

## CREDIT CONSTRAINT AND AGRICULTURAL PRODUCTION IN SLOVAKIA

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## Credit constraint and agricultural production in Slovakia

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### ABSTRACT

The objective of the paper is to identify and evaluate credit constraint in agricultural sector in Slovakia. We assess the supply of and demand for financing in agricultural sector, which helps to understand the potential need for new or additional financial instruments (FIs) to further support the sector. The analysis of supply and demand for finance is elaborated from secondary data obtained from EU and national data sources. It also relies on the Fi-compass survey on financial needs and access to finance of EU agricultural enterprises.

The results show that access to loans is insufficient in Slovakia, especially in case of small and young farmers. Lack of access to credit has a negative impact on agricultural production and rural development. Access to credit can be supported by CAP financial instruments. However, there are currently no financial instruments for farmers in place in Slovakia. Financial instruments can positively affect time flexibility and administrative burden on farms.

Keywords: credit constraint, agricultural sector, Slovakia, financial instruments

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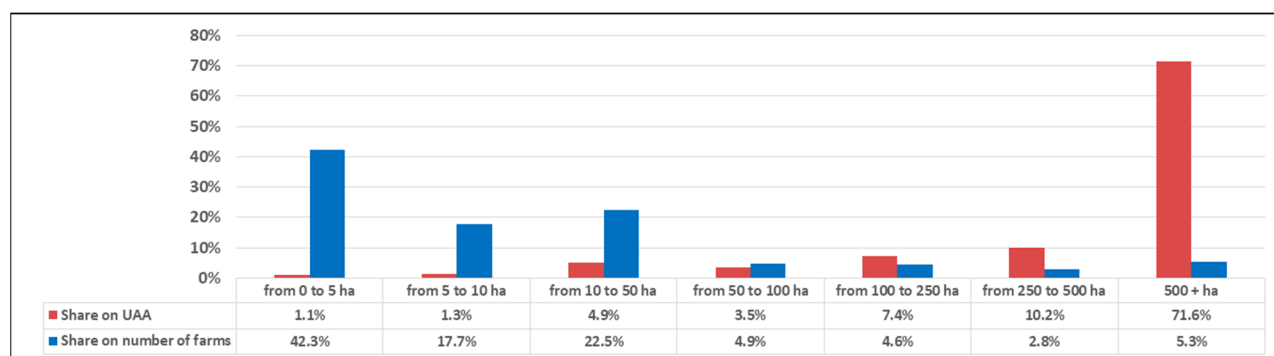
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## 1 MARKET ANALYSIS OF THE AGRICULTURAL SECTOR IN SLOVAKIA

Slovakia has a population of 5.43 million inhabitants, 37.5% of the total population lives in rural regions. Rural regions cover 46% of the Slovak territory. Agricultural land comprises 48.6% of the total area, and arable land 59% of agricultural land. According to the agricultural structural survey conducted in year 2016, Slovakia has 25,660 farms that cultivate 1,9 million ha of utilized agricultural area (UAA) (Eurostat). Compared to the last survey of 2013, the number of farms in Slovakia increased by 8.8% and the UAA increased by 1.1%. 76% of all farms were registered in the Integrated Administration and Control System (IACS) in 2016, which enabled them to obtain support from the Common Agricultural Policy (CAP).

There is a dual structure of farms in Slovakia. Of 25 660 farms, 20 400 are smaller than 20 hectares, 2860 farms range from 20 to 100 hectares and 2 400 farms are larger than 100 hectares. Farms bigger than 100 hectares are dominant in Slovakia and they cultivate about 90% of all agricultural land (Figure 1). The share of farms with the size below 20 hectares is about 3.5% of total agricultural land. Remaining 6.5% of land is cultivated by farms which size ranges from 20 to 100 hectares.

Figure 1 Distribution of UAA and number of farms subject to public support under the CAP based on size in ha (2016)



Source: Agricultural paying agency in Slovakia, 2016

The average size of the farm is 80.7 ha, which is five times higher than the EU average farm size of 16.6 ha (EU Statistical Factsheet Slovakia, 2018). In Slovakia there is higher proportion of large farms above 100 ha than in the rest of the EU. Slovakia has also 6.82% of farms with 0 ha while the EU average is 2.09.

Agricultural output measured in current prices has been stagnant in recent years (Table 1). The share of crop production is higher (56.1%) than the share of animal production (37.9% of

agricultural output). Less than 4% of the biggest farms in Slovakia produces 75% of all agricultural production. Farms above 100 ha produce 95% of agricultural output.

Table 1 Development of the crop, animal and total agricultural output (mil. EUR, value at current prices and in %)

|                                     | 2015     |       | 2016     |       | 2017     |       |
|-------------------------------------|----------|-------|----------|-------|----------|-------|
| <b>Crop output</b>                  | 1,126.96 | 55.1% | 1,364.46 | 60.0% | 1,272.44 | 56.1% |
| <b>Animal output</b>                | 766.73   | 37.5% | 786.76   | 34.6% | 859.80   | 37.9% |
| <b>Agricultural services output</b> | 150.27   | 7.4%  | 150.27   | 5.4%  | 150.27   | 6.0%  |
| <b>Agricultural output</b>          | 2,043.96 | 100%  | 2,273.15 | 100%  | 2,267.01 | 100%  |

Source: Eurostat

Given the Slovak structure of farms, cereals and oilseeds production is more profitable than animal production and fruits and vegetables production. This is reflected in the development of the structure of production whereby animal, fruits and vegetables production has been declining while oilseeds and cereals area and production have increased.

Table 2 Development of number of farms cultivating crops in Slovakia

|                  | 2004  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014 | 2015 | 2016  |
|------------------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| <b>Wheat</b>     | 3 760 | 4 104 | 3 987 | 3 479 | 3 524 | 3 620 | 3 651 | 2721 | 3254 | 3 303 |
| <b>Barley</b>    | 3 566 | 3 676 | 3 367 | 2 608 | 2 635 | 2 782 | 2 556 | 1902 | 2599 | 2 305 |
| <b>Rye</b>       | 761   | 674   | 587   | 464   | 400   | 437   | 508   | 332  | 256  | 270   |
| <b>Corn</b>      | 2 000 | 1 991 | 1 946 | 1 848 | 2 144 | 2 209 | 2 242 | 1776 | 1778 | 1 801 |
| <b>Rapeseed</b>  | 1 085 | 1 648 | 1 652 | 1 613 | 1 453 | 1 141 | 1 323 | 1121 | 1117 | 1 133 |
| <b>Sunflower</b> | 1136  | 1072  | 1211  | 1108  | 1 163 | 1 145 | 1 125 | 956  | 1041 | 1 082 |
| <b>Apples</b>    | 436   | 373   | 370   | 364   | 324   | 306   | 295   | 283  | n.a. | n.a.  |
| <b>Peaches</b>   | 181   | 157   | 154   | 149   | 139   | 132   | 123   | 120  | n.a. | n.a.  |
| <b>Plumbs</b>    | 204   | 187   | 189   | 186   | 176   | 172   | 169   | 166  | n.a. | n.a.  |
| <b>Currants</b>  | 54    | 49    | 51    | 47    | 41    | 40    | 37    | 35   | n.a. | n.a.  |
| <b>Tomato</b>    | 205   | 89    | 89    | 55    | 53    | 56    | 50    | 42   | 31   | 29    |
| <b>Carrot</b>    | 245   | 84    | 74    | 72    | 74    | 82    | 80    | 59   | 54   | 48    |
| <b>Cabbage</b>   | 310   | 152   | 118   | 101   | 119   | 134   | 138   | 78   | 90   | 85    |

Source: Poľ, CD MPRV SR, calculation by research institute NPPC-VÚEPP

The most important commodities (in value terms) are cereals (21.1%), oilseeds (15.3%), forage plants (9.9%) and milk (13.5%). Slovakia is lagging in the share of fruits and vegetables behind the rest of the EU. Since 2004 there has been a significant decrease of number of farms cultivating fruits and vegetables (Table 2). The number of farms engaged in apple-growing fell

by 35%; the number of peach growers by 33,7%; and similarly, the number of growers of other fruits and vegetables also fell dramatically in the selected time period. Generally, the number of farms engaged in the production of labour-intensive crops has been decreasing in Slovakia. On the other hand, the number of cereals and oilseeds growers is increasing. Cereals and oilseed are crops suitable for large-scale farming using modern technologies and techniques.

Animal production is focused on milk and meat production. There have been significant changes in Slovakia since its accession to EU. Compared to 2004, the most significant decline was in dairy and pig farms: -21% in case of dairy farms; -48,5% in case of pig farms. In terms of the number of cows per farm mainly small dairy farms ceased the production of milk. Other types of livestock production, such as cattle, sheep and poultry has increased in terms of number of farms.

Agricultural sector in Slovakia employed 48.5 thousand employees in 2017 which is down from 57.9 thousand in 2015. The share of agricultural employment in total employment has been declining too. In 2017 it reached 1.9% of total employment (Table 3). The share of farm managers older than 55 years is 46.7% which is lower than the EU average (57.9%). Farm managers younger than 35 years make 11.1%; in comparison, in the EU is the share 5.1% (Table 4).

Table 3 Employment in agriculture in Slovakia

|   | 2015  | 2016  | 2017  |
|---|-------|-------|-------|
| <b>Employment in Agriculture in thousand (AWU)</b>            | 57.90 | 52.50 | 48.50 |
| <b>Share of agriculture as percentage of total employment</b> | 2.4   | 2.1   | 1.9   |

Source: CAP context indicators, C.13

Table 4 Age structure of farm managers

|                 | Less than 35 years | Between 35 and 54 years | 55 years and over |
|-----------------|--------------------|-------------------------|-------------------|
| <b>EU-28</b>    | 5.1                | 36.9                    | 57.9              |
| <b>Slovakia</b> | 11.1               | 42.2                    | 46.7              |

Source: CAP context indicators, C.23

Agricultural income as measured by agricultural factor income (AFI) per annual work unit (AWU) has been increasing in Slovakia recently mainly due to the decrease in employment.

From EUR 13,403 per AWU in 2014 it increased to EUR 19,211 per AWU in 2017 (Table 5). AFI in Slovakia is above the EU average in 2017.

In 2017 4,4 mil. people in Slovakia owned agricultural land. On average a landowner owned 0.9 ha of agricultural land. An average size of agricultural parcel reached 0.5 ha and the number of parcels amounted to 8.4 million. A land parcel was owned on average by 12 persons. There were 100.7 mil. agricultural land ownership relationships in Slovakia in 2017. The extreme land fragmentation causes significant transaction costs at the land markets in Slovakia. 90% of land is rented. Farms own only 10% of the land they cultivate. Some farms use financial markets to invest in land ownership, to purchase land they cultivate.

Table 5 Agricultural factor income per AWU in real terms

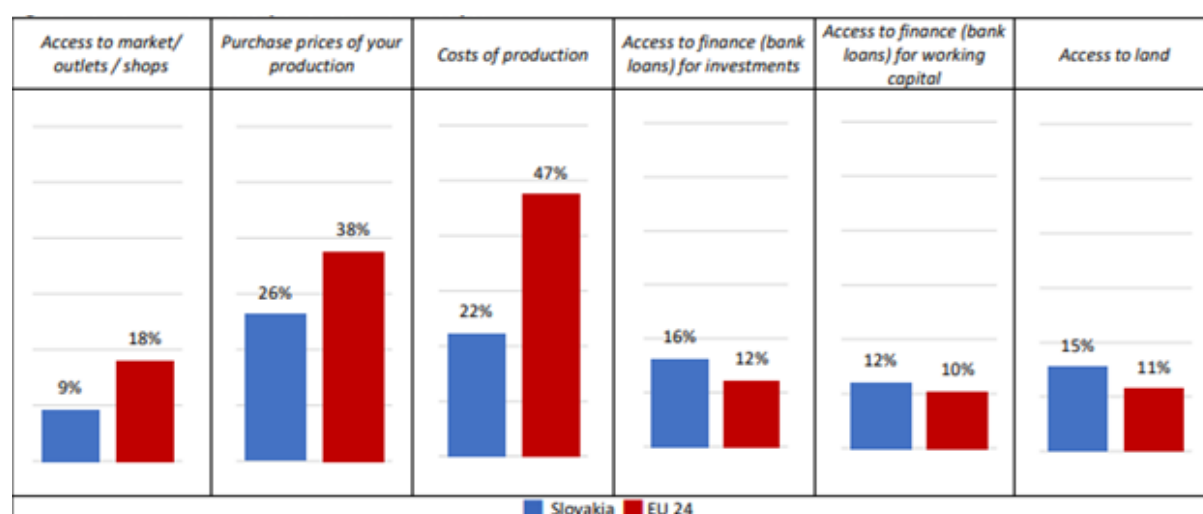
|                 | 2014     | 2015     | 2016     | 2017     |
|-----------------|----------|----------|----------|----------|
| <b>EU 28</b>    | 15,704.1 | 15,201.1 | 15,543.7 | 17,303.9 |
| <b>Slovakia</b> | 13,403.2 | 13,350.0 | 16,202.2 | 19,211.6 |

Source: European Commission, CAP Context indicators, C.25

## 2 ANALYSIS ON THE DEMAND SIDE OF AGRICULTURAL FINANCE

In this section, demand for finance is quantified in two steps. First, the met demand is assessed through statistics of approved loan volumes and outstanding loans on the sector’s balance sheet. Second, the unmet demand is gauged from the number of farmers that reported a rejected loan application in the fi-compass survey.

Figure 2 Difficulties experienced in the last year

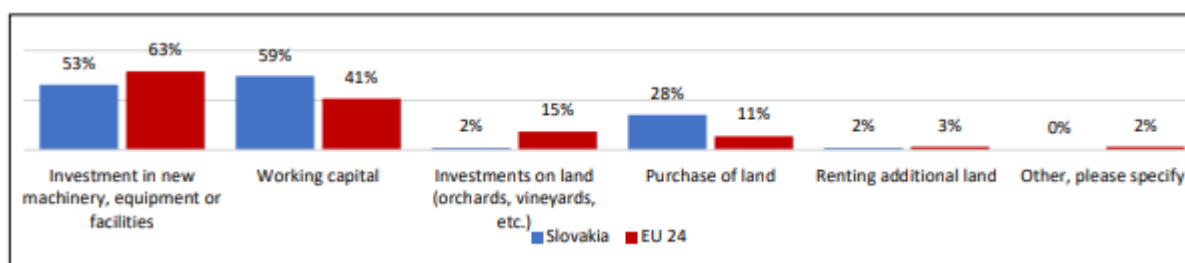


Source: EIB Survey, 2018

According to the EIB survey the main concerns of the Slovak farmers in 2016 were output prices (26% of respondents) and costs of production (22% of respondents). In the EU costs of production worried 47% of farmers while output prices 26% of farmers which are significantly higher numbers than in Slovakia (Figure 2). However, access to finance for investment was a problem for 16% of Slovak farmers and only 12% of EU farmers. Similarly, access to working capital and land access were slightly a higher problem in Slovakia than the EU average.

Overall demand for finance in the Slovak agriculture, according to the EIB survey, consisted mainly of (i) the demand for working capital, (ii) demand for investment in new machinery, equipment or facilities, and (iii) purchase or renting of additional land (Figure 3). Both demand for short-term financing in the form of working capital as well as demand for investment in the upgrading of the farm via purchase of machinery, equipment or facilities are equally important in the Slovak agriculture. Significant fragmentation of land ownership is a specific problem of Slovakia and therefore farmers demanded finances to purchase or rent additional land. Some farmers borrowed funds to expand their farm while some farmers invest in purchasing land they were renting.

Figure 3 Purpose of the received or partially received loan



Source: EIB Survey, 2018

Gross fixed capital formation (GFCF) in the Slovak agriculture is below the EU average. In 2017 GFCF reached 294.8 mil. EUR, which means that 47 % of Gross Value Added in agriculture was used on GFCF. Between years 2015 and 2017 GFCF in Slovakia declined from EUR 393.2 mil. to EUR 294.8 mil (Table 6). This development in GFCF might negatively affect competitiveness in the future. The share of agriculture in total GFCF of the economy is lower than the share of agriculture in gross value added. Agriculture in Slovakia is stagnating which is reflected in lower GFCF. Relatively higher GFCF reported in 2015 and 2016 was due to new investment support measures introduced in the CAP2014 – 2020.

Table 6 Development of GFCF by categories

|                          | 2015         | 2016         | 2017         |
|--------------------------|--------------|--------------|--------------|
| <b>GFCF</b>              | <b>393.2</b> | <b>336.9</b> | <b>294.8</b> |
| -Buildings               | 109.9        | 88.1         | 71.9         |
| -Machinery and equipment | 166.1        | 113.2        | 111.3        |
| -Vehicles                | 68.4         | 89.3         | 73.1         |
| -Animals and Plantations | 46.7         | 44.6         | 37.3         |
| -Other                   | 2.1          | 1.7          | 1.2          |

Source: MARD SR, Green Report, 2018

In 2017 farmers invested mainly in buildings (24%), machinery (38%), and transportation equipment (25%) followed by investment in plantations and animals (MARD SR, Green Report, 2018). Total working capital in Slovak agriculture was 1.7 billion EUR, which is almost equal to the amount of working capital in 2015 (Table 7). Other goods and services, feeding stuffs and energy have the highest share.

Table 7 Development of agricultural input in Slovakia in mil. EUR

|                                       | 2015        | 2016        | 2017        |
|---------------------------------------|-------------|-------------|-------------|
| Seeds and planting stock              | 107         | 107         | 100         |
| Energy                                | 198         | 167         | 185         |
| Fertilisers and soil improvers        | 157         | 161         | 127         |
| Plant protection products             | 123         | 146         | 125         |
| Veterinary expenses                   | 43          | 42          | 41          |
| Feeding stuffs                        | 298         | 377         | 443         |
| Maintenance of materials              | 28          | 28          | 28          |
| Maintenance of buildings              | 51          | 51          | 51          |
| Agricultural services                 | 146         | 119         | 130         |
| Other goods and services              | 473         | 512         | 430         |
| <b>Total intermediate consumption</b> | <b>1636</b> | <b>1720</b> | <b>1673</b> |
| <b>Fixed capital consumption</b>      | <b>215</b>  | <b>246</b>  | <b>229</b>  |

Source: Eurostat, Economic Accounts for Agriculture: values at real basic prices (2010 = 100)

Bank loans are important for farmers in Slovakia. They form 11.1% of liabilities and owner's equity in Slovakia, while the share of subsidies is 8.4% (Green report, Ministry of Agriculture and Rural Development of Slovak republic). Based on national data, farmers in Slovakia acquire new fixed assets from owner's equity by 66%, bank loans by 26% and the rest is covered from subsidies and other funds (Table 8).



Table 8 Share of funds in financing new fixed assets in Slovak agriculture

|                | 2015  | 2016  | 2017  |
|----------------|-------|-------|-------|
| Owner's equity | 64.7% | 66.5% | 65.7% |
| Bank loans     | 24.6% | 25.5% | 25.6% |
| Subsidies      | 14.7% | 5.0%  | 2.8%  |
| Other funds    | 10.8% | 7.9%  | 8.7%  |

Source: Green report, Ministry of Agriculture and Rural Development of Slovak republic

Slovak farmers carried out investment in 2017 from own resources (profit and write offs) and from external resources. Bank loans were the most important external source for investment. Bank loans to agriculture increased annually by 9.6% in 2017 (Table 9). Medium-term (1-5 years) and long-term (more than 5 years) loans grew faster than short-term loans. Growth of loans was supported by low interest rate too. Short-term loans dominate (40,2% of all bank loans in 2017). The amount of short-term loans is linked to direct payments of the farm, which serve as a collateral. Medium-term and long-term bank loans served to pre-finance or co-finance projects from Rural Development Program (RDP) too.

Table 9 Development and structure of loans in Slovak agriculture in thousand EUR

| Year | Total loans | Short-term | Medium-term | Long-term | Failed loans |
|------|-------------|------------|-------------|-----------|--------------|
| 2015 | 543,230     | 272,931    | 101,993     | 168,306   | 32,667       |
| 2016 | 650,314     | 274,900    | 146,220     | 229,194   | 35,144       |
| 2017 | 712,432     | 286,364    | 170,756     | 255,312   | 45,499       |

Source: National bank of Slovakia

In the programming period 2014 – 2020 Slovakia has received EUR 4.635 billion from the Common Agricultural Policy. Of this EUR 2.745 billion was allocated to direct payments and common market organization (First Pillar) and 1.890 to Rural Development Programme (Second Pillar). By national decision 21.3% of funds allocated to the second pillar were transferred to the first pillar, which caused that EUR 3.075 billion became available for direct payments and common market organization and EUR 1.560 billion for the RDP. Furthermore, the second pillar was co-financed from national budget in the amount of 0.539 billion EUR. So, the total funds available in the programming period 2014-2020 in both pillars of the CAP amounted to 5.174 billion EUR.

State aid was used to support suckler cows, pigs, goats, sheep, sugar beet, fruits, vegetables, potatoes and wine in the amount of EUR 9 mil. and some types of cattle in the amount of EUR 6 mil. annually. In aggregate, in 2017 state aid in Slovakia amounted to EUR 27 per ha, which is below the EU average of EUR 35 per ha. Slovakia uses 13% of direct payments on voluntary coupled support (VCS). VCS is used to support milk production (EUR 35 mil. per year, EUR 279 per cow), cattle (EUR 9 mil., EUR 216 per animal), sugar beet (EUR 7 mil., EUR 362 per ha). In RDP Slovakia allocated 25% of all funds to measure 4 – Investment in physical assets and 8% of RDP to Measure 6 – Farm and Business Development. The volume of grants to farmers per RDP measure over period 2015-2017 is in Table 10.

Table 10 Development of RDP 2014-2020 subsidies in Slovakia by measures

| Measure | Title   | 2015 | 2016  | 2017  | 2018   | TOTAL  |
|---------|---|------|-------|-------|--------|--------|
| 1       | Knowledge transfer and information actions  | 0    | 0     | 0     | 0      | 0      |
| 2       | Advisory services, farm management and farm relief services   | 0    | 0     | 0     | 0      | 0      |
| 4       | Investments in physical assets  | 0    | 31.9  | 65.63 | 76.6   | 174.13 |
| 5       | Restoring agricultural production potential damaged by natural disasters and catastrophic events and introduction of appropriate prevention actions | 0    | 0     | 0     | 0      | 0      |
| 6       | Farm and business development   | 0    | 0.5   | 6.23  | 23.7   | 30.43  |
| 7       | Basic services and village reveal in rural areas  | 0    | 0     | 0     | 0      | 0      |
| 8       | Investments in forest area development and improvement of the viability of forests  | 0    | 15.2  | 30.61 | 22.8   | 68.61  |
| 10      | Agri-environmental-climatic measure   | 0    | 15.5  | 18.5  | 19.9   | 53.9   |
| 11      | Organic farming   | 0    | 16.3  | 17.4  | 17.5   | 51.2   |
| 12      | Natura 2000 and Water Framework Directive payments  | 0    | 0.9   | 1     | 0.7    | 2.6    |
| 13      | Payments to areas facing natural or other specific constraints  | 60   | 56.1  | 61.55 | 133.65 | 311.3  |
| 14      | Animal welfare  | 0    | 19.9  | 22.88 | 25.82  | 68.6   |
| 15      | Forest-environmental and climate services and forest conservation   | 0    | 0.4   | 1.05  | 0.95   | 2.4    |
| 16      | Cooperation   | 0    | 0     | 0     | 0      | 0      |
| 19      | Community-led local development (LEADER)  | 0    | 0.2   | 0.65  | 0      | 0.85   |
|         | RDP TOTAL   | 60   | 156.9 | 225.5 | 321.62 | 764.02 |

Source: Agricultural paying agency in Slovakia, 2018

Regarding young farmers, they receive less than 2% of RDP grants and direct payments in Slovakia as additional support (APA, 2018), and farmers received compensations for climatic and other events. Over the period 2015-2017 the amount of national aid amounted to EUR 108.7 mil. (MARD SR, 2018).

Figure 4 Percentage of farms that applied for finance in the last year, by product type (i.e. since beginning of 2017)



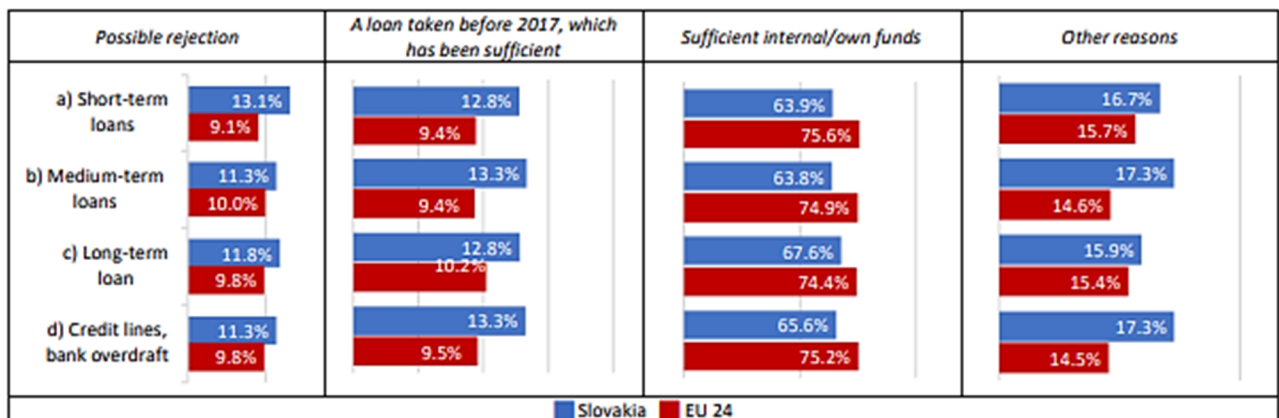
Source: EIB Survey, 2018

Farmers in Slovakia use bank loans or other resources to finance either working capital or investment. 23.8% of farms in Slovakia applied for bank loan or private resources in 2017 (Figure 4). This share is below EU average (29.6%). Farmers applied for mainly short-term loans (6.1%) and medium-term loans (6.5%). The demand for credit lines (3.4%) and long term-loans (3.6%) was lower.

There are several reasons why some farms in Slovakia did not apply for loans in 2017. Some farms did not apply in 2017 (63.8% in case of medium-term loans and 67.6% in case of long-term loans) because they had sufficient own internal funds (Figure 5). Other farms did not apply

in 2017 because they obtained sufficient loans in previous years. About 12% of farms were discouraged to apply because they thought they would be rejected. The share of this reason for not applying is in Slovakia higher than the EU average, which is also in line with the information collected in the interviews with stakeholders. Both banks and farms confirmed that many farmers learn about difficulties to obtain a loan early in the process and therefore they do not formally apply for a loan. Majority (84%) of small farms (20,400) in Slovakia are non-business individuals. This group of small farms is considered to be a regular household and banks generally refuse to offer them agricultural loan, but non-business individuals rather apply as regular households. Possible rejection was the reason for not applying for a short-term loan stated by 13.1% of respondents, medium-term loan by 11.3% of respondents, long-term loan by 11.8% of respondents and credit line by 11.3% of respondents.

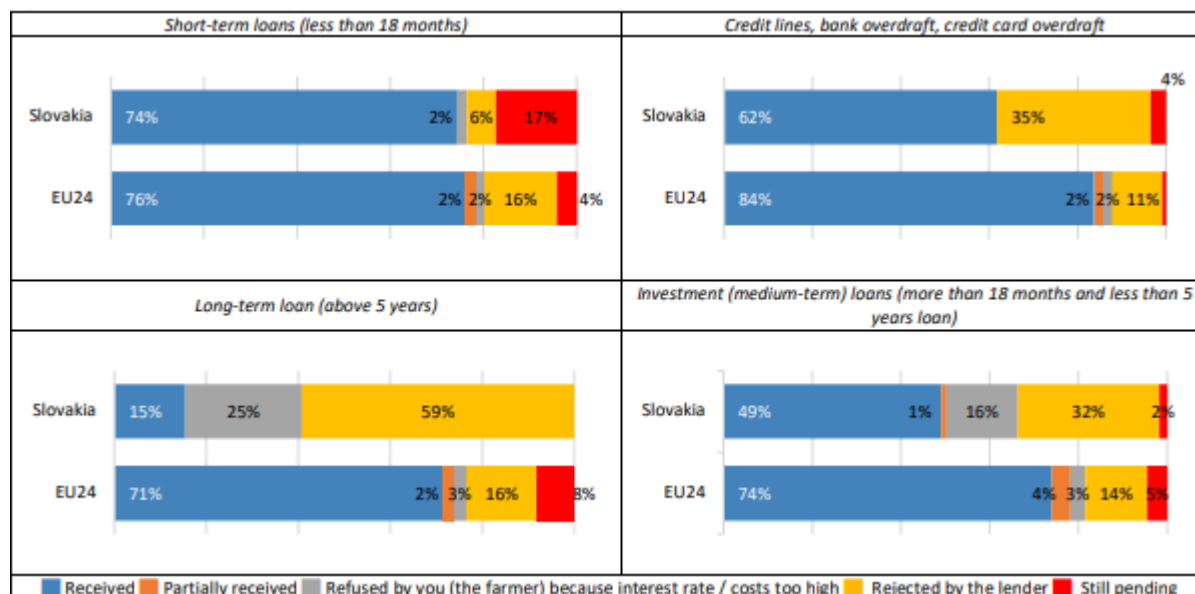
Figure 5 Key reasons for no application (multiple answers allowed)



Source: EIB Survey, 2018

Significant majority of farms that apply for a loan generally receive the loan in Slovakia. However, according to the survey results, farmers in Slovakia are refused more often than their EU counterparts in all types of loans except for short term loans. In Slovakia, 59% of long-term loans is refused by the bank (EU average 16%), 35% of credit lines (EU average 11%), and 32% of medium-term loans in Slovakia are refused (EU average 11%) (Figure 6).

Figure 6 Result of the application



Source: EIB Survey, 2018

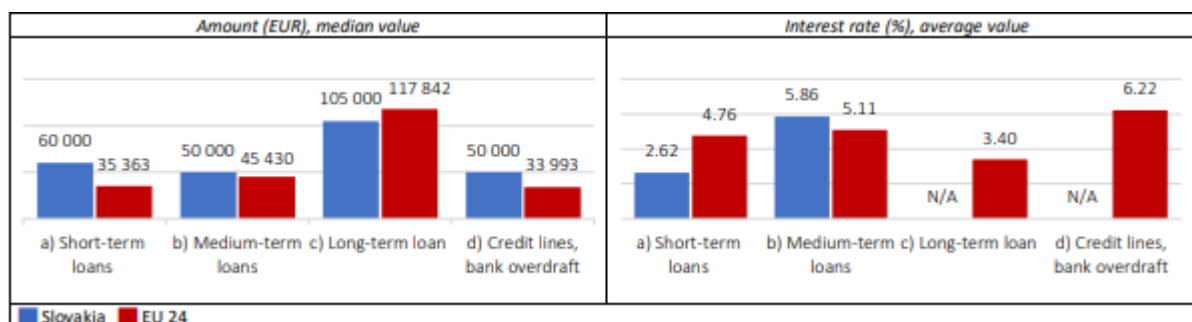
There is only a small unmet demand for short term loans. Much higher unmet demand exists in other types of loans. Interviews confirmed that banks offer mainly short-term loans which are repaid from direct payments and have therefore low risk. Farmer`s need for loans with longer maturity go more often unmet.

Main reasons why banks refuse loan application in Slovakia include among others economically non-viable purpose of the loan or non-viable farm (49%), lack of sufficient collateral (44%), inadequate business plan (22%) and high investment risk (20%) (EIB Survey, 2018).

The amount of the loan depends on the size of the farm. Due to the structure of farms in Slovakia with 997 farms with over 500 ha there is a significant difference in average amount of loan between categories of farms. Based on survey results the median volume of a short-term loan is 60,000 EUR, medium-term loan 50 000 EUR, long-term loan EUR 105,000 and credit line EUR 50 000 in Slovakia. According to the interviews with stakeholders (banks and associations of farmers) average total loan for small farms is significantly lower (90 000 EUR). This amount reflects significant heterogeneity between small farms. There are viable small farms but also non-business individuals that conduct farming as a hobby or part-time activity. For the category of large farms, the amount of loans is higher which is due to the structure of farms in Slovakia which significantly differs from the structure of farms in the EU member states. The category

of large farms in Slovakia is dominated by corporate farms with average size of 695 hectares. These farms have much higher demand for loans. According to interviews with stakeholders the average loan to large farms is 1.5 times higher than estimated by the EIB survey.

Figure 7 Amount and interest rate of the financial product applied for



Source: EIB Survey, 2018

Interest rates on short-term loans (2.26%) are below EU average (4.76%) in Slovakia. Farmers confirmed floating interest rates based on 3M EURIBOR. The interest rate increases with the maturity of the loan.

Banks ask for guarantees in case of 40.5% of respondents. The value of the guarantee as a percentage of the loan is from 1 to 75% in case of 17% of respondents in Slovakia. Guarantee above 100% of the loan is in case of 38% of respondents (EU average 30%). Mostly personal collateral is used as a guarantee (land, buildings). Slovenska zarucna a rozvojova banka provides also some guarantees to commercial banks for their loans to farmers.

### Quantification of Demand for Finance

The demand for finance of farms in Slovakia was calculated following the approach of the methodological handbook for implementing the ex-ante assessment of agricultural financial instruments under the EAFRD. The met credit demand is the volume of loans offered in agriculture. In Slovakia as of December 2017 the outstanding loan volume was 712.4 mil. EUR. The annual maximum outstanding loan volume was as of November and amounted to 798.4 mil. EUR. Generally, the potential total demand for finance consists of the met and unmet demand for finance. The unmet demand includes rejected applications, refusals by farmers, and farmers that have been discouraged to file an application for a loan. In calculating the total unmet credit demand, the responses from the survey results (percentages) are multiplied by the

average loan volume. Consequently, the total potential demand for finance is EUR 1,039.9 mil. (Table 11), of which EUR 241.5 mil. are unmet demand.

Table 11 Quantification of the total met and unmet credit demand in Slovak agriculture 2017

| <b>Parameter</b>    | <b>mil. EUR</b> |
|---------------------|-----------------|
| Met Credit Demand   | 798.4           |
| Unmet Credit Demand | 241.5           |
| Total Credit Demand | 1,039.9         |

Source: EIB Survey, own calculation

### **3 ANALYSIS ON THE SUPPLY SIDE OF AGRICULTURAL FINANCE**

This chapter provides an overview of the financial institutions and the financial products offered to the Slovak agricultural sector, including the use of FIs. The environment of the financing market, such as interest rates and requirements for collateral, is described, and the availability of funding for agricultural producers is analysed. Potential differences in availability of financial products across different types of agricultural producers are reviewed and analysed. This section draws its information from interviews with financial institutions, as well as from national statistics and the FADN database.

#### **Description of Finance Environment and Funding Availability**

Slovak agriculture is mainly financed by commercial banks. In 2017 there were 27 banks registered in Slovakia. Of them, six provide a bulk of all credit to farmers (Table 12). UniCredit Bank with the market share of 30% in the segment of agricultural loans is traditionally the biggest bank for farmers in Slovakia because it is the country's successor of Polnobanka which was set up as a specialized financial institution for farming sector. UniCredit Bank is followed in agricultural loans by Vseobecna uverova banka with market share of 25%, Tatra Banka, which has market share of 20%, Slovenska sporitelna (10%), Slovenska zarucna a rozvojova banka (10%) and CSOB (5%).

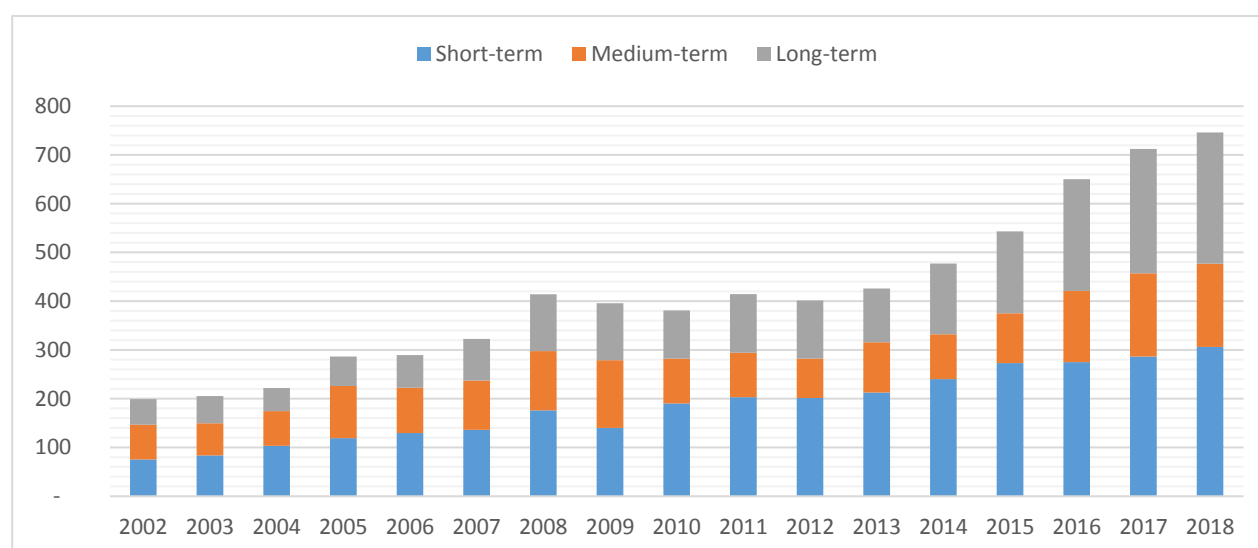
Table 12 Main banks providing loans in Slovak agriculture

| Bank  | Address                               |
|---|---------------------------------------|
| Československá obchodná banka, a.s.               | Žižkova 11, 811 02 Bratislava         |
| Slovenská sporiteľňa, a.s.                        | Tomášikova 48, 832 37 Bratislava      |
| Slovenská záručná a rozvojová banka, a. s.        | Štefánikova 27, 814 99 Bratislava     |
| Tatra banka, a.s.                                 | Hodžovo námestie 3, 811 06 Bratislava |
| Všeobecná úverová banka, a.s.                     | Mlynské nivy 1, 829 90 Bratislava     |
| UniCredit Bank Czech Republic and Slovakia, a.s., | Šancová 1/A, 813 33 Bratislava        |

Source: National bank of Slovakia

Agricultural loans have been increasing since Slovakia’s accession into the EU in 2004 (Figure 8). Recently total agricultural bank loans increased from EUR 543 mil. in 2015 to EUR 712 mil. in 2017. Growth of loans has been mainly driven by increasing direct payments and favourable interest rates recently. Majority of loans are obtained by the biggest farms which are viewed by banks as less risky than smaller farms. Over the year the outstanding loan volume varies with a peak in November. The total outstanding loan volume in November 2017 was 798.4 mil. EUR.

Figure 8 Development of agricultural loans in Slovakia



Source: National bank of Slovakia

### Financial Products

In addition to bank loans, financial institutions provide to agricultural sector also leasing services and bank guarantees. Loans can be further divided into general loans and specific agricultural loans. General loans are used by all types of clients including farms while specific



agricultural loans are created for the use of farmers only. To access general loans farmers can approach all 27 commercial banks registered in Slovakia. Specific agricultural loans are provided by 6 banks.

The value of agricultural leasing market is 149 mil. EUR, which is about 20% of the value of agricultural loan market. Farmers use leasing to finance trucks, combines, tractors, harvesters, and other types of machinery. Machinery serves as a collateral and leasing companies can offer services to farmers with higher risk.

The state-owned Slovenská záručná a rozvojová banka (Slovak guarantee and development bank) provides guarantees to commercial banks that extend loans to farmers. In 2017 the share of guarantees on all financial products in Slovak agriculture was less than 2%.

### **Description of Financing Market**

Favourable business conditions after the accession of Slovakia into the EU and rising CAP subsidies play an important role in financing of agriculture in Slovakia. Farming risk has been declining since the joining of the EU in 2004. The accession of the Slovak Republic to the EU in 2004 and the introduction of the CAP in Slovak agriculture led to a decrease in the risk of farming in Slovakia due to enhanced stability of markets and policies. This contributed to an increase in the volume of agricultural loans. Due to economic and financial crisis agricultural loans were stagnating in the period between 2009 and 2013, After 2014, banks have eased credit lending standards, which contributed to increased lending.

In 2017 banks reported annual increase of agricultural loans by 9.6%. However, the share of agricultural loans on total loans in the economy remains small (1.38%) but the share increased annually by 0.08 pp. Specifically, short-term lending which is directly linked to direct payments serving as collateral increased significantly. Short-term loans made 40.2% of total agricultural loans in 2017 and they were used to bridge the time mismatch between the need to finance agricultural activities and the receipt of subsidies from the Agricultural Paying Agency. Banks normally provide short term loans in the amount of 100% of direct payments, in some cases to good costumers 150% of direct payments that the farm receives.

The share of medium-term loans in total agricultural loans reached 24.0% in 2017. Their maturity varies between 1 and 5 years. Volume of medium-term loans increased by 16.8% in 2017 (the highest increase of all types of loans by maturity, but their share in total loans remains the lowest.

Long-term loans make 11.4% of total agricultural loans and their amount increased in 2017 relative to the previous year too. About half of medium-term and long-term loans are used to pre-finance and co-finance RDP 2014-2020 investment projects. Long-term loans are used by farmers in Slovakia also to purchase land. Land purchases serve to expand the farm or to buy the land that was rented. Slovak farmers have the highest share of rented land among all the EU member states. For purchase of land some commercial banks provided long-term investment loans up to 15 years. The amount of loan for the purchase of land ranges from € 3,000 to € 330,000 and farms have to contribute with 10-20% of their own resources. The demand for loans for purchase of land is driven by low interest rates, higher direct payments, and the expectation of increasing of land prices in the future. Price of land was kept low due to significant fragmentation of land ownership and high transaction costs to purchase or rent land. Consolidation of land ownership in the future within a state programme financed by RDP funds or national funds will lead to lower transaction costs at the land market and higher land prices. Banks offer loans to farmers in Slovakia with flexible interest rates. Interest rates increase with the maturity of loans. Short-term loans are offered with interest rate EURIBOR + 2% on average, medium-term loans EURIBOR + 2.5% on average and long-term loans EURIBOR + 3% on average. Loans to purchase land are characterized by the highest interest rates. Leasing market is focusing on financing vehicles and passenger cars for farmers. The volume of leasing for farms in Slovakia is EUR 149 mil. in 2018. Main banks providing loans in Slovak agriculture own leasing companies which are active in providing leasing services to farms.

Bank loans in agriculture are increasing in Slovakia (Table 13). Currently the situation on the money and financial market is favourable for farmers. Banks offer loans with relatively low interest rates. In Slovakia, large farms are dominant. They cover 90% of land and provide 95% of agricultural production. Generally large farms have no problem to obtain loans, according to representatives of farm associations and banks. Large farms can have loan application rejected if the planned project is too risky. Very specialized farms and farms specializing in animal production are considered riskier than average. Farms that heavily depend on the weather conditions, i.e. farms producing fruits and vegetables are considered riskier too, specifically if insurance is not sufficient. Start-ups that have no history and inferior collateral are also considered very risky by the banks.

Table 13 Development and structure of loans in Slovak agriculture in thousand EUR

| Year | Total loans | Short-term | Medium-term | Long-term | Failed loans |
|------|-------------|------------|-------------|-----------|--------------|
| 2015 | 543,230     | 272,931    | 101,993     | 168,306   | 32,667       |
| 2016 | 650,314     | 274,900    | 146,220     | 229,194   | 35,144       |
| 2017 | 712,432     | 286,364    | 170,756     | 255,312   | 45,499       |

Source: National bank of Slovakia

Small farms have the most difficult access to credit in Slovakia. The market is dominated by large farms. Small farms have been created only recently. They do not have sufficient credit history and collateral. Furthermore, small farms and young farmers especially have huge investment needs that require significant amount of loans. Most small farms are the first-generation farm. Furthermore, infrastructure in Slovakia, including the structure of suppliers of inputs and purchasers of outputs, banks and provider of services are used to deal with large farms not with small farms which have not existed until 1989. Large farms are significantly helped by high amount of direct payments that they receive. Direct payments are either used to invest or as a collateral for loans. Small farms with low direct payments cannot invest enough from direct payments or have low collateral.

Banks have no specific product for small farms. Some banks do not deal with farms with lower agricultural area than 20 hectares or even 100 hectares due to high transaction costs. Small farms do not pass through their selection criteria. For that reasons small farms receive loans not as businesses but as households only. Long-term loans are also difficult to obtain by farms and have higher interest rates.

Land market imperfections negatively affect credit market. Extreme fragmentation of land ownership hinders the use of land as a collateral. In many cases buildings cannot be used as collateral due to unclear property rights. Low prices of land make land an insufficient collateral for loans.

#### 4 FINANCING GAP IN THE AGRICULTURE SECTOR

This chapter presents an assessment of the financing gap in the Slovak agriculture sector. The financing gap is calculated by combining information from the *fi-compass* survey with farm counts from Eurostat (see Annex X for details on the methodology). Drivers of the financing gap are discussed, and recommendations are provided with regard to the type of Financial Instrument that might be useful in addressing the gap.

**The financing gap arises from unmet financing demand.** This unmet demand includes lending applied for but not obtained as well as lending not applied for due to expected rejection. This section presents an approximation of the unmet financing needs of financially viable agricultural enterprises obtained by multiplying the number of farms with a constrained access to finance by the average farm's loan amount.

$$\text{Financing gap} = \text{Number of farms} \times \text{percentage of financially viable farms with unmet demand} \times \text{average loan volume}$$

An upper bound for the financing gap is obtained by considering farms with unmet demand and that reported a stable or growing turnover. The lower bound relies on a more stringent criteria by considering only farms retained in the upper bound calculation and that did not have an increase of their cost of production in the preceding year.

**Using the results of the 2017 *fi-compass* survey for Slovak farms, the following results are obtained:**

The financing gap for Slovak primary agriculture sector is estimated between EUR 95.6 million and EUR 216.0 million. This would amount to EUR 8.000 to EUR 19.000 per farm over 2 ha. However, unmet financing needs are concentrated in specific segments of the sector. The financing gap mainly concerns small farms and young farmers. The type of loans for which the gap is the largest are long-term loans. Young farmers and small farms suffer under low collateral and lack of simple loan product.

The financing gap as estimated from the *fi-compass* survey represents approximately 13.4% to 30.3% of the total outstanding loan volume to the sector.

Table 14 Financing gap in Agriculture

|                       | Short term | Medium term | Long term | Credit line/ overdraft | Total | Young farmers |
|-----------------------|------------|-------------|-----------|------------------------|-------|---------------|
| <b>Upper boundary</b> | 22.2       | 44.9        | 127.1     | 21.8                   | 216.0 | 77.4          |
| <b>Lower boundary</b> | 9.1        | 21.3        | 55.3      | 9.9                    | 95.6  | 17.4          |

Source: EIB Survey, own calculation

General drivers of the gap include lack of history and collateral of young and small farmers, low profitability of farms which negatively affects the share of long-term loans.

18.2% to 35.8% of the overall gap might be attributed to young farmers. Between 62% and 66% of rejected and viable loan applications came from applicants below 41 years old. Similarly, 0% and 28% of the discouraged applications came from young farmers. Using this information to provide a different break down of farms with constrained access to finance, we obtain a financing gap for young farmers of between EUR 17.4 and EUR 77.4 million. The fact that young farmers represents a large part of the gap can be explained by high entry barriers for young farmers and new entrants, low access to land, lack of history and low value of collateral. Based on the stakeholder interview the overall gap might be higher for large farms. Reason for this is the structure of farms in Slovakia. The average large farm size in Slovakia is 2.62 times bigger than average large farm in EU. Larger farms have higher loan volumes and therefore the gap might be higher in case of large farms.

### **Financially viable farms with unmet demand**

The percentages of rejected or discouraged financially viable farms have been calculated based on the FI Compass survey results. The percentages of unmet demand for each loan maturity-category were multiplied with the number of farms per farm-size category to obtain the number of viable farms with unmet demand (Table 15). In total 2,098 constrained farms in the lower boundary and 4,729 constrained farms in the upper boundary were identified in all loan categories in Slovakia. In the calculation same ratio of viable farms with unmet demand for all size categories is used.

Table 15 Share of viable farms with unmet demand in Slovakia

| Farm-size Category             | Loan Maturity | Lower Boundary                       |                         | Upper Boundary                       |                         |
|--------------------------------|---------------|--------------------------------------|-------------------------|--------------------------------------|-------------------------|
|                                |               | Share of Farms with Unmet Demand (%) | Farms with Unmet Demand | Share of farms with Unmet Demand (%) | Farms with Unmet Demand |
| Small-scale Farms (< 20 ha)    | Short-term    | 3.94%                                | 270                     | 9.61%                                | 659                     |
|                                | Medium-term   | 4.81%                                | 330                     | 10.12%                               | 695                     |
|                                | Long-term     | 4.74%                                | 325                     | 10.91%                               | 748                     |
|                                | Credit Line   | 3.82%                                | 262                     | 8.38%                                | 575                     |
| Medium-scale Farms (20-100 ha) | Short-term    | 3.94%                                | 113                     | 9.61%                                | 275                     |
|                                | Medium-term   | 4.81%                                | 138                     | 10.12%                               | 290                     |
|                                | Long-term     | 4.74%                                | 136                     | 10.91%                               | 312                     |
|                                | Credit Line   | 3.82%                                | 109                     | 8.38%                                | 240                     |
| Large-scale Farms (> 100 ha)   | Short-term    | 3.94%                                | 94                      | 9.61%                                | 231                     |
|                                | Medium-term   | 4.81%                                | 115                     | 10.12%                               | 243                     |
|                                | Long-term     | 4.74%                                | 114                     | 10.91%                               | 262                     |
|                                | Credit Line   | 3.82%                                | 92                      | 8.38%                                | 201                     |

Source: *fi-compass* survey, own calculations

Interviews with stakeholders confirmed that there are differences in loan rejection rates and share of discouraged farms out of total farms between different size categories and between different farm production types. Small farms, livestock farms and very specialized farms are characterized by higher unmet demand. Reliability of calculation would be improved if different rejection and discouragement ratios were used for different types of farms.

#### *Average loan volume*

To assess the financing gap, a standard size of loan was constructed, using an EU-wide geometric mean adjusted by PPS. Based on FI Compass survey the EU-wide geometric mean

of total loan for a small farm is 192,855 EUR, medium farm EUR 207,203 and large farm EUR 490,388 (Table 16). Loan volume for Slovakia uses the PPS index 67.9% (Eurostat).

Table 16 Average loan volume by farm-size category and maturity for Slovakia (EUR)

| Farm-size Category             | Loan Maturity | EU wide Loan Volume | Loan Volume Slovakia (PPP 67,9%) |
|--------------------------------|---------------|---------------------|----------------------------------|
| Small-scale Farms (< 20 ha)    | Short-term    | 17,502              | 11,884                           |
|                                | Medium-term   | 42,458              | 28,829                           |
|                                | Long-term     | 117,093             | 79,506                           |
|                                | Credit Line   | 15,801              | 10,729                           |
| Medium-scale Farms (20-100 ha) | Short-term    | 22,176              | 15,058                           |
|                                | Medium-term   | 40,355              | 27,401                           |
|                                | Long-term     | 127,144             | 86,331                           |
|                                | Credit Line   | 17,528              | 11,902                           |
| Large-scale Farms (> 100 ha)   | Short-term    | 65,406              | 44,410                           |
|                                | Medium-term   | 102,695             | 69,730                           |
|                                | Long-term     | 228,936             | 155,448                          |
|                                | Credit Line   | 93,351              | 63,385                           |

Source: *fi-compass* survey, own calculations

The size structure of farms in Slovakia is different than in the rest of the EU which has a direct effect on the loan volume. The average farm size is 80.7 ha, which is significantly higher than the EU average (16.6 ha). The large farms (above 100) in Slovakia are 2.62 times higher than large farms in the rest of the EU. The average large farm in Slovakia has 695 ha. Large farms in Slovakia being bigger therefore need higher volume of loans relative to large farms in the rest of the EU. On the other hand large farms in Slovakia invest less and produce less per hectare than large farms in the rest of the EU. Due to the higher loan volume for large farms the gap calculated for large farms in Slovakia using EU-wide geometric mean adjusted by PPS might be underestimated.

Small farms in Slovakia have been created only recently and therefore they do not have assets, collateral and sales comparable to small traditional family farms with longer history observed in old EU Member States (EU-15). Lower production and sales as well as lack of sufficient collateral affect the loan capacity of small farms in Slovakia, which on average are not able to repay the same amount of loans as small farms in EU-15. Based on national data (IL MARD SR) and insights from interviews the average total loan capacity of small farms in Slovakia is on average about 90,000 EUR.

### *Total financing gap*

The total financial gap for Slovak agriculture is between EUR 95.6 and 216.0 mil. (Table 17). Based on the interviews with relevant stakeholders including banks farmers' associations there is a significant financing gap for young farmers, and small farmers. Additionally, financial gap exists for large farms and farms focused on livestock production and specialized farms especially in fruits and vegetables production.

Table 17 Total financing gap in Slovak agriculture (EUR)

| <b>Farm-size Category</b>         | <b>Loan Maturity</b> | <b>Lower Boundary</b> | <b>Upper Boundary</b> |
|-----------------------------------|----------------------|-----------------------|-----------------------|
| Small-scale Farms<br>(< 20 ha)    | Short-term           | 3,209,997             | 7,834,163             |
|                                   | Medium-term          | 9,517,090             | 20,023,374            |
|                                   | Long-term            | 25,863,566            | 59,497,209            |
|                                   | Credit Line          | 2,809,828             | 6,164,228             |
| TOTAL Small-scale Farms           |                      | 41,400,480            | 93,518,973            |
| Medium-scale Farms<br>(20-100 ha) | Short-term           | 1,695,640             | 4,138,298             |
|                                   | Medium-term          | 3,771,233             | 7,934,444             |
|                                   | Long-term            | 11,708,325            | 26,934,131            |
|                                   | Credit Line          | 1,299,449             | 2,850,743             |
| TOTAL Medium-scale Farms          |                      | 18,474,647            | 41,857,615            |
| Large-scale Farms<br>(> 100 ha)   | Short-term           | 4,196,694             | 10,242,250            |
|                                   | Medium-term          | 8,053,489             | 16,944,048            |
|                                   | Long-term            | 17,691,241            | 40,697,384            |
|                                   | Credit Line          | 5,807,487             | 12,740,520            |
| TOTAL Large-scale Farms           |                      | 35,748,911            | 80,624,201            |
| TOTAL FINANCING GAP               |                      | 95,624,039            | 216,000,790           |

Source: *fi-compass* survey, own calculations

Around 37% of the financing gap is linked to large farms, which produce 95% of total agricultural output in Slovakia. Long-term loans gap is 59% of the total financing gap. Long-term loans are viewed risky by financial institutions. They are used mostly to purchase land and invest in buildings and other fixed assets. 90% of land in Slovakia is rented and there is huge fragmentation of land ownership. Farms wish to replace rented land by owned and to expand the size of the farm. Large fragmentation of land ownership hinders land and building use as a collateral. Financing gap is also higher for very specialized farms due to price risks and inefficient insurance market and for animal production which is generally less competitive in Slovakia and declining.

Small farms (below 20 ha) dominate in numbers (80% of all farms) but they cultivate only 3.5% of agricultural land in Slovakia. Small farms are very heterogeneous in Slovakia. They include



non-business individuals which have very limited agricultural activity, no-history, inferior collateral, low level of direct payments, and low human capital. These are part-time farms. Their ability to repay loans is low. This type of farms can on average take only small loans in Slovakia therefore these farms were not considered in the financing gap calculation. There are also viable small farms with good business projects and potential to sustain on the market. Financing gap for small farms exists mainly for long-term loans (63%) as they need to invest in land, machinery, and buildings. Small farms have insufficient collateral and credit history and low profitability. Infrastructure in Slovakia is suitable mainly for large farms (input suppliers, purchasers of output, land market, credit market).

The share of young farmers on financing gap was calculated based on the share of young farmers on rejected and discouraged (Table 18)

There are no differences in rejection and discouragement rates among large, small and medium farms. Also, the share of young farmers is different in small, medium and large farm categories. Large farms are less likely to be controlled by young farmers. Based on insights from interviews with financial institution and farmers the average loan volume of a young farmer is EUR 150,000 due to higher investment needs.

Table 18 Share of young and old farmers on rejected and discouraged viable farms

|  |        |
|--|--------|
| % Share of <u>Young</u> within viable REJECTED applications    | 61.95% |
| % Share of <u>Old</u> within viable REJECTED applications      | 38.05% |
| % Share of <u>Young</u> within viable DISCOURAGED applications | 27.47% |
| % Share of <u>Old</u> within viable DISCOURAGED applications   | 72.53% |

Source: *fi-compass* survey, own calculations.

The financing gap for young farmers in Slovakia is between 17.4 and 77.4 mil. EUR. Of this 60% is for long-term loans. (Table 19). This type of farms needs guarantees which would decrease the risk for banks.

Table 19 Young farmers financing gap in EUR

| Farm Category | Loan Maturity              | Lower Boundary | Upper Boundary |
|---------------|----------------------------|----------------|----------------|
| Young farmers | Short-term                 | 184,056        | 6,500,791      |
|               | Medium-term                | 2,930,719      | 17,080,304     |
|               | Long-term                  | 14,313,972     | 46,828,086     |
|               | Credit Line                | -              | 7,018,590      |
|               | <b>TOTAL financing gap</b> | 17,428,747     | 77,427,770     |

In Slovakia young farmers are mainly small and medium farms. Young farmers obtain increased support about 2% of direct payments and rural development grants in Slovakia. This does not cover their demand for external sources. Young farmers can obtain start-up grants in the amount of 50 000 EUR. However, young farmers have much higher demand for loans than ordinary small farms.

## 5 FINANCIAL INSTRUMENTS AND TECHNICAL SUPPORT

In Slovakia the biggest financing gap for all types of farms is in the long-term loans. Long-term loans make about 59 percent of the overall financing gap.

Young farmers have the most difficult access to sufficient funds for investment everywhere in the EU. However, in Slovakia the situation of young farmers is specifically difficult with respect to financing because young farmers are mostly newly created small farms with low assets, insufficient collateral, low production and difficult access to land. Young farmers form around 36 percent of the aggregate financing gap in Slovakia.

Interviews with stakeholders confirm that financial instruments (FIs) are specifically needed to support access to long-term loans for all types of farms. Small farms and young farmers would also benefit from financial instruments for short-term loans because they have insufficient access to working capital. FIs in Slovakia therefore should mainly focus on young farmers, small farmers and long-term loans.

Currently there is enough loanable funds in the Slovak banking system and interest rates are at historically lowest levels. The need for Funded risk-sharing Loan<sup>2</sup> is nowadays low due to favourable liquidity conditions on the market. This type of instrument furthermore is characterized by lower leverage effect and higher absorption of RDP resources.

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<sup>2</sup> *fi-compass*, 2019, Joint Initiative for improving access to funding for European Union Young Farmers

Slovak farmers would benefit from financial instruments in the form of guarantees. This was confirmed by all stakeholders in the focus group. Guarantee FIs would expand loans by solving insufficient collateral especially for small and young farmers.

The guarantee instrument provides a credit risk coverage to the financial institutions enabling them to create a portfolio of new loans. These new loans would cover the financing gap in Slovakia. A standard Guarantee instrument has several benefits<sup>3</sup>:

1. Due to decrease in credit risk farmers might benefit from lower interest rate. This benefit is derived from the standard structure of interest rate components. The interest rate consists of different components, many of which are not affected by the guarantee. The guarantee can only have an impact on the credit spread component. This component is expected to be reduced by the Guarantee instrument.
2. Leverage effect multiplies the CAP II. Pillar resources for farmers. An important aspect of guarantees relates to the distribution of losses in case of the borrower's default. Risk sharing arrangements can be made at the level of the individual loan, or alternatively, at the level of the portfolio. On the individual loan level, guarantees are provided with a fixed share of the loss on a single loan (e.g. 80%). Losses on individual loans can be limited (capped) at portfolio level. In this case losses incurred on individual loans will be paid to the bank according to the agreed loss share, but within a ceiling - the Guarantee cap - (corresponding to a given percentage of the total portfolio volume). The maximum 80% guarantee rate per loan and 25% cap rate at portfolio level are defined in art. 21(13) of the General Block Exemption Regulation, Commission Regulation (EU) N°651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty. In this case the multiplier is calculated as the share of CAP II. Pillar resources on the total portfolio of new loans. In this case the multiplier is 5 and calculated as follows:  $1/0,8 * 1/0,25$ .

The multiplier of CAP II. Pillar resources might be increased by the combination of EAFRD and ESI Funds. This combination of EAFRD and ESI Funds within portfolio Guarantee instrument is possible based on the general Omnibus Regulation.

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<sup>3</sup> fi-compass case study: Financial instruments for rural development 2014–2020 Occitanie/Pyrénées-Méditerranée.

Further study should be focused on adjustments of the Guarantee instrument to conditions in Slovakia. As Slovakia has no experience with FIs implementation technical assistance in form of knowledge transfer is needed.

Based on the insights from the interviews, there is a demand for full or partial coverage of interest rate cost by FIs as well as for the technical assistance. In the future the combination of FIs and grants should be considered too.

The implementation of FIs in Slovakia would also alleviate the problems of current investment grant system within the RDP. FIs will bring time flexibility for farmers as the frequency of calls in the programming period 2014-2020 was low. Furthermore, the project evaluation and monitoring processes of investment grants in RDP 2014-2020 were time consuming and connected with high administrative burden. MA in Slovakia together with EIB prepares a pilot FI project as a part of the CAP 2014-2020 to test the functioning and effects of FIs in Slovakia.

## CONCLUSIONS

### Key findings on constraints in access to finance

- Slovak farms have credit constraint especially for long-term loans and in sub-sectors in which Slovak agricultural production is declining (animal production, fruits and vegetables).
- Credit market fails to provide sufficient loans to small and young farmers. Banks do not have appropriate financial products for small and young farmers;
- New family farms in Slovakia were founded by mainly young farmers after 1989;
- Small and young farmers in Slovakia have short business history, low assets and collateral, relatively low support from CAP and national sources, but high investment needs;
- Small farms on average can sustainably absorb relatively low loans. There is a potential for growth of small farms if government adopts measures for supporting small farms.

Different FIs are recommended for large farms than for small farms. Small farms would benefit from simple and flexible FIs serving as guarantees for loans. Large farms would benefit from long-term loans supported by FIs. Policymakers should place a special attention on the use of FIs in sub-sectors with potential high value added, like production of fruits and vegetables or animal production.

### **Key findings on emerging trends for supply and demand for finance**

- The volume of loans has been increasing steadily since 2013 due rising CAP support, low interest rates, higher availability of funds, GDP growth, and continuing stabilization of farming sector;
- Provision of short-term loans is alleviated by CAP's direct payments which serve as a collateral. Banks also pre-finance and co-finance RDP projects. Loans linked to CAP make 75% of all loans in Slovakia;
- There are currently no financial instruments for farmers in place in Slovakia;
- All interviewed stakeholders confirmed that FIs would be more efficient than RDP grants. In addition to reducing credit constraint, FIs will decrease administration cost for farmers, provide time flexibility and solve the problem of low frequency of calls for proposals;
- A guarantee instrument based on EAFRD funds would support access to finance for farmers (young farmers in particular) who lack sufficient assets to be used as collateral.

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