Financial needs in the agriculture and agri-food sectors in Slovenia

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DISCLAIMER

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Glossary and definitions

Expression	Explanation
Agri-food survey	Survey of the financial needs of EU agri-food processing enterprises carried out in mid-2019 in the framework of study 'EU and Country level market analysis for Agriculture' and based on respondents' financial data from 2018.
CAP	Common Agriculture Policy
CSB	Central Statistical Bureau of Slovenia
EAA	Economic Accounts for Agriculture
EAFRD	European Agriculture Fund for Rural Development
EC	European Commission
EIB	European Investment Bank
EIF	European Investment Fund
ERDF	European Regional Development Fund
EU	European Union
EU 24	The 24 EU Member States covered by the *fi-compass* 'EU and Country level market analysis for Agriculture': Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.
EU 28	All EU Member States: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, The United Kingdom.
FADN	Farm Accountancy Data Network
fi-compass survey[1]	Survey on financial needs and access to finance of 7600 EU agricultural enterprises carried out by *fi-compass* in the period April-June 2018 and based on respondents financial data from 2017.
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GVA	Gross Value Added

1 *fi-compass*, 2019, 'Survey on financial needs and access to finance of EU agricultural enterprises', Study report, https://www.fi-compass.eu/publication/brochures/survey-financial-needs-and-access-finance-eu-agricultural-enterprises.

ha	Hectare
LDR	Loan-to-deposit ratio
MAFF	Ministry of Agriculture, Forestry and Food
NKBM	Nova KBM
NPL	Non-Performing Loans
RDI	research / development and innovation
RDP	Rural Development Programme
SBS	Structural Business Statistics
SEF	Slovene Enterprise Fund
SME	Small and medium-sized enterprise
SO	Standard Output
SRDF	Slovenian Regional Development Fund “Ribnica”
UAA	Utilised Agricultural Area

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EXECUTIVE SUMMARY

This study gives an insight into agriculture and agri-food financing in Slovenia by providing an understanding of the investment drivers, financing supply and financing difficulties, as well as the existing financing gap.

The analysis draws on the results from two comprehensive and representative EU-level surveys carried out in 2018 and 2019. These were the *fi-compass* survey on financial needs and access to finance of EU agricultural enterprises and a survey of the financial needs of EU agri-food processing enterprises. The report does not take into account the impact of the ongoing COVID-19 health crisis and/or the effect of any new support scheme being set-up by the Member State and/or changes in legal basis and/or policies at European level to mitigate the crisis, as surveys and data available covered a period prior to its outbreak. This would need to be subject to further analyses by interested stakeholders, administrations and/or researchers.

Financing gap for the agriculture sector in Slovenia

Agriculture investments in Slovenia are on an upward trend. At 49% of the sector's Gross Value Added (GVA) in 2018, Gross Fixed Capital Formation (GFCF)[2] is above the EU 28 average. Investments are driven by several factors, including modernisation of equipment and machinery, expansion of production and productivity enhancement, purchase of agricultural land, and climate change. The dairy, wine, and fruit sub-sectors display the most dynamic investment levels.

The Common Agricultural Policy (CAP), through the direct payments and investment support provided by the Rural Development Programme (RDP), plays an important role in driving modernisation investments in agriculture. Between 2015 and 2019, over EUR 190 million was provided for investment in agriculture and start-up aid for young farmers.

Farmers in Slovenia mostly apply for short-term bank finance, according to results of the *fi-compass* survey. This demand for short-term finance contrasts with the more long-term nature of identified investment drivers and is indicative of difficulties for Slovenian farmers in accessing loans with longer maturities. Survey findings reveal that access to finance was considered a bigger problem for farmers in Slovenia than anywhere else in the EU 24. Access to land is also a significant issue in Slovenia.

A large majority (about 80%) of agricultural producers use the services of a single bank (Deželna Banka Slovenije), which has a client base composed largely of agriculture producers, agriculture cooperatives and agri-food enterprises. Targeted products are available to farmers without credit and business history. However, farmers with no business or credit history, or that do not have a stable business relation with the bank, are often offered standard household financial products, such as consumer and mortgage loans. The Slovenian Regional Development Fund supports regional and rural development, including the provision of loans with a favourable interest rate and longer maturities to the agriculture and agri-food sectors. The take-up of the instrument is reported to be quite low, partly due to a limited budget.

2 GFCF measures the value of acquisitions of new or existing fixed assets. GFCF/GVA is used as a measure for how much of the new value added in the economy is invested rather than consumed. Increase of the GFCF is a measure of business confidence, a belief in that investments will be profitable in the future. In times of economic uncertainty or recession, typically business investment in fixed assets will be reduced, since it ties up additional capital for a longer interval of time, with a risk that it will not pay itself off.

The financing gap for the agriculture sector is estimated at EUR 952 million, which mainly concerns access to long-term financing[3]. Small-sized farms[4] have the most difficulties in accessing finance. Among farmers requesting loans, some 17% of the applications were rejected. While, among the farmers that did not apply for a loan, approximately 17% did not do so due to the fear of being rejected by the banks.

Lack of credit history, in conjunction with the lack of bookkeeping and business history is an important driver of the financing gap, particularly for young farmers that also lack a well-established bank relationship. Additionally, lack of collateral and adequate business plans, together with low repayment capacity, exacerbate the difficulty of accessing finance, particularly for small-sized farms. Furthermore, the concentration of the supply within one bank and lack of interest among other banks that prefer working with less risky and more profitable customers means that the choice of provision of finance available to farms is limited. Also, high credit approval costs and burdensome administrative procedures can cause farmers to refrain from applying for loans. This can be compounded by a lack of financial literacy, which may lead to farmers not being willing to discuss their financial situation or being unable to prepare the required documentation.

RECOMMENDATIONS

In order to improve farmers' access to finance, the following proposals could be considered:

- As proposed in the ex-ante assessment for the use of financial instruments and its update, the setting-up of a guarantee instrument with EAFRD resources continues to be relevant in Slovenia. The instrument could improve access to credit for the most affected market segments (small-sized farms and young farmers), reduce collateral requirements and, to some extent, financing cost. It may also stimulate other banks to enter the sector and start financing farmers.
- An EAFRD risk-sharing loan instrument might also be considered, as it would combine the provision of risk coverage with a reduction of the financing cost. Such an instrument could also be effective in promoting longer loan maturities. Preferential loans are already available to farmers, but their take-up is reported to be low by stakeholders, also due to budget limitations. At the same time, farmers, particularly young farmers, face higher financing cost than enterprises in other sectors.
- A specific micro-credit instrument might be considered to meet the needs of the large number of small-sized enterprises with requirements for small loan amounts, who currently appear to have a low level of financial inclusion.
- For all the above mentioned financial instruments, the possibilities offered by the new legal framework (e.g. easier combination of financial instruments, grant support and interest rate subsidies, finance for the purchase of land for young farmers, and stand-alone working capital finance) might provide interesting opportunities to increase the effectiveness of financial instruments available to small-sized farms, young farmers and new entrants.
- Technical assistance to improve farmers financial literacy, digital skills, and managerial skills, could be beneficial. Farmers are often not familiar with on-line banking and their lack of digital skills prevents them from benefitting from the growing offer of online services.
- The setting-up of one or more financial instruments accompanied by a competition to select the partner financial institutions, could stimulate interest among banks to develop services for the agriculture sector, thereby reducing market concentration.
- Capacity building to improve understanding of the agriculture sector could help overcome barriers caused by lack of sector knowledge within banks and stimulate the entry of new players in the provision of finance for agriculture.

3 The *fi-compass* survey defined short-term loans: <18 months, medium-term loans: 18 months – 5 years, long-term loans: >5 years maturity.

4 The *fi-compass* survey, on which the estimations are based, divided farms in three size categories: small (below 20 hectares), medium-sized (20-100 hectares), and large (Above 100 hectares). In Slovenia, in 2016, less than 6% of the farms were above 20 ha.

Financing gap for the agri-food sector in Slovenia

The agri-food sector is characterised by high production costs and low selling prices, coupled with difficulties to access market outlets and retailers. This reflects a weak value chain, fierce competition from imported food products, and the ability of lead agri-food producers to operate on small economic margins.

Nevertheless, in 2016 and 2017, gross investment in the Slovenian agri-food sector increased to reach EUR 205.8 million. This followed a drop of approximately 59% between 2008 and 2015, resulting from the economic crisis. Investments in the sector are driven by the modernisation of equipment, machinery and facilities, alongside investments relating to climate change mitigation policies, as well as expansion of production capacity. New product development targeting niche products for local consumers and entry into new geographical markets is another important driver. Between 2008 and 2017, the number of firms in the Slovenian agri-food sector grew by almost 150%, mostly explained by the numerous farmers that started to undertake activities linked to processing their own products and/or products from the local area.

Agri-food enterprises mostly apply for short-term loans. Although the preference for shorter maturities can be seen as a reflection of the considerable need for working capital, it contrasts with the more long-term nature of the investment drivers identified from the analysis. As for the agriculture sector, it is likely that this demand for short-term finance is indicative of difficulties for Slovenian agri-food processors in accessing loans with longer maturities.

In this context, investment support from the EAFRD provided through the Rural Development Programme (RDP) has been found to have a positive influence on the investment decisions of many agri-food companies, particularly small-sized enterprises.

The financing gap for the agri-food sector is estimated at EUR 127.4 million. Small-sized agri-food enterprises (<50 employees) have the most difficulties in accessing finance, especially for long-term loans. The rejection rate of loan applications stands at 11%, and results from the Agri-food survey indicate that 10% of agri-food companies are discouraged from applying to banks due to their fear of being rejected.

The low economic margins of many agri-food companies raises questions about their repayment capacity and the risk for banks to lend to them. Consequently, banks have a limited interest in lending to small-sized companies in the sector. Other drivers of the financing gap for agri-food companies include lack of collateral, lack of credit history, burdensome loan application process, as well as lack of financial literacy among start-up companies. In addition, loan terms and conditions are often unfavourable, and not adapted to the specificities of the agri-food sector. Start-ups and young farmers who want to start processing products are the predominant discouraged segment. For these farmers, their limited business and entrepreneurial experience, as well as their lack of financial literacy and/or own resources, may hold them back from approaching banks.

RECOMMENDATIONS

To prevent the financing gap increasing further, its root causes could be addressed through measures like those proposed for the agriculture sector:

- As proposed in the ex-ante assessment for the use of financial instruments and its update, the setting-up of a guarantee instrument with EAFRD resources continues to be relevant in Slovenia. It might be an effective tool to support access to long-term finance for small-sized enterprises, which represents the largest part of the identified financing gap in Slovenia.
- An EAFRD risk-sharing loan instrument might also be considered, as it would combine the provision of risk coverage with a reduction of the financing cost. This would facilitate access to credit for micro and small-sized enterprises, which face higher financing cost than larger enterprises.
- The design of the financial instrument and its set-up might attempt to stimulate the offer of financial products more adapted to the specific needs of the agri-food enterprises (for example through an open

call for the selection of the partner financial institutions). A capacity building activity dedicated to interested banks might also contribute to this objective.

- The opportunities offered by the new legal framework, such as the easier combination of financial instruments, grant support and interest rate subsidy, might offer interesting opportunities to increase the effectiveness of all the above mentioned financial instruments to improve access to finance for small-sized firms and start-ups.
- Additional technical support aimed at improving financial literacy and digital skills among small-sized enterprises and start-ups could be beneficial. Farms investing in food processing to diversify their activity are signalled as a specific segment with such technical support needs.

1. INTRODUCTION

Objective

This document belongs to a series of 24 country reports and presents an assessment of the potential financing gap for the agriculture and agri-food sectors in Slovenia. The assessment is based on the identification and evaluation of the supply of and demand for financing, on the one hand, and on the quantification of the currently unmet demand for financing for the two sectors, on the other hand. This report aims to contribute to a better understanding of the potential need for continuing currently operating financial instruments, or the creation of new or additional ones, supported by the European Agriculture Fund for Rural Development (EAFRD).

Approach

To conduct an analysis of the potential financing gap in the agriculture and agri-food sectors, the study under which this report is prepared adopts the following three-step approach:

1. Assessment of the number of farms/firms participating in the credit market and analysis of the dynamics of their demand.
2. Mapping of the sources of finance and examination of the dynamics of supply of credit.
3. Assessment of the potential existence of a financing gap, whereby parts of the demand cannot be satisfied by the existing supply but could benefit from financial instruments.

By definition, a financing gap (for a specific sector) arises from unmet financing demand from economically viable enterprises (operating in the same sector). This unmet demand includes two major elements:

I. lending applied for (by the viable enterprises), but not obtained as well as
II. lending not applied for (by the viable enterprises) due to expected (by the same enterprises) rejection of the application (by a financial institution).

The analysis draws on the results from two comprehensive and representative, at EU level, surveys carried out in 2018 and 2019, namely the *fi-compass* survey on financial needs and access to finance of EU agricultural enterprises and a survey of the financial needs of EU agri-food processing enterprises, where the latter survey was undertaken as part of the work of this study. The analysis of supply and demand for finance is further elaborated by desk research and enriched with secondary data obtained from EU and national data sources.

The financing gaps for the two sectors are calculated using data from the above-mentioned surveys and additional data and statistical indicators from Eurostat. The calculated financing gaps for the two sectors are independent from each other. The report also outlines the drivers of unmet demand for finance as identified from desk research, and from interviews with key stakeholders from the agriculture and agri-food sectors, Government representatives, and financial institutions, and as identified by two focus groups, one for each sector. Information on the supply side of finance was obtained from interviews with nationally or regionally operating financial institutions.

The report does not take into account the impact of the ongoing COVID-19 health crisis and/or the effect of any new support scheme being set-up by the Member State and/or changes in legal basis and/or policies at European level to mitigate the crisis, as surveys and data available covered a period prior to its outbreak. This would need to be subject to further analyses by interested stakeholders, administrations and/or researchers.

Report structure

This report is structured in two parts, each focused on one of the sectors of interest: Part I covers financing for the agriculture sector; and Part II discusses financing for the agri-food sector. Each part is structured in five sections: an overview of the market, an analysis of the demand for financing, an analysis of the supply of finance, an assessment of the financing gap, and conclusions and recommendations.

2. PART I: AGRICULTURE SECTOR

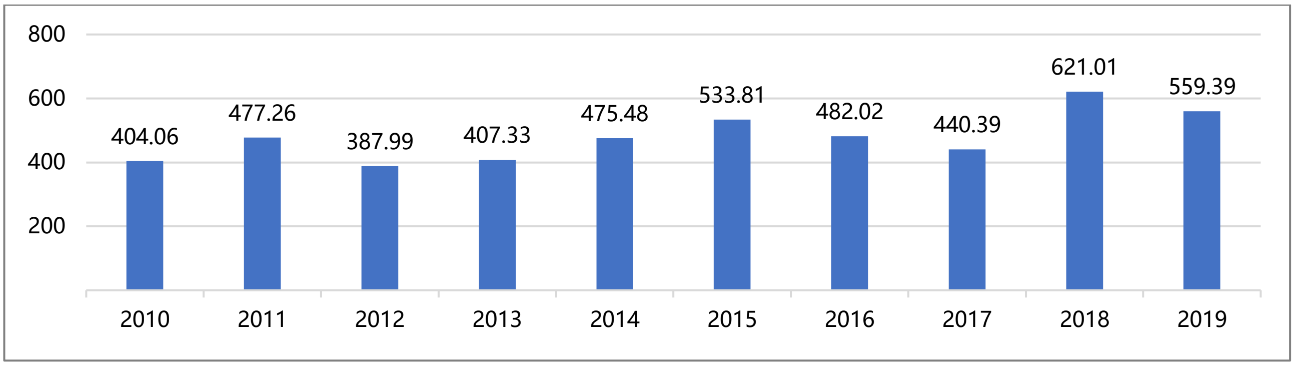
2.1. Market Analysis

Key elements on the Slovenian agriculture sector
• The Gross Value Added of the Slovenian agriculture sector increased by approximately 38% between 2013 and 2019, although with significant fluctuations over the period. • In 2016, Slovenia had 69 900 farm holdings, with agriculture accounting for 4.6% of total employment. • 35% of the farms specialise in grazing livestock (cattle, dairy), followed by 19% in arable crops and 17% in mixed farms. The crops sub-sector has the highest production value. • The average farm size in Slovenia is 6.9 ha, with almost 60% of agriculture holdings having an Utilised Agricultural Area (UAA) of less than 5 ha. Under 6% of the farms are above 20 ha. • Agriculture cooperatives have an important role, accounting for almost three-quarters of the total purchases and sales of farm products. • The average age of farmers is 57 years. In 2016, young farmers below the age of 40, accounted for 9% of the farm population. • Between 2010 and 2018, there was an unsteady development pattern of growth in agriculture income, with a sharp decrease recorded from 2016 to 2017. • The sector had a trade deficit of EUR 815.8 million in 2018.

Slovenia is predominantly a rural country, with an agriculture sector that is dominated by family farms. Agriculture represents a significant part of employment. In 2016, there were approximately 69 900 agriculture holdings in Slovenia. In 2017, the share of the workforce employed in agriculture sector was equivalent to 4.6% of the total employment. Approximately 97% of the workforce employed in the sector works in family farms[5]. In 2018, the agriculture sector accounted for 1.4% of total GVA of the Slovenian economy[6].

Between 2013 and 2019, agriculture GVA increased by 38%, although with significant fluctuations over the period (Figure 1).[7] The value of agricultural production was approximately EUR 1.3 billion in 2018.

Figure 1: GVA in the Slovenian agriculture sector, 2010-2019, EUR million



Source: Eurostat - Economic Account for Agriculture, 2019[8].

5 Kis and MAFF, 2019, Green report about Agriculture and Agri-food situation in Slovenia for 2018, https://www.kis.si/Porocila_o_stanju_v_kmetijstvu_OEK/.
6 Eurostat - Economic Accounts for Agriculture, 2019.
7 Eurostat - Economic Accounts for Agriculture, 2019.
8 Based on latest available data.

The average age of farmers is 57 years. In 2016, 28.5% of Slovenian agriculture holdings were owned by farmers older than 64, whereas young farmers (under the age of 40) accounted for approximately 9% of the farm population[9].

In 2016, the average farm size was 6.9 ha, only a slight increase from 6.4 ha[10] in 2010[11]**.** In the same year, farms with an UAA of less than 5 ha accounted for almost 60% of the farm population (Table 1)[12], with less than 6% of farms above 20 ha. Overall, as shown in Table 1, there was almost no noticeable structural change between 2010 and 2016.

Table 1: Number of Slovenian farms by utilised agriculture area, 2010-2016

	2010		2013		2016	
Agriculture area	**Number**	**Share (%)**	**Number**	**Share (%)**	**Number**	**Share (%)**
Less than 5 ha	45 390	60.8	43 270	59.7	41 570	59.4
From 5 to 9.9 ha	17 440	23.3	17 260	23.8	16 060	22.9
From 10 to 19.9 ha	8 350	11.1	8 190	11.3	8 230	11.7
From 20 to 49.9 ha	2 990	4.0	3 120	4.3	3 430	4.9
From 50 to 99.9 ha	380	0.5	420	0.5	500	0.7
Over 100 ha	100	0.1	110	0.2	120	0.2
Total	**74 650**	**100**	**72 380**	**100**	**69 900**	**100**

Source: Eurostat - Economic Account for Agriculture, 2019[13].

Most farmers are dairy and cattle producers, but the crop sector has the highest share of the production value. Farms specialise in grazing livestock, such as cattle and dairy, account for 35% of the total number of farms. They are followed by in arable crops (19.2% of farms), mixed farms (17.1%), farms managing perennials, such as wine and fruit (13.1%), and mixed livestock farms (5.4%). In terms of production value, however, the crop sub-sector dominates; it accounts for 55.6% of total of agriculture output, of which forage plants and wine were the most important sectors. Animal production represented 43% of the overall agricultural output value, within which dairy has the highest share[14].

Average income levels of farmers is low and has shown an unsteady pattern of development over the past decade. The average farming income in Slovenia is approximately EUR 7 000, with 70% of the farmers having another part-time job to complement their farming income.[15] As shown in Figure 2 there has been an unsteady development of farm income between 2009 and 2018. The sharp drop that occurred in 2016 and 2017 is mostly due to adverse climate conditions, such as frost affecting the permanent crops sectors. In 2018,

9 Eurostat, 2019, Economic Accounts for Agriculture.

10 Eurostat, 2019, Economic Accounts for Agriculture.

11 The farm structure of Slovenia is important to bear in mind for the forthcoming analysis in this report, where the *fi-compass* survey results will be analysed. The analysis of the survey divided farms into small-sized farms (below 20 ha), medium-sized farms (20-100 ha), and large-sized farms (above100 ha). Hence, in the case of Slovenia, 94% of the farms will fall into the category of small-sized farms. However, in the understanding of the national context, a small-sized farm is considered to be smaller than five ha, rather than below 20 ha. Farms between 20 and 50 ha are considered commercial farms, and farms above 50 ha are considered large-sized farms.

12 European Commission, DG Agri, June 2019, Statistical Factsheet for Slovenia.

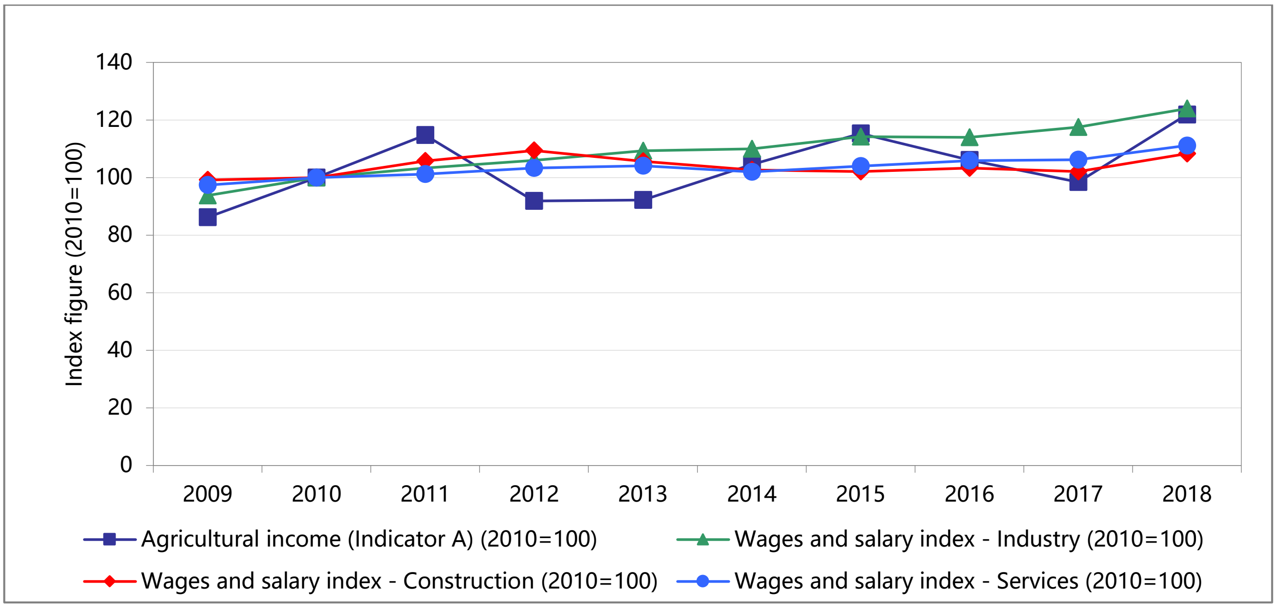
13 Based on latest available data.

14 European Commission, DG AGRI, June 2019, Statistical Factsheet for Slovenia.

15 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex No 12.

agriculture income grew strongly, to reach the highest level over the observed period, at 20% above the level of 2010.[16]

Figure 2: Evolution of agriculture income compared to wages and salaries in other sectors of the economy, 2009-2018



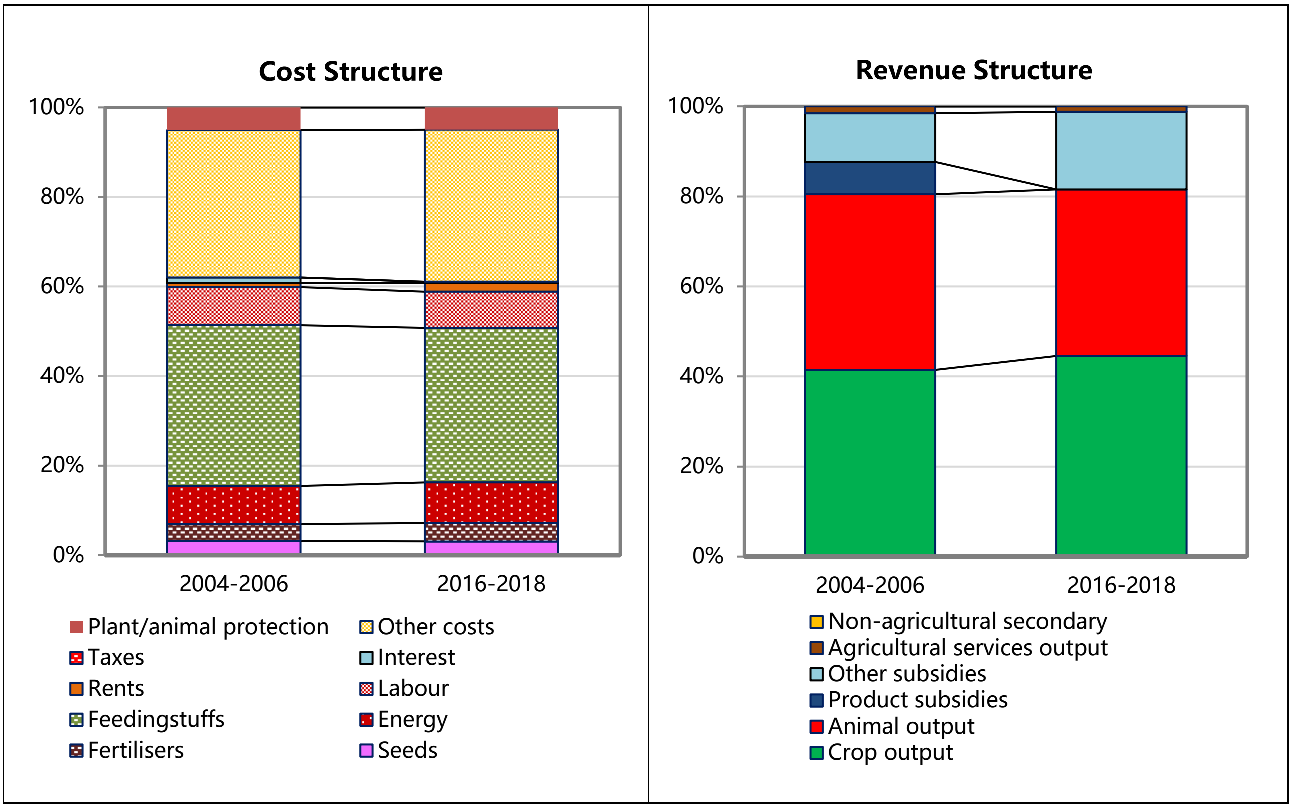
Source: European Commission, DG AGRI, Statistical Factsheet for Slovenia, June 2019.

Over the past decade, output and input prices for the Slovenian agriculture sector have developed along matching paths. Even if there has been a lot of variation in annual farming incomes over the period 2010 to 2018, output and input prices have closely followed each other. Prices peaked in 2012 and 2013 at 20% above their 2010 levels, before falling back to their 2010 levels in 2018[17]. Meanwhile, consumer food prices have followed, or even been above, consumer prices for other sectors (See Annex A.6 for figures).

Over the last 15 years, the cost structure in the agriculture sector has remained relatively stable. Feedstuffs make up the largest element within the cost structure of Slovenian agriculture sector (Figure 3). Changes in the revenue structure of agriculture have also been limited, with the most important differences associated with changes in subsidy income arising from the numerous CAP reforms and the replacement of production support by income support in the form of the Single Area Payment Scheme. Revenues in the animal sector have decreased, whereas they have increased in the crop sector.

16 European Commission, DG AGRI, June 2019, Statistical Factsheet for Slovenia.
17 European Commission, DG AGRI, June 2019, Statistical Factsheet for Slovenia.

Figure 3: Agriculture income – cost and revenue structures in Slovenia, 2004-2018



Source: European Commission, DG AGRI, Statistical Factsheet for Slovenia, June 2019.

In 2018, the Slovenian primary sector reported a trade deficit of EUR 815.8 million. The value of agricultural product exported was EUR 2 billion, representing 5.4% of the total exports in 2018, while imports stood at EUR 2.8 billion or 8% of the total imports. [18] Trade with EU countries accounted for 71% of Slovenian agricultural product imports and 75% of exports.

Agriculture cooperatives play an important role in the Slovenian agriculture sector. Over 100 agriculture cooperatives are active in the Slovenian market, most of them for dairy and cattle production, where they hold strong market positions. 14 000 farmers are directly affiliated, and at least three times as many that do business with them, whereby approximately three-quarters of the total purchases and sales of farm products go through the cooperatives. Besides purchasing agriculture produce from farmers, the cooperatives also act as the suppliers of inputs, including raw materials, plant protection products, seeds, mineral fertilizers and fodder, and several of them also process agricultural produce. Additionally, the coops own more than 350 stores and supermarkets and employ approximately 3 000 people. Slovenian agriculture cooperatives have a market share for eight products that is above the average for EU cooperatives: 78% for milk, 76% for wine, 83% for fruit and vegetables, 41% for wheat, 52% for maize and 82% for pigs.[19]

Statistical factsheet Slovenia, 2019

More data on agriculture indicators from Slovenia can be found in the **Statistical Factsheet for Slovenia 2019** of the Directorate-General for Agriculture and Rural Development, Farm Economics Unit and in the Annex A.6.

18 European Commission, DG AGRI, June 2019, Statistical Factsheet for Slovenia.

19 Cooperative Union of Slovenia internal data, 2014, based on latest data available.

2.2. Analysis on the demand side of finance to the agriculture sector

This section describes the drivers of demand for finance in the agriculture sector and analyses the met and unmet demand. It seeks to identify the main reasons for farms to request financing and the agriculture sub-sectors showing the largest need for finance. The section also provides an analysis of the type of producers that face the greatest constraints to accessing credit. The examination of the demand for agricultural finance is based on the findings from the *fi-compass* survey results of 315 Slovenian farms, as well as interviews with key stakeholders in the agriculture sector, combined with information obtained from the Farm Accountancy Data Network (FADN).

Key elements on finance demand from the Slovenian agriculture sector

- Investment in the agriculture sector, in terms of GFCF, is on an upward trend. Its share of GVA, at 49% in 2018, is well above the EU 28 average of 31.4%.
- Demand for finance is driven inter alia by investments in modernisation of equipment and machines to improve productivity, the expansion of production capacity, and the purchase of agriculture land.
- The main sectors responsible for the growing investment demand are dairy, wine, and fruit.
- Investments by the agriculture sector have been facilitated by support from the CAP, in particular investment support from the EAFRD.
- The most frequently demanded financing products are short-term loans, which were applied for by 9% of farmers, as compared to 4% for long-term loans.
- Access to land is an important issue in Slovenia, with 20% of farmers reporting that they have experienced difficulties, as compared to an EU 24 average of 11%.
- The total value of unmet credit demand in the Slovenian agriculture sector is estimated at EUR 1.2 billion.
- Approximately 17% of the loan applications for long-term, medium-term, and short-term loans were unsuccessful, either because the application was rejected by the bank or because the bank's loan offer was refused by the farmer.
- The main reasons for banks to reject an application are lack of credit history, lack of collateral, an inadequate business plan and accountancy records, and low repayment capacity.
- Among farmers that did not apply for a loan in 2017, 16% cite fear of rejection as a reason for not making an application.
- 15% of Slovenian farmers reported access to investment finance as problematic, and 13% found access to working capital finance difficult.
- Lack of financial literacy amongst farmers is a reason for them to refrain from submitting a loan application.
- Access to finance for young farmers is comparatively more difficult than for other enterprises, and the financing conditions they are offered are less favourable in terms of collateral requirements, costs and grace periods.

2.2.1. Drivers of total demand for finance

A positive investment trend for the Slovenian agriculture sector. Gross Fixed Capital Formation (GFCF) in the Slovenian agriculture sector increased over the period 2011-2018. [20] Investment levels increased from EUR 203.7 million in 2011 to EUR 249 million in 2015. After a slight decrease in 2016 due to the impact of adverse weather climate conditions, the upward trend continued, reaching EUR 305.3 million in 2018 (Table 2). In 2018, investments in non-agriculture assets amounted to EUR 272.5 million, accounting for

20 Eurostat, 2019, Agriculture Economic Accounts.

approximately 90% of total investments. The largest amount was devoted to investments in capacity expansion and efficiency, with approximately EUR 210 million invested in machines and equipment[21]. The shares of GFCF in total GVA of the agriculture sector increased from 42.7% in 2011 to 49.1% in 2018. In 2017, Slovenia had the highest share on GFCF in GVA within the EU 28, with a rate of 58% compare to EU 28 average of 31.4%.

Table 2: Gross Fixed Capital Formation in the Slovenia agriculture sector, 2011-2018, EUR million

	2011	2012	2013	2014	2015	2016	2017	2018
Agriculture Products	**22**	**20.2**	**27.2**	**36.6**	**37.9**	**34.4**	**33.5**	**32.8**
Animals	11.9	6.9	10.5	17.7	18.7	14.9	12.1	12.5
Plantations	10.1	13.3	16.6	18.9	19.1	19.5	21.3	20.2
Non-Agriculture Products	**181.7**	**192.1**	**196.7**	**196.3**	**211.1**	**196.8**	**222.3**	**272.5**
Materials	132.1	142.3	145.1	142.6	154.7	138.7	161.7	209.6
Buildings	48.4	48.7	50.9	53.1	55.3	57.6	59.9	62.4
Other	1.1	1.1	0.6	0.5	0.9	0.5	0.6	0.4
Total GFCF	203.7	212.4	224.0	233.0	249.0	231.3	255.8	305.3
GFCF as a share of GVA	42.7%	54.7%	54.9%	49%	46.6%	47.9%	58%	49.1%

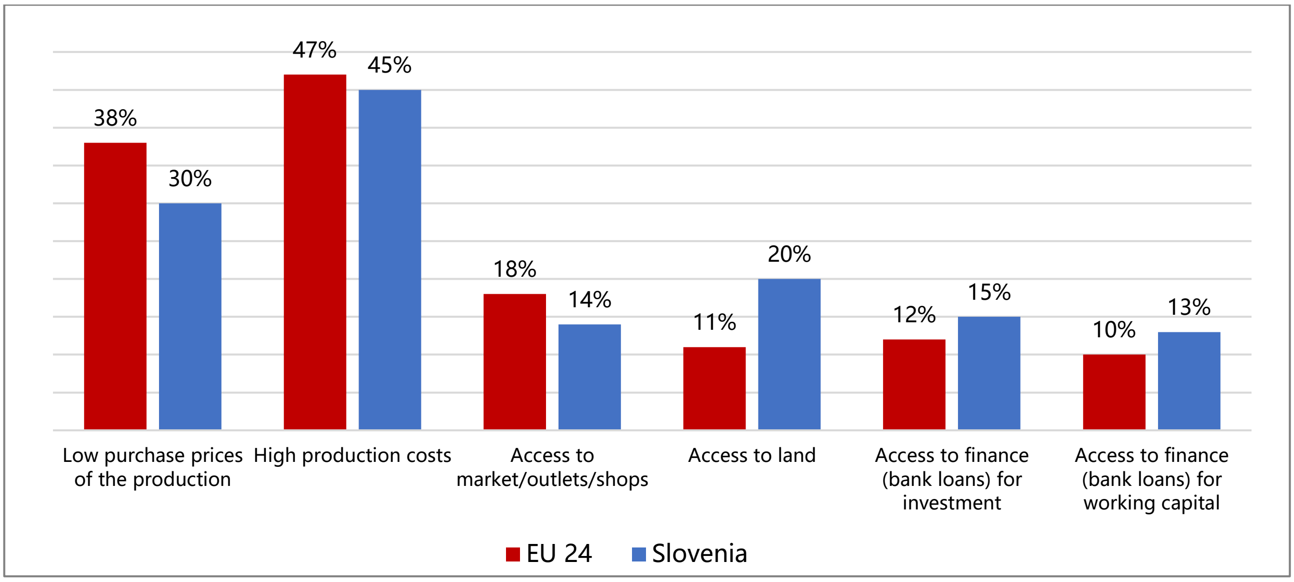
Source: Eurostat – Economic Agriculture Accounts, 2019.

The dairy and fruit and vegetable sub-sectors suffered from squeezed economic margins and low profits. According to the *fi-compass* survey, in 2017, 45% of Slovenian farmers experienced difficulties relating to high production costs, and 30% experienced problems relating to selling prices (Figure 4). Squeezed economic margins is a problem in almost all EU Member States, and Slovenia does not stand out in any particular manner in this regard. The most affected sub-sectors are dairy and fruit & vegetable. In 2016, for example, apple production was hit severely by frost and hail. In the same year, the dairy sub-sector entered a market price crisis, as the strong foreign competition pushed down the prices and put significant pressure on Slovenian dairy production, from which the sub-sector has yet to recover.[22] Competition from other EU countries is also an important challenge for fruit and vegetable farms, with the orientation of domestic demand towards foreign products having a negative effect on the prices of domestic production.

21 Eurostat, 2019, Agriculture Economic Accounts.

22 Interviews with farm organisations and universities, 2019.

Figure 4: Difficulties experienced by farmers in 2017



Source: fi-compass survey.

Slovenian farmers experience more difficulties in accessing land and finance than many other EU 24 farmers. Approximately 20% of the surveyed Slovenian farmers indicate encountering problems of access to land, which compares to 11% for their European peers (11%). Difficulties arise also in relation to access to investment loans (15% of respondents in Slovenia compare to an EU 24 average of 12%) and working capital loans (13% compared to EU 24 average of 10%). The issues relating to access to finance is analysed in detail under section 2.2.2.

Access to land, which is influenced by land policy, is consider problematic be several stakeholders. Interviews with universities, the Ministry of Agriculture (MAFF) and agriculture organisations, revealed that 7% of the agriculture land belongs to the National Agricultural Fund.[23,24] As large parcels of agriculture land are not available from other sources, the Fund is the most important leasing entity in Slovenia.

In 2018, out of the almost 60 000 ha managed by the National Agricultural Fund, approximately 21 000 ha were rented to 510 legal entities, with an average of 41.9 ha per entity and an average rental price of EUR 142 per ha. In the same year, 16 158 leasing contracts were signed with individual farms, renting on average 1.9 ha per person at an average price of EUR 137 per ha[25]. By comparison, in 2016, the average annual rent of arable and permanent grassland in Slovenia was EUR 146.54 per ha.[26] According to agriculture

23 The National Agricultural Fund manages and disposes of the state-owned farmland, farms and forests, and ensures their rational use and cultivation. For this purpose, the Fund puts the farmland out to lease. Following the adoption of the development policy and directions of Republic of Slovenia, it provides interested farmers and farm enterprises additional land for farming activities, enables their enhanced production and consequently higher income and development.

24 The National Farmland and Forest Fund Act, 1993, Official Gazette of Republic of Slovenia No. 10/93 and its subsequent amendments.

25 Republika Slovenija, 2019, Porcilo o delu in zaklucni racun sklada kmetijskih zemljisc in gozdov rs za leto 2018, http://imss.dz-rs.si/IMiS/ImisAdmin.nsf/ImisnetAgent?OpenAgent&2&DZ-MSS-01/1013e6dfaa27b6e888c28712f5a7dde5ea75d540861710635c31a94ed435fb2c.

26 Sveta Sklada, 2018, Cenik zakupnin za kmetijska zemljišča za leto, http://www.s-kzg.si/static/uploaded/htmlarea/2018/Cenik_zakupnin_za_kmetijska_zemljia_za_leto_2018.pdf.

stakeholders, access to land for family farms is complicated by the Fund's policy of renting to larger enterprises[27], which is argued to be one of the drivers of increasing costs of renting land.

Interviewed government representatives take the view that the main reason for difficulties in accessing land to increase farm size is the fragmentation of land ownership and production associated with the existence of numerous very small-sized farms.

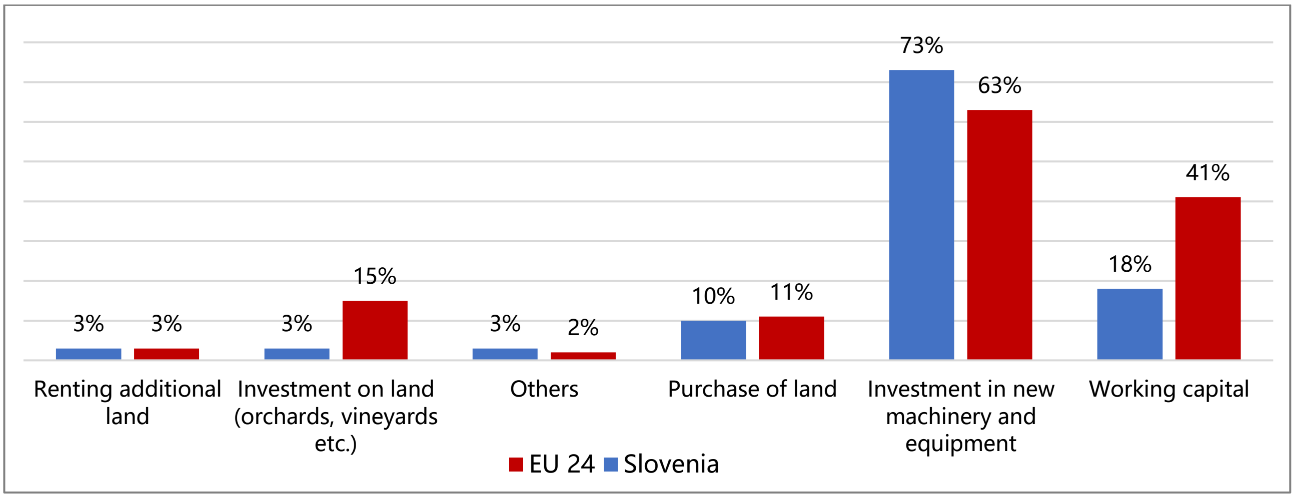
In addition, interviewed agriculture stakeholders highlight land legislation[28] and policy as contributing to a rigid and illiquid land market. For example, inherited land cannot be split, while priority for purchasing land is given to neighbouring farms and then family farms.

The main drivers of demand for finance include:

- Investments aimed at the modernisation of the equipment/machinery, including increased productivity.
- Investments to mitigate and adapt to the impacts of climate change.
- Investments aimed at the expansion of the agricultural production.
- Investments aimed at meeting EU regulatory requirements (animal welfare standards).
- Purchase of land.

Investments in modern production technologies are an important driver of the demand for finance. In 2017, according to the *fi-compass* survey, 73% of Slovenian farmers sought finance to invest in buildings, equipment, and machinery (Figure 5). This makes Slovenia one of the countries with the highest share of investments targeted to this purpose. In 2014, the ex-ante assessment of the use of financial instruments carried out in Slovenia[29] (see Section 2.2.2 for main findings) observed a similar pattern for the loan purpose amongst agriculture producers, with almost 70% of farmers showing a preference for investments in the acquisition of machinery or equipment.

Figure 5: Purpose of bank loans in the agriculture sector in 2017



Source: fi-compass survey.

27 In 2018, 297 agricultural companies operated in the agriculture sector in Slovenia. In the agriculture sector, the largest number of enterprises registered were micro-sized enterprises (86%), small-sized (10%), medium-sized (3%) and large-sized (1%). At the same time, there were 69 672 family farms. For 40 149 family farms (58%) the major part of their agricultural production was intended for their own consumption, and for 29 523 family farms (42%) the main part of agricultural production was intended for sale.

28 The Agriculture Land Act, Official Gazette of Republic of Slovenia No. 59/96 and its subsequent amendments.

29 PwC, 2015, 'Ex-ante assessment of Financial Instruments in Slovenia', Final Report.

According to interviews with the farm organisations, the MAFF, and university representatives, investments for the modernisation of productions are indeed the main driver of demand for finance. The average age of current equipment for the agriculture and agri-food sectors is estimated at approximately 18 years. Consequently, important investments for the renewal of machinery and equipment are needed.[30] According to the MAFF, the Slovenian primary sector is going through a restructuring process, which intensified after the accession to the EU. This process means that farms are specialising production through investments in new technologies, digitalisation, and advance mechanisation of the production process.[31] Modern production technologies also facilitate expansion of production, improve efficiency, and reduce manual work.

Climate change as an investment driver. Investments in buildings and machines are also taking place to cope with the impacts of climate change. Farmers are being pushed to spend, also, by the need for mitigation equipment and products, such as anti-hail nets, and by utilisation of seeds and/or crops adapted to the new climatic circumstances (crop covers, plantations quality and durable crop varieties). Climate change related investments are also geared towards the development of renewable energy sources and/or energy savings to improve on-farm heating facilities.[32] The permanent crops sector has undertaken large investments relating to mechanisation recently, partly for the purpose of climate change mitigation and adaptation[33].

The main investment dynamics by sub-sectors are the following:

- The fruits and wine sub-sectors have invested in new plantations of fruit trees and vineyards. Over the last few years, fruit growers faced significant challenges linked to climate change impacts. In the spring of 2016, orchards were adversely affected by frost and snow. The damage was estimated at EUR 44.2 million. Consequently, fruit growers are investing in infrastructure, such as backwaters, that minimises negative influences of the weather on production. Investments in new orchards, as well as in more resistant and commercially interesting varieties, are also motivated by better economies of scale, increased production volumes, and more efficient technologies.[34]
- Over recent years, grape growers and winemakers have had to accommodate a 3% increase in production costs while dealing with poor harvests and almost unchanged product sales prices. Apart from the slightly more favourable years in 2016 and 2017, sales have been very poor for some time. Grape growers producing for high quality wines have achieved better economic results. Against this background, winegrowers have invested foremost in modernising and expanding production capacity, with an intention of improving competitiveness and reducing costs. In particular, they have focused on reducing the volume of physical work so as to reduce labour costs. Investments have also been undertaken to increase product quality and to meet hygiene standards[35].
- Dairy and beef sub-sectors are growing and expanding. The dairy sub-sector has increasingly invested in infrastructure and automation technologies. Generally, economies of scale in the dairy and the livestock sub-sectors depend upon the production of fodder, which has triggered investments in mechanisation and improved storage capacity of feed. Dairy farmers are investing significantly in construction and modernisation of farms to improve work processes (including by buying robots) and raise production potential. To access EAFRD grants, dairy and beef producers have also invested in storage facilities for manure and slurry, as well as in other measures and standards that are necessary to qualify for subsidies.

30 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex No 12.

31 Interviews with MAFF.

32 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex No 12.

33 Interviews with the Chamber of Agriculture, MAFF and universities.

34 Kmetijski institute Slovenike, 2019, prva ocena stanja v kmetijstvu, https://www.kis.si/f/docs/Porocila_o_stanju_v_kmetijstvu_OEK/Prva_ocena_stanja_v_kmetijstvu_2019.pdf.

35 Kmetijski institute Slovenike, 2019, prva ocena stanja v kmetijstvu, https://www.kis.si/f/docs/Porocila_o_stanju_v_kmetijstvu_OEK/Prva_ocena_stanja_v_kmetijstvu_2019.pdf.

- Arable land farms have made investments to purchase land and increase mechanisations. Several large-sized farms have begun to invest in modern technologies, such as drones.
- Recent investments in the pig meat and poultry sector sub-sectors have targeted increasing overall production levels and improved animal welfare[36]. Uptake of investments to comply with EU regulatory requirements (e.g. relating to animal welfare) have been stimulated by the support available through the RDP.

Purchase of agriculture land is an important driver of Slovenian farmers' demand for finance, Figure 5 interviews with agriculture representatives suggest that farmers growing arable and permanent crops are the largest investors. Land prices are increasing in the areas where land is not only fertile, but also consolidated. At the same time, parts of Slovenia where land is less productive, particularly more hilly areas, are seeing land prices going down.[37]

The granivore, milk and wine sub-sectors have the largest shares of total financial liabilities in the Slovenian agriculture sector. In 2017, according to the FADN database, the granivore sub-sector accounted for 54.2% of total liabilities in the primary sector, followed by the milk sub-sector at 13%, and the wine sub-sector at approximately 12%.

Large-sized farms are the main contributors to total financial liabilities in the Slovenian agriculture sector. Interviews with universities and agricultural organisations indicate that demand for finance is mostly driven by farms above 50 ha, which need significant financing resources to expand their activities. This is reflected in FADN data for 2017, which shows that approximately 77% of total liabilities in the sector were held by large-sized farms[38], whilst medium-sized holdings[39] accounted for an additional 10.6% of liabilities.

The share of Slovenian farmers using bank loans to cover working capital costs is below the EU 24 average. Only 18% of Slovenian respondents to the *fi-compass* survey use bank loans to cover working capital costs, compared to 41% for the EU 24 (Figure 5). There appears to be a slight downward trend of using bank loans to cover working capital costs, as 22% of the farmers surveyed in 2014 for the EAFRD ex-ante assessment for financial instruments reported using loans to cover working capital. Interviewees from the agriculture sector have, however, underlined that working capital is important to Slovenian farmers. One reason for apparent low demand for working capital loans found by surveys may be due to the practices of agriculture cooperatives, who will defer repayments until after the farm has obtained income from its sales. Financing through cooperatives is relevant for all sub-sectors and is a common way of operating for many farmers, even though the size of the market is difficult to estimate.

CAP support encourages investments and facilitates access to finance. In Slovenia, as for other EU Member States, most financial support for the agriculture sector is provided through the CAP. In 2018, total CAP support to Slovenia was EUR 262.3 million, of which 51.4% (EUR 135 million) was direct payments and 45.8% (EUR 120 million) was RDP support[40], showing the share of RDP support in Slovenia was substantially above the EU28 average[41].

Interviews with banks and agriculture sector representatives, as well as public administration, indicate that the EAFRD **investment support affects the volume and type of investments**, particularly for family farms that would not be willing to take on credit risks of an investment loan if not supported by an accompanying grant. Consequently, the availability of public investment support - whether EU or national - tends to increase demand for finance, as farmers tend to use a bank loan to complement the public grant component.

36 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex No 12x.

37 Information provided from interviews.

38 In this case, large-sized farms are farms with a standard output between EUR 100 000 and EUR 500 000. The standard output (SO) of an agricultural product (crop or livestock) is the average monetary value of the agriculture output at farm-gate price in Euro.

39 With an average SO between EUR 50 000 and EUR 100 000.

40 The remaining part is spent on market measures.

41 European Commission, DG AGRI, June 2019, Statistical Factsheet for Slovenia.

Investment support from the EAFRD, provided through the RDP, is helpful for Slovenian farmers looking to invest. The total budget of the RDP for the 2014-2020 programming period is EUR 1.1 billion, of which EUR 838 million is from the EAFRD budget. Over the full period, the biggest share of the budget (EUR 216 million) is allocated to Measure 4 investments in physical assets; the highest demand for support has been noticed for sub-measure 4.1 'Support for investments in agriculture holdings' and sub-measure 4.2 'Support for investments in processing, marketing and/or development of agriculture products' is relatively popular, also. According to the MAFF, there is also a considerable interest in sub-measure 6.1 'Start-up support for young farmers'.

In the period 2015-2019, the budgets have been balanced and the demand for grants has been stable, slightly exceeding the budgets made available under the grant calls (see Table 3). The demand not covered by the grant calls is EUR 8.7 million for sub-measure 4.1, and EUR 8.1 million for sub-measure 6.1, taking into account the initial number of submitted applications (before administrative checks).

Table 3: Slovenia: 2014-2020 RDP implementation data for sub-measures 4.1 and 6.1, total public finance, by the end of 2019

Sub-measure	Total number of received applications	Total budget requested by all submitted applications for all calls (EUR million)	Total number of approved and supported applications from all calls	Total budget made available under all grant calls (EUR million)	Number of non-approved applications	Total requested budget not being supported by all calls (EUR million)
4.1 'Support for investments in agricultural holdings'	2 038	131.4	1 416	122.7	622	8.7
6.1 'Business start-up aid for young farmers' for financing farmers'	1 492	76.1	1 153	68.0	339	8.1

Source: Slovenian MAFF, 2020. Preliminary data.

Note: The total amount requested is calculated based on all received applications before any administrative check regarding eligibility or selection criteria to have taken place. Applications that have not been approved could have been non-eligible, and/or with insufficient or missing information not allowing their evaluation, and/or with insufficient value-added, and/or ranked at a place for which budget under the call has not been anymore available.

Sub-measure 4.1 covers co-financing of investments in buildings, machinery and equipment for agriculture producers. The support rate under the RDP is fixed at 30% in most of the cases, with possible increases that may not exceed 50% of public support for most types of investments.

The support goes mainly for investments in machinery, mechanical installations and transport equipment rather than for other investments (such as construction and modernisation of buildings, ICT, etc.). Through incentives built into selection criteria and high support rates, the Managing Authority favours support for innovative projects and those supporting agricultural businesses to adapt to climate change, and to mitigate negative effects of agriculture on the environment. Aggregate demand for funds for investing in machinery and buildings, which comes mainly from milk production and livestock production, tends to exceed the total amount available for tender. Climate change mitigation equipment such as anti-hail nets, crop covers, plantations with quality and durable crop varieties, is also of great interest. In this context, the Managing Authority has tried to steer the investments supported in a more innovative direction, by keeping the aid intensity low for buying machinery, for example[42].

As a general trend, the demand for finance increases due to the availability of public (EU and/or national) investment support, as farmers often complement the grant part of the support with a bank loan. To obtain an investment grant, farmers must submit an application with supporting documents and a business plan. If bank financing is used to cover the 'own resources' part of the investment, a mandatory statement of the bank's intention to cover the investment with financial assets is required. In many cases, these bank statements are provided by the banks financing the agriculture sector, i.e. NLB, Deželna Banka Slovenije, and Nova KBM (see section 2.3.1.1 for more details about finance providers). In the past, farms provided the 'own resources' component through savings but in recent years the use of bank loans has prevailed. Under special conditions, investment could be finalised with the inclusion of funds from the Regional Development Fund 'Ribnica'[43].

The young farmers' organisation, as well as other agriculture stakeholders, have underlined the positive impact of the EAFRD start-up support on the number of young farmers and its importance for stimulating generational renewal in the sector. At the same time, these same stakeholders point out that the average level of support, which is less than EUR 40 000, is far from sufficient for a young farmer faced with high initial costs for starting a business. Usually, when taking over a farm, a young farmer is obliged to pay his siblings and/or parents while, at the same time, often seeks to make investments to expand production capacity and improve market position, including through modernised production machinery and equipment, which requires significant investment efforts for a start-up phase.

Plans to introduce a financial instrument under the remit of the EAFRD, which had reached an advanced stage, were withdrawn in 2019. In 2015, following the ex-ante assessment of the use of ESIF financial instruments carried out for Slovenia[44], the MAFF decided to implement a financial instrument in its RDP 2014-2020. The initial total amount of funding foreseen for the instrument was EUR 60 million. The form of implementation would be a guarantee, or a capped portfolio guarantee, and it would have been implemented for sub-measures 4.2, 6.4, and 8.6 'Support for investments in forestry technology and processing, mobilisation and marketing of forest products'.

To improve its knowledge on financial instruments, the EAFRD managing authority benefitted from the targeted coaching on financial instruments under the *fi-compass* platform, developed by DG AGRI and the EIB. However, the initial plan to have a financial instrument up and running, did not materialise. While the managing authority has been very active on the subject, negotiations with local financial counterparts carried out in 2017 and 2018 did not result in a successful outcome. In 2018, the managing authority decided to see whether the EAFRD-EFSI Initiative would be relevant for Slovenia and launched an update of its ex-ante assessment with the EIB. On this basis, negotiations on the funding agreement with the European Investment Fund started in 2019.

Between the initial ex ante assessment of 2015 and the updated ex ante assessment of 2019, the initially planned budget for the financial instruments was revised downwards twice as the MAFF found the timeframe left for implementation of the instrument too short and the risks of not achieving the intended results for the sub-measures under the RDP too high. As a result, the Managing Authority decided in 2019 that a financial instrument - with a public contribution of EUR 15 million - could not be implemented due to excessive cost of running it (given it was planned to be a guarantee instrument implying high fees from the start and revolving

42 Under sub-measure 4.1, the investments pursued has two general objectives, namely the objective of restructuring in agriculture and the objective of increasing productivity and thus increasing the competitive capacity of agriculture. Investment in restructuring focuses on agriculture holdings which do not represent a major source of income, which has a low market participation, and which will only become economically viable by the investment. Investment in boosting competitiveness pursues the primary objective of increasing productivity in agriculture, cost-effectiveness and added value and quality products. Source: Slovenian RDP 2014-2020.

43 This fund is described in detail in section 2.3.1.2 Financial products.

44 PwC, 2015, 'Ex-ante assessment of Financial Instruments in Slovenia', Final Report.

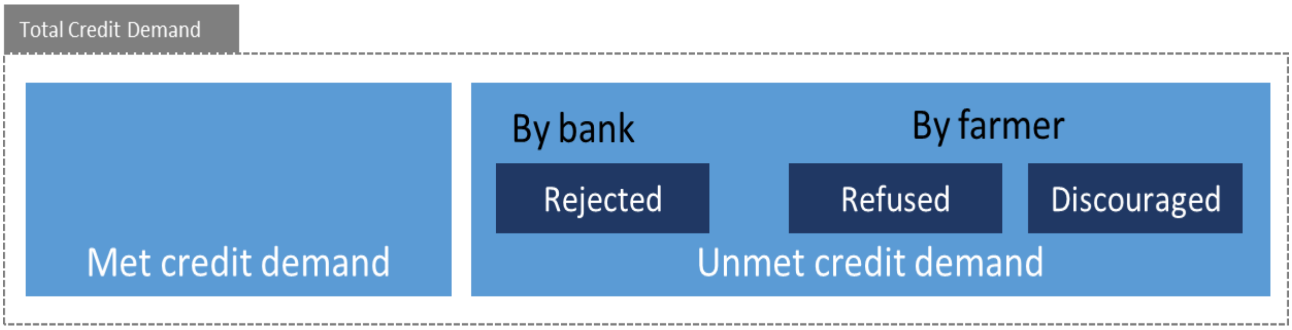
benefits only late in the implementation cycle) and high management fees, which would require engagement of considerable national means. The Managing Authority decided not to conclude a funding agreement with the European Investment Fund and withdrew its intentions to launch a financial instrument under the EAFRD in 2014-2020.[45]

At the same time, interviews with farm organisations and universities have found that farmers are mostly interested in obtaining grants, rather than repayable sources of finance. However, interviewees from the farming sector estimated that there are approximately 1 000 farms in Slovenia that would be suitable to benefit from loans linked to a financial instrument. Many farmers are aware that grants may decrease over time, and so the most sustainable manner of developing the business could be through bank loans.

2.2.2. Analysis of the demand for finance

The potential total demand for finance combines both met and unmet demand. The met demand consists of the value of all applications for finance which were accepted by the financial institutions in the relevant year. The unmet demand consists of the assumed value of applications rejected by a financial institution, offers of credit refused by farmers', alongside cases where farmers are discouraged from applying for credit, due to an expectation of rejection or refusal (Figure 6).

Figure 6: Schematic overview of the demand side of agriculture sector



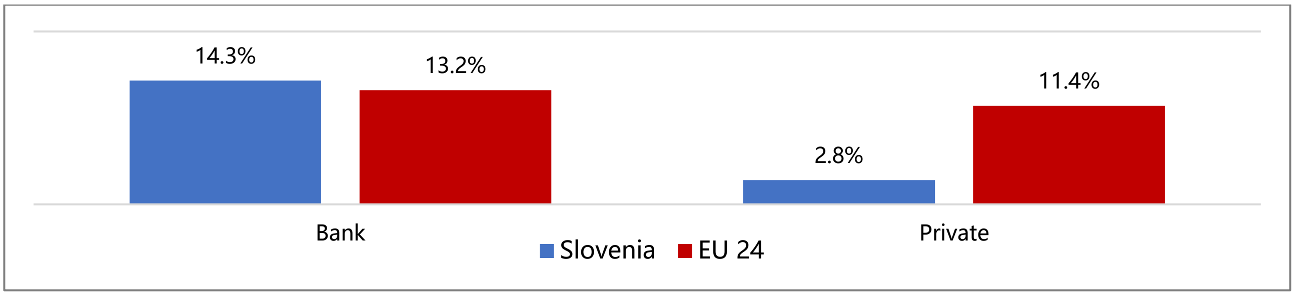
Source: Ecorys, 2019.

Based on the results of the *fi-compass* survey, the unmet demand for the agriculture sector in Slovenia is estimated at EUR 1.2 billion.

In Slovenia, requesting finance from banks is more common than using private finance. In 2017, the *fi-compass* survey found that 14.3% of the Slovenian farmers had applied for bank finance, which is slightly above the EU 24 average (Figure 7). Less than 3% of all farmers asked friends and family for loans, as compared to approximately 11% for the EU 24.

45 Interviews with MAFF.

Figure 7: Slovenian farms applying for finance in 2017

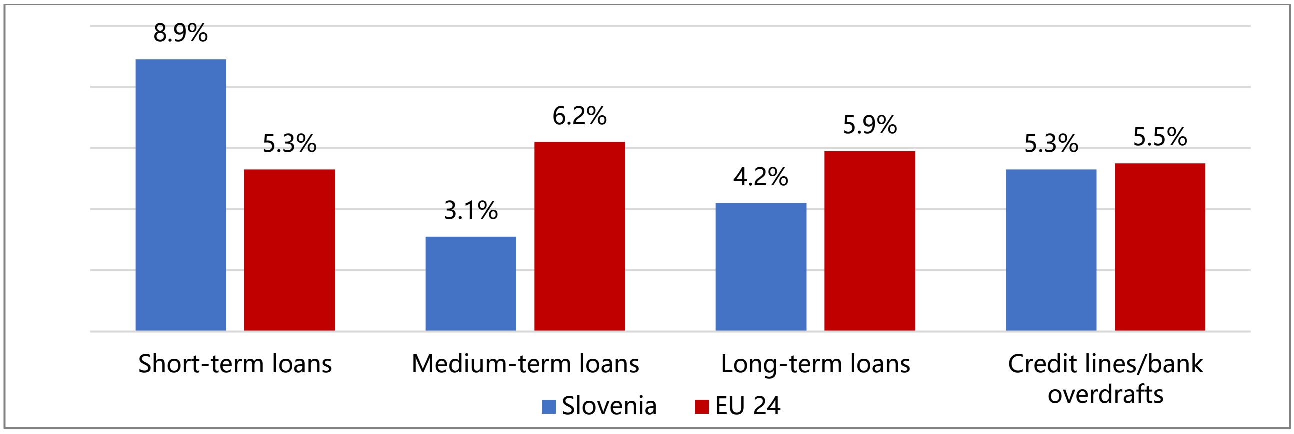


Source: fi-compass survey.

Average loan size in Slovenia is low by EU standards. Investment levels in the agriculture sector varies from very small investments of less than EUR 10 000 to larger investments of more than EUR 2 million, with amounts between EUR 20 000 and EUR 100 000[46] predominating. Investments are almost always financed using external sources.

In 2017, short-term loans were the most requested financing product by the sector. Approximately 8.9% of the farmers operating in the Slovenian primary sector applied for short-term loans in 2017 (Figure 8). The second most demanded product was credit lines/bank overdrafts with an application rate of 5.3%, followed by long-term investment loans (4.2% application rate), and medium-term loans (3.1% application rate). The ex-ante assessment for the use of financial instruments in Slovenia found that 37% of the agriculture sector considered short-term loans to be the most important financial product, followed by medium and long-term loans (both with 22%).

Figure 8: Slovenian farms applying for finance in 2017, by financing product



Source: fi-compass survey.

Interviews with the MAFF and with farmers' representatives, suggest that access to long-term loans for the agriculture sector is complicated in Slovenia, usually because of their high collateral requirements. Consequently, short-term loans are also being used for investment purposes. In addition, based on interviews with farm representatives, universities, and the MAFF, farmers in Slovenia were described as 'conservative' and risk-adverse with regards to credit. In this light, long-term loans are associated with higher risks, and farmers are not confident that they will be able to repay the loans. Therefore they prefer loans with shorter maturities.

46 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex No 12.

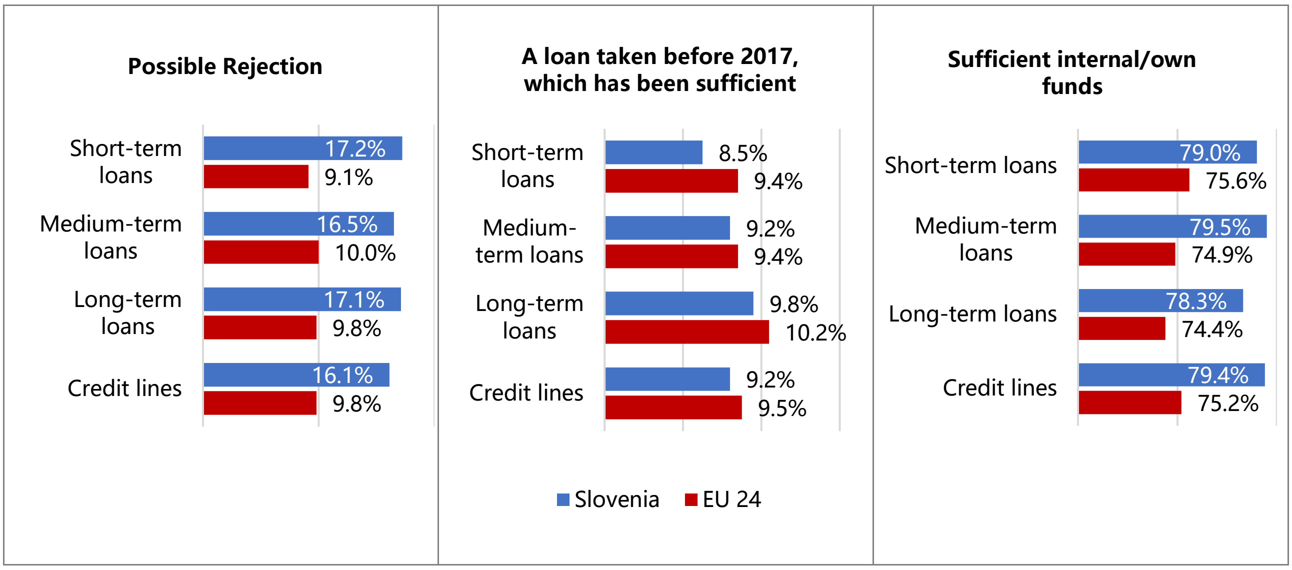
Slovenian farmers can be discouraged from applying for finance for a variety of reasons:

- fear of not being able to repay a loan;
- lack of collaterals and insufficient cash flow;
- high costs of the loans;
- cultural issues;
- burdensome loan application processes, and
- lack of financial literacy.

Farmers are uncomfortable with approaching banks. According to the *fi-compass* survey, more than 16% of the agriculture holdings were discouraged from applying for bank loans due to the fear of being rejected. The proportion of farmers reporting fear of rejection as a reason for being discouraged for a loan is substantially higher in Slovenia than the EU 24 average, notably for short and long-term loans at 17.2% and 17.1%, respectively (Figure 9). Interviews with farmers' representatives indicate that farmers' fear of asking for a loan may partly be due to cultural issues and also an unwillingness of farmers to share their financial needs and/or documentation with banks.

Lack of financial literacy, combined with bureaucratic loan approval processes, discourages farmers from applying for bank loans. Interviewees from the agriculture sector point to the paperwork associated with taking up a loan as an obstacle for farmers. The ex-ante assessment[47] also found that almost half of the micro-sized enterprises perceive the administrative burden to obtain finance as an issue. It also identified the lack of financial knowledge and lack of experience with financial institutions as reasons why micro-sized enterprises across the economy are discouraged from seeking finance.

Figure 9: Reasons for not applying for loans in the agriculture sector in 2017



Source: fi-compass survey.

Negative previous experiences is a reason for farmers not wanting to approach banks. Interviewed farm representatives point to several cases when farmers with Non-Performing Loans (NPL) have had their land and farms seized by banks.[48] Reports of these actions spread quickly among the agricultural society and may

47 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex No 12.

48 This was the case in 2016 for NPLs in the dairy sector and, earlier, for other sectors (including crops), where a foreign bank was involved.

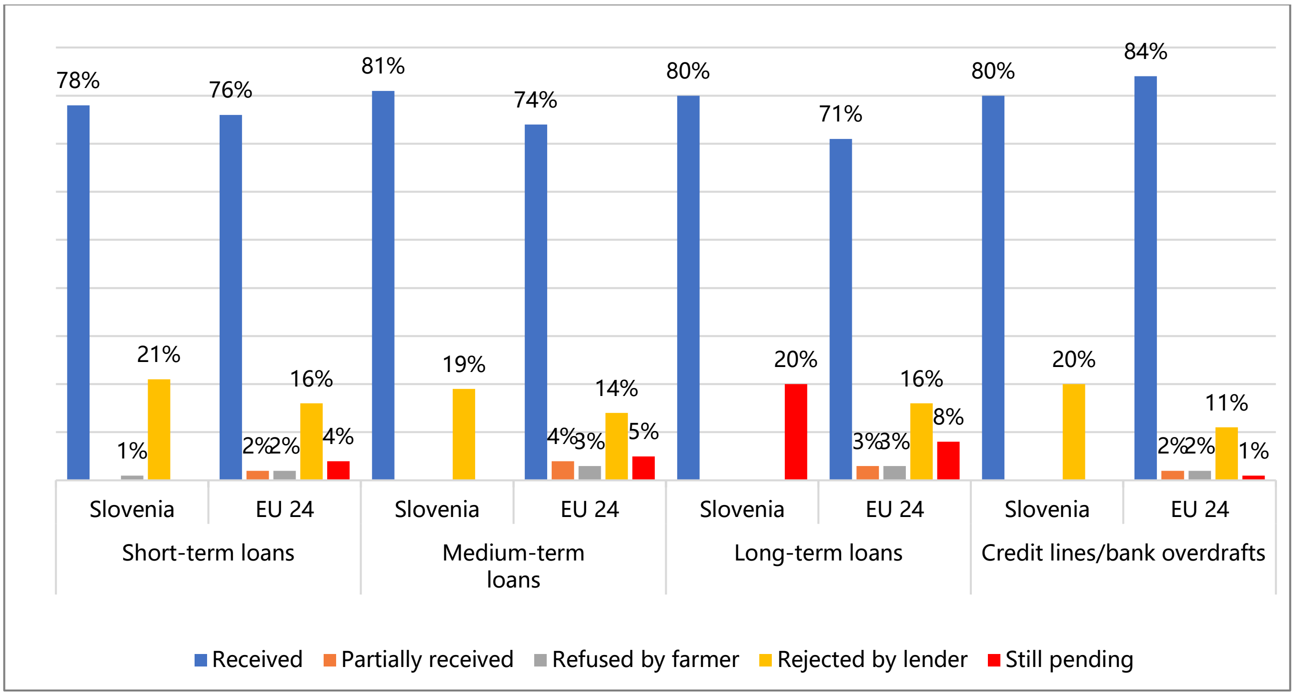
have discouraged other farmers from engaging with credit institutions. Equally, bad experiences with some parts of the sector might have resulted in banks being more careful when providing loans.

Doubts about repayment capacity deters farmers from borrowing money. A weak cash flow situation, especially for small-sized (family) farms, may discourage farmers from approaching banks. Many Slovenian agriculture holdings have low profits and face severe liquidity constraints[49]. They are not able to provide adequate collateral and satisfy the requirements of the banks, due to the low profitability of their businesses.

Unfavourable loan conditions can also cause farmers to refrain from approaching banks. High costs of loans, relating foremost to credit approval costs, are perceived by many in the agriculture sector as a major obstacle. In 2018, a survey by the Chamber of Commerce of its 60 members (medium and large-sized agriculture companies, food producers and food processors) for the update of the ex-ante assessment for the use of financial instruments[50] found that one third considered 'other costs', such as notary and appraisal costs, to be an important reason hampering access to finance.

Loan application rejection rates in Slovenia are above the EU 24 average. According to the *fi-compass* survey, the rejection rate for bank loans is between 19% and 21% for all loan maturities, which is higher than the EU 24 average (Figure 10). By contrast, the reported rejection rate for applications for credit lines/bank overdrafts is below the EU average. Further, due to unfavourable conditions offered by the banks, 1% of applicant farmers refused short-term loan offers and 2% refused credit line/bank overdraft offers.

Figure 10: Results from applications for finance in the agriculture sector in 2017



Source: fi-compass survey.

The main reasons for loan rejections include:

- **Lack of credit history.** A quarter of the Slovenian farmers (24% compared to EU 24 average of 12%) state that banks turned down their loan application due to a lack of credit history (Figure 11). In the past,

49 Interviews with MAFF, Chamber of Agriculture and universities.

50 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex No 12.

the Slovenian primary sector relied mainly on public subsidies to meet its financial needs. After joining the EU, there was a full shift towards a grant system complemented with bank finance (due to the need of own contribution). As a result, many farms operating in the sector cannot fulfil the usual credit history requirements of the banks[51]. Importantly, Slovenian banks have underlined that they consider farmers without credit history to be households and, therefore, it is very difficult, if not impossible, for them to obtain a loan for a business operation.

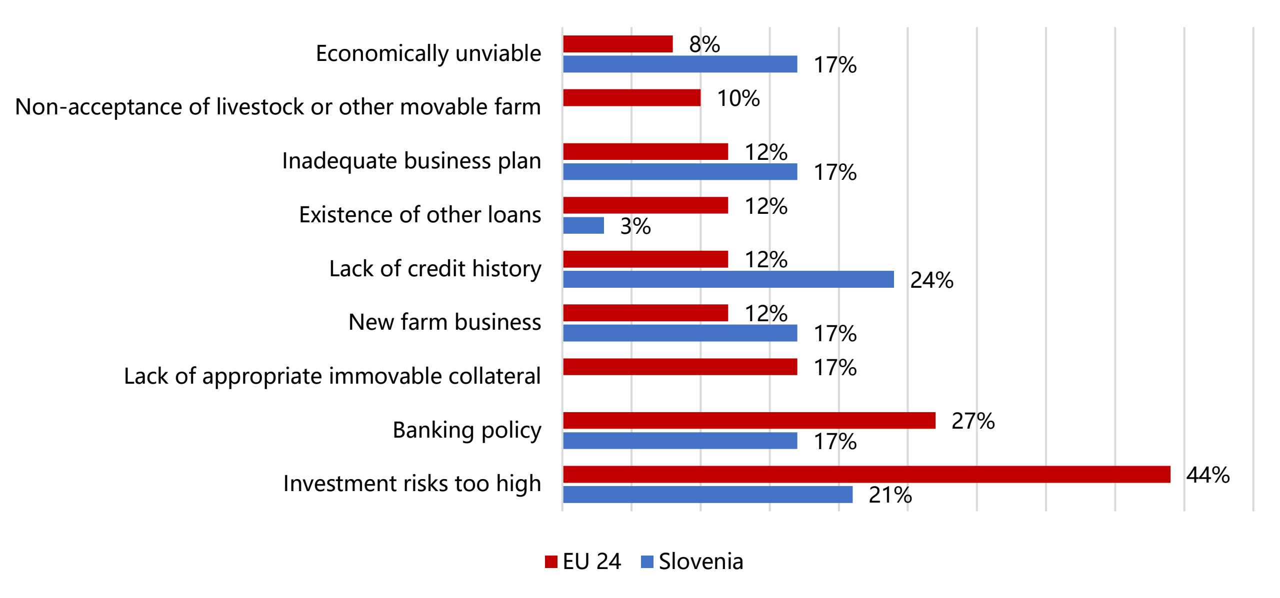
- **Inadequate business plan and lack of accountancy**. Compared to an EU 24 average of 12%, 17% of Slovenian farmers indicate that an inadequate business plan is one of the reasons for the rejection of their loan application.[52] According to interviews with farmers' representatives and universities, Slovenian farmers, and particularly small-sized farms, are entirely focused on farm production activities and have limited knowledge and experience from other aspects of running a business, such as accountancy and marketing. In addition, keeping accountancy records is not a requirement for farms with an income of below EUR 7 000 per year[53]. Consequently, as many farms lack accountancy records, they are also unable to provide business information when applying for a loan. As bookkeeping is legally optional and payments are often made without invoices (invoicing is optional and so payments are transferred to their transaction bank account), particularly in the fruits and vegetables sub-sector, many farmers have difficulties in presenting proof of their business' viability, which complicate the bank's assessment of their loan application. This is compounded by a general lack of knowledge among bank employees of the primary sector, its business cycles and processes and, as a result, its real financial needs.
- **Economically non-viable farms**. As outlined in section 2.1, the average annual income of a farmer in Slovenia is EUR 7 000, the average farm size is approximately 7 ha, and 70% of the farmers have another part-time job to complement their farm income. Furthermore, farms may often experience difficulties with price volatility due to weather and climatic events, which puts further constraints on the viability of the farm. As confirmed by the *fi-compass* survey and the ex-ante assessment, this situation negatively affects its access to finance.
- **Farm indebtedness.** Although the *fi-compass* survey did not find the existence of other existing loans as an important reason for banks to reject loan applications, interviewees have pointed to farm indebtedness as a contributing factor for rejections. Previous mortgages of assets to secure earlier loans can prevent some farmers from taking out new loans; this is particularly the case for young farmers who are taking over existing farms and are looking to grow their business.
- **Banks' risk perception of the sector**. Although only 21% of Slovenian farmers (as compared to EU 24 average of 44%) identified high investment risk as the reason for being rejected, agriculture stakeholders interviewed have stressed that banks are not keen to lend to the agriculture sector, as the sector is considered too risky. The experience of the dairy sector, which had many NPLs in 2016 (as described above), has led banks to be even more cautious when lending to the whole sector. In addition, failures on the part of over-ambitious farmers who tried to grow too fast without the right technical, agronomical and financial expertise, has further strained relationships with the banks.

51 Interviews with farm representatives and universities.

52 The Slovenian ex-ante assessment also identified the lack of an adequate business plan as one of the main constraints for micro-enterprises to access finance in Slovenia.

53 According to the Chamber of Commerce, EUR 7 000 is the average income of a Slovenian family farm.

Figure 11: Reasons for applications' rejection in the agriculture sector in 2017



Source: fi-compass survey.

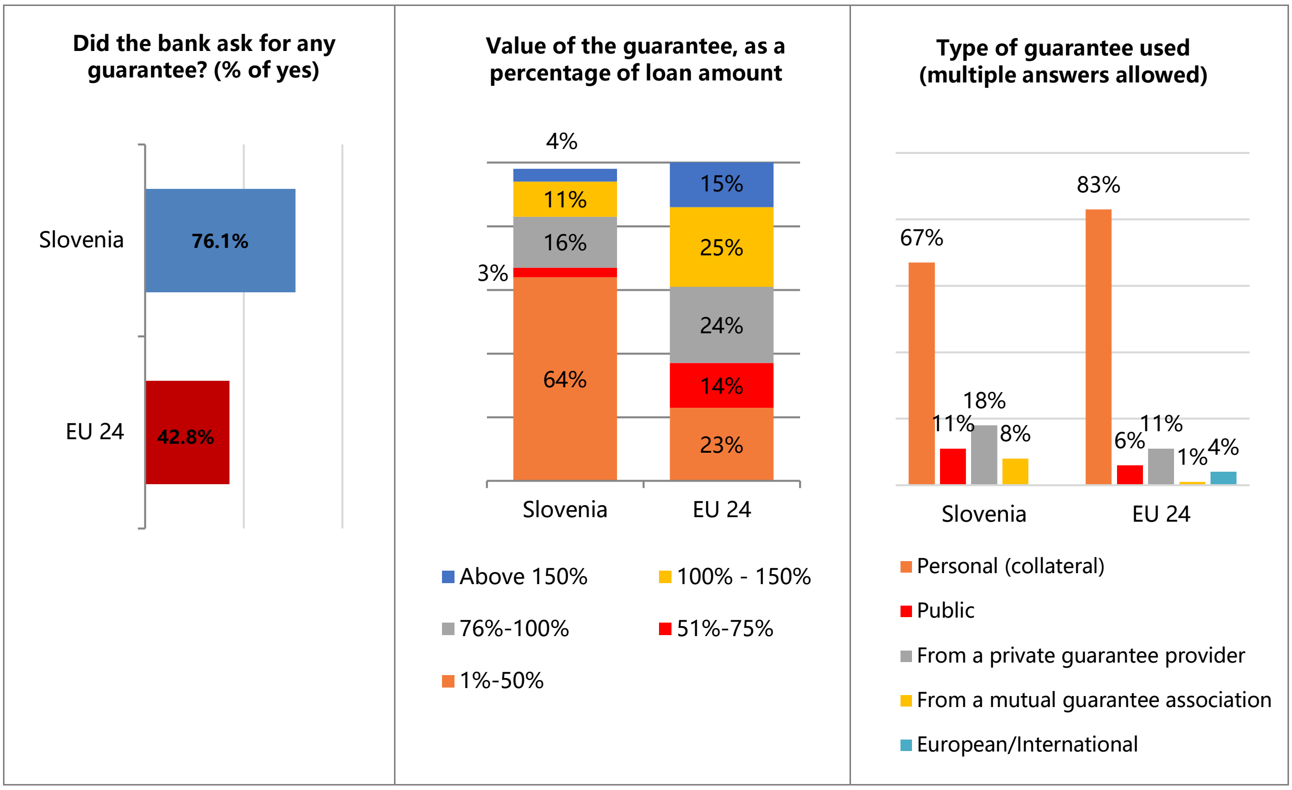
Lack of collateral is another factor limiting farmers' access finance. The *fi-compass* survey did not identify the lack of collateral as a major reason for banks to reject loan applications from farmers. Several interviewees representing farmers have, however, underlined lack of access to collateral for farmers, particularly small-sized farms, as a constraint. The survey conducted by the Chamber of Commerce (within the remit of the updated ex-ante assessment for financial instruments under the EAFRD as referred to above) found that two-thirds of companies consider 'other terms or conditions of financing', among which are also the requests for collateral, as a main reason limiting access to finance.[54]

Usually a higher collateral is asked from clients' that are new customers to the bank. The National Bank of Slovenia said that as a rule, banks in Slovenia always require collateral for borrowed funds. However, banks are limited by the types of collateral they can accept from farmers; for example, an animal herd is not considered a suitable collateral.

The *fi-compass* survey results show that 76% of the Slovenian farmers are asked to provide collateral (Figure 12) compared to less than 50% for the EU 24. However, the level of the collateral required relative to the loan amount is generally lower in Slovenia than the EU 24 average; one reason is the prevalence of short-term financing in Slovenia. Two-thirds of the Slovenian farmers (67%) report using personal collateral, and 18% use a guarantee from a private guarantor.

54 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex No 12.

Figure 12: Information related to guarantees requested by agricultural producers, 2017



Source: *fi-compass* survey.

Young farmers face more difficulties in accessing finance. The *fi-compass* survey found that 17% of the farmers in Slovenia are rejected bank loans because their business is considered too risky, compared to only 12% in the EU 24. As already discussed, taking over an existing farm also means accepting its old debts (if any) and often implies a payment to the previous owners, including parents or siblings with an inheritance right. This increases the financial burden on young farmers and significantly reduces their re-payment capacities (i.e. liquidity at their disposal).

Lending costs to young farmers are often high, not only in terms of interest rates but also guarantee fees and the fees relating to earlier repayments. The justification of these costs is perceived by the farming community to be unclear and not transparent enough. In addition, young farmers often see the proposed grace periods of the loans, if any, as too short.[55] The combination of all these factors, alongside the lack of suitable guarantee or loan funds providing financing at preferable conditions, constitute a market failure that needs policy action if its impact is to be mitigated.

55 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex No 12.

Main findings of the ex-ante assessments for the use of Financial Instruments in Slovenia for the agriculture sector[56]

- In 2019, the main drivers for investments undertaken in the agriculture sector include modernisation of farms, and to a lesser extent, climate change related factors.
- In 2015, investments in machinery and equipment represented 70% of total investments and working capital investments represented 22%.
- In 2015, there was a larger preference in the agriculture sector for short-term loans over medium and long-term loans; 37% preferred short-term loans and 22% preferred medium and long-term loans.
- Several difficulties in accessing finance for the agriculture sector have been identified:
  - the cost of the finance for their business (2015 and 2019);
  - the lack of collateral (2019);
  - the administrative burden related to obtaining a loan (2015 and 2019);
  - the lack of financial knowledge and the lack of experience with financial institutions (2015);
  - the lack of willingness of the banks to provide financing (2015 and 2019);
  - the lack of an adequate business plan (2015);
  - the lack of credit history (2019);
  - the financial situation of the company, low repayment capacity (2015 and 2019).
- Young farmers and small-sized farms have particular difficulty in accessing finance.
- Recommendations include the introduction of a guarantee or a capped-portfolio guarantee financed through the EAFRD, to be implemented for sub-measures 4.1, 4.2, 6.4, and 8.6 (in 2015, sub-measure 4.1 was not included, and was added after the 2019 evaluation).

Farmers' access to finance could be facilitated by technical support for capacity building. As outlined above, many farmers are not used to keeping accountancy records for their business and are therefore unable to provide business information when requesting a loan. This is particularly true for small-sized farms. In addition, the poor quality of many business plans leads banks to reject applications. Thus, supporting small-sized farm-holdings wanting to develop into better businesses and strengthen their financial skills could contribute to raising approval rates and support growth in the sector. Technical support could be provided with a view to helping farmers to formulate applications for financing and increasing their accountancy and business plan knowledge. Provision of specific advisory services and trainings can be stimulated using EAFRD grants. Furthermore, some banks have underlined that they are hesitant to approve loans as they are not confident in the farmer's ability to properly manage their business over time.

56 PwC, 2015, 'Ex-ante assessment of Financial Instruments in Slovenia', Final Report; European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex No 12. A general ex-ante assessment was published in 2015, covering the whole economy, and with a limited part dedicated to the agriculture sector. In 2019, an update of the ex-ante assessment was presented, focusing only on the agriculture and agri-food sectors.

2.3. Analysis on the supply of agriculture finance

This section provides an overview of the financial environment in which the agriculture sector in Slovenia operates. It describes the main financial products offered, including any currently operating financial instrument targeting agriculture, with national and/or EAFRD resources. The section draws its information from interviews with financial institutions, as well as from national statistics.

An attempt is made to give a description of the general conditions for accessing finance, such as interest rates and requirements for collateral, and the availability of funding for agricultural producers. Potential differences in the availability of financial products across different types of agricultural producers are reviewed and analysed.

Key elements on the supply of finance to the Slovenian agriculture sector

- About 80% of all agriculture producers are clients of one bank, Deželna Banka Slovenije.
- Agriculture cooperatives provide working capital finance to their members, which is commonly used.
- A few bank products targeted to the agriculture sector are available, especially from Deželna Banka Slovenije, but loans are more expensive than those offered to other economic sectors.
- Many farmers only have access to the classical household products, such as consumer and mortgage loans, as they lack credit and business history.
- Leasing is common, particularly the leasing of tractors.
- The Slovenian Regional Development Fund 'Ribnica', is a public financial fund that supports regional and rural development. The Fund offers loans with favourable interest rates and long maturities to the agriculture and agri-food sector.
- The total outstanding loan volumes to the sector is low and on a decreasing trend. As of 31 December 2019, the total outstanding loan volume stood at EUR 61 million.
- Constraints on supply of finance are due to: (i) the high concentration of financing to the agriculture sector that allows the main bank to set the loan conditions for the whole sector; (ii) the limited interest of other commercial banks in the agriculture sector, particularly linked to the low profitability of small loans; (iii) the use of household loans to meet financing requirements of small-sized farms, and; (iv) the high costs for credit approvals and demanding administration requirements of loan applications.

2.3.1. Description of finance environment and funding availability

2.3.1.1. Finance providers

According to the Bank of Slovenia's Annual Report in 2018, 17 banks were operating in the Slovenian banking sectors, of which 12 were domestic commercial banks, three were saving banks, and two were branches of foreign banks. Only eight banks were considered to have significant lending activities. In 2018, the total assets of banks increased by 2.2%, reaching 84.4% of Gross Domestic Product (GDP) at the end of the year, which places Slovenia at the high level among EU countries.

Different sources of financing are available for the farms in Slovenia, but the market is dominated by a single player. Commercial providers of finance include banks, savings banks, leasing companies and cooperatives. The state-owned Slovenian Regional Development Fund 'Ribnica' (SRDF) also acts as a market provider. However, with a few exceptions, there is generally little interest in the supply of financial products for the agriculture market.

Two other banks, namely Banka Intesa Sanpaolo, and Delavska hranilnica, offer loan products targeted to the sector[57] but uptake of these products is low according to interviewees. Lon Bank offers special bank accounts to farmers (Table 4).

Table 4: Banks offering of credits for Slovenian farmers

	Bank/Saving Bank	Type of products
Offering targeted[58] products to farmers	Banka Intesa Sanpaolo d. d.	Investment and working capital loans for farmers
	Delavska hranilnica d.d.	Investment and working capital loans for farmers
	Deželna Banka Slovenije d.d.	Investment and working capital loans for farmers
	Lon d.d.	Offering special bank account for farmers
	Abanka d.d.	
	Addiko Bank d.d.	
	Banka Sparkasse d.d.	
	BKS Bank AG, Bančna podružnica	
Not offering targeted products to farmers	Gorenjska banka d.d.	Offering similar bank products to farmers as provided to entrepreneurs or households
	NLB d.d.	
	Nova KBM d.d.	
	Primorska hranilnica Vipava d.d.	
	Sberbank banka d. d.	
	SKB banka d.d.	
	UniCredit Banka Slovenija d.d.	

Source: Commercial banks websites, 2019.

The three main banks providing financing to agriculture and agri-business in Slovenia are Deželna Banka Slovenije, NLB, and Nova KBM (NKBM).

Deželna has a dominant position in the agriculture financing market. Deželna Banka Slovenije (translated as the Land Bank), is a specialised bank for the agriculture and food industries, providing lending products tailored to their client base. The Bank serves approximately 80% of active farms in Slovenia and has a large rural presence. Agriculture cooperatives are also important clients for the bank. Originally coming from the development of cooperative banks, Deželna is now a commercial bank. During interviews, several agriculture stakeholders claimed that Deželna is the only bank willing to work with farmers in Slovenia. As evidenced further in Section 2.3.1.2, the bank offers products with some flexibility adapted to the conditions of the agriculture sector. Reasons for Deželna's control over a large share of the market are *inter alia* the loyalty of agriculture producer clients and the conservativeness of farmers with regards to changing their credit institution[59].

Other banks have limited capacity or interest in providing finance to the agriculture sector. Nova KBM and NLB are the main market players after Deželna, although they play a more limited role and their exact market shares is not available. They offer specialised bank accounts and credit cards, but according to interviews[60], they have no loan products specifically adapted to the agriculture sector.

57 Products that are included in the specific marketing offers to the agriculture sector, but that may not differ from the offer to other economic sectors in terms of their financial structure.

58 Ibid.

59 Interviews with universities.

60 Interviews with non-financial suppliers, as banks were not keen on sharing information.

Delavska hranilnica, a domestic bank with a small market share and a clientele of mostly sole proprietors and enterprises, offers certain specific loan products to the agriculture sector. One foreign bank, Bank Intesa Sanpaolo, has some specific products, however with very limited, almost negligible, uptake. This is due to the dented reputation of foreign banks amongst agriculture producers arising from the seizure of lands and farms for non-repayment of loans, which involved another foreign bank almost a decade ago[61]. As a consequence, farmers have a lack of trust in foreign banks and prefer to rely on the locally present, domestic players such as Deželna Banka Slovenije, even if the conditions offered for the agriculture loan products are more expensive than those given to other sectors (see section 2.3.1.2). It is also the case that switching banks is not easy for farmers, due to bureaucratic hurdles, which is also a reason for many farmers to stay loyal to Deželna, which offices in every village and small town in the country.

The Slovenian Regional Development Fund 'Ribnica' acts as one of the pillars of regional development policy in the country[62] and is another finance provider. It has the status of a public financial fund aimed at achieving more sustainable public goals in the field of regional and rural development. Through calls for applications the Fund provides loans and guarantees. The beneficiaries of the Fund include agriculture holdings, agriculture cooperatives, and food processors. However, municipalities, entrepreneurs and companies from all sectors of the economy can also qualify to participate in the Fund's calls for tenders.

The limited budget available for the Fund reduces its potential outreach, although its relevance has increased significantly, with its budget increasing from less than EUR 1 million, to more than EUR 10 million between 2015 and 2018[63]. The increase of funds available has led to increased interest in their financial products also amongst farmers. The Fund, which is not regulated by the Bank of Slovenia, has different requirements for the distribution of funds, such as lower collateral requests and repayment holidays. Also, farmers are not required to switch bank in order to benefit from the Fund's products. The Fund has only one office in Ljubljana and offers mainly preferential loans through calls for tenders.

Leasing is a common form of financing for farmers in Slovenia. Leasing is common for tractors, followed by equipment leasing and real estate leasing. Leasing companies are often part of the banking groups and are presented in the Table 5 below. Financial leasing to physical persons is widely used in Slovenia for financing of agricultural equipment and mechanisation.

Table 5: Leasing companies supporting agriculture in Slovenia, 2019

Leasing companies	
BKS Leasing	SKB Leasing
DBS Leasing	SKB Leasing Select
GB Leasing	Sparkasse Leasing S
NLB Leasing	Summit Leasing Slovenia
RCI Banque	VBKS Leasing

Source: Bank of Slovenia, 2019.

Agriculture cooperatives provide important working capital finance to their members. As part of their regular business activity, agriculture cooperatives allow farmers to purchase produce without advance payment. Farmers' payments for product inputs is offset by the payment from the cooperative when crop or other products are delivered by the farmer to the cooperative. As outlined in section 2.1, three quarters of Slovenian farmers are either affiliated to cooperatives or do business with them, making this a common way of financing working capital needs. However, at the time of drafting this report, no estimates on the size of the market could be obtained.

61 University interview.

62 Slovenian Regional Development fund, 2019, http://www.regionalnisklad.si/english.

63 EUR 832 477 to EUR 10 681 654 between 2015 and 2018, according to the fund manager.

2.3.1.2. Financial products

Bank loans are the most common form of financing offered to farmers and agriculture companies and they are used for various purposes, such as:

- purchase of technology, equipment, tools etc;
- financing of construction, reconstruction or renovation of agriculture buildings;
- financing of working capital and inputs such as raw materials, seeds, pesticides, gas, etc.;
- specialised loans according to the request and needs of the client.

Short, medium and long-term maturity loans are available for agriculture. Table 6 provides an overview of the products offered by the three banks with targeted agricultural products. (i.e. Banka Intesa Sanpaolo d.d, Delavska hranilnica d.d, and Deželna Banka Slovenije d.d). Farmers and agricultural companies can also use other banking products, such as (authorised and unauthorised) overdrafts, with this type of financing mainly used by larger-sized, well-run farms and from agriculture companies. The use of credit cards[64] is becoming widespread and can be an appropriate way for pre-financing certain purchases by farmers.

Deželna's products are popular because the bank knows its customers' segment. In the interview with Deželna[65], it has been stated that products offered to farmers are more expensive than those offered to other sectors of the economy but that the higher interest rates offered to the sector by all three main banks remain competitive. Compared to a regular 'entrepreneur loan', Deželna offers loan products adapted to the needs of the farming sector and small-sized enterprises and entrepreneurs (e.g. smaller loan amounts, products that complement RDP investment grants, less strict requirements on credit history for young farmers, flexible repayment schedules in case of cash flow problems etc.). Because of the Bank's history of working and collaborating with their clients, loyalty is important and almost no NPLs from farm clients are recorded. If a farmer has repayment problems, the Bank usually adjusts the loan conditions to ease the burden on its customer. Also, the Banks' good knowledge of the farming sector, means that young farmers are not disadvantaged in accessing finance.

However, Deželna requires a collateral for all loan products, usually in the form of land or buildings, as the Bank of Slovenia does not allow livestock to be used as collateral. The main indicator for approving a loan is the cash flow indicator EBITDA. To obtain a loan, the farmer has to be a customer of the bank. Despite a range of products adapted to farmers' business conditions, farmers with low cash flow, lack of collateral, or who are not already bank customers can have difficulties in accessing finance.

64 Bank webpages, interview, 2019.

65 The only bank accepting an interview invitation for the study.

Table 6: Bank products offered to farmers in Slovenia

Bank	Product	Loan purpose	Loan amount (EUR)	Interest rate	Repayment period	Approval costs and monthly costs	Credit insurance
DEŽELNA BANKA SLOVENIJE	Credit for farm investments	New farm investments	<500 000	6 M EURIBOR +2,5%	<20 years	1,5% min, min EUR 30 – max EUR 600	Mortgage
	Sowing/harvesting credit	Working capital	400-10 000	monthly (no info available on rate)		1,2%, min EUR 25 - max EUR 400	
	Credit for breeding animals purchase	Assets - live animals purchase	<50 000		<2 years	1,5%, min EUR 25 - max 800	Required, 1)
INTESA SANPAOLO BANK	Investment financing	Fixed assets farm investments	Depends on type of investment	Fixed interest rate: 3.6%-4.2%; or EURIBOR +3.4-3.8%	1-3, 3-7, 7-10, and >10 years	EUR 8 /month	Required, 2)
	Working capital financing	Liquidity assets	Depends on debtor's credit rating		<12 months		Required, 2)
DELAVSKA HRANILNICA	Promotional credit for farmers	Farm investments; repayment of less attractive credits	<500 000	6M EURIBOR + 2,4%	< 360 months	1,5%, min EUR 150, max EUR 3 000; and EUR 1,5/ month	
	Fast credit for farmers	Investments or working capital	<20 000	5,80%	< 36 months	Like consumer credits	

Sources: Deželna Banka Slovenije, Banka Intesa Sanpaolo, Delavska Hranilnica websites.

Notes: 1) Insurance company, or 2 personal promissory notes. 2) e.g.: bank deposit, stocks and shares, investment funds, fixed assets, insurance company.

Generally, family farmers are regarded as private consumers, with access to credit only for consumer goods and housing. The main problem for the bank is how to assess the creditworthiness of the borrower, as natural persons often have no records of a business history. However, where banks have a track record of a business, the farmers are rated according to adjusted criteria. As indicated in section 2.3.1.3, the interest rate has been continuously decreasing for household loans, and interest rates of mortgages up to EUR 1 million was, for 2018, low, on average between 2.5-3%, depending on the maturity of the loan. See Annex A.6 for more details on housing and consumer credits.

The lack of financial providers to the agriculture sector mainly relates to the lack of cooperation between the agriculture sector and banks. Farm representatives underline this as one of the main constraints on the supply of financing. Poor cooperation with banks - with the exception of Deželna - is attributed to their limited interest in the sector and their orientation towards less risky and more profitable customers. This results in few products being available that are specifically adapted to the agriculture sector, and available products that are more expensive than those offered to other economic sectors (as observed in Table 6 above).

The Slovenian Regional Development Fund

As a primary form of support, the Slovenian Regional Development Fund offers loans with favourable interest rates and long maturities (e.g. payback periods of up to 20 years.) This appears to be particularly helpful when compared to market or bank investment loans. Amongst other advantages, the Fund offers the co-financing of projects in the field of rural development and support for projects in primary agriculture production, as well as project processing, marketing and complementary activities. Investments carried out by farmers account for 90% of the loans provided by the Fund. The majority of the applicants are active in the livestock sub-sector (e.g. milk, cattle breading, pigs) as well as vegetable, fruit and wine growers, and are generally large-sized farms.[66] As already mentioned, the limited budget available for the Fund reduces its potential outreach.

Compared to most commercial credit institutions, the Fund has an offer that is better adapted to the needs of the farmers. For example, the Fund can apply some flexibility if farmers have difficulties in paying off their obligations, something which only seems to be matched by Deželna among the commercial banks. However, according to the fund manager, cases where farmers cannot meet their repayment obligations are relatively rare. The interest rates for natural persons is EURIBOR +0.5%, currently around 1.1%-1.5%. In order to approve a loan, the Fund checks the inflows to the farmers transaction account and an estimate of the farm's land (if available) is carried out through an external auditor selected by the bank. Agriculture stakeholders consider the favourable loans offered by the Fund as an interesting product and, alongside Deželna Banka Slovenije, the Fund is seen as the only other financing partner that demonstrates an evident interest in adapting its products to the agriculture sector's conditions.

Similarly to commercial loans, small-sized farms can have problems in obtaining loans from the Fund due to their lack of credit history and the limited level of collateral that can be provided (see section 2.2.2 for a more in-depth analysis on the topic). In addition, accessing a loan is considered costly and burdensome by some, due to the amount of documentation that needs to accompany an application to the Fund. The Fund advises farmers to prepare in advance for a business review before applying for finance through the calls for tender. In order to obtain a loan, farmers' current debt must not exceed 1/3 of their assets. The most over-indebted sector is currently the dairy sector and, consequently, dairy farmers experience more difficulties obtaining loans. The Fund offers advice on how to prepare for the call for proposals and cooperates with the Agriculture Advisory Service to provide training to farmers.

Leasing mostly concerns vehicle financing, followed by equipment leasing and real estate leasing. Operational leasing can be used only by legal entities, while equipment and mechanisation leasing can be used by family farmers, as well. There is a growing interest amongst farmers in leasing due to easier access to credit guarantees; for example, agriculture machinery or the purchase of farm animals is regarded as a guarantee for leasing repayment. Interviewed agriculture stakeholders state that the leasing of tractors is the most common form of leasing amongst farmers. This is due to the fact that the RDP does not support the purchase of tractors but supports only the purchase of special machinery required for specific weather conditions.

2.3.1.3. Description of Financing Market

Slovenian banks have a good level of liquidity and capital, which makes their insolvency risk lower than the EU average. There are, however, some structural issues in the banking system that affect the financial stability of commercial banks. According to the Bank of Slovenia Annual Report in 2018, despite a falling share of NPLs for the overall economy since 2015, commercial banks face significant ongoing credit risks due to the growth of domestic banks' loans to non-financial corporations which represents a potential source of increased bank exposure to non-performing loans.[67] In addition, the Annual Financial Stability Review from December 2018[68] states that interest rates on corporate loans, which are decreasing with respect to 2017, remain at historically low levels in Slovenia and further reduce the profitability of commercial banks. Interest rates decreased sharply after 2010, reaching rates in 2018 of approximately 2.4%-2.9% for loan

66 In 2017, the economic damages due to the frost in Slovenia resulted in a higher than normal number of applications originated by fruit growers.

67 According to the Institute of Macroeconomic Analysis and Development of the Republic of Slovenia, the proportion of non-performing loans was 15.2% in 2016.

68 Bank of Slovenia, December 2018, Annual Financial Stability Review.

amounts of up to EUR 1 million and approximately 2.1%-2.4% for loan amounts above EUR 1 million (Table 7).

Table 7: Average interest rate for lending in Slovenia, by maturity and loan amount, 2010-2018

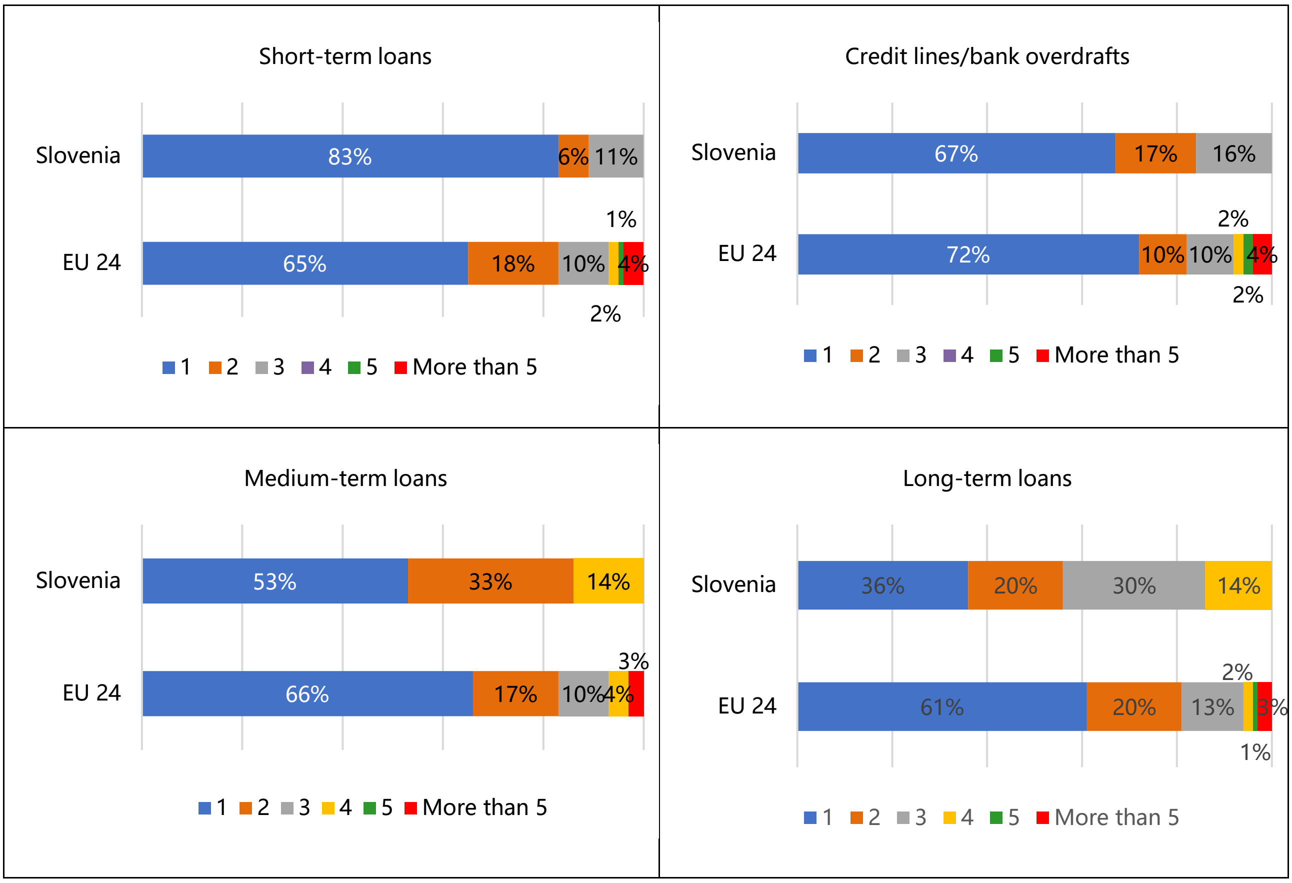
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Loan amounts below EUR 1 000 000									
Up to 1 year	6.15%	5.96%	6.13%	6.05%	6.07%	5.58%	4.04%	3.37%	2.91%
1-5 years	5.44%	5.02%	5.33%	5.20%	5.02%	4.06%	3.34%	2.77%	2.67%
5-10 years	4.56%	4.57%	4.93%	4.79%	4.62%	4.44%	3.19%	2.60%	2.44%
Over 10 years	4.78%	4.47%	4.87%	4.82%	4.85%	4.46%	3.31%	2.52%	2.56%
Loan amounts above EUR 1 000 000									
Up to 1 year	5.50%	5.07%	5.06%	4.84%	4.92%	4.48%	3.31%	2.39%	2.40%
1-5 years	5.21%	4.89%	5.21%	4.63%	3.94%	3.95%	2.77%	2.45%	2.08%
5-10 years	4.67%	4.20%	4.74%	4.40%	3.74%	3.84%	2.51%	2.14%	2.16%
Over 10 years	4.65%	4.31%	4.64%	4.35%	4.05%	3.58%	2.58%	2.56%	2.11%

Source: Bank of Slovenia.

Farmers are loyal bank customers. The Bank of Slovenia regulates the credit terms (including credit exposure) of the financial institutions operating in the country. Banks in turn monitor farm operations through their internal records. Although not able to provide details on interest rate or administrative costs, the main agricultural bank indicated in interviews that even if the cost of approval and credit management on loans to farmers is not the cheapest, they are flexible if there are problems with repayments. Many interviewees, both representing farmers and public authorities' interests, have pointed out that in Slovenia, it is very difficult to change bank for farmers, as often there is usually only one bank per village, typically Deželna, with whom farmers form a loyal relationship. Furthermore, farmers are not very familiar with online banking and their lack of digital skills prevents them from benefitting from the growing amount of services offered online.

The loyalty of farmers to their bank is confirmed by the findings from the *fi-compass* survey, which finds that 83% of the farmers applying for short-term loans (which is the product with the significantly higher demand, Figure 8, section 2.2.2) make an application to only one bank (Figure 13).

Figure 13: Farmers and the number of banks to which they have applied for the same project/proposal, 2017



Source: fi-compass survey.

Bank financing for the agriculture sector has decreased over time and its volumes are limited. Between 2016 and 2019, total outstanding loan volumes decreased by more than 20%, from EUR 76.5 million to EUR 60.8 million (Table 8). This confirms the perception amongst agriculture stakeholders that, even if banks are better capitalised now that they were following the economic crisis of 2009-2015, the supply of finance and the access to finance for agriculture holdings and agri-businesses has not improved. This suggests a limited and narrowing financial offer to the agriculture sector, which seems likely to remain in the future unless there is appropriate public intervention[69].

Table 8: Amount of outstanding loans in the Slovenian agriculture sector, 2016-2019[70], EUR million

	2016	2017	2018	2019
Amount of outstanding loans	76.5	71.8	64.8	60.8

Source: Slovenian Central Bank data, 2019.

Only a fraction of all farmers participates to the financial market. Small-sized farms below 10 ha, generally do not apply for loans[71] and when they do so it is usually for household products, such as consumer and

69 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final Report, Annex No 12.
70 Data provided in the table are from the 31st of December. In addition, data before 2016 were not available.
71 According to the Chamber of Commerce.

mortgage loans, rather than agriculture loans, which they cannot access because of their lack of bookkeeping records.[72] This helps explain the limited volume of outstanding loans in the agriculture sector, as household loan products are not counted towards the total for the sector.

72 According to the Chamber of Agriculture and MAFF, the average annual farm income is EUR 7 000. Farmers with an income below EUR 7 000 are not required to keep bookkeeping records, therefore, many farmers in the country have no records of their agriculture business activity.

2.4. Financing gap in the agriculture sector

This section presents an assessment of the financing gap in the Slovenian agriculture sector, broken down by farm-size and financial product.

Key elements of the financing gap in the Slovenian agriculture sector

- The financing gap is estimated to be EUR 952 million and is expected to increase over the next two or three years.
- Small-sized farms account for 90% of the financing gap.
- Access to long-term loans, accounting for more than 60% of the gap, represent the biggest difficulty for the sector.
- Lack of credit history for many farmers, as well as the lack of bookkeeping and business history, is an important driver of the gap. This is compounded by lack of collateral, low level of financial literacy, and the low repayment capacity, particularly for small-sized farms.
- Supply of finance to the agriculture sector is highly concentrated in one bank. Other banks have limited, if any, interest in financing farms, as they prefer working with less risky and more profitable customers.
- Credit approval costs are high, and the red tape can be substantial, leading some farmers to refrain from applying for bank loans.
- Young farmers face difficulties in accessing finance due to their lack of managerial experience and credit history, lack of sufficient liquidity, as well as a lack of a well-established relationship with banks.

This section presents an estimate of the total value of unmet financing needs of financially viable agricultural enterprises, defined as financing gap, for 2017. The estimate is calculated by multiplying the total number of farms in the financing market by the proportion of financially viable farms reporting unmet demand for finance multiplied, in turn, by the average obtained loan value to farms.

Financing gap = Number of farms X percentage of farms that are both financially viable and have unmet demand X average loan volume

All the calculations are based on the results of the *fi-compass* survey for Slovenian farms and statistics from Eurostat (see annex A.3 for more information).

The financing gap arises from unmet financing demand from economically viable farms.[73] The unmet demand for finance includes:

(i) lending applied for but rejected by the bank, or

(ii) a lending offer refused by the potential borrower, as well as

(iii) lending not applied for due to expected rejection.

For the purpose of this study, 'turnover growth' is used as a proxy of farm viability. In particular, two different criteria for viability are used, which lead to the calculation of a range for the financing gap between an upper and a lower bound:

- The **lower bound** gap is calculated under the hypothesis that only enterprises which reported a stable (non-negative) turnover and no cost increase in the previous year can be considering as viable;

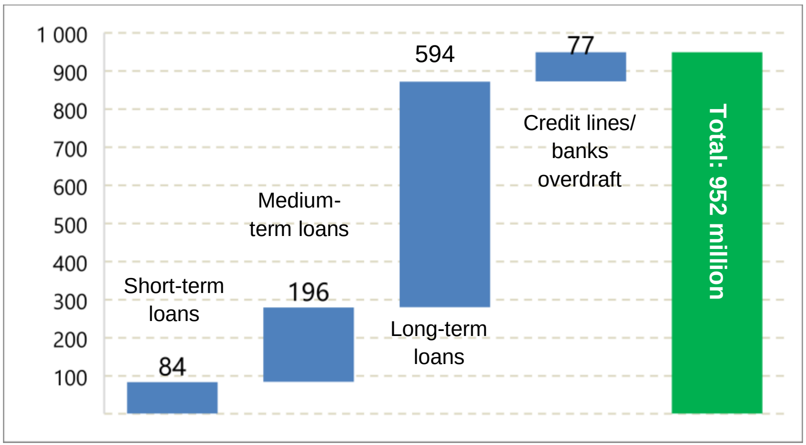
73 The financing gap presented in this section is different from the total unmet demand presented in section 2.2.2. In the quantification of the total unmet demand, all the enterprises in the population applying for finance are considered independent from their economic viability.

- The **upper bound** gap is calculated under the hypothesis that all enterprises which reported a stable (non-negative) turnover can be considered as viable.

In the case of Slovenia, none of the enterprises which reported a positive or stable turnover, reported increasing costs. Accordingly, there is no range of enterprises considered economically viable and so only a single estimate for the gap is presented.

The financing gap for the Slovenian primary agriculture sector is estimated to be EUR 952 million. Farms have the most difficulties in accessing long-term loans and accounts for more than 60% of the gap (EUR 595 million). Important gaps are also found for short and medium-term loans, as well as credit lines and bank overdrafts (Figure 14).

Figure 14: Financing gap by product in the agriculture sector, 2017, EUR million



Source: Calculation based on results from the fi-compass survey.

Based on the *fi-compass* survey, small-sized farms account for most of the financing gap (EUR 860 million) (Table 9). Interviewed stakeholders identify numerous reasons why small-sized farms have problems accessing finance. The main reasons are presented below.

Table 9: Financing gap by farm size and product, 2017, EUR million

		Total	Short-term loans	Medium-term loans	Long-term loans	Credit lines/bank overdrafts
Financing gap	Small-sized farms	**860.3**	74.5	179.4	537.7	68.7
	Medium-sized farms	**85.3**	8.7	15.7	53.9	7.0
	Large-sized farms	**6.1**	0.8	1.2	3.0	1.1
	Total	**951.7**	**84.0**	**196.4**	**594.6**	**76.9**

Source: Calculation based on results from the fi-compass survey.

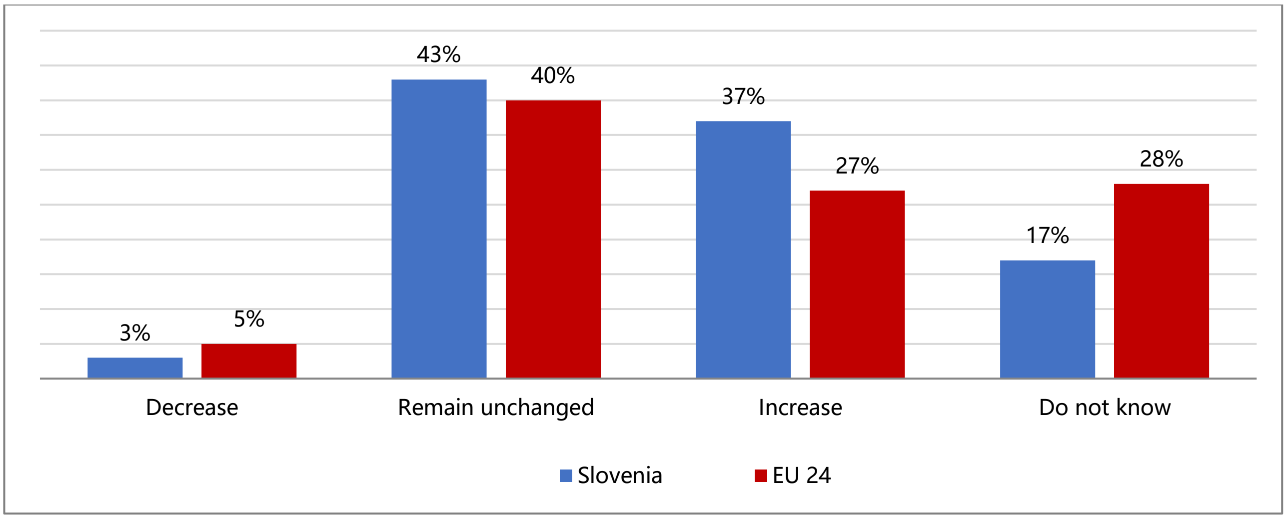
Farmers' lack of credit history and lack of bookkeeping records. Keeping accountancy records is not a requirement for farms with an income of below EUR 7 000 per year. As a result, when they approach a bank to request a loan, they have no track record of their business history, and the bank does not know how to assess their creditworthiness.

Lack of collateral, low repayment capacity together with lack of financial literacy are all explanatory factors contributing to the financing gap.

On the supply side, most of the banks lack interest in collaborating with the agriculture sector, which is perceived as having high risk and low profitability. One commercial bank (Deželna Banka Slovenije) serves 80% of the farms. This high level of market concentration translates into higher interest rates applied to farmers compared with other sectors. More generally, high credit approval costs and cumbersome banks' administration discourage farms from seeking bank financing.

The financing gap can be expected to grow in the next two to three years, as 37% of the farmers expect their financing needs to increase (Figure 15). The sub-sectors expected to have the greatest demand for finance in the coming years are dairy, wine, and fruit and vegetables.

Figure 15: Famers' expectations on future financing needs, 2017



Source: fi-compass survey.

The current situation in Slovenia seems to justify further actions by the public administration to improve farmers' access to finance. Even if farmers prefer grants, fostering their participation on the financial market should be encouraged to increase long-term competitiveness.

2.5. Conclusions

The GFCF in Slovenia is on an upward trend. It represented 49% of the sector GVA in 2018, which is above the EU 28 average. Farmers invest in the modernisation of equipment and machinery. They also invest in order to expand production, to improve productivity, and to purchase land. The most dynamic investment sub-sectors are dairy, wine and fruit. Working capital needs are important but are often resolved through the agriculture cooperatives, and not through bank loans. Leasing is common, particularly the leasing of tractors.

One commercial bank (Deželna Banka Slovenije) serves 80% of farms. Stakeholders identify it as the bank that is the 'friend of the farmers', offering longer repayment periods and other conditions which are more flexible compared to those of other banks. However, its dominant market position enables the bank to be very selective in its lending policy. The total outstanding loan volume for the agriculture sector from banks stood at EUR 61 million at the end of 2019.

RDP support facilitates the investments undertaken in the sector. Between 2015 and 2019, over EUR 190 million was provided as grants for investments in agriculture and start-up aid for young farmers. The demand has been balanced and all resources were taken up. The presence of contracts for investments under the RDP eases the access to finance, for example by ensuring the private contribution of the farmer.

In 2017, according to the *fi-compass* survey, 14% of Slovenian farmers applied for bank finance, which is similar to the EU 24 average rate. Farmers mainly applied for short-term loans, which is contrary to the identified investment drivers pushing for longer-term investments, and suggests that farmers face difficulties in accessing loans with longer maturities.

The financing gap is estimated at EUR 952 million. The gap is the largest for small-sized farms and mainly concerns access to long-term finance. Among farmers presenting loan applications, 17% were rejected. While for farmers that did not apply for loans, approximately 16% did not do so due to their fear of being rejected.

Lack of credit history of many farmers, as well as the lack of bookkeeping and business history, is an important driver of the financing gap. In addition, lack of collateral, lack of an adequate business plan, and low repayment capacity are drivers that aggravate the situation, particularly for small-sized farms. Furthermore, the fact that the supply is highly concentrated to one bank, and other banks have limited interest in financing farms, limits the provision of financing to the sector. Furthermore, the credit approval costs are high and the administration demanding, leading farmers to refrain from applying for loans.

Young farmers face difficulties in accessing finance due to their lack of business and credit history, as well as a lack of a well-established relationship with the banks. Lack of financial literacy among farmers may cause them to refrain from presenting loan applications, due to their unwillingness to discuss their financial situation with an outsider (a bank). Another important reason for unmet demand for finance is the inability of farmers to prepare required documentation.

Recommendations:

Unless the underlying reasons for the gap are addressed, the gap will continue to grow. In this context, in order to improve farmers' access to finance, the following could be taken into account:

- As proposed in the ex-ante assessment for the use of financial instruments and its update, the setting-up of a guarantee instrument with EAFRD resources continues to be relevant in Slovenia. The instrument could improve access to credit for the most affected market segments (small-sized farms and young farmers), reduce collateral requirements and, to some extent, financing cost. It may also stimulate other banks to enter the sector and start financing farmers.
- An EAFRD risk-sharing loan instrument might also be considered, as it would combine the provision of risk coverage with a reduction of the financing cost. Such an instrument could also be effective in promoting longer loan maturities. Preferential loans are already available to farmers, but their take-up is reported to be low by stakeholders, also due to budget limitations. At the same time, farmers, particularly young farmers, face higher financing cost than enterprises in other sectors.

- A specific micro-credit instrument might be considered to meet the needs of the large number of small-sized enterprises with requirements for small loan amounts, who currently appear to have a low level of financial inclusion.
- For all the above mentioned financial instruments, the possibilities offered by the new legal framework (e.g. easier combination of financial instruments, grant support and interest rate subsidies, finance for the purchase of land for young farmers, and stand-alone working capital finance) might provide interesting opportunities to increase the effectiveness of financial instruments available to small-sized farms, young farmers and new entrants.
- Technical assistance to improve farmers financial literacy, digital skills, and managerial skills, could be beneficial. Farmers are often not familiar with on-line banking and their lack of digital skills prevents them from benefitting from the growing offer of online services.
- The setting-up of one or more financial instruments accompanied by a competition to select the partner financial institutions, could stimulate interest among banks to develop services for the agriculture sector, thereby reducing market concentration.
- Capacity building to improve understanding of the agriculture sector could help overcome barriers caused by lack of sector knowledge within banks and stimulate the entry of new players in the provision of finance for agriculture.

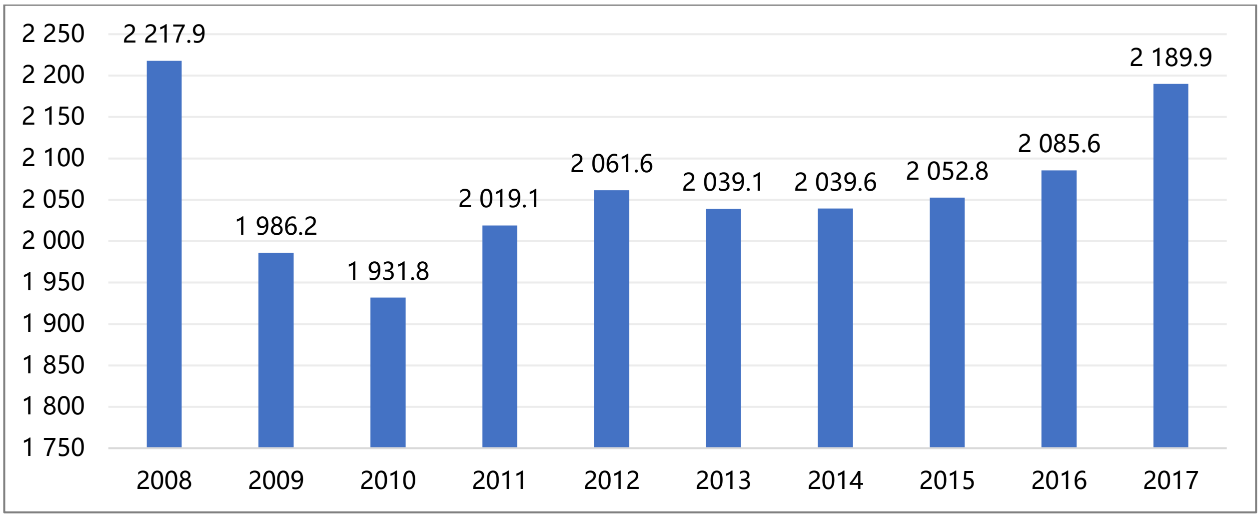
3. PART II: AGRI-FOOD SECTOR

3.1. Market analysis

Key elements on the Slovenian agri-food sector
• In 2017, the Slovenian agri-food processing industry contributed approximately 1.5% to the total added value and 1.7% to total employment of the national economy. • In 2017, there were 2 479 enterprises in the agri-food sector in Slovenia, a significant increase from the 1 079 enterprises observed in 2008[74]. • In 2016, the number of employees in the sector stood at 16 935. • The production value of the sector reached EUR 2.2 billion in 2018. • The ten largest companies account for at least half of the revenues of the sector, while 98% of the agri-food companies are small-sized companies with less than 50 employees. • Within the sector, 44% of all agri-food processing enterprises produce bread, fresh pastry goods and cakes, while 13.6% produce meat and meat products.

The overall agri-food production value has been stable. The output value of the Slovenian agri-food sector fell substantially between 2008 and 2010, since when it has grown slowly to reach EUR 2 billion, which is still below its level in 2008. Different trends are reported at sub-sector level. The production value in the manufacture of food products industry increased by more than 6% over the period considered, whereas the production values of enterprises operating in the manufacture of beverages dropped by 18.5%[75].

Figure 16: Trend of production value in Slovenian agri-food sector, 2008-2017, EUR million



Source: Eurostat, 2019, Structural Business Statistics.

74 The steep increase of number of companies is likely to result from a shift in the statistics definition, whereby agri-food processing activities on farms were included for the later years of the data collection.

75 Eurostat, 2019, Structural Business Statistics (SBS). Data for 2018 are not available.

The Slovenian agri-food sector contributes approximately 1.5% of the total added value of the national economy[76]. In 2017, value added at factor costs amounted to EUR 543.3 million[77]. In 2018, the revenues of the agri-food industry amounted to EUR 2.19 billion[78].

Between 2008 and 2017 the number of firms in the Slovenian agri-food sector had grown dramatically by almost 150%, increasing from 1 079 in 2008 to 2 479 in 2017. The bulk of the increase is attributable to the number of firms operating in the manufacture of food products, which increased by 132% over the same period.[79] In the last few years, a new trend has appeared that is contributing to the increase of processors, as farmers began undertaking activities linked to processing their products (and/or those from the local area) to a greater extent than previously observed. About half of all food processing enterprises (44%) are enterprises that produce bread, fresh pastry goods and cakes, followed by companies producing meat products and meat (13.6%).

In 2016, the agri-food sector in Slovenia employed 16 935 workers. The number of employees in the manufacture of food products accounted for almost 91% of the total number of people employed in the sector.[80] In 2017, the number of employees in this industry increased by almost 4%.[81]

Small-sized enterprises (less than 50 employees) account for 98% of the total number of enterprises in the Slovenian agri-food sector, and micro-sized enterprises (less than 10 employees) accounted for approximately 93% of the total number of enterprises for both the manufacture of food and beverages.[82] The number of small-sized companies increased the most between 2008 and 2017, reaching 2 423 in 2017.

The 10 largest companies account for at least half of the revenue of the agri-food sector and are present in a variety of sub-sectors.[83] Two of the top 10 companies, Droga Kolinska and Pivovarna Laško Union, are foreign-owned. Droga Kolinska is part of Atlantic Grupa, one of the leading food companies in the region. Atlantic Grupa's distribution portfolio includes brands from manufacturers such as Unilever, Wrigley, Ferrero, Hipp, Johnson & Johnson amongst others. Pivovarna Laško Union is the largest manufacturer of beverages in Slovenia and employs over 600 staff. The company, owned by the Dutch international brewer Heineken, was created in 2016 with the merger of Pivovarna Laško and Pivovarna Union. However, the nationally owned companies are particularly strong in meat and dairy production: Perutnina Ptuj is a specialised meat processing corporation; Pivka a poultry meat processor, and Ljubljanske mlekarne is the leading dairy and the largest wholesaler of milk and dairy products in Slovenia. Of all the dairies in Slovenia, Ljubljanske Mlekarne purchases the largest volume of domestic milk from over 2 000 Slovenian farms.

76 Chamber of Commerce and Industry of Slovenia - Chamber of Agriculture and Food Enterprises, Poročilo o stanju kmetijstva in živilstva v letu 2018.
77 SBS-Eurostat, 2019. Data for 2018 are not available.
78 Chamber of Commerce and Industry of Slovenia - Chamber of Agriculture and Food Enterprises, Poročilo o stanju kmetijstva in živilstva v letu 2018.
79 SBS-Eurostat, 2019. Data for 2018 are not available.
80 SBS-Eurostat, 2019. Data for 2018 are not available.
81 Data for the number of persons employed in the manufacture of beverages is not available for later years.
82 SBS-Eurostat, 2019. Data for 2018 are not available.
83 AJPES, 2019, www.bizi.si.

Table 10: Top-10 agri-food companies in Slovenia, 2018

Top 10 in 2018		
	By Number of Employees	**By Net Sales Revenue**
1	Perutnina Ptuj d.d.	Droga Kolinska d.d.
2	Žito d.o.o.	Perutnina Ptuj d.d.
3	Ljubljanske mlekarne d.o.o.	Ljubljanske mlekarne d.o.o.
4	Pivovarna Laško Union d.o.o.	Pivovarna Laško Union d.o.o.
5	Mlinotest d.d.	Žito d.o.o.
6	Droga Kolinska d.d.	Celjske mesnine d.o.o.
7	Pivka perutninarstvo d.d.	Jata Emona d.o.o.
8	Incom d.o.o.	Panvita MIR d.d.
9	Celjske mesnine d.o.o.	Mlekarna Celeia d.o.o.
10	Pekarna Pečjak d.o.o.	Mlinotest d.d.

Source: AJPES, 2019, www.bizi.si.

3.2. Analysis on the demand side of finance to the agri-food sector

This section describes the drivers of demand for finance in the agri-food sector and analyses the met and unmet demand. It seeks to identify the main reasons for agri-food enterprises to request financing and the agri-food sub-sectors showing the largest need for finance. The section also provides an assessment of the type of agri-food enterprises which face more constraints in accessing credit. The examination of the demand for agri-food finance is based on the findings from the Agri-food survey results of 50 Slovenian firms, as well as interviews with key stakeholders in the agri-food sector and on the Structural Business Statistics.

Key elements on finance demand from the Slovenian agri-food sector

- After a drop of 59% in the period 2008-2015, gross investment in the Slovenian agri-food sector increased in 2016 and 2017, reaching EUR 205.8 million.
- The main problems identified in the sector include high production costs, low selling prices, difficulties in accessing market outlets and shops, as well as regulatory and administrative barriers.
- The main investment drivers for the agri-food sector are: (i) expansion and modernisation of production; (ii) investments triggered by climate change policies; as well as (iii) the development of new products to enter new geographical markets, and (iv) working capital needs.
- Investment support from the EAFRD through the RDP influences the investment decisions of many agri-food companies, particularly amongst small-sized businesses.
- In 2018, 35% of the agri-food companies applied for bank finance, with the highest demand registered for short-term loans. However, many businesses, both large and small-sized, use their own resources to finance their investments.
- The unmet demand for the agri-food sector in Slovenia is estimated at EUR 127.4 million.
- Banks rejected 11% of all agri-food companies' loan applications, while another 10% of the agri-food companies are discouraged from approaching banks due to their fear of being rejected.
- The main reasons underlying rejection of loan applications from agri-food companies relate to: (i) the low economic margins of the companies; (ii) the lack of collateral; and (iii) the lack of credit history, particularly affecting start-ups; and, in some case (iv) lack of an appropriate business plan, particularly for the small-sized enterprises.
- Key reasons for agri-food companies to be discouraged from approaching banks include inter alia (i) repayment conditions; (ii) burdensome loan application process; and (iii) lack of financial literacy amongst start-ups, particularly young farmers starting a processing activity in addition to their agricultural one.
- Almost 40% of the agri-food businesses expect their financing needs to increase over the next two-three years, particularly those involved in dairy, fruit processing and wine production.[84]

3.2.1. Drivers of total demand for finance

Gross investments in the Slovenian agri-food sector increased in 2016 and in 2017, after a long decline[85]. Between 2009 and 2015, the overall level of investments in the agri-food sector in Slovenia decreased by almost 59%, due to the severe economic crisis. In 2016, the trend reversed and in 2017, gross investment[86] reached EUR 205.8 million, although it still remained below the 2008 level. In 2017, investment in the food processing sub-sector amounted to EUR 136.6 million, whilst investment in beverages stood at EUR 69.2 million[87]. In 2017, investments in the sector were mainly targeted to tangible assets and machinery

84 The survey was carried out in 2018 before the impacts of COVID-19 on the sector and the economy were known.
85 Data for 2018 and 2019 were not available at the time of writing.
86 Gross investment is the amount a company has invested in an asset or business without factoring in depreciation.
87 SBS-Eurostat, 2019.

and equipment. Investment in tangible assets accounted for over 57% of the overall gross investment in the sector, whilst resources devoted to machinery and equipment represented the 40% (Table 11).

Table 11: Gross Investment in the Slovenian agri-food sector, 2008-2017, EUR million

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Gross investment in construction and alteration of buildings	54.5	28.8	28.3	16.5	10.2	12.1	20.1	3.4	11.6	4.2
Gross investment in existing buildings and structures	0	6.7	0.2	0.6	1.6	2.9	3.2	0.6	0.4	0
Gross investment in land	16.2	11.4	1.2	2.2	0.4	1.4	3.6	0.5	0.1	0.1
Gross investment in machinery and equipment	46.1	68.2	68.7	81.6	37.2	41.8	63.1	27.6	70.9	82.6
Gross investment in tangible goods	184.4	129.3	110.9	113.7	84.1	58.8	90.5	91.5	94.7	118.9
Total	**301.2**	**244.4**	**209.3**	**214.6**	**133.5**	**117**	**180.5**	**123.6**	**177.7**	**205.8**

Source: Structural Business Statistics - Eurostat, 2019.

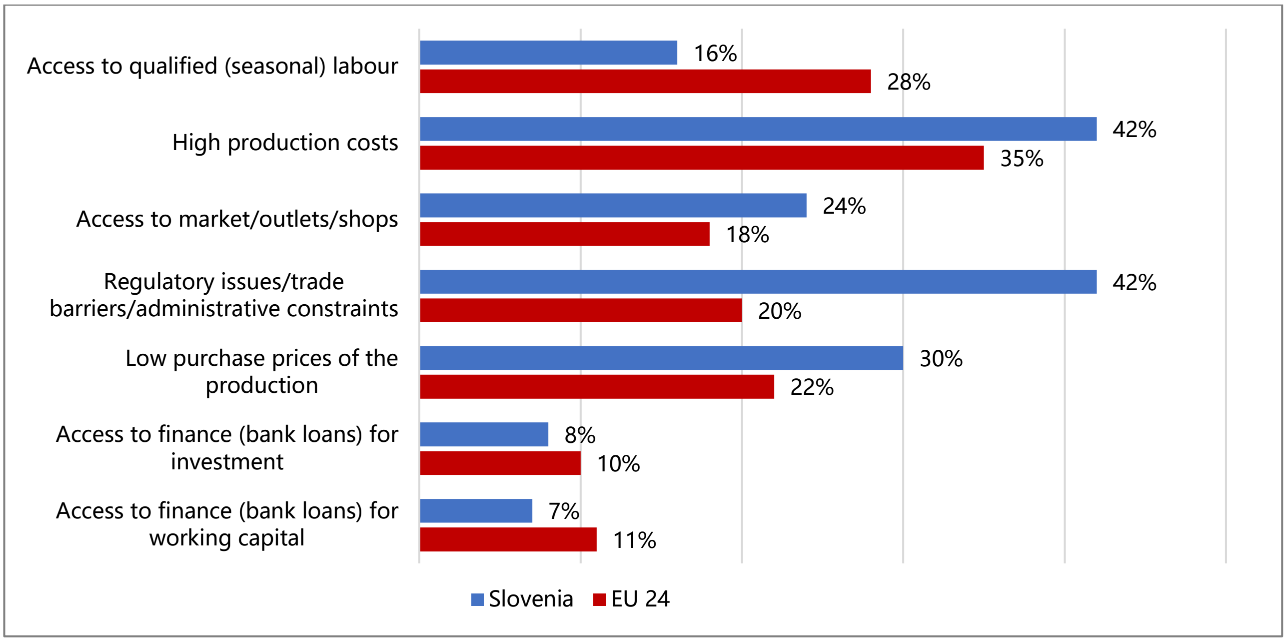
After some difficult years, the agri-food sector is now recovering. The investment development confirms the picture painted by many stakeholders. After some difficult years following the economic crisis of 2008, the sector's performance, both in terms of productivity and sales of food is improving. However, competition from imports of processed food is fierce, and the agri-food sector is being squeezed by the retail sector. As a result, the capacity of the domestic companies to invest has been low, and an important part of the investments has been undertaken by foreign companies.[88]

Although the sector is now stable, growth is constrained by poor value chain organisation and the dynamic with local producers. Poor organisation is a problem both up-stream and down-stream in the value chain. Processors are often disconnected from the needs and activities of farmers. This even applies to agricultural cooperatives undertaking processing activities and owned by farmers[89], which are said to be largely detached from the activities of their affiliated farmers. Hence, the part of the chain linking farmers and processors sometimes does not operate smoothly. At the same time, the market power of retailers puts pressure on the agri-food companies. According to interviews with the MAFF and universities, the agri-food sector is a price taker in relation to the retail sector. Three main retail chains dominate the trade with food products and they use their market power to impose hard conditions on the agri-food processors who are often struggling to find different market outlets for their products. In 2018, findings from the Agri-food survey conducted amongst agri-food companies in Slovenia indicate that 24% of the surveyed businesses face difficulties in accessing markets, outlets and shops; a rate above the EU 24 average (Figure 17).

High production costs and low sales' prices are important problems for the Slovenian agri-food firms. According to the Agri-food survey, 42% of the enterprises experienced difficulties related to high production costs. This is due to high input costs in relation to selling prices, non-competitive infrastructure capacity and the relatively poor productivity of several companies[90]. Survey findings indicate that 30% of companies report problems related to low selling prices (Figure 17). Slovenian agri-food companies compete on market shares with products from other countries, and parts of the sector aim at competing through the price of the final products, at the expense of prioritising product differentiation. However, according to interviews with the MAFF, many companies are now in a turnaround phase, with an increased focus on improving the quality of products, and differentiating them from other products through the link with local/regional/national territories.

88 According to interviews with MAFF, university, Chamber of Commerce.
89 During the privatisation wave, following Slovenia's accession to the EU in 2004, the cooperatives became owners of processing facilities, but this part of the cooperatives' business is largely disconnected from the activities of the affiliated farmers.
90 Interviews with university.

Figure 17: Difficulties experienced by agri-food enterprises in 2018



Source: Agri-food survey.

Regulatory issues, trade and administrative barriers represent important constraints for agri-food enterprises (Figure 17). According to interviews, the Slovenian business environment is characterised by rapid and frequent changes of public policy, legislation, and tax regulations that businesses must comply with in their operations. Companies are burdened with a high level of administration linked to public requirements.[91]

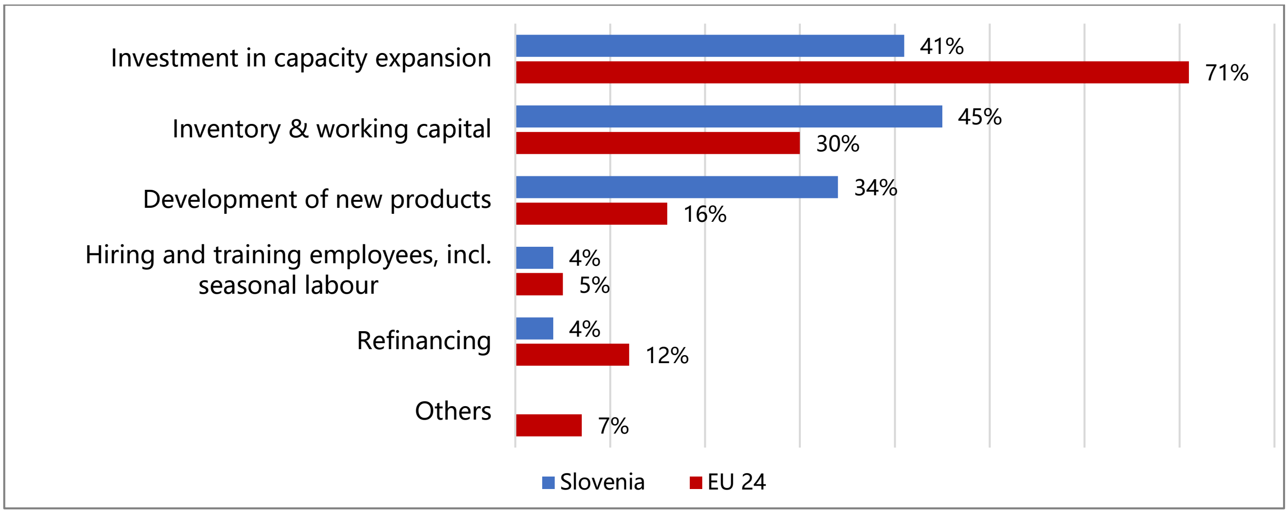
The main investment drivers for the Slovenian agri-food sector include:

- Working capital needs;
- Investment in expansion capacity and modernisation of production;
- The development of new products both for the domestic and new international markets;
- Investments triggered by climate change.

Interestingly, the purpose of bank loans differ between Slovenia and the average for the EU 24. About 45% of surveyed companies indicated that the main purpose of requested loans was for working capital costs, which is a substantially higher share than for the EU 24. At the same time, only 41% asked for a loan for investments in capacity expansion, which is a substantially lower share than the 71% in EU 24. In the same manner, 34% of Slovenian's businesses asked for loans for developing new products, more than twice the rate compared to the EU 24 (Figure 18).

91 Interviews with agri-food sector representatives and universities.

Figure 18: Purpose of bank loans in the agri-food sector in 2018



Source: Agri-food survey.

Stakeholders from both the agri-food and agriculture sectors have underlined that the future development of the sector depends heavily on the production of high-quality, sustainable products with higher value added. This requires access to modern technology, knowledge and innovation. Additionally, an increase of exports to foreign markets is considered an important driver for the whole sector.

Working capital needs are high. According to all interviewed stakeholders from the agri-food sector (the MAFF, the banks, and the Agri-food survey), the sector needs finance for working capital, resulting in agri-food companies applying mainly for short-term loans.[92] In general, the agri-food sector meets its working capital needs through bank loans to a much greater extent than the agriculture producers.

Agri-food companies' working capital needs are mainly arising from the long payment delays by the retail sector. Retailers pay the agri-food companies with a delay of 60 days to six months after the product has been delivered to them, putting enormous pressure on the agri-food companies' cash flow. In addition, in order to maintain their relations with retailers, agri-food companies need to offer special discounts on everything sold at the end of the year to the retailers, putting additional strains on the potential profits of the agri-food sector. Furthermore, companies with poor credit ratings usually have difficulties in negotiating payments to suppliers, and this complicates the overall situation.[93]

Investments to renew equipment and to improve and expand production processes are the most frequent investments undertaken. Interviewees representing the sector have underlined that most of the investments are devoted to the modernisation of processing equipment and the expansion of processing capacities. The necessity of modernisation stems from the need of reducing production costs, increase productivity and raising the quality of final products. In a survey conducted by the Chamber of Commerce[94], 100% of the respondents had used bank finance during the last two-three years to purchase equipment or

92 This is confirmed not only by the Agri-food survey, but also by a survey undertaken by the Chamber of Commerce. A survey conducted by the Chamber of Commerce in 2018 amongst 60 of its members (medium and large agriculture companies, food producers and food processors). Source: EIB, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex N 12.

93 Interview Chamber of Agriculture and Food Enterprises, November 2019.

94 Where the 60 companies participating were medium and large-sized companies with a good financial situation (thus not representing necessarily the typical situation in the sector). EIB, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex N 12.

intangible assets, and 83% foresaw the same investments for the following two-three years. This shows the continuous desire of the businesses to invest for improving production processes and updating equipment.[95]

The development of new products and the expansion into new international markets is another investment driver. After the modernisation of production, the second most prevalent investment driver is the development of new products, which was reported as a reason for taking a loan by 34% of the agri-food enterprises responding to the Agri-food survey (Figure 18).

Before joining the EU, agri-food companies based their performance on economies of scale, competing on price. Today, adapting products to the local customers' demand is viewed as a better way to capture additional market shares. The focus is on locally produced food advertised with the logo "Made in Slovenia"', for example, or the name of the region to give an additional competitive edge. The focus on value added and on niche products has increased over the last years, and although progress is slow, the trend for the future is well established.[96]

Companies are also trying to find new niche markets, including the creation of development strategies for entering foreign markets. Over the past 10-15 years, local companies have been very dependent on sales on the domestic market, or in neighbouring countries. Now attention is turning to the EU markets in Austria, Poland, and Germany. Also markets outside Europe have been mentioned, including the United Arab Emirates.[97]

According to the MAFF, in the recent years investment support from the RDP to agri-food companies has been increasingly directed towards climate change related investments, which is in line with policy objectives of attempting to drive companies to undertake investments related to climate change. Many stakeholders have also pointed out that RDP grants are the main source for financing investments. [98]

At sub-sector level, the largest shares of investments were undertaken by the manufacturers of bakery, farinaceous products and of meat processing segments. In 2017, the investment levels in these sub-sectors accounted for 21.3% and 14.4% of the overall gross investment in the agri-food sector, respectively.[99]

Investment support offered from the EAFRD and provided through the national RDP is helpful for the Slovenian agri-food sector. This is particularly the case for small-sized companies whose investment patterns often follow the RDP priorities. Sub-measure 4.2 supports processing of agricultural production and is mainly relevant for agri-food companies, although applications can also be made from farmers seeking to process their inputs directly on the farm. The sub-measure aims at support investments to improve competitiveness, increase added value of agriculture products (including the processing of agriculture products from quality schemes), and the introduction of new products. The sub-measure can support *inter alia* innovative projects that represent a substantial technological novelty in the market, projects aiming at increasing the horizontal and vertical integration of the chain, as well as investments for greater environmental efficiency of food processing plants[100].

By the end of 2019, a public financing of EUR 75 million had been made available to the market and a minor part of this had been left without a potential beneficiary. The planning of RDP resources seems balanced against the demand. Nevertheless, the withdrawal from the EAFRD financial instrument, which could have supported guarantees for agri-food companies under that sub-measure, may have slightly affected the uptake level.

95 According to the Chamber of Commerce, the average age of the current equipment for the agri-food sector is 18 years.

96 Interview MAFF.

97 Interview MAFF.

98 One third of the companies surveyed by the Chamber of Commerce intend to use finance in the coming two-three years in order to improve their energy efficiency. Source: EIB, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex N 12.

99 SBS-Eurostat, 2019.

100 Slovenian RDP 2014-2020.

Table 12: Slovenia: 2014-2020 RDP implementation data for sub-measure 4.2, total public finance, by the end of 2019

Sub-measure	Total number of received applications	Total budget requested by all submitted applications for all calls (EUR)	Total number of approved and supported applications from all calls	Total budget made available under all grant calls (EUR)	Number of non-approved applications	Total requested budget not being supported by all calls (EUR)
4.2 Support for investments in processing/ marketing and/or development of agricultural products	454	67.2	239	75.0	215	n.a.

Source: Slovenian MAFF, 2020. Preliminary data.

Note: The total amount requested is calculated based on all received applications before any administrative check regarding eligibility or selection criteria to have taken place. Applications that have not been approved could have been non-eligible, and/or with insufficient or missing information not allowing their evaluation, and/or with insufficient value-added, and/or ranked at a place for which budget under the call has not been anymore available.

The demand for financing increases due to the availability of investment support, as agri-food companies often complement the grant part of support with a bank loan. In addition, under special conditions, it is possible to include funds from the Regional Development Fund 'Ribnica' in the implementation of an investment.

The national food strategy aims at providing long-term objectives for the sector. At the time of writing, the MAFF was due to launch a national food strategy, aimed at responding to the sector's call for policy stability and long-term goals for the sector. The strategy is called 'Resolution: Our food, rural areas and natural resources after 2021.[101] The strategy does not contain a separate budget and depends on a combination of RDP and national measures.

3.2.2. Analysis of the demand for finance

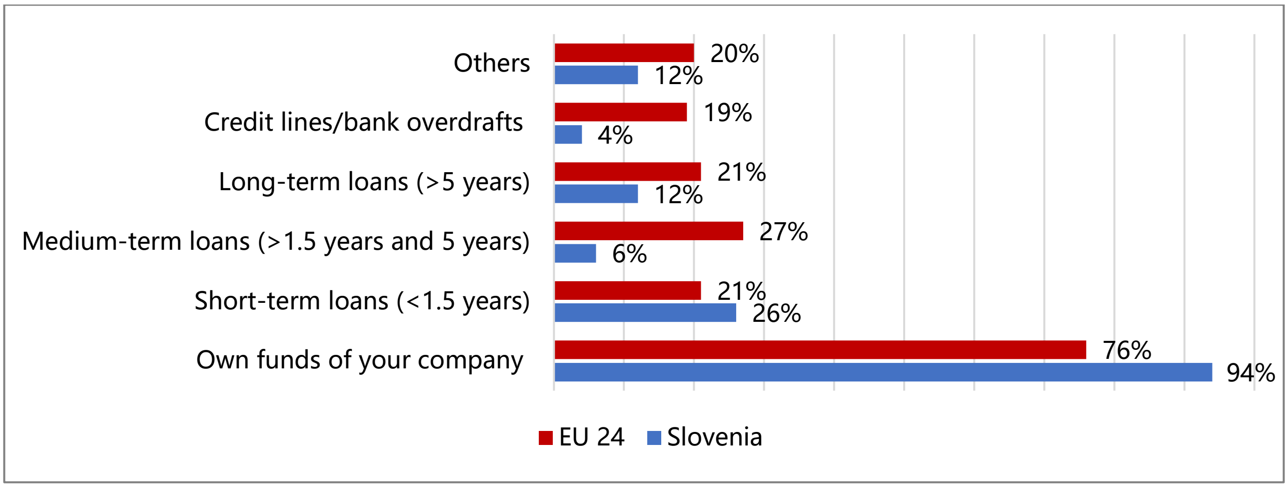
The potential total demand for finance combines both met and unmet demand. The met demand consists of the value of all applications for finance which were accepted by the financial institutions in the relevant year. The unmet demand consists of the assumed value of applications rejected by a financial institution, offers of credit refused by farmers, alongside cases where farmers are discouraged from applying for credit due to an expectation of rejection or refusal.

Based on the Agri-food survey, unmet demand for finance within the agri-food sector in Slovenia is estimated at EUR 127.4 million.

According to the Agri-food survey, 94% of enterprises consider their own funds as their main source of finance (Figure 19)**.** The second most common source is short-term loans. Long-term loans are important for 12% of companies in Slovenia.

101. PIS, 2019, Resolucija o nacionalnem programu o strateških usmeritvah razvoja slovenskega kmetijstva in živilstva »Naša hrana, podeželje in naravni viri od leta 2021, http://www.pisrs.si/Pis.web/pregledPredpisa?id=RESO125.

Figure 19: Most important financing instruments to agri-food enterprises in 2018

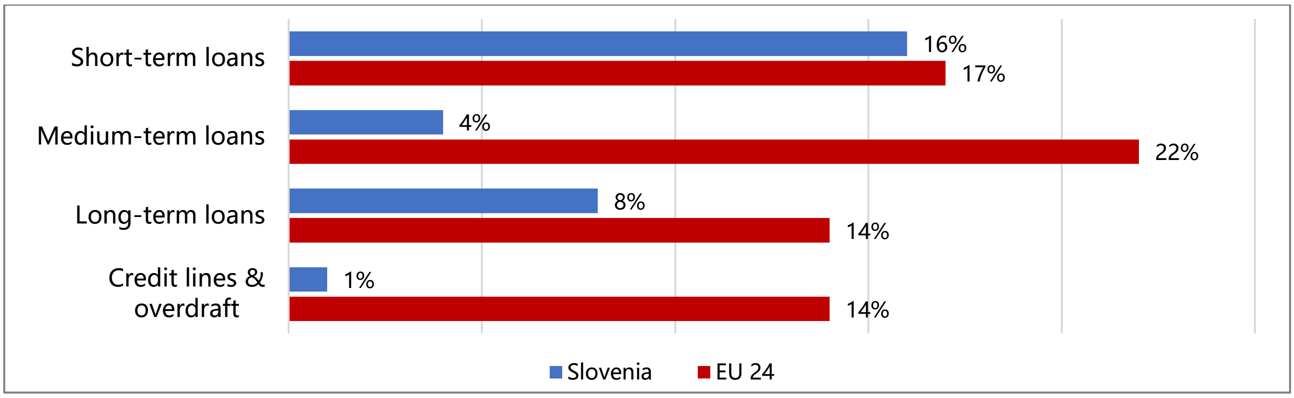


Source: Agri-food survey.

The size of companies influences their choice of financing solutions. In the agri-food sector, when analysing financing patterns, the sector should be divided into three sub-groups, the large foreign owned, the large domestically owned, and small-sized enterprises. Their financing methods vary depending on their ownership and size. Large-sized foreign owned companies are financed by loans from the principal parent company. Large-sized domestically owned companies search for financial sources with domestic banks, which are their long-standing partners. Generally, small-sized businesses are very conservative about financing, and often use their own resources to undertake investments. Smaller enterprises make use of short-term loans when borrowing, as well as investments grants and subsidies from RDP measures. For the small-sized companies, the amounts invested predominantly ranged between EUR 20 000 and EUR 100 000.[102]

In 2018, 35% of the agri-food enterprises applied for bank finance in Slovenia[103]. The application rate was 16% for short-term loans, followed by long and medium-term loans, at 8% and 4%, respectively (Figure 20).

Figure 20: Slovenian agri-food enterprises applying for finance in 2018, by financing product



Source: Agri-food survey.

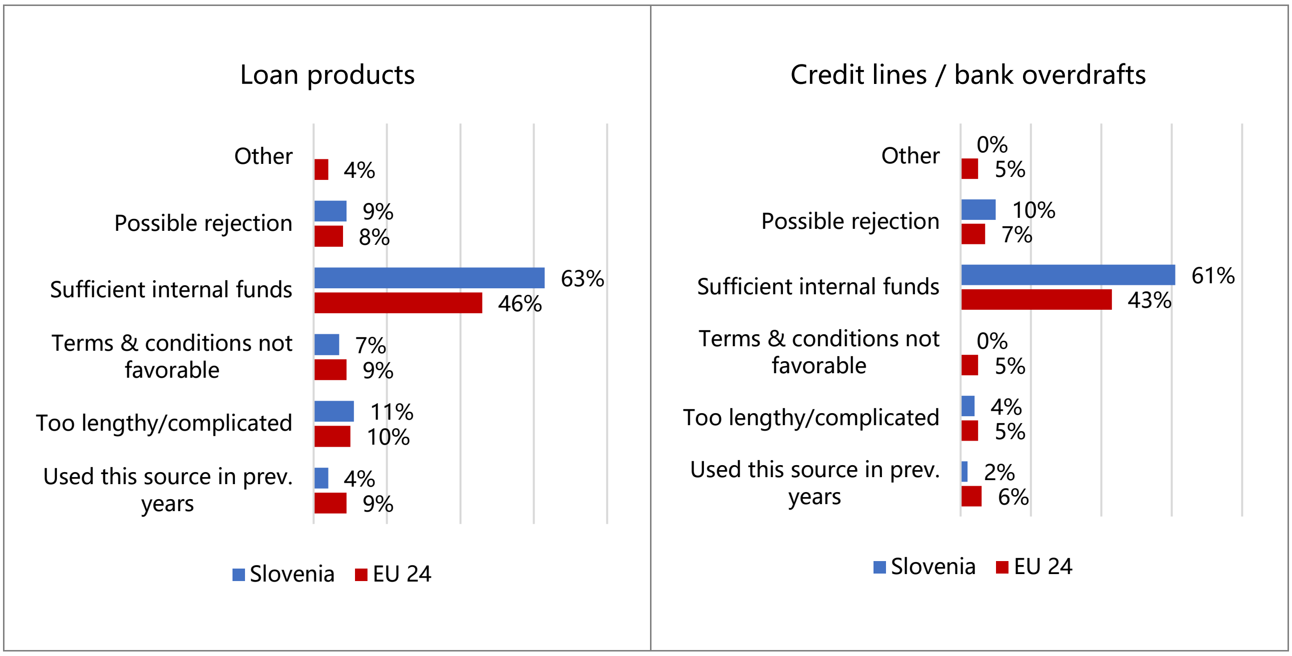
102 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex N 12.

103 Agri-food survey.

Fear of rejection as an important driver of unmet credit demand. The majority of the agri-food companies that decided not to apply for loans did not do so because they had sufficient internal resources. However, discouraged enterprises account, respectively, for 9% and 10% of non-applicants for bank loans and credit lines (Figure 21). The agri-food processors that limit their contact with banks do so because:[104]

- **Low cash flow and repayment capacity.** Some agri-food companies are hesitant to take on additional risks stemming from credit, as they fear not being able to repay loans because of low cash flow and liquidity problems. Also, some companies believe that they would be rejected by the banks, due to their low repayment capacity, and so do not even attempt approaching the banks.
- Another important factor stopping agri-food companies from applying for bank loans is the **complexity of the loan application process and the red tape** involved in preparing an application. Preparing an application is a time-consuming process, and the approval process may take a long time. The banks processing time of a loan application depends on how important the customer is for the bank. If the customer is important, then the bank can move fast, within days even. However, if the client is not considered as important, approval of loan applications may take as long as six months.
- **Start-ups and young farmers who want to start processing products are the predominant discouraged segment**. For these farmers, their limited business and entrepreneurial experience, as well as their lack of financial literacy and/or own resources, may hold them back from approaching banks. They could try to solve their financing needs through other means, including savings from the agriculture business, or loans from family and friends instead.
- **The loan terms and conditions** offered to agri-food companies may also cause some enterprises to hold back from approaching banks, as the general inflexibility of Slovenian banks' repayment conditions (such as grace periods, provisional suspensions of payments due to temporary cash flow problem etc.) are considered – for example, by the Chamber of Commerce – to be an issue for smaller agri-food companies.

Figure 21: Key reasons for not applying for loans in the agri-food sector in 2018

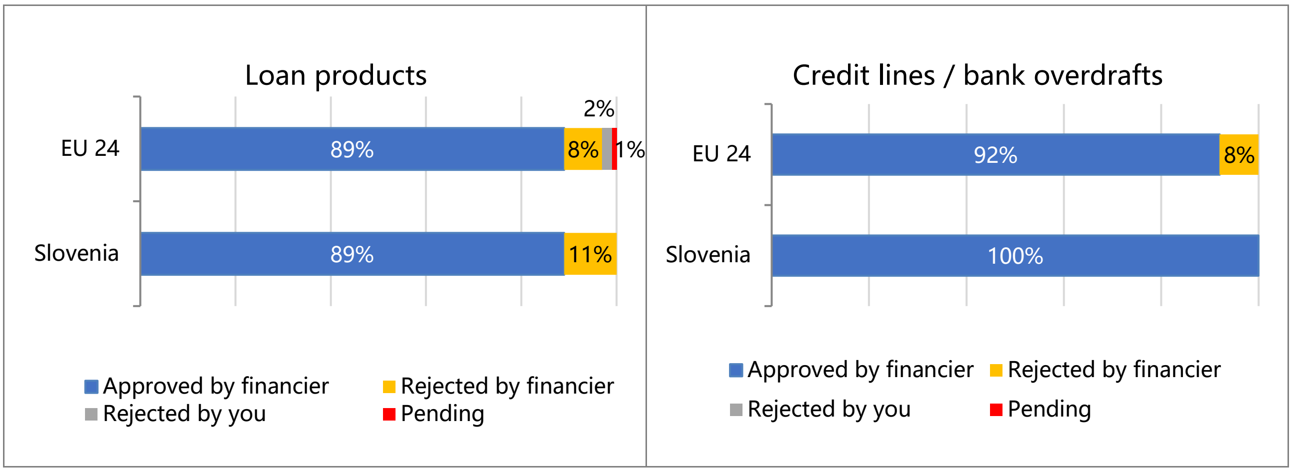


Source: Agri-food survey.

104 Interviews with Chamber of Commerce, MAFF and universities.

In 2018, according to the Agri-food survey, **approximately 11% of the loan applications presented by agri-food companies were rejected by the banks** (Figure 22). According to interviews with sectoral representatives, the actual rejection rate could be much higher than this level, particularly for small to medium-sized enterprises. In relation to this, it is pointed out that 'good borrowers', such as agri-food businesses presenting strong financials and economic perspectives, do not have difficulties in accessing finance, whilst smaller companies with weaker financials may experience significant difficulties.[105] No rejections have been recorded in the Agri-food survey for credit lines and bank overdrafts.

Figure 22: Results from loans applications in the agri-food sector in 2018



Source: Agri-food survey.

Stakeholders identify different reasons for banks to reject loan applications, with insufficient profit levels and lack of collateral amongst the most important. The low profitability of agri-food businesses, as well as the difficulty in fulfilling banks' requests for collateral and guarantees, are considered by some as the main challenges faced by agri-food businesses in Slovenia when trying to access finance[106].

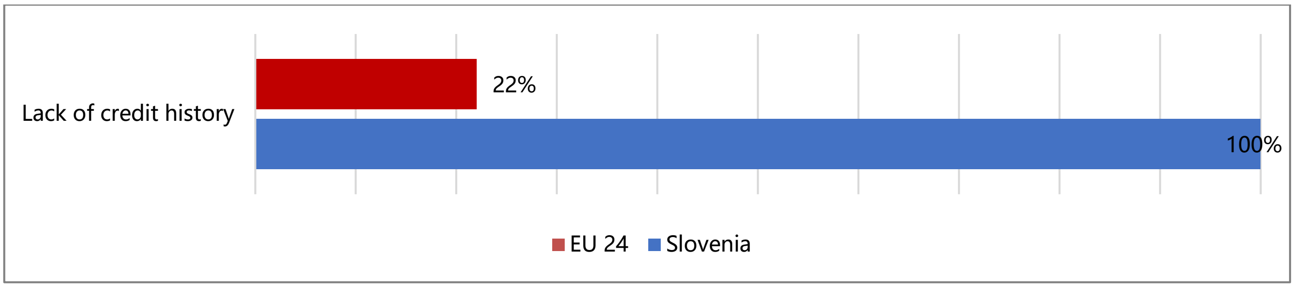
In particular, the reasons for rejections can be outlined as follows[107]:

- **Low profits and liquidity**. Due to limited economic margins and the lack of adequate liquidity, agri-food companies do not score highly enough in the banks' credit assessments.
- **Lack of collateral** is a problem for a large portion of small agri-food enterprises. Many of them rent their business facilities, and/or lease the business equipment, and therefore they have limited assets that banks can use as guarantees.
- Preparation of a **suitable business plan** is not a problem for the large and medium-sized companies but can be difficult for micro and small-sized enterprises due to their limited financial knowledge.
- **Lack of credit history** was, rather surprisingly, the only reason for rejection identified in the Agri-food survey (Figure 23). Interviewed stakeholders from the sector give a more nuanced perspective, however. For companies that have been in business for some time, the lack of credit history is not usually a problem, as the agri-food companies are generally loyal bank clients and remain tied with the same bank where they also have a bank account. In addition, agri-food companies do not face the problem faced by agriculture producers, in terms of lack of balance sheets and bookkeeping that prevent banks from properly assessing their applications. The agri-food businesses are registered as companies, and thus have distinct bookkeeping for their business. However, the problem of established agri-food companies may be that their credit history is not good enough.

105 Interview with Chamber of Commerce and EIB, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex N 12.
106 Interview with Chamber of Commerce
107 Based on interviews with MAFF, universities and the Chamber of Commerce.

- Start-ups and new enterprises can face problems relating to the **lack of credit history**. Amongst other criteria, banks require three consecutive years of balance sheet data, or a high coverage of credit liabilities with collateral. These requirements can mean that it is practically not possible for start-ups to obtain credit. They may avail themselves from other forms of financing such as equity investments from third party investors, but this is still not common practice in Slovenia. In general, according to interviews, banks are very hesitant to engage with start-ups.

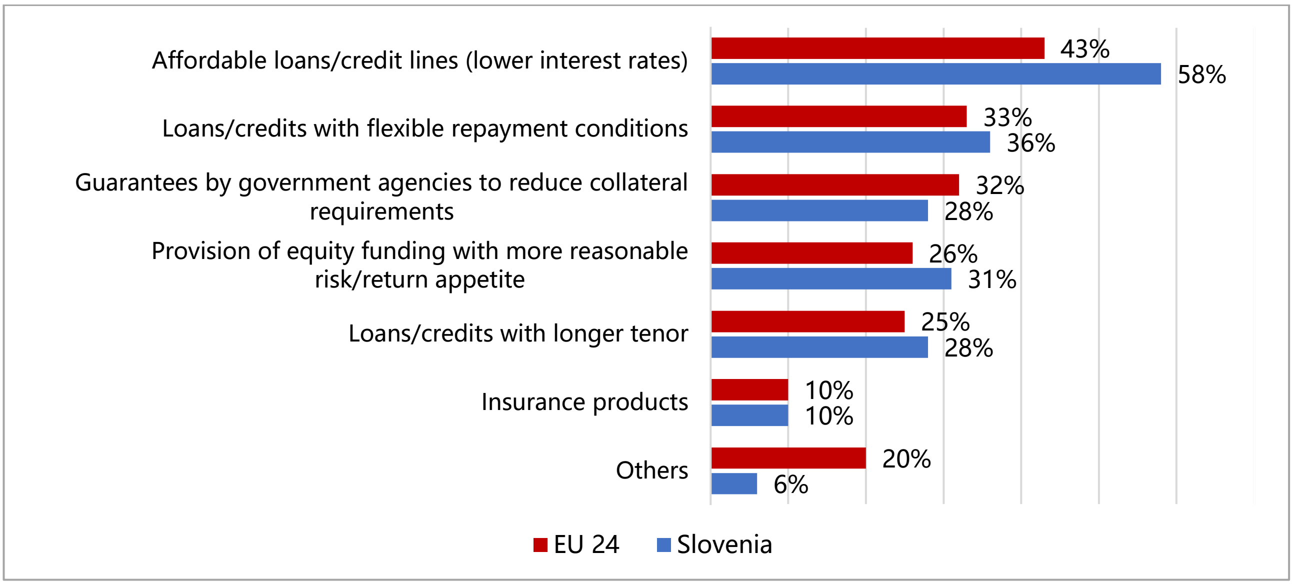
Figure 23: Reasons for loans' rejection in the agri-food sector in 2018



Source: Agri-food survey.

According to the Agri-food survey, almost 60% of the surveyed companies considered that **more affordable loans and credit lines with lower interest rates would help reduce their difficulty in accessing finance** (Figure 24). More flexible repayment conditions, loan schemes with longer maturities, guarantees and equity provided by Government agencies were other solutions that approximately one third of the survey respondents considered would facilitate their access to finance, and these aspects were also echoed by the Chamber of Commerce.[108]

Figure 24: Solutions to reduce difficulties in accessing finance, 2018



Source: Agri-food survey.

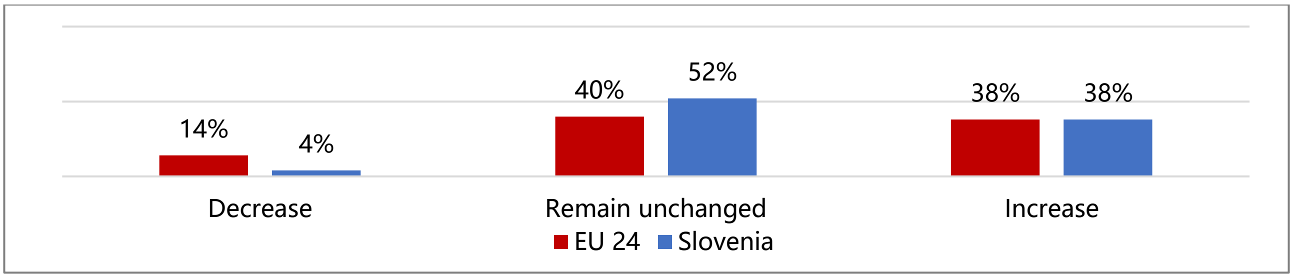
108 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex N 12.

Main findings of the ex-ante assessments for the use of financial instruments in Slovenia for the agri-food sector[109]

- The most important drivers for investments undertaken by the agri-food sector include improvements to production processes and developments of new products.
- The largest financing needs relate to working capital.
- Several difficulties in accessing finance for the agri-food sector were identified:
    - costs of the finance and the loan conditions;
    - lack of collateral;
    - administrative burden of obtaining a loan;
    - lack interest of the banks to provide financing;
    - the financial situation of the company and low repayment capacity.
- Small-sized firms face considerable difficulties in accessing finance.
- More flexible repayment conditions, loan schemes with longer maturity, guarantees provided by government agencies and the provision of equity could facilitate access to finance.
- Recommendation: Introduction of a guarantee or a portfolio guarantee instrument with a cap financed through the EAFRD, implemented for sub-measures: 4.1, 4.2, 6.4, and 8.6.

Almost 40% of surveyed agri-food companies expect their financing needs to increase in the next two and three years, whereas only 4% expect their financing needs to decrease (Figure 25). Investment needs for the future are mainly identified among agri-food businesses working in dairy and fruit processing, and wine production. In the future, these companies may need to increase their storage capacity, which requires relatively large investments that are mainly carried out by cooperatives.

Figure 25: Agri-food companies' expectations on future financial needs, 2018



Source: Agri-food survey.

Representatives of the sector consider that a key priority for the future should be to support investments in existing agri-businesses – as opposed to supporting the creation of new entities – to help them grow, improve the quality produced, and reinforce their profitability[110]. Financing resources needed for this purpose would be directed to both tangible assets and working capital. The Association of Cooperatives also emphasises the role of key players (i.e. the largest companies) in both agriculture and agri-food businesses, since these players often represent clients for smaller entities.

In order to improve access to finance for the agri-food companies, particularly small-sized agri-food companies, provision of technical support could be beneficial. Training aimed at improving financial literacy would likely lead to more companies being comfortable in approaching banks. In addition, assistance in the preparation of a business plan may be useful in some cases. Improving digital skills may also help in the context of marketing.

109 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex N 12.

110 Chamber of Commerce.

3.3. Analysis on the supply side of the agri-food sector

This section provides an overview of the financial environment in which the agri-food sector in Slovenia operates. It describes the main available financial products including any currently operating financial instrument targeting the agri-food sector, with national and/or EAFRD resources. This section draws its information from interviews with financial institutions, as well as from national statistics.

An attempt is made to give a description of the general conditions for accessing finance, such as interest rates and requirements for collateral, and the availability of funding for agri-food enterprises. Potential differences in availability of financial products across different types of agri-food enterprises are reviewed and analysed.

Key elements on the supply of finance to the Slovenian agri-food sector
• Loan products are offered to agri-food companies on similar conditions as those available to companies from other economic sectors. However, the loan conditions offered to SMEs are not as favourable as those offered to large businesses. With a vast majority of SMEs in the agri-food sector, this can be expected to adversely affect the agri-food sector. • The Slovenian Regional Development Fund 'Ribnica', together with the Slovene Enterprise Fund (SEF) offer preferential loans and guarantees to the agri-food sector, as well as to other sectors, but up-take is limited. • In December 2018, the total outstanding loan volume to the agri-food sector was EUR 304 million, and credit is on a stable and slightly increasing trend. • Small agri-food companies find that the supply of finance to their businesses is constrained. This is explained by the limited interest of many banks to work with small-sized enterprises. Instead, they opt for less risky and more profitable customers. The lack of interest in the agri-food sector means that there are no financial products adapted to the agri-food sector needs.

3.3.1. Description of finance environment and funding availability

3.3.1.1. Finance providers

Different sources of financing are available for the agri-food enterprises in Slovenia. Commercial providers are banks, savings banks and leasing companies. The non-commercial providers include the Slovenian Regional Development Fund 'Ribnica' (SRDF) and the Slovene Enterprise Fund.

In 2018, as described in the previous section (section 2.3.1.1), there were 17 commercial banks in Slovenia, including three branches of foreign banks and three saving banks active in Slovenia. According to the Bank of Slovenia Annual Report in 2017[111], only eight commercial banks were considered relevant in terms of lending to non-financial corporation.

Domestic banks provide most of the services required by the agri-food sector. NLB and NKBM are the traditional finance providers supplying the medium and large agri-food companies. The foreign banks – Intesa Sanpaolo, Sberbank, and Sparkasse – also to some extent finance the larger agri-food companies. The top 10 companies, presented in section 3.1, are all clients of these banks.112 The agri-food sector is also among the core clients group of Deželna Banka Slovenije, which was identified as the major player for the agriculture

111 Banka Slovenije, 2019, https://www.bsi.si/en/publications/annual-report.

112 AJPES, www.bizi.si.

sector. However, the clients of Deželna Banka Slovenije are mostly small-sized enterprises, whereby this bank is less relevant in terms of the volume of loans provided to the agri-food sector.113

Leasing is a common form of financing for the agri-food sector. The largest part is vehicle leasing, followed by equipment leasing and real estate leasing. Leasing companies are often part of banking groups[114]. Small-sized businesses mainly use leasing services.

The activities of the SRDF benefit the agri-food sector, as described in section 2.3.1.1. SRDF supports rural and regional development in the country.[115] The forms of incentives provided by the Fund through calls for tenders are grants, loans and guarantees. The beneficiaries of the Fund include the agri-food sector. The relevance of the Fund has increased significantly over the last few years, with growing interest from agri-food companies in the Fund's financial products. As already mentioned in relation to the agriculture sector, the limited budget available for the Fund reduces its potential outreach.

The agri-food sector can also access guarantees and micro-credit through the Slovene Enterprise Fund (SEF). This is a public financial fund offering financial support to Slovenian micro, small and medium-sized enterprises (SMEs), start-ups and fast-growing enterprises. Having said this, even if SEF funds are available to the agri-food sector, less than 10 agri-food projects have been approved by the SEF[116].

SID Banka (SID – Slovenska izvozna in razvojna banka, d.d., Ljubljana) is a promotional development and export bank, 100% owned by the Republic of Slovenia. With its banking and insurance services it promotes sustainable development and improve the competitiveness of the Slovene economy.

3.3.1.2. Financial products

The agri-food sector is treated as any other sector of the economy by the banks. Therefore, there is no bank that markets loans which are specific to the agri-food sector. However, interviewees from the agri-food sector have implied that loans which are specific to the sector are offered on a business-by-business basis, with bespoke offers to important long-term clients.

Loans are offered for the following purposes:

- Purchase of technology, equipment, tools and other needs;
- Financing of construction, reconstruction or renovation of processing capacities;
- Financing of working capital;
- Special loans according to the request and needs of the clients.

The loans are offered for short, medium and long-term maturities. Agri-food companies can also use other banking products, such as an authorised and an unauthorised overdraft.[117]

Examples of the standard products offered by NLB, NKBM, and Intesa Sanpaolo to enterprises, including the agri-food sector, and their associated conditions, are presented in Table 13.

113 Although no exact market shares, nor volumes, have been obtained for the study, whereby these are qualitative assessments.

114 See section 2.3.1.1 for an overview of the bigger leasing companies.

115 Slovenski regionalno razvojni Sklad, 2019, Slovenian Regional Development Fund, http://www.regionalnisklad.si/english.

116 According to interview with MAFF.

117 Bank webpages, interviews with bank.

Table 13: Products available to the agri-food sector from NLB, NKBM and Intesa Sanpaolo

Bank	Product	Loan purpose	Interest rate	Repayment period	Approval costs and monthly costs	Credit insurance
NLB	liquidity credit <30 days	n.a.[118]	3.45%	n.a.	from 0,15% /value, min EUR 140	n.a.
NLB	short-term credit 1-20 months	n.a.	from 3.45%	n.a.	from 0,15% /value, min EUR 140	n.a.
NLB	revolving short-term credit 1-12 months	n.a.	from 3.55%	n.a.	from 0,15% /value, min EUR 140	n.a.
NLB	long-term credit 13-20 months	n.a.	from 3.55%	n.a.	from 0,35% /value, min EUR 160	n.a.
NLB	allowed limit on business account	n.a.	from 4.95%	n.a.	0,35-0.65%/value	n.a.
NKBM	short-term credits	working capital, allowed overdraft	n.a.	<30 days, <180 days, <360days	0,10%-0,40%, min EUR 200	required, 1)
NKBM	long-term credits	investments in fixed assets, projects	n.a.	1-10 years	0,10%-1%, min EUR 200	required, 1)
Intesa Sanpaolo	Investment financing	long-term investments in fixed assets, expansion of production, or new business process.	13-36 months from 1.7%; 37-84 months, from 2%; 85-120 months, from 2.3%; >121 months, from 3.3%	1-3 years; 3-7 years; 7-10 years, >10years (determined in accordance with the debtor's estimated cash flow.	1,5%, min EUR 150, max EUR 3 000; and EUR 1.5/ month	the form of collateral depends on the debtor's credit rating

Source: NLB, NKBM, Intesa Sanpaolo websites, 2019. Note: Insurance company, or two personal promissory notes.

The interest rates reported are fixed interest rates. The costs relating to the loans offered from NLB, aside from the approval costs outlined in the table, also include: change of credit conditions at a minimum of EUR 105, costs for yearly follow-up of the credit at 0.10% yearly, costs for project follow-up at a minimum of EUR 200 monthly, and 'other costs' which the bank estimates to be between EUR 55 and EUR 200. For NKBM, to change the conditions cost between 0.1 - 0.3%, or a minimum of EUR 200.

Slovene Enterprise Fund (SEF):

The purpose of SEF's operation is to improve access to favourable financial resources in the market. The SEF designs and offers financial incentives of relevance to the agri-food sector in the following form:

- Start-up incentives - grants of up to EUR 54 000;

118 The information available is included, thus some cells are left blank, as the banks did not share or provide the specific information.

- Seed capital – EUR 75 000 convertible loan, EUR 200 000 of equity investment;
- Venture capital up to EUR 8 million, including private equity;
- Microcredits – from EUR 5 000 to EUR 25 000 of direct credit form SEF;
- Guarantees – up to EUR 1.25 million of bank loan.

The value of SEF's active contracts by the end of 2018 was EUR 657.22 million of which 54% (EUR 366.2 million) corresponded to guarantee lines held by 5 195 clients, of which less than 10 were from the agri-food sector.[119] Even so, stakeholders interviewed from the MAFF and the Chamber of Commerce have pointed out the potential relevance for the agri-food sector of the preferential access to finance that the SEF provides. The Chamber of Commerce pointed out that funding offered by a provider with specific expertise in the agri-food sector, would increase the impact of the public support.

SID Banka products[120]

- **SME products. SID Bank offers micro-loans** (from EUR 5 000 to 25 000 and two to five years tenor) to SMEs, micro-sized enterprises and sole traders via the Fund of Funds for the purpose of financing working capital and investments in fixed assets[121]. For SMEs, there are also guarantees, including micro-guarantees, for investment loans (fixed assets investments) or for the financing of working capital. SID Bank finance equity and quasi-equity for SMEs in the seed, start-up, development and turnaround phases.
- **Development, research / development and innovation (RDI) products.** These loans (from EUR 10 000 to EUR 10 million and three to nine years maturity) are offered to SMEs, start-up companies and large-sized enterprises, via the Fund of Funds. Partnering financial institutions are also offered portfolio guarantees.

No data on the significance of SID Banka's products for the agri-food sector could be obtained.

3.3.2. Analysis of the supply of finance

According to the Bank Lending Survey in 2017, overall credit terms and conditions remained stable and they are considered particularly favourable due to falling interest rates as discussed for section 2.3.1.3 (Table 7). However, there is still a gap, since interest rates for lending to SMEs, which are prevalent in the agri-food sector, are higher than for lending to large enterprises. In 2018, loans to non-financial corporations grew by 2.8%, mainly due to an increase of credit in the domestic market.[122]

Lending to the agri-food sector is stable. Between 2016 and 2019, total outstanding loans have increased slightly from EUR 286.6 million to EUR 293.9 million. The loans provided to the agri-food sector are significantly higher than those to the agriculture sector (see section 3.2.2). This is most likely due to the few large domestic companies which are active on the domestic financial market.

119 Slovenski Podjetniski Sklad, 2019, Letno Porocilo 2018, https://podjetniskisklad.si/images/letnaporocila/Letno-poroilo-2018.pdf.

120 SID bank, https://www.skladskladov.si/en/financing/financing.

121 The Ministry of Economic Development and Technology appointed SID Bank in 2017 as the manager of the Fund of Funds, to which EUR 253 million will be paid from European cohesion funds available to Slovenia in the 2014-2020 financial perspective until 2023 to finance development and entrepreneurship. European cohesion policy funds will need to be provided with additional funding of EUR 150 million by financial intermediaries as a result of the demand for leverage and the re-use of the repayments, so that more than EUR 400 million will be made available to companies and other final recipients. https://www.skladskladov.si/en/about/about-fund-od-funds.

122 Information from the bank lending survey.

Table 14: Amount of outstanding loans in the agri-food sector, 2016-2019[123], EUR million

Year	2016	2017	2018	2019
Amount of outstanding loans	286.6	306.6	304.0	293.9

Source: Slovenian Central Bank data, 2019.

Stakeholders are less optimistic about access to finance for small operators. Even if the banks are better capitalised now, following the economic and financial crisis, national stakeholders do not perceive a change in access to finance for small-sized agri-businesses (representing 98% of the sector). This was indicated during a workshop organised by the EIB in November 2018,[124] which showed that the difficulties experienced by the agri-food sector seem to have remained similar over time and could potentially remain as such in the (near) future.

Small agri-food companies find that cooperation with many banks is limited, which is attributed to the limited appetite of many banks to engage with micro and small-sized companies. The lack of interest in the agri-food sector means that there are no products available that are specifically adapted to the agri-food sector needs. The low profit margins of small-sized agri-food companies is a reason that they are considered as a risky clients segment.

123 Data provided in the table are from the 31st of December. Data before 2016 were not available.

124 European Investment Bank, 2019, Update of the ex-ante assessment of Financial Instruments in Slovenia, Final report, Annex N 12.

3.4. Financing gap in the agri-food sector

This section presents an assessment of the financing gap in the Slovenian agri-food sector, broken down by firm-size and financial product.

Key elements of the financing gap in the Slovenian agri-food sector

- The financing gap for the Slovenian agri-food sector is estimated to be EUR 127.4 million.
- The largest part of the financing gap is attributed to long-term loans.
- Small-sized firms have the most difficulties in accessing finance.
- Low economic margins, low and unstable cash flow of the agri-food companies, mean that banks consider them to be risky, and is the main reason for banks' limited interest in the sector. In addition, this situation leads to agri-food companies doubting their repayment capacity. Therefore, many firms refrain from approaching banks.
- Other drivers of the financing gap include: lack of collateral amongst agri-food companies; lack of credit history; burdensome loan application process; and lack of loans with terms and conditions adapted to the specificities of the agri-food sector. Lack of financial literacy, particularly amongst start-ups also plays a role.

This section presents an estimate of the total volume of unmet financing needs of financially viable agri-food enterprises, defined as financing gap, for 2018. The estimate is calculated by multiplying the total number of firms by the proportion of financially viable firms reporting unmet demand for finance multiplied, in turn, by the average obtained loan value to firms.

Financing gap = Number of enterprises X percentage of enterprises that are both financially viable and have unmet demand X average loan volume

All the calculations are based on the results of the Agri-food survey for Slovenian firms (see Annex A.5 for more information). The methodology used for calculating the gap is the same as the methodology used for the agriculture sector (see Annex A.3).

The financing gap arises from unmet financing demand from economically viable firms[125]. As explained in section 2.2, the unmet demand for finance includes

(i) lending applied for but not obtained, or

(ii) a lending offer refused by the potential borrower, as well as

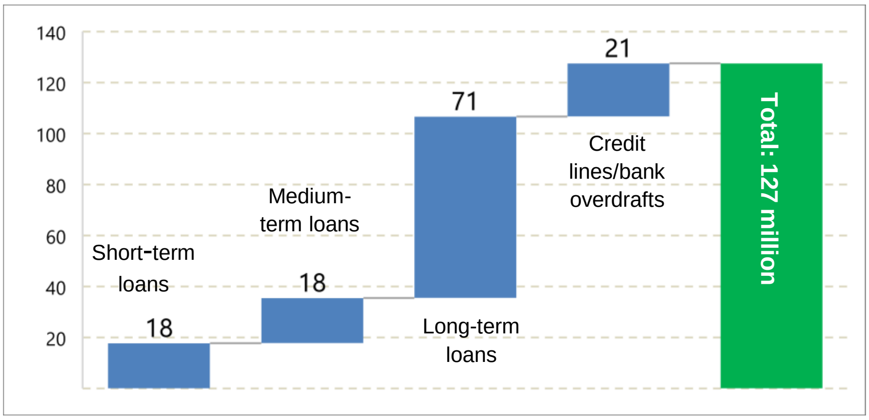
(iii) lending not applied for due to expected rejection.

For the purpose of this study, 'turnover growth' is used as a proxy of firm viability. In particular, we make the hypothesis that all enterprises which reported a stable (non-negative) turnover growth can be considered as viable.

The financing gap for the Slovenian agri-food sector is estimated to be EUR 127.4 million (Figure 26). The largest part of the gap is attributed to long-term financing (EUR 71 million).

125 The financing gap presented in this section is different from the total unmet demand presented in section 3.2.2. In the quantification of the total unmet demand, all the enterprises in the population applying for finance are considered independent from their economic viability.

Figure 26: Financing gap by product in agri-food sector, 2018, EUR million



Source: Calculation based on results from Agri-food survey.

Based on the Agri-food survey, the estimates indicate that small-sized firms have the most difficulties in accessing finance. The financing gap for small-sized firms is estimated to be EUR 110.9 million. The gap for medium-sized firms is about one tenth of that at EUR 11.3 million, and the gap for large-sized firms is very limited at EUR 5.3 million (Table 15).

Table 15: Financing gap by firm size and product, 2018, EUR million

	Total	Short-term loans	Medium-term loans	Long-term loans	Credit lines/bank overdrafts
Small-sized firms	**110.9**	15.0	15.5	62.3	18.1
Medium-sized firms	**11.3**	2.1	1.5	5.9	1.7
Large-sized firms	**5.3**	0.6	0.8	3.0	1.0
Total	**127.4**	**17.7**	**17.7**	**71.2**	**20.8**

Source: Calculation based on results from Agri-food survey.

Low economic margins, and the limited size of many agri-food companies are the main drivers of the financing gap. The low profits and unstable cash flows of many companies, which to a large extent is due to the pressure put on the sector by the retail chains, together with the competition with foreign producers, places the agri-food sector in a precarious economic situation. This in turn causes the banks to look at it as a high-risk sector, which as a consequence becomes of little interest to them. In addition, most firms are too small to generate a request for loans with a reasonable (from banks' point of view) volume. Small loans lead to lower profits for the banks, due to the higher impact of fixed appraisal costs, and further reduce the banks' interest in the sector.

Another important driver of the gap includes the lack of access to collateral for small-sized companies. Medium and large-sized companies have less problems in this regard.

The lack of credit history is an obstacle for start-ups. Additionally, the lack of experience and proven skills often limits newcomers' access to finance. Also, this group often lacks financial literacy, causing them to have more difficulties in accessing finance than their peers in the sector.

Other important factors that limit access to finance amongst Slovenian agri-food enterprises include the conditions offered on loans, particularly the **lack of flexibility of repayment conditions, and cumbersome**

administration associated with applying for bank loans. This discourages many smaller-sized companies from approaching the banks for a loan.

The **financing gap is expected to persist** if the existing problems constraining enterprises' access to finance are not tackled. Approximately 38% of the agri-food enterprises expect their financial needs to increase over the next two to three years (estimated before the outbreak of Covid-19), according to the Agri-food survey. Also, the previous trends of gross investment in the agri-food sector, together with a productivity level that is well behind the EU 28 average, leads to the conclusion that investment demand and, therefore, demand for finance can be expected to continue to grow in the Slovenian agri-food sector.

3.5. Conclusions

After a drop of approximately 59% between 2008 and 2015, gross investment in the Slovenian agri-food sector increased in 2016 and 2017, reaching EUR 205.8 million. Investments undertaken by the sector are driven by modernisation of equipment, machinery and facilities, as well as the development of new products. The demand for working capital finance among Slovenian agri-food businesses is high, also, as many operate on low economic margins.

For small-sized agri-food companies, investment support from the EAFRD is helpful for companies. In addition, the SRDF, together with the Slovene Enterprise Fund offer preferential loans and guarantees to the agri-food sector (as well as to other sectors). The outreach of these instruments is currently limited, and stakeholders suggest that a dedicated instrument for the agri-food sector might be more effective.

The financing gap for the agri-food sector is estimated to be EUR 127 million. Feedback from stakeholders suggest that difficulties in accessing finance in Slovenia may be higher than is suggested by the Agri-food survey and that the financing gap might be underestimated.

Small-sized firms have difficulties in accessing finance, especially for long-term loans. Around 11% of the loan applications are rejected, while another 10% of the agri-food companies are discouraged from approaching banks due to their fear of being rejected. The main reasons for the rejection of agri-food companies loan applications include the low economic margins of companies, which affects their repayment capacity. Additionally, banks usually require collateral, which smaller-sized agri-food companies do not possess. Furthermore, credit approval costs are high, and administration is demanding, which discourages companies from applying. For some firms, the drafting of a suitable business plan is an issue, particularly for smaller-sized enterprises.

The lack of credit history is a problem for start-ups. While, the focus of banks on less risky and more profitable customers does not help to improve the relationship between small-sized agri-food companies and banks, which is regarded as poor at the moment.

The situation for the agri-food sector is less severe than for the agriculture sector. Even so, the range of problems experienced by the small-sized agri-food companies in accessing finance are very similar to the problems experienced by the agriculture sector. Therefore, recommendations of the same nature can be made, especially in terms of targeting small agri-food businesses.

- As proposed in the ex-ante assessment for the use of financial instruments and its update, the setting-up of a guarantee instrument with EAFRD resources continues to be relevant in Slovenia. It might be an effective tool to support access to long-term finance for small-sized enterprises, which represents the largest part of the identified financing gap in Slovenia.
- An EAFRD risk-sharing loan instrument might also be considered, as it would combine the provision of risk coverage with a reduction of the financing cost. This would facilitate access to credit for micro and small-sized enterprises, which face higher financing cost than larger enterprises.
- The design of the financial instrument and its set-up might attempt to stimulate the offer of financial products more adapted to the specific needs of the agri-food enterprises (for example through an open call for the selection of the partner financial institutions). A capacity building activity dedicated to interested banks might also contribute to this objective.
- The opportunities offered by the new legal framework, such as the easier combination of financial instruments, grant support and interest rate subsidy, might offer interesting opportunities to increase the effectiveness of all the above mentioned financial instruments to improve access to finance for small-sized firms and start-ups.
- Additional technical support aimed at improving financial literacy and digital skills among small-sized enterprises and start-ups could be beneficial. Farms investing in food processing to diversify their activity are signalled as a specific segment with such technical support needs.

ANNEX

A.1. References

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A.2. Stakeholders interviewed

Type of Organisation	Name of Institution
Managing authority	MAFF, Forestry and Food
Managing authority	Agency for Agriculture Markets and Rural Development
Financial institution	Deželna Banka Slovenije Group
Farmers organisation	Kmetijsko gozdarska zbornica (Agriculture Chamber)
Food Industry organisation	Chamber of Agriculture and Food Enterprises
Farmers organisation	Farmers Union, Sindikat kmetov
Zveza slovenske podeželske mladine (Young Farmers Association)	Representative from young farmers
Agriculture Cooperative	Cooperative Union of Slovenia
Slovenski regionalni razvojni sklad	Financial institution
University of Ljubljana, Biotechnical Faculty	Other

A.3. Methodology for financial gap calculation

This section of the report clarifies the terminology and proposes a method for estimating the financial gap formula for Target Group I and Target Group II. This version of the formula aligns with the *fi-compass* Factsheet on the financial gap in agriculture and the 2013 EC working paper on the Ex-ante assessment of the EU SME initiative. It is based on the data from the *fi-compass* survey of 7 600 farms carried out in mid-2018.

Financing gap definition. We define the financing gap to be the *unmet credit demand due to constrained or missing access to financing*. This definition includes market failures as well as other types of constraints.

Operationalisation of the financing gap formula. Each component of the formula can be obtained in the survey data under the following **assumptions**:

$\boldsymbol{Rejected}$ **credit applications** include applications that are rejected by banks (or other credit organisations) and offered from banks but turned down by the farmers/firms.

The share of $\boldsymbol{Viable}$ **firms is measured by** the share of total firms that have a non-negative turnover growth[126] or a non-negative turnover and that are not in a situation of cost increase (these two criteria might be used to obtain an upper and lower boundary for the calculations).

Discouraged application is proxied by the average size (financial value) of loan applications made by firms that applied for a similar type of financial product. This allows for grouping firms which did not apply for fear of rejection with rejected firms (see step 2 and 4 below).

To calculate the financial gap, we define the following four steps. Each step refers to the latest surveyed year for both the surveys.

Step1: Ratio of viable farms with unmet demand for finance

$\boldsymbol{Rejection\ Rate^{Viable}}$ **:** This refers to the share of viable enterprises whose application was unsuccessful. It is measured by the ratio of enterprises with unsuccessful applications over the total population. It includes rejected applications by the lending institution and offers turned down by the applicant itself.

$$Rejection\ Rate_j^{Viable} = \frac{Number\ of\ Rejected\ Viable\ Firms}{Total\ survey\ population_j}$$

with and $j = Short - term\ , Medium - term, Long - term\ Loans, Credit\ lines.$

$\boldsymbol{Discouraged\ Rate^{\ Viable}}$**:** It represents the share of viable enterprise that were self-discouraged because of fear of rejection. It is computed as follows:

$$Discouraged\ Rate_j^{Viable} = \frac{Number\ of Discouraged\ Viable\ Firms}{Total\ survey\ population_j}$$

with and $j = Short - term\ , Medium - term, Long - term\ Loans, Credit\ lines.$

$\boldsymbol{Unmet\ demand\ Rate^{\ Viable}}$**:** The total share of survey respondents with unmet demand for finance is obtained by summing the two rates:

$$Unmet\ demand\ Rate_j^{Viable} = Rejection\ Rate_j + Discouraged\ Rate_j$$

Step 2: Number of farms rejected or discouraged

$\boldsymbol{N. of\ Farms\ in\ unmet\ demand_{ij}^{Viable}}$: In order to get the number of farms constrained in accessing financing, we multiply total share of viable respondents with unmet demand from the survey sample (Step 1) by the total farm population from Eurostat by farm size.

For TG I, this total population is adjusted by removing farms having a Standard Output (SO) below EUR 8 000 EUR 4 000 or EUR 2 000, depending on the Purchasing Power Parity Index (PPI) of the country. The

126 A turnover that has been stable or growing in the last year.

EUR 8 000 EUR 4 000 or EUR 2 000 SO thresholds are used for countries with their 2017 PPI respectively above the 66th percentile, between the 33rd and 66th percentile, or below the 33rd percentile of the PPI index in the EU. We assume equal rates of rejections amongst small, medium and large-sized farms, and disentangle the share of farms with constrained in obtaining credit by financing product.

$$N.of\ Farms\ rejected_{ij}^{Viable} = Eurostat\ Farm\ population_i * Rejection\ Rate_j^{Viable}$$

$$N.of\ Farms\ discouraged_{ij}^{Viable} = Eurostat\ Farm\ population_i * Discouraged\ Rate_j{}^{Viable}$$

$$N.of\ Farms\ in\ unmet\ demand_{ij}^{Viable} = N.of\ Farms\ rejected_{ij} + N.of\ Farms\ discouraged_{ij}$$

for $i = Small, Medium, Large$

and $j = Short - term\ , Medium - term, Long - term\ Loans, Credit\ lines.$

Step 3: Standard Loan Application Size

$\boldsymbol{Application\ Size_{ij}}$: For each type of financial product and each firm/farm size category, a standard size of application is constructed. A starting point for Country experts might be the EU wide geometric mean, adjusted at country level with the purchasing power parity index. This value might be further adjusted based on the results of the analysis.

Step 4: Financial gap across farm size and product type

The financing gap is obtained by multiplying the amount of loans (Step 3) by the total number of farms facing constrained access to credit as calculated in Step 2.

Note: when the survey sample size allows, an indicative breakdown of the gap will be provided for young farmers per member state. The breakdown is obtained from the age ratio within rejected loan applications.

$$\boldsymbol{Financial\ Gap_{ij}} = \boldsymbol{Application\ Size_{ij}} \times \mathbf{N.of\ Farms\ in\ unmet\ demand_{ij}^{Viable}}$$

for $i = Small, Medium, Large$

and $j = Short - term\ , Medium - term, Long - term\ Loans, Credit\ lines.$

Finally, the total gap is the sum of figures across size classes (*i*) and products (j).

Private financing (obtained from family or friends) will be included in a separate quantification for countries with a high share of private lending.

The methodology for the gap calculation for TG II is the same as for TG I, but no lower limit on the size of enterprises is applied in step 2 (all enterprises in the population are included in the calculation). For Target Group II, we obtain each component of the financing gap formula from the following questions in the Agri-food survey of Target Group II carried out in mid-2019:

Lending/funding applied to: For what kind of finance did you apply in 2018 and with what amount?

Lending not applied to: For what reasons did you not apply for some kind of finance?

***Rejected* :** What was the result of your application?

Viability: Has the following company indicator changed in the last year: Turnover ?

It has to be noted that the surveys to be used by the Study for the calculations, the *fi-compass* farm survey and the Agri-food survey, are designed to be statistically representative at national level. Therefore, regionalised figures and calculations could be applied with a limited dimension and for only few countries. Information from interviews may complement such regionalised descriptions.

For Slovenia, Table 16 and Table 17 report the elements used in the calculation of the financing gap for the agriculture and agri-food sector, respectively.

Table 16: Elements for the calculation of the financing gap in the agriculture sector

		Short-term Loans	Medium-term Loans	Long-term Loans	Credit lines/bank overdraft
Lower bound: farms with a non-negative turnover growth and no cost increase	Share of respondents rejected by creditor or farmer	1.44%	0.51%	0.85%	0.42%
	Share of respondents that have not applied because of possible rejection	10.49%	11.34%	12.03%	11.77%
	Total (sum of rejected and discouraged)	***11.93%***	***11.85%***	***12.88%***	***12.19%***
Upper bound: farms with a non-negative turnover growth	Share of respondents rejected by creditor or farmer	1.44%	0.51%	0.85%	0.42%
	Share of respondents that have not applied because of possible rejection	10.49%	11.34%	12.03%	11.77%
	Total (sum of rejected and discouraged)	***11.93%***	***11.85%***	***12.88%***	***12.19%***
Total unmet demand: all farms	Share of respondents rejected by creditor or farmer	1.94%	0.59%	0.85%	0.42%
	Share of respondents that have not applied because of possible rejection	14.30%	14.56%	15.83%	15.14%
	Total (sum of rejected and discouraged)	***16.24%***	***15.14%***	***16.68%***	***15.57%***
Farms with constrained access to finance, **lower bound**	Small-sized farms	5 083	5 048	5 487	5 195
	Medium-sized farms	469	466	506	479
	Large-sized farms	14	14	15	15
Farms with constrained access to finance, **upper bound**	Small-sized farms	5 083	5 048	5 487	5 195
	Medium-sized farms	469	466	506	479
	Large-sized farms	14	14	15	15
Standard loan application size	Small-sized farms	EUR 14 615	EUR 35 452	EUR 97 773	EUR 13 194
	Medium-sized farms	EUR 18 517	EUR 33 696	EUR 106 165	EUR 14 636
	Large-sized farms	EUR 54 614	EUR 85 750	EUR 191 162	EUR 77 948

Source: fi-compass survey

Table 17: Elements used for the calculation of the financing gap in the agri-food sector

		Short-term Loans	Medium-term Loans	Long-term Loans	Credit lines/bank overdraft
Firms with a non-negative turnover growth	Share of respondents rejected by creditor or firmer	2.93%	0.00%	0.00%	0.00%
	Share of respondents that have not applied because of possible rejection	6.35%	7.02%	9.94%	9.94%
	Total (sum of rejected and discouraged)	***9.28%***	***7.02%***	***9.94%***	***9.94%***
Total unmet demand: all firms	Share of respondents rejected by creditor or firmer	2.93%	0.00%	0.00%	0.00%
	Share of respondents that have not applied because of possible rejection	6.35%	7.02%	9.94%	9.94%
	Total (sum of rejected and discouraged)	***9.28%***	***7.02%***	***9.94%***	***9.94%***
Firms with constrained access to finance	Small-sized firms	220	166	236	236
	Medium-sized firms	4	3	4	4
	Large-sized firms	1	1	1	1
Standard loan application size	Small-sized firms	EUR 113 999	EUR 143 926	EUR 420 015	EUR 154 307
	Medium-sized firms	EUR 1 419 609	EUR 741 855	EUR 1 798 117	EUR 630 259
	Large-sized firms	EUR 6 017 198	EUR 3 389 797	EUR 22 589 374	EUR 15 201 699

Source: Agri-food survey

A.4. TG I: *fi-compass* survey

The analysis for the agriculture sector in the report relies on the *fi-compass* survey on financial needs of EU agricultural enterprises, conducted from April to June 2018 across 24 EU Member States (EU 24): Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Slovenia, Lithuania, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.

The survey was carried out targeting the completion of 300 questionnaires for each Member State. The target was reached in all countries except Lithuania (for few interviews) and Ireland, where the farmers were less confident in sharing information.

Overall, the survey consists of 7 659 respondents, of which 73% own the agricultural enterprise, 8% are member owners, 8% are owner's relatives, 7% administrative managers, 3% other employees, and 1% human resource managers. Table 18 reports the number of respondents by Member State.

Table 18: *fi-compass* survey sample size per Member State

Country	No. of Respondents	Country	No. of Respondents
Belgium	350	**Slovenia**	315
Bulgaria	351	**Lithuania**	296
Czech Republic	309	**Hungary**	315
Denmark	302	**The Netherlands**	301
Germany	376	**Austria**	320
Estonia	310	**Poland**	320
Ireland	151	**Portugal**	349
Greece	350	**Romania**	350
Spain	354	**Slovenia**	300
France	350	**Slovakia**	312
Croatia	300	**Finland**	327
Italy	351	**Sweden**	300
Spain	354	**Slovenia**	300
France	350	**Slovakia**	312
Croatia	300	**Finland**	327
Italy	351	**Sweden**	300

Source: fi-compass survey

Additionally, the sample covers 198 (94.7%) of the 209 NUTS2 regions in the 24 Member States. These regions have nearly 99% of EU 24 farms

Almost 85% of questions were completely answered and 98% of all questions were answered on average. The most problematic questions were on confidential, financial aspects. Only 50% of interviewees replied concerning their turnover, 67% gave the specific amount of their loan and 56% the exact interest rate of their loan.

For additional information, please refer to https://www.fi-compass.eu/publication/brochures/survey-financial-needs-and-access-finance-eu-agriculture-enterprises.

A.5. TG II: Agri-food survey

To mirror the *fi-compass* survey on the needs of EU agricultural enterprises, a computer assisted telephone interviewing (CATI) survey was conducted for the agri-food processing sector in mid-2019.

For the purpose of this survey, a commercial global register was used in each country. A commercial global register provides data in a single source, harmonises the information collected on businesses (e.g. Industrial classification, employee size, turnover, contact names etc.) and offers software platforms that allow users to easily access a sample of businesses for commercial purposes.

The survey was conducted targeting the completion of a minimum of 45 questionnaire for each Member State. The minimum sample size obtained varied per country mirroring the differences in the size of the sector. Table 19 reports the sample size per country

Table 19: Agri-food survey sample size per Member State

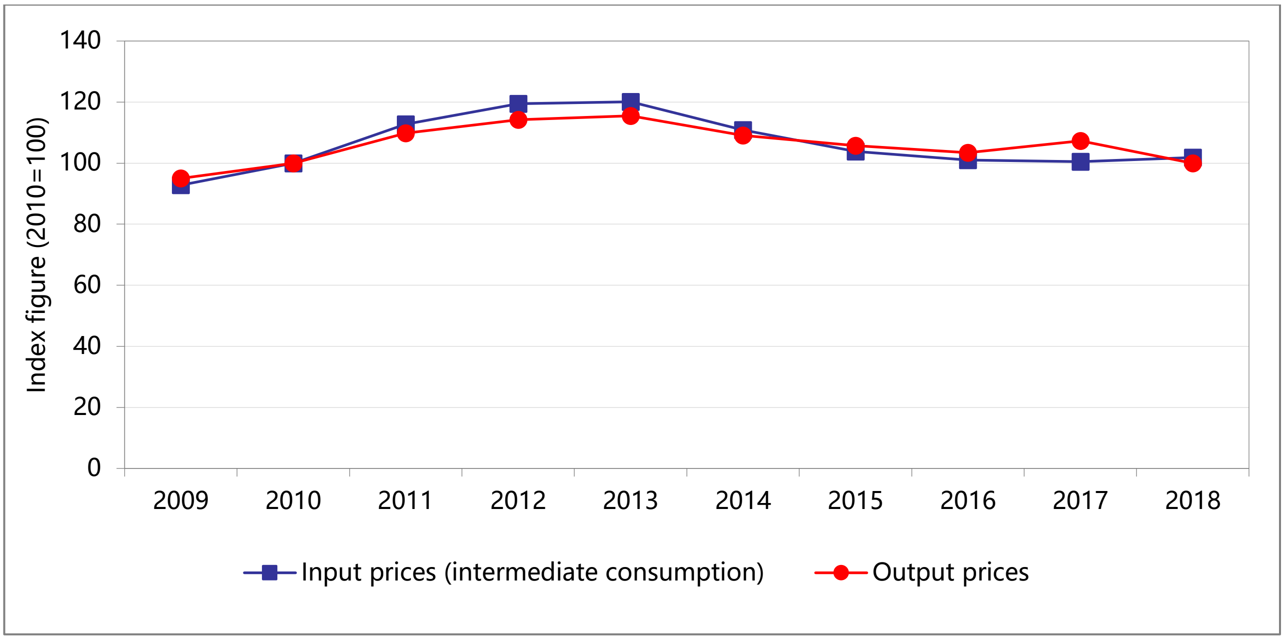
Country	No. of Respondents	Country	No. of Respondents
Belgium	100	**Slovenia**	50
Bulgaria	100	**Lithuania**	50
Czech Republic	66	**Hungary**	46
Denmark	50	**The Netherlands**	80
Germany	186	**Austria**	50
Estonia	50	**Poland**	130
Ireland	50	**Portugal**	100
Greece	70	**Romania**	150
Spain	197	**Slovenia**	50
France	180	**Slovakia**	50
Croatia	45	**Finland**	50
Italy	200	**Sweden**	48

Source: Agri-food survey

The survey consists of 2 148 respondents, of which 85% were enterprises operating in the manufacturing food sector, and 15% in the manufacturing of beverages.

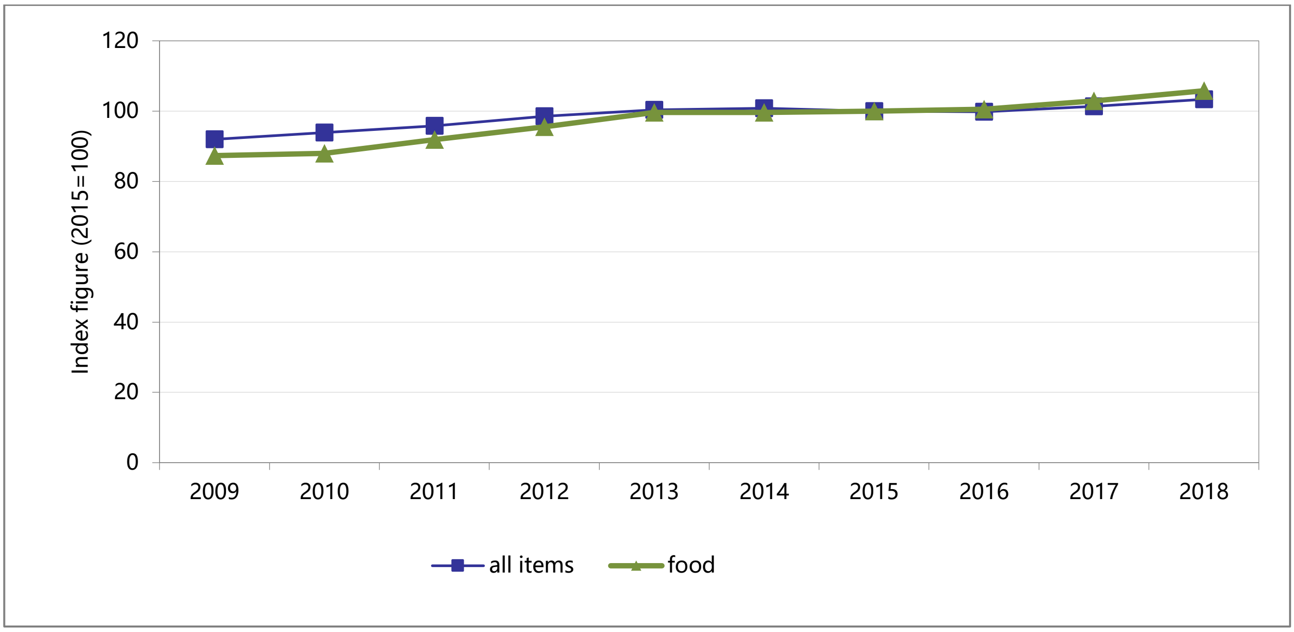
A.6. Data from the agriculture statistical factsheets

Figure 27: Evolution of agriculture input and output prices, 2009-2018



Source: European Commission, DG AGRI, Statistical Factsheet for Slovenia, June 2019.

Figure 28: Evolution of harmonised indices of consumer prices, 2009-2018



Source: European Commission, DG AGRI, Statistical Factsheet for Slovenia, June 2019.

A.7. Tables on housing and consumer credit

Table 20: Housing Credit, EUR 80 000, 20 years

Credit	Variable Interest Rate				Fixed Interest Rate			
	20 Years							
Bank/Saving Bank	Interest Rate	Initial Monthly Obligation (EUR)	EOM	Total Consumer Costs (EUR)	Interest rate	Initial Monthly Obligation	EOM	Total Consumer Costs (EUR)
Abanka d.d.	6M EURIBOR + 2.15%	410.42	2.23%	18 950.05	-	-	-	-
Addiko Bank d.d.	3M EURIBOR + 2.40%	420.04	2.54%	20 818.98	-	-	-	-
Banka Intesa Sanpaolo d. d.	6M EURIBOR + 2.50%	423.93	2.64%	22 552.70	3.40%	459.87	3.57%	31 178.00
Banka Sparkasse d.d.	6M EURIBOR + 2.05 %	406.60	2.15%	18 190.47	3.45%	461.91	3.59%	31 467.34
BKS Bank AG, bančna podružnica	6M EURIBOR + 2.05%	-	-	-	-	-	-	-
Delavska hranilnica d.d.	6M EURIBOR + 1.80%	398.67	1.91%	16 080.80	2.60%	429.33	2.73%	23 439.20
Deželna banka Slovenije d.d.	6M EURIBOR + 1.55%	387.88	1.63%	13 592.99	3.35%	457.83	3.47%	30 396.23
Gorenjska banka d.d.	6M EURIBOR + 2.10%	408.51	2.19%	18 537.02	3.20%	451.73	3.32%	28 912.27
Lon d.d.	6M EURIBOR + 2.80%	-	-	-	-	-	-	-
NLB d.d.	6M EURIBOR + 2.50%	423.92	2.63%	22 497.70	3.55%	466.03	3.72%	32 602.97
Nova KBM d.d.	6M EURIBOR + 2.15%	-	-	-	3.45%	461.91	3.62%	31 814.11
Primorska hranilnica Vipava d.d.	6M EURIBOR + 2.30%	-	-	-	-	-	-	-
Sberbank banka d. d	6M EURIBOR + 1.95%	402.82	2.04%	17 244.27	-	-	-	-
SKB banka d.d.	3M EURIBOR + 2.00 %	404.71	2.16%	18.296.65	3.20%	451.73	3.39%	29 581.82
UniCredit Banka Slovenija d.d.	3M EURIBOR + 2.20 %	397.79	1.93%	-	2.60%	429.34	2.77%	

Source: Commercial banks website.

Table 21: Consumer credit, EUR 3 000, one year

Credit	Variable Interest Rate				Fixed Interest Rate			
	12 Months							
Bank/Saving Bank	Interest Rate	Initial Monthly Obligation (EUR)	EOM	Total Consumer Costs (EUR)	Interest rate	Initial Monthly Obligation (EUR)	EOM	Total Consumer Costs (EUR)
Abanka d.d.		-	-	-	4.95%	256.76	10.70%	163.88
Addiko Bank d.d.	3M EURIBOR + 6.20%.	-	-	-	6.50%	-	-	-
Banka Intesa Sanpaolo d. d.		-	-	-	6.00%	258.20	9.55%	148.37
Banka Sparkasse d.d.	6M EURIBOR + 4.75%	256.48	13.07%	198.15	5.50%	257.51	13.93%	210.59
BKS Bank AG, bančna podružnica	6M EURIBOR + 4.45%	-	-	-	-	-	-	-
Delavska hranilnica d.d.		-	-	-	4.40%	257.50	12.42%	188.25
Deželna banka Slovenije d.d.		-	-	-	3.95%	255.38	8.72%	134.92
Gorenjska banka d.d.		-	-	-	5.00%	256.82	11.28%	172.12
Lon d.d.		-	-	-	4.50%	-	-	-
NLB d.d.		-	-	-	6.00%	258.20	16.49%	243.75
Nova KBM d.d.		-	-	-	6.30%	258.61	8.10%	128.54
Primorska hranilnica Vipava d.d.		-	-	-	3.80%	-	-	-
Sberbank banka d. d.	6M EURIBOR + 4.00%.	255.45	9.85%	150.67	3.00%	255.31	9.54%	146.23
SKB banka d.d.		-	-	-	5.40%	257.37	12.31%	188.01
UniCredit Banka Slovenija d.d.		-	-	-	6.50%	259.04	8.42%	-

Source: Commercial banks websites.

Table 22: Consumer credit, EUR 7 000, four years

Credit	Variable Interest Rate				Fixed Interest Rate			
	48 Months							
Bank/Saving Bank	Interest Rate	Initial Monthly Obligation (EUR)	EOM	Total Consumer Costs (EUR)	Interest rate	Initial Monthly Obligation (EUR)	EOM	Total Consumer Costs (EUR)
Abanka d.d.	6M EURIBOR + 3.90%	157.75	6.18%	855.87	5.15%	161.69	7.48%	1 038.28
Addiko Bank d.d.	3M EURIBOR +6.20%	165.04	9.57%	1 221.48	6.50%	166.01	9.90%	1 271.36
Banka Intesa Sanpaolo d. d.		-	-	-	6.00%	164.40	7.05%	1 002.96
Banka Sparkasse d.d.	6M EURIBOR + 4.90%	160.89	6.14%	870.09	5.75%	163.59	7.05%	1 000.11
BKS Bank AG, bančna podružnica	6M EURIBOR + 4.80%	-	-	-	5.60%	-	-	-
Delavska hranilnica d.d.		-	-	-	4.40%	160.81	7.50%	1 035.88
Deželna banka Slovenije d.d.	6M EURIBOR + 4.15%	158.52	6.39%	886.55	5.30%	162.16	7.57%	1 054.12
Gorenjska banka d.d.	6M EURIBOR + 3.80%	157.43	6.01%	834.26	5.00%	161.21	7.25%	1 008.95
Lon d.d.		-	-	-	4.50%	-	-	-
NLB d.d.	6M EURIBOR + 5.00%	161.21	7.79%	1 074.73	6.30%	165.36	9.27%	1 280.00
Nova KBM d.d.		-	-	-	6.50%	166.00	7.39%	1 069.08
Primorska hranilnica Vipava d.d.	6M EURIBOR + 3.9 o.t.	-	-	-	4.40%	-	-	-
Sberbank banka d. d.	6M EURIBOR + 4.20%	158.68	6.63%	917.38	3.00%	157.74	6.19%	858.07
SKB banka d.d	3M EURIBOR + 4.80 o.t.	160.57	7.40%	1 050.17	5.60%	163.11	8.25%	1 171.87
UniCredit Banka Slovenija d.d.	3M EURIBOR + 5.20%	160.79	5.72%	-	6.50%	166.31	7.56%	-

Source: Commercial banks website.

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