD Working Papers on Finance, Insurance and Private Pensions, No. 15, OECD Publishing. <http://dx.doi.org/10.1787/5k9csfs90fr4-en>.

European Bank for Reconstruction and Development (2014), *Business Environment and Enterprise Performance Survey (BEEPS)*, <http://ebrd-beeps.com/>, accessed 1-12 August 2014.

FAOSTAT (2013), FAO Statistical Databases, <http://faostat.fao.org>, accessed 13 August 2014.

FinScope (2010), *FinScope South Africa Small Business Survey 2010*, <http://www.finmark.org.za/blog/publication/finscope-south-africa-small-business-survey-2010-report/>, accessed 5 August 2014.

FinScope SME (2014), *Finscope SME*, <http://www.finmark.org.za/finscope/finscope-sme/>, accessed 1-12 August 2014.

"Improving Financial Literacy. Analysis of Issues and Policies", OECD, 2005. http://www.keepeek.com/Digital-Asset-Management/oecd/finance-and-investment/improving-financial-literacy_9789264012578-en#page3.

Kempson, E. (2009), "Framework for the Development of Financial Literacy Baseline Surveys: A First International Comparative Analysis", OECD Working Papers on Finance, Insurance and Private Pensions, No. 1, OECD Publishing. doi: 10.1787/5kmdpz7m9zq-en.

Kuntchev, V., Ramalho, R., Rodriguez-Meza, J. and J. Yang (2012), "What Have We Learned from the Enterprise Surveys Regarding Access to Finance by SMEs?", *World Bank Research Papers*, Washington DC: <http://www.enterprisesurveys.org/~media/GIAWB/EnterpriseSurveys/Documents/ResearchPapers/Enterprise-Surveys-access-to-finance-and-SME.pdf>.

OECD (2006) "Trade Policy Studies. Liberalisation and Universal Access to Basic Services. Telecommunications, Water and Sanitation, Financial Services and Electricity".

OECD/INFE Toolkit to measure Financial Literacy and Financial Inclusion: Guidance, Code Questionnaire and Supplementary Questions.

Statistical Yearbook of Ukraine for 2010 and the Site of the State Statistics Service of Ukraine <http://www.ukrstat.gov.ua/> accessed 13 August 2014.

Winn, M., Miller, C., Gegenbauer, I. (2009), “The use of Structured Finance Instruments in Eastern Europe and Central Asia”.

World Bank (2014), *World Bank Enterprise Survey Methodology*, <http://www.enterprisesurveys.org/Methodology>, accessed 1-12 August 2014.

Xu, L., Zia, B. (2012), “Financial Literacy around the World. An Overview of the Evidence with Practical Suggestions for the Way forward”, World Bank Development Research Group Finance and Private Sector Development Team.

www.oecd.org/globalrelations/eurasia.htm



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