

# Financial needs in the agriculture and agri-food sectors in Latvia

June 2020







# DISCLAIMER

This document has been produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union or the European Investment Bank. Sole responsibility for the views, interpretations or conclusions contained in this document lies with the authors. No representation or warranty express or implied is given and no liability or responsibility is or will be accepted by the European Commission or the European Investment Bank or by the managing authorities of ESI Funds Programmes in relation to the accuracy or completeness of the information contained in this document and any such liability or responsibility is expressly excluded. For the avoidance of doubt, this document is provided for information only. Financial data given in this document has not been audited, the business plans examined for the selected case studies have not been checked and the financial model used for simulations has not been audited. The case studies and financial simulations are purely for theoretical and explanatory illustration purposes.

The case projects can in no way be taken to reflect projects that will actually be financed using financial instrument. Neither the European Commission nor the European Investment Bank gives any undertaking to provide any additional information on this document or correct any inaccuracies contained therein.

This document has been prepared with the support of a consortium of Ecorys and Frankfurt School of Finance & Management gGmbH.

This document is to be referred as: *fi-compass*, 2020, Financial needs in the agriculture and agri-food sectors in Latvia, Study report, 74 pages. Available at: https://www.fi-compass.eu/sites/default/files /publications/financial\_needs\_agriculture\_agrifood\_sectors\_Latvia.pdf.



# **Glossary and definitions**

Expression	Explanation			
Agri-food survey	Survey of the financial needs of EU agri-food processing enterprises carried or in mid-2019 in the framework of study 'EU and Country level market analysis for Agriculture' and based on respondents' financial data from 2018.			
AREI	Institute of Agro-resources and Economics, Latvia			
AWU	Annual Work Units			
САР	Common Agricultural Policy			
COSME	EU Programme for the Competitiveness of Small and Medium Enterprises			
CSB	Central Statistical Bureau of Latvia			
EAA	Economic Accounts for Agriculture			
EAFRD	European Agricultural Fund for Rural Development			
EaSI	EU Programme for Employment and Social Innovation			
EC	European Commission			
ECB	European Central Bank			
EFF	European Fisheries Fund			
EIB	European Investment Bank			
EIF	European Investment Fund			
ERDF	European Regional Development Fund			
EU 24	The 24 EU Member States covered by the <i>fi-compass</i> '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.			
EUR	Euro			
FADN	Farm Accountancy Data Network			
FCMC	Financial and Capital Market Commission			



fi-compass survey <sup>1</sup>	Survey on financial needs and access to finance of 7 600 EU agricult enterprises carried out by <i>fi-compass</i> in the period April - June 2018 and ba on respondents' financial data from 2017.					
GFCF	Gross Fixed Capital Formation					
GVA	Gross Value Added					
ha	Hectares					
LDR	Loan-to-deposit ratio					
LLA	Latvian Leasing association					
МоА	Ministry of Agriculture					
RDP	Rural Development Programme					
SMEs	Small and medium-sized enterprises					
SO	Standard Output					
UAA	Utilised Agricultural Area					

*fi-compass*, 2019, Survey on financial needs and access to finance of EU agricultural enterprises, <u>https://www.fi-compass.eu/publication/brochures/survey-financial-needs-and-access-finance-eu-agricultural-enterprises</u>.



# **Table of contents**

Glossary and definitions					
Table of contents	5				
List of figures	6				
List of tables	7				
EXECUTIVE SUMMARY	8				
Financing gap for the agriculture sector in Latvia	8				
Financing gap for the agri-food sector in Latvia	10				
1. INTRODUCTION	12				
2. PART I: AGRICULTURE SECTOR	13				
2.1. Market analysis	13				
2.2. Analysis on the demand side of finance to the agriculture sec	tor 17				
2.2.1 Drivers of total demand for finance	17				
2.2.2 Analysis of the demand for finance	23				
2.3. Analysis on the supply side of finance to the agriculture sector	or 28				
2.3.1 Description of finance environment and funding availa	bility 28				
2.3.2 Analysis of the supply of finance	34				
2.4. Financing gap in the agriculture sector	37				
2.5. Conclusions	40				
3. PART II: AGRI-FOOD SECTOR	41				
3.1. Market analysis	41				
3.2. Analysis on the demand side of finance to the agri-food sector	or 43				
3.2.1 Drivers of total demand for finance	43				
3.2.2 Analysis of the demand for finance	48				
3.3. Analysis on the supply side of to the agri-food sector	54				
3.3.1 Description of finance environment and funding available	ility 54				
3.3.2 Analysis of the supply of finance	58				
3.4. Financing gap in the agri-food sector	61				
3.5. Conclusions	64				
ANNEX	65				
A.1 References	65				
A.2 Stakeholders interviewed	67				
A.3 Methodology of financing gap calculation	68				
A.4 TG I: fi-compass survey	72				
A.5 TG II: Agri-food survey 73					



# List of figures

Figure	1: Evolution of agricultural income compared to wages and salaries in other sectors of	
	the economy, 2009-2018	15
Figure	2: Evolution of agricultural input and output prices, 2009-2018	15
Figure	3: Evolution of harmonised indexes of consumer prices, 2009-2018	16
Figure	4: Agricultural income – cost and revenue structure in Latvia, 2004-2018	16
Figure	5: Purpose of bank loans in the agriculture sector in 2017	19
Figure	6: Difficulties experienced by farmers in 2017	21
Figure	7: Schematic overview of the demand side of the agriculture sector	23
Figure	8: Latvian farms applying for finance in 2017	24
Figure	9: Latvian farms applying for finance in 2017, by financing product	24
Figure <sup>•</sup>	10: Reasons for not applying for loans in the agriculture sector in 2017	25
Figure <sup>•</sup>	11: Results from applications for finance in the agriculture sector in 2017	26
Figure	12: Financing gap by product in the agriculture sector, 2017, EUR million	38
Figure	13: Gross Investment structure in the Latvian agri-food sector, 2013-2017, EUR million	44
Figure <sup>•</sup>	14: Purpose of bank loans in the agri-food sector in 2018	44
Figure	15: Difficulties experienced by agri-food enterprises in 2018	46
Figure <sup>•</sup>	16: Solutions to reduce difficulties in accessing finance, 2018	46
Figure <sup>•</sup>	17: Most important financing instruments to agri-food enterprises in 2018	49
Figure	18: Latvian agri-food enterprises applying for finance in 2018, by financing product	49
Figure <sup>•</sup>	19: Reasons for not applying for loans in the agri-food sector in 2018	50
Figure	<b>20</b> : Results from loans applications in agri-food sector in 2018	51
Figure	21: Agri-food companies' expectations on future financing needs, 2018	52
Figure	22: Financing gap by product in the agri-food sector, 2018, EUR million	62



# List of tables

Table	1: Gross Fixed Capital Formation in the Latvian agriculture sector, 2013-2018, EUR million	18
Table	2: Assets and liabilities by farm economic size, per farm in Latvia in 2017	20
Table	3: Assets and liabilities by type of farming, per farm in Latvia, 2017	21
Table	4: Implementation of the Latvian RDP sub-measures 4.1 and 6.1, total public financing,	
	2014-2019	23
Table	5: Approximate market shares of the main finance providers in Latvia at the end of 2017	29
Table	6: Financial Instruments/products offered to farmers by ALTUM	30
Table	7: Dynamics of bank loans for agriculture in Latvia, 2015-2018, EUR million	33
Table	8: Loan-to-deposit ratio for agriculture in Latvia, 2015-2018	33
Table	9: Newly granted loans by ALTUM in 2018	35
Table	<b>10</b> : Newly granted guarantees by ALTUM in 2018, EUR million	35
Table	11: Financing gap by farm size and product, 2017, EUR million	38
Table	<b>12</b> : Assets and liabilities in manufacture of food products and beverages in Latvia, 2017	45
Table	<b>13</b> : Implementation of the Latvian RDP sub-measure 4.2, total public financing, 2014-2019	47
Table	14: Approximate market shares of the main finance providers for the agri-food sector in Latvia,	
	at the end of 2018	55
Table	<b>15</b> : Dynamics of bank loans in Latvia, 2015-2018, EUR million	56
Table	16: Breakdown of outstanding bank loans by sector in Latvia, 2015-2018, EUR million	58
Table	17: Newly granted loans by ALTUM in 2018, EUR million	59
Table	<b>18</b> : Newly granted guarantees by ALTUM in 2018, EUR million	60
Table	<b>19</b> : Financing gap by firm size and product, 2018, EUR million	62
Table	<b>20</b> : Elements for the calculation of the financing gap in the agriculture sector	70
Table	<b>21</b> : Elements used for the calculation of the financing gap in the agri-food sector	71
Table	<b>22</b> : <i>fi-compass</i> survey sample size per Member State	72
Table	23: Agri-food survey sample size per Member State	73



# **EXECUTIVE SUMMARY**

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

The analysis draws on the results from two comprehensive and representative 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. 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 Latvia

**The agriculture sector in Latvia shows a positive attitude towards investment**. One of the main investment drivers is the **modernisation** of production mechanisms. Investment in modern production technologies (including precision farming) facilitates production expansion and helps to improve efficiency.

Another important investment driver is the need to purchase agricultural land. This is particularly the case for crop farmers choosing to further specialise rather than diversifying their activities. Agricultural land is also needed by young farmers.

Demand for finance is led by investment trends, but **the need for working capital also significantly contributes**. More working capital is required due to the overall growth of the sector and rising labour costs.

The CAP is an important vehicle for investment support. It sustains the demand for finance and facilitates the access to financing resources. The analysis shows that direct payments (Pillar I) and rural development grants (Pillar II) play an important role in stimulating demand for finance. The demand is strongly influenced and facilitated by the investment support under the EAFRD and the respective Rural Development Programme 2014-2020. Demand for grants under the RDP exceeds significantly what is available for agriculture. A similar trend, although less marked, could be noticed for the start-up aid for young farmers. Overall, the execution of the RDP investment support is one of the highest in the EU 28.

**Financing supply is provided by different intermediaries** including four main banks (with a total market share of 72% in 2017), a state-owned development finance institution called ALTUM, and other actors (leasing companies, cooperative agribusiness companies, commodity traders and non-bank lenders). A significant share of short-term finance is provided by cooperatives. ALTUM implements national support programmes to compensate market failures and provides support, mainly in the form of financial instruments.

The bank loans dynamics in the period 2015-2018 indicates that, despite the decrease in the aggregate lending at national level, loans to the agriculture sector are increasing both in terms of amount and share in total lending.

This report shows that there is a potential for new financial instruments for the agriculture sector, with a **financing gap estimated between EUR 17 million and EUR 32 million.** Around 55% of the gap value relates to small-sized farms (below 20 ha). In terms of financial products, more than 75% of the gap relates to medium and long-term investment loans:

- A first component of the gap is constituted by the estimated value of loan applications submitted in the past year by viable enterprises, which were rejected by banks, or which translated into loan offers refused by the applicants due to non-acceptable lending conditions.
- The second component of the gap relates to the estimated value of the loan applications that are **not** submitted by farmers considered viable due to discouragement by a possible rejection. The *fi*-



*compass* survey results reveal that this financing gap component is dominant, and it relates to all maturities. Discouragement may be based on own experience or experience of other farmers, as well as it can be the consequence of the preliminary informal meeting with banks.

Several factors that cause viable loan applications by farmers to be rejected, refused, or farmers to be discouraged from applying, have been identified. The main problems hindering farmers' access to finance are related to insufficient collateral, lack of credit history and other bank requirements that can be discouraging. Some farmers also lack sufficient management experience and have existing credits, which affects their creditworthiness The supply of finance to agriculture is constrained by high concentration, resulting in limited choice among banks and other lenders, by the absence of fixed interest rate loans, which forces farmers to bear the interest rate risk, and by inadequate supply of long-term loans, causing problems to finance the construction of buildings and the purchase of land.

According to interviews, access to credit is particularly constrained for new entrants and young farmers, due to the lack of credit history, experience, and skills.

#### RECOMMENDATIONS

Several recommendations for public interventions could be considered:

- Despite the fact that ALTUM offers specialised loans to young farmers and new entrants, these groups still face restricted access to finance. Young farmers point out that the interest rates are too high although these loans have lower requirements for collateral (compared to bank loans). Consequently, ALTUM's loans do not sufficiently close the financing gap for young farmers and new entrants. Specialised loans with reduced interest rates could close the financing gap for young farmers, new entrants and small-sized farms more efficiently.
- Currently, ALTUM offers only so-called individual guarantees, whereas portfolio guarantees, which are more flexible for banks, are not available to the agriculture sector. The introduction of portfolio guarantees in the financing of agriculture could increase the efficiency of guarantee type of financial instruments.
- There are occasions when farmers want to exit the sector and sell the whole farm, but there are no sector specific financial instruments to support such transactions. It would be necessary to provide integrated loans for the purchase of functioning farms, especially for new entrants, and thus facilitating the generation renewal in agriculture.
- Due to a high loan-to-deposit ratio required for medium and, especially, long-term loans, the supply of bank medium and long-term credit is limited. The provision of long-term loans by ALTUM doesn't seem to be sufficient to cover the financing gap, and seems to be in any case more targeted to large-sized farms. Loans with maturity of over ten years are non-existent but they are essential to finance long-term investments, such as the construction of agricultural buildings, purchase of agricultural land, etc. Therefore, it is worth considering the development of financial instruments (e.g. specialised public loans to banks or intermediate loans) that would support the supply of long-term loans in the market in particular for small-sized farms.
- The majority of loans are floating rate loans and farmers bear interest rate risk, whilst at the same time operate in a risky sector. Therefore, it is necessary to develop financial instruments that promote fixed-rate loans, especially for medium to long-term products.
- Considering the share of small-sized farms that uses informal financing from family members or friends, a micro-credit instrument (in the form of a guarantee or a risk sharing loan fund) might be an appropriate solution to promote their financial inclusion.
- Lack of management experience and existing current liabilities hinder the success of the loan applications. Possibilities to promote business ideas and exchange of management experience between farmers could be helpful.



# Financing gap for the agri-food sector in Latvia

The investment dynamic is also positive in the agri-food sector in Latvia. This is shown by the analysis, which highlights four main investment drivers of the Latvian agri-food sector:

- The need to increase production efficiency (including expansion of production capacities) and production process automation (driven by a labour shortage).
- The development of new products (e.g. organic products).
- Product promotion on the market (e.g. new packaging).
- The development of exports.

Results from the study also reveal that the **need of working capital represents one of the main drivers of the demand for finance in the Latvian agri-food sector**. Loans for working capital are important for running and developing businesses and they can account for up to 80% of total loans in an enterprise.

The supply of finance to the sector is provided by a group of financial intermediaries composed of banks, the state-owned development finance institution ALTUM and leasing companies. The market share of the four banks (including their leasing subsidiaries) is approximately 70%. Financial Instruments for the agrifood sector are provided through the financial products of ALTUM (with national funding), mainly as loans and guarantees.

The study shows that there is a potential for new financial instruments, with a **market gap in the agri-food sector estimated to be EUR 15.3 million**. Unmet financing needs are concentrated in specific segments of the sector. Around 47% of the gap value relates to small-sized enterprises (below 50 employees). In terms of financial products, almost 50% of the gap relates to long-term investment loans. Whilst important constraints exist for large-sized enterprises and in accessing short-term financing.

The main reason for the rejection of investment loan applications is **insufficient own funding**, as banks require applicants own financial contribution to reduce moral hazard. Another reason for loan application rejection is **insufficient collateral**. As there is a restricted secondary market for fixed assets, banks significantly discount the value of collateral (especially equipment and inventory), which makes it difficult to raise finance even if enterprises have assets to pledge.

Qualitative information reveals that the **discouragement to apply for finance is mainly related to bank requirements**, in particular related to collateral requirements.

The three main supply side constraints identified for the agriculture sector (**lending market concentration**, **lack of fixed interest rate loans** and **inadequate supply of long-term loans**, especially for investment in assets with a long-life cycle) also apply to the agri-food sector. Furthermore, there is an **additional constraint related to working capital financing**, as banks offer mostly short-term loans or credit lines for a maximum duration of 12 months, whilst enterprises would need longer term credit lines to finance their permanent working capital cost.

Interviews have also highlighted the difficulties to obtain finance for large strategic projects (above EUR 50 million), which would be essential to increase the competitiveness and the value added in the sector. Such projects, however, may impact negatively on the local smaller agri-food producers, in sub-sectors well represented by them.

#### RECOMMENDATIONS

Several **recommendations** for public interventions could be considered for the future:

 A significant problem for enterprises in the agri-food sector is the financing of working capital. Banks typically offer only loans and credit lines with a maximum 12-months maturity, whilst enterprises would need a more stable provision of funds for their capital needs. Therefore, there is a need for financial instruments (e.g. specialised loans, guarantees for medium-term credit lines, etc.) to address this market failure.



- The supply of bank medium and long-term credit is constrained. Banks are not willing to offer longer loan
  maturity for more than five-seven years, but loans with a maturity of ten years or more are necessary to
  finance the construction of buildings, the purchase of specific industrial equipment and investment in other
  assets with long lifecycles. Therefore, it is worth considering the development of financial instruments
  (e.g. specialised public loans to banks or intermediated loans) that would support the supply of long-term
  loans in the market. The specialised loans targeted at enterprises that undertake such investment projects
  can be the possible solution, as well.
- It is worth considering the development of financial instruments (e.g. specialised public loans to banks, including through the EAFRD) that would support the supply of loans with fixed-interest rates, particularly for medium and long-term maturity, for which there is a limited availability in the market.
- ALTUM's loans do not sufficiently close the financing gap for new entrants and start-ups, as banks
  reluctantly finance this segment. Specialised loans with reduced interest rates could stimulate the settingup of new companies with new ideas and close the financing gap for start-ups more efficiently.
- A significant obstacle for start-ups and new entrants is the low level of own funds and equity that limits their creditworthiness. Therefore, it is worth considering improving equity financial instrument (e.g. some type of acceleration funding or venture funding) in the agri-food sector as the existing equity financial instrument are more indented for other industries.
- Another significant problem for the agri-food sector is the very constrained supply of finance to large strategic projects (projects with the amount of investment EUR 50 million, EUR 75 million and more). At present it is very difficult to raise financing for these projects, but such projects are essential to ensure the strategic growth in the agri-food sector. Public support to address this problem seems to be justified. Financial instruments could be used as long as a sufficient critical mass can be reached.



# 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 Latvia. 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 instrument, or the creation of new or additional ones, supported by the European Agricultural 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 instrument.

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 EU 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 gap for each of the two sectors is 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 Latvian agriculture sector

- Overall, the development of the agriculture sector over the period 2013-2018 was positive. Crop production rose by 11% and animal output grew by 7%. There has been a remarkable growth in cereal production (+40%) and the volume of milk output grew by 12%.
- The agricultural output in 2018 was EUR 1.14 billion, an increase by 8.5% compared to 2016.
- Agriculture constitutes around 2% of the 2018 Gross Value Added in Latvia and the agricultural labour productivity is relatively low.
- Out of 69 930 farms, more than 78% are managed as small family farms (< 20 ha)<sup>2</sup>.
- More than half of the farmers are over 55 years old, whilst just 5% are categorised as young farmers (< 40 years old).
- 31% of Latvian farms specialise on general field cropping, followed by 21% dairy farms, 8% mixed farms, and 7% specialising on arable crops<sup>3</sup>.
- 56% to the agricultural production value is provided by crop production, while livestock contributes with 41.5%.
- The sector faced a series of adverse events between 2013 and 2018, including the African swine fever, the milk price crisis, a heavy summer and an autumn rainfall in 2017, along with a summer drought in 2018.

Agriculture<sup>4</sup> represented 1.9% of the Gross Value Added (GVA) of Latvia in 2018, whilst its contribution to total employment was 6.9%<sup>5</sup>. The total labour input in agriculture was 70 510 Annual Work Units (AWU) in 2017, out of which nearly 75% was family (non-salaried) labour force<sup>6</sup>. Labour productivity is still relatively low in Latvian agriculture (in 2017 it stood at 46% of the EU average<sup>7</sup>). The number of farms in Latvia have been decreasing over the last several years, standing at 69 930 in 2016<sup>8</sup>.

**Most of the farms are small-sized family run units**. The share of farms with Utilised Agricultural Area (UAA) less than 20 hectares (ha) was 78.7% in 2016, whilst farms with UAA exceeding 100 ha accounted for 4.6% of the total<sup>9</sup>. The main type of farming is field crops (31% of all farms), followed by dairy (21%), mixed crop and livestock (8%), and arable crops (7%)<sup>10</sup>. The average Farm Accountancy Data Network (FADN)<sup>11</sup> farm in

- 4 A01 Crop and animal production, hunting and related service activities.
- 5 Eurostat, 2019, Economic Accounts for Agriculture.

- 7 Calculated by the authors as value added (output minus intermediate consumption) per AWU (FADN).
- 8 Eurostat, 2019, Economic Accounts for Agriculture.
- 9 Ibid.
- 10 Eurostat, 2019, Agricultural Census in Latvia, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File: Figure\_2\_Main\_type\_of\_farming\_by\_number\_of\_holdings\_Latvia\_2010.PNG.
- 11 FADN data represents 24 550 farms with standard output larger than EUR 4 000.

<sup>3</sup> Eurostat, 2019, Agricultural Census in Latvia, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File: Figure\_2\_Main\_type\_of\_farming\_by\_number\_of\_holdings\_Latvia\_2010.PNG.

<sup>6</sup> Ibid.



Latvia had an output of EUR 60 308, a farm net value added of EUR 23 223 and a gross investment of EUR 17 028 in 2017.

**More than half of the farm managers (56.9%) are over 55 years old**<sup>12</sup>**.** The share of young farmers (up to 40 years old) was just 5%. In 2016, 73% of all farms employed up to two workers and 99.4% employed up to ten workers (including family members).

**The agricultural output in 2018 was EUR 1.14 billion**. Crop output was EUR 639 million (56% of the total output) and animal output stood at EUR 475 million (42%)<sup>13</sup>. The main crops in Latvia are cereals with 30% of total output, followed by rapeseed (9%), potatoes (6%) and vegetables (5%). Animal output consists mainly of milk production (22% of total output), followed by pig production (5%) and cattle (4%).

The agriculture sector faced various challenges over the period 2013-2018, including African swine fever outbreak, low milk prices, a heavy summer and an autumn rainfall in 2017 (especially in some parts of Latvia) followed by an atypical climatic conditions causing a summer drought in 2018 (whilst there was a record harvest in 2015).

**Overall, the development of the agriculture sector over the years 2013-2018 was positive**. Whilst crop production rose up by 11% and animal output grew by 7%<sup>14</sup> in 2017. In 2018 agricultural production decreased by 13%. Still, in volume terms, there has been a remarkable growth (+40%) in cereal production, and also the volume of milk output grew by 12%. Cereal and milk productions are well developed agriculture sub-sectors, where a number of strong farms operate. One of the main factors behind the production growth in these sub-sectors is the increased establishment of cooperatives. The overall development of these segments has made cereal and milk producers attractive clients for finance providers.

**Agricultural incomes are in sync with other sectors of the economy.** With smaller deviations, agricultural incomes evolved in comparable manner compared to wages and salaries in other sectors of the economy. In 2017 the agricultural income peaked driven by the revenues obtained in the animal production. However, in 2018, the income decreased by 14% because of the losses reported in the crop production due to the drought (Figure 1).

12 Eurostat, 2019, Economic Accounts for Agriculture.13 Eurostat, 2019, Economic Accounts for Agriculture.14 Ibid.







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

**The price dynamics in the period 2013-2018 was volatile** (Figure 2). Agricultural prices were trending downwards until 2016, followed by a price increase in 2017 and stagnation in 2018<sup>15</sup>. Prices of goods and services used in production exhibited a downward trend over 2013-2018 (2017 was 8.4% lower than in 2013), whilst prices of goods and services contributing to agricultural investment, as well as labour and land prices increased (+14%, +41% and +42%, respectively)<sup>16</sup>.



Figure 2: Evolution of agricultural input and output prices, 2009-2018

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

As output prices have been stagnating, and with the consumer price index for food products surpassing the consumer price index for all goods since 2015 (Figure 3), farmers' economic margins were squeezed in 2018.

15 Ibid.

<sup>16</sup> Eurostat, 2018, Central Statistical Bureau of Latvia, 2019, https://www.csb.gov.lv/en/statistika/db and AREI, FADN standard results, https://sudat.arei.lv.



#### Figure 3: Evolution of harmonised indexes of consumer prices, 2009-2018



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

As for the cost and revenue structure for the agriculture sector (Figure 4), costs for taxes and feed stuffs have decreased, while the cost of labour, fertilizers, and rent increased between the period 2004-2006 and 2016-2018. On the revenue side, the share of revenues stemming from animal production and non-agricultural activities have decreased, while the share from crop output and public support has increased.



Figure 4: Agricultural income - cost and revenue structure in Latvia, 2004-2018

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

#### Statistical factsheet Latvia, 2019

More data on agriculture indicators from Latvia can be found in the <u>Statistical Factsheet for Latvia</u> 2019 of the Directorate-General for Agriculture and Rural Development, Farm Economics Unit.



# 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 elaborate the main reasons for farm enterprises to request financing and identify the agriculture sub-sectors displaying 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 analysis of the demand for agriculture finance is based on the findings from the *fi-compass* survey of 315 Latvian 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 Latvian agriculture sector

- Those farms that specialise in horticulture, pigs and poultry hold the largest amount of liabilities per farm and also have the highest liabilities to assets ratio.
- The main drivers of loan demand of Latvian farmers are the financing of working capital, investment in modern production technologies and the purchase of land.
- Demand for finance is influenced negatively by several factors, such as the fragmented farm structure, with a high percentage of small-sized enterprises and limited farm income.
- Farmers mainly demand medium and long-term finance.
- The demand for finance is strongly influenced and facilitated by the Rural Development Programme 2014-2020 investment support.
- Using farm liabilities as a reference indicator<sup>17</sup>, it can be said that the demand for finance is led by field crops and dairy farming, with 83% of total liabilities concentrated in large-sized farms.
- The total credit unmet demand for the Latvian agriculture sector is estimated at EUR 151 million.
- The main reasons for the rejection of farmers' loan applications are (i) the lack of sufficient collateral, (ii) the lack of management experience, (iii) weak credit history, and (iv) bad credit worthiness.
- More specifically, according to the *fi-compass* survey, the rejection rate for loans in Latvia is below the EU 24 average, mainly for long-term loans (9%) and 100% of answers indicate that all applications were rejected because of lack of immovable collateral.
- Young farmers and new entrants make up for a significant share of the demand for finance, and as they lack experience and skills to present a well-structured business plan, often results in the rejection of loan applications. Technical support for advice to new entrants, young farmers and small-sized farms is therefore needed.
- The existence of unmet demand supports the introduction of financial instruments.

## 2.2.1 Drivers of total demand for finance

The Gross Fixed Capital Formation<sup>18</sup> (GFCF)<sup>19</sup> dynamics in Latvian agriculture shows a positive investment attitude in the sector, with an increase in the period 2014-2018 and a total value of

<sup>17</sup> Farm Accountancy Data Network (FADN).

<sup>18</sup> 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.

<sup>19</sup> GFCF does not include investment in land purchase.



**EUR 469.2 million in 2018**. Investments were made mainly in machines and other equipment (EUR 301.1 million, accounting for 64.2% of the total investments in 2018), and buildings (EUR 155.2 million, 33.1% of total investments in 2018). The GFCF in other assets was not significant (Table 1).

Investments represented 128.9% of the GVA of the sector, significantly higher than the 32.3% share in the EU 28<sup>20</sup>. According to FADN data, this investment attitude is reflected in a growing level of medium and long-term liabilities, increased by 5% between 2013 and 2017.

A sound demand for investment, and hence for finance, can be expected in the Latvian agriculture, as the productivity in the sector is still lagging behind the EU average (the value added per AWU was 46% of EU average in 2017)<sup>21</sup>.

	2013	2014	2015	2016	2017	2018
Agricultural Products	5	6	4	5	7	8
Animals	5	5	4	4	4	4
Plantations	0	0	0	1	3	4
Non-Agricultural Products	284	180	262	298	318	461
Materials	200	95	153	213	212	301
Buildings	83	74	107	83	103	155
Other	1	11	2	2	2	5
Total GFCF	288	186	266	304	325	469

 Table 1: Gross Fixed Capital Formation in the Latvian agriculture sector, 2013-2018, EUR million

Source: Eurostat, 2019, Economic Accounts for Agriculture.

The demand for finance in the Latvian agriculture sector is influenced negatively by several factors such as the fragmented farm structure, with a high percentage of small-sized enterprises and limited farm income. Disregarding very small-sized farms, there are 45 800 farms with at least 5 ha of UAA in Latvia. According to data from the State Revenue Service, there were 22 700 farms that reported revenues from agriculture in 2017, out of which 77% had revenues below EUR 25 000, and 43% had revenues below EUR 5 000. This means that many farms have limited possibilities to create demand in the formal financial market. Another factor hindering the demand for finance is the age demographics, with a majority of farm owners older than 55 years old.

**Most bank loans received by the Latvian farmers are used for covering working capital needs.** The *ficompass* farmers survey shows that working capital needs were the main purpose of the loans received in 2017 (68%, compared to 41% in EU 24). Investing in fixed assets was the objective of the loan for 48% of the respondents against 63% in EU 24 (Figure 5). Land purchase was also above EU 24 average.



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



Source: fi-compass survey.

**Overall growth in the sector requires a higher share of working capital**, even though farmers are constantly looking for possibilities to reduce the level of intermediate costs per unit produced. Working capital includes goods and services used in the agricultural production, i.e. intermediate consumption (estimated at EUR 1.0 billion in 2017), compensation for employees (EUR 160.6 million), rents (EUR 23.7 million), and interest paid (EUR 8.5 million)<sup>22</sup>. Compared to 2013, the total cost of working capital of Latvian farmers has increased by approximately 3% in 2017, driven by growing labour costs (+28%). This increase has impacted the need for short-term financing: over the same period, the total short-term liabilities of FADN farms increased by 7%, as well.

**Investment in modern production technologies represents another important driver of the demand for finance.** Investments allocated to the modernisation of the means of productions represent one of the main purposes behind the request of financing<sup>23</sup>. Modern production technologies would facilitate production expansion, improve efficiency (including precision farming) and reduce manual work.

Another important driver of Latvian farmers' demand for finance is the need to purchase agricultural land, although the access to land is reported as one of the main challenges for the sector based on the *ficompass* survey (see further down in this section). In terms of investment strategies, existing farmers mostly choose to develop their specialisation instead of diversifying their activities. On the other hand, young farmers and new entrants are more likely to opt for diversified activities, including mixed farming and on farm food processing. They are often interested in engaging in grazing livestock activities (using the land that is not suitable for cereals) and in horticulture (as it does not require large land areas). It should be noted, however, that the problem for young farmers in these sub-sectors is that there is usually a period up to four years, when no stable cash flow is generated.

**In terms of size, the demand for finance is driven by large-sized farms**. According to FADN data, approximately 83% of all liabilities are concentrated in farms with Standard Output above EUR 100 000<sup>24</sup>. The sub-sector, which has shown the highest need for finance is field crops, which accounts for 54% of total liabilities. Dairy farms hold 16% of total liabilities, whereas 14% belongs to mixed farms. Amongst all farms,

- 22 Eurostat, 2019, Economic Accounts for Agriculture.
- 23 Interview with the Latvian Farmers Federation.

<sup>24</sup> 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. A SO of EUR 100 000 represents 0.23% of the Latvian farm population.



those specialised in horticulture, pigs and poultry have the largest average economic size, hold the largest amount of liabilities per farm, and also have the highest liabilities to assets ratio<sup>25</sup>.

**The success of a loan application is partially determined by balance sheet ratios.** The existing liabilities to assets ratio is one of the relevant criteria that banks consider, when deciding on granting a loan<sup>26</sup>. If the ratio exceeds 35%, the creditworthiness of the farm is evaluated cautiously, even if the turnover is significant and growing. According to FADN data, the liabilities to assets ratio for a farm in Latvia in 2017 remained around 31.5% on average over the period 2013-2017.

**Level and maturity of liabilities varies amongst** farms of different sizes (Table 2). Small-sized farms have less liabilities as a share of total assets, but most of them are short-term liabilities. On the other hand, the debt of large-sized farms is higher with a large amount of medium and long-term liabilities.

Economic size group (Standard Output)	Total assets, EUR	Total liabilities, EUR	Short-term liabilities, EUR	Medium and long- term liabilities, EUR	Liabilities to assets ratio, %	Short-term to total liabilities ratio, %	Number of farms
EUR 2 000 -< 8 000	35 050	3 450	1 676	1 774	9.8%	48.6%	6 310
EUR 8 000 -< 25 000	55 933	6 908	2 199	4 710	12.4%	31.8%	12 920
EUR 25 000 -< 50 000	111 686	21 642	7 298	14 344	19.4%	33.7%	2 450
EUR 50 000 -< 100 000	242 744	66 757	19 951	46 807	27.5%	29.9%	1 370
EUR 100 000 -< 500 000	855 987	322 251	111 591	210 661	37.6%	34.6%	1 260
EUR >= 500 000	4 611 507	2 153 330	633 061	1 520 269	46.7%	29.4%	240
All farms	151 768	47 819	15 293	32 526	31.5%	32.0%	24 550

**Table 2**: Assets and liabilities by farm economic size, per farm in Latvia in 2017

Source: Calculations based on data from FADN, 2019.

**Important differences in the level and structure of liabilities is also driven by the type of farming.** In terms of total assets, field crop and grazing livestock farms are the largest (Table 3). FADN data reveals that field crop farms also have a debt ratio that is above the average of the sector, standing at 37% in 2017. Those farms are also characterised by a relatively high share of short-term debt, accounting for 33.4% of total liabilities in 2017. Dairy farms, on the other hand, managed to keep lower debt levels and below average levels of short-term debt.



Type of farming	Total assets, EUR	Total liabilities, EUR	Short-term liabilities, EUR	Medium and long-term liabilities, EUR	Liabilities to assets ratio, %	Short-term to total liabilities ratio, %	Number of farms
Field crops	218 125	80 687	26 987	53 700	37.0%	33.4%	6 710
Other permanent crops	10 817	35 485	14 441	21 045	32.8%	40.7%	160
Milk	105 115	24 624	6 419	18 205	23.4%	26.1%	8 000
Other grazing livestock	109 662	24 588	5 105	19 483	22.4%	20.8%	1 860
Mixed	85 523	23 060	6 468	16 591	27.0%	28.0%	7 090
All farms	151 768	47 819	15 293	32 526	31.5%	32.0%	24 550

Source: Calculations based on data from FADN, 2019.

Note: As not all farm categories are covered, the total is higher.

In 2017, the main concerns of Latvian farmers were the increasing costs of production and difficulties in getting access to land. According to the *fi-compass* survey, one third of all farmers were affected by difficulties relating to production costs, a percentage much lower than the EU 24 average of 47% (Figure 6). Considering the declining prices of main intermediate consumption goods and recovered sale prices, the share of intermediate consumption in output was comparatively low in 2017. However, rising labour and capital prices presumably represented the main problems for the farmers, as increasing labour costs are one of the drivers behind structural changes and capital investments in Latvian agriculture. In addition, 21% of Latvian farmers reported difficult access to land (almost double of the EU 24 average of 11%). Availability of fertile and accessible land has been a challenge in Latvia, and land prices have been increasing. Access to finance for investment has been reported as problematic for 10% of farms, whilst 11% of the respondents experienced difficulties accessing finance for working capital. Those figures are broadly in line with the EU 24 averages.



Figure 6: Difficulties experienced by farmers in 2017

Source: fi-compass survey.



The Common Agricultural Policy (CAP) is a vehicle for investment support and can support demand and access to finance. The review of the CAP support in Latvia is essential to this analysis, as direct payments (Pillar I) and the rural development grants (Pillar II) play an important role in stimulating demand for finance. Besides contributing to beneficiaries' income, they also help in guaranteeing famers' repayment capacity.

In 2018, the total funding of direct payments to Latvian farmers was EUR 255 million<sup>27</sup>. Payments included single area payments, greening payments, young farmers' payments, voluntary coupled support, and the small-sized farmers' scheme. 44 800 farmers received single area payments, whilst 12 500 farmers received support under the scheme for small-sized farmers according to data from the Rural Support Service (RSS). The lower limit for being eligible for support under this scheme is set at 1 ha, and approximately 6 100 farmers (8.8% of the total) are not able to meet this criterion<sup>28</sup>.

The total budget allocated to the Rural Development Programme (RDP) 2014-2020 in Latvia is EUR 1.5 billion, and the total public spending on RDP in the period 2015-2018 was EUR 862.6 million<sup>29</sup>. The total public spending on Measure 4 Investments in physical assets between 2015 and 2019 amounted to EUR 302.6 million, which is 61.7% of the total programmed amount. By the end of April 2020, the EAFRD execution under Measure 4 reached 68.5%, a level much above the average EU 28 level of 41.4% by that time. In 2015-2018, EUR 178.5 million were spent under sub-measure 4.1 Support for investments in agricultural holdings.

**The majority of agricultural investment projects were implemented in the main agriculture sub-sectors.** For example, from the approved investment projects in 2017, 47% (555 projects) were in field crops, 17% in dairy farming and cattle fattening farms (respectively 207 and 203 projects). Most investments in fixed assets refer to the purchase of tractors (260 projects), transportation equipment (195 projects) and harvesters (216 projects). Investments in building construction are mostly for the establishment of farmsteads (55 projects) and grain storage facilities (43 projects)<sup>30</sup>.

The demand for bank finance by farmers is strongly linked to the RDP grant calls for farm investment project applications, which are announced once or twice a year (once in 2017 and 2018 each).

The interest of farmers in investment support exceeded significantly the allocated budget, by 82%, and with almost EUR 305 million, by the end of 2019 (preliminary data). While reasons for not supporting applications can vary, including being non-eligible for support or incomplete, it is clear that the Latvian agriculture needs much more resources to what is available to reach its investment equilibrium (Table 4).

27 Ministry of Agriculture, 2019, Latvian agriculture,

28 Central Statistical Bureau of Latvia, 2019, https://www.csb.gov.lv/en/statistika/db.

https://www.zm.gov.lv/public/files/CMS\_Static\_Page\_Doc/00/00/01/33/19/Gadazinojums.pdf.

https://www.zm.gov.lv/public/files/CMS\_Static\_Page\_Doc/00/00/01/62/36/2019\_lauks\_gada\_zinojums.pdf.

<sup>29</sup> Ministry of Agriculture, 2019. Unpublished data on the declared public funding of the RDP 2014-2020.

<sup>30</sup> Ministry of Agriculture, 2018, Latvian agriculture,

Sub-measures	Amount under the RDP calls (EUR million)	Amount requested by all submitted applications (EUR million)	Amount that could not be supported (EUR million)	Number of applications received	Number of approved for support applications	Number of applications not approved for support
4.1 Support for investments in agricultural holdings **	371.7	676.7	305.0	9 388	6 030	3 358
6.1 Business start-up aid for young farmers	18.9	25.1	6.2	628	368	260

Table 4: Implementation of the Latvian RDP sub-measures 4.1 and 6.1, total public financing, 2014-2019

Source: Ministry of Agriculture, 2020, Preliminary data, including also national top-ups.

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 Latvian RDP 2014-2020 supports also the entry of young farmers to the sector.** By the end of 2019, 368 new young farmers have been supported with a total public budget of EUR 18.9 million<sup>31</sup>. The maximum support rate per young farmer is limited in the RDP to EUR 40 000. The demand for financing has been higher with EUR 6.2 million and some 260 applications were not in the final list of those to be supported.

In the period 2014-2020 the Latvian managing authority did not establish an EAFRD-funded financial instrument. Instead, national programmes implemented in the form of financial instruments by the state-owned development finance institution ALTUM were offered to the farmers (for more details see section 2.3.1.2).

# 2.2.2 Analysis of the demand for finance

The potential total demad 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 7).

Figure 7: Schematic overview of the demand side of the agriculture sector



Source: Ecorys, 2019.

31 Interview with Latvian Young Farmers Club.



Based on the results of the *fi-compass* survey, the unmet demand for finance in the agriculture sector in Latvia is estimated at EUR 150.9 million.

**Approximately a quarter of the Latvian farmers applied for finance in 2017**. According to the *fi-compass* survey, requesting financing from private resources<sup>32</sup> was slightly more popular than using banks. Compared to the EU 24 average, Latvian farmers were less active in applying for finance, especially for bank loans (Figure 8). Interviews show that private resources are used for small short-term loans aimed at meeting farmers' working capital needs. They are based on mutual trust and do not require interest payments. Private lending may signal a potential for the expansion of the formal financial market.



Figure 8: Latvian farms applying for finance in 2017

Source: fi-compass survey.



Figure 9: Latvian farms applying for finance in 2017, by financing product

Source: fi-compass survey.

**Credit lines/bank overdrafts and medium-term loans were the most demanded bank products in Latvia**. According to the *fi-compass* survey (Figure 9), applications for short and long-terms loans are much lower than the EU 24 average. The low application rate for short-term loans offered by banks is affected by the alternative short-term financial options in Latvia (for more details see section 2.3.1.1), and by the role that access to private finance still plays in the Latvian agriculture sector. Due to the restricted supply of long-term loans, investments (except land) in Latvian agriculture are mainly financed by medium-term loans.

<sup>32</sup> Loans obtained from other private individuals (e.g. family members, friends, etc.).

The key reason for not applying for a loan in 2017 was the sufficient availability of own resources for over 80% of the Latvian farmers. The *fi-compass* survey reveals that this share is higher than the EU 24 average for all loan maturities (Figure 10). A possible explanation could be that these are farms that have high equity and thus just rely on their own capital. Also, during the interviews, it was mentioned that there are several cases in which viable farmers do not apply for loans because they want to be debt-free<sup>33</sup>. Such farms rely on their own resources for development, although their growth, if any, is slow.



Figure 10: Reasons for not applying for loans in the agriculture sector in 2017

The share of discouraged farmers<sup>34</sup> is lower in Latvia than in the EU 24. It was 5% for medium-term loans, and below 3% for other types of financial products compared to 10% in the EU 24. This does not necessarily mean that Latvian farmers have a more stable financial situation. In fact, considering the percentage of farmers relying on finance from other private individuals and their reluctance to engage with banks (see above), it is possible to assume that there is a significant group of farmers, who are just not considering loans from banks as a possible solution for their financial needs. In any case, the obtained qualitative information reveals that

33 Interview with the Latvian Farmers Federation.

34 Discouraged farmers are the once, who did not for a loan due to fears of possible rejection.

Source: fi-compass survey.



bank requirements can be discouraging for a farm applying for a loan, and sometimes can cause farms to refuse it.

The rejection rate for loans in Latvia is below the EU 24 average. According to the *fi-compass* survey, only long-term loans show a significant rejection rate (9%), whilst 4% of short-term loans were refused by the farmer (Figure 11). All applications were rejected because of lack of immovable collateral (100% of answers).



Figure 11: Results from applications for finance in the agriculture sector in 2017

**Feedback from interviews suggests that access to finance for Latvian farmers might be, in reality, much more challenging than suggested by the** *fi-compass* **survey results**. According to financial sector experts, the application rejection rate in Latvian agriculture sector might be much higher (on average between 30% and 50% for all types of loans). It could be even higher in a number of cases:

- If the applicant is a new entrant;
- If it is a sub-sector other than field crops or dairy farming;
- If it is a sub-sector that the bank experts are not familiar with;
- If it is a sub-sector with high market fluctuations or high external risks (e.g. African swine fever).

For example, the rejection rate could jump to 90% in the case of new entrants in horticulture. Case study evidence was gathered regarding applications from a new start-up in horticulture, which was rejected by the bank despite having an approval for grant financing RDP project (with 50% public financing).

**Latvian farmers frequently apply for finance at multiple financial intermediaries.** Compared to the EU 24 average, more Latvian farmers apply for finance at multiple financial institutions, especially for short-term loans and credit lines. This is confirmed by interviews with banks and also explains the difficulty in estimating farmers' refusals, as if the desired loan conditions are not negotiated in one bank, there is the possibility the farmer will apply again in other financial institutions. Nevertheless, ALTUM<sup>35</sup> has provided information that approximately

Source: fi-compass survey.

<sup>35</sup> ALTUM is a state-owned development finance institution, which offers state aid for various target groups with the help of financial tools. https://www.altum.lv/en.



30% of the approved applications are refused by farmers because either they are not ready to borrow, or they have alternative sources of financing. However, part of these clients come back to ALTUM later.

According to interviews with the banks, the main reasons for rejection of loan applications include:

- Lack of experience and insufficient management practice (described as the most important reason);
- Lack of credit history of the farm;
- Poor creditworthiness, high level of current liabilities to assets and weak repayment capacity;
- Lack of collateral.

**Banks rank the rejection reasons differently than farmers.** Information gathered from interviews with farmers revealed that the main reason is the lack of collateral, followed by the lack of credit history and only then the creditworthiness (experience in management practice, current liabilities and business ideas). It has been confirmed during the interviews that banks prefer mortgage loans, with agricultural land being the most accepted collateral. It is difficult to obtain a loan without any collateral or public guarantees in Latvia.

The viability of loan applications is assessed on the basis of the ability of the farms to provide the banks with the necessary information to demonstrate the success of their business. According to both - financial experts and farmers interviewed - neither the size of the farms nor their field of specialisation are used as main criteria for assessing the viability of a loan application.

Small-sized farms, as well as young farmers, often lack the experience and the business skills necessary to meet banks' requirements in terms of business planning. Interviews reveal that farmers typically show a weak financial literacy, and commercial banks do not provide technical assistance. However, farmers can attract consultants and attend special courses. Additionally, ALTUM also works with farmers when preparing their bank loan applications.

The finance supply side also lacks sufficient knowledge on agriculture sub-sectors other than crops and dairy farming, which could evidence the necessity to further develop technical assistance tools targeting both farmers and financial providers.



# 2.3. Analysis on the supply side of finance to the agriculture sector

This section provides an overview of the financial environment in which the agriculture sector in Latvia 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 Latvian agriculture sector

- The providers of finance to agriculture are banks, the state-owned development finance institution ALTUM, leasing companies, cooperative agribusiness companies, commodity traders (vendors), and non-bank lenders.
- There is a market concentration of financial intermediaries, as the market share of the four leading banks (including their leasing subsidiaries) is approximately 72%.
- The state-owned development finance institution ALTUM provides financial instruments for the agriculture sector, funded by state. Their main products are specialised loans and credit guarantees, and also reverse leasing of agriculture land<sup>36</sup>.
- There are no EAFRD financial instruments in Latvia's RDP 2014-2020.
- Outstanding loans to agriculture have increased by 33% in the period 2015-2017.
- The majority of bank loans are floating rate loans. The average margin over the base interest rate is 3% to 4% for bank loans, but can be higher for some farmers as the margin for loans granted by ALTUM is typically 5%-6% over the base rate.
- The largest part of loans is granted to field crops and dairy farming, in line with leading role they play in the farm and agricultural production structure.
- There are supply constraints that contribute to the unmet demand in the Latvian agriculture sector, leaving room for possible public intervention.

# 2.3.1 Description of finance environment and funding availability

#### 2.3.1.1. Finance providers

**The main finance providers for farmers in Latvia are the banks, ALTUM** (a state-owned development finance institution), **leasing companies, cooperative agribusiness companies** (cooperative societies of agricultural services), **commodity traders** (vendors) and **non-bank lenders**. The estimated market shares of the various finance providers are presented in (Table 5)<sup>37</sup>.

Four banks serve the agriculture sector the most: SEB banka, Swedbank, Luminor and Citadele banka. The total market share of these banks (including their leasing subsidiaries) is approximately 72%. These are universal banks that offer a wide range of financial products. Currently, Luminor is affected by a merger process and is less active. Nevertheless, it has the highest share in the leasing segment, whilst Citadele banka is active in granting new credits.

<sup>36</sup> Reverse leasing is a financial transaction in which one sells an asset and leases it back for long-term duration.

<sup>37</sup> The estimates of the market volume size and market shares of individual participants are made using data provided by the Financial and Capital Market Commission (FCMC), the Latvian Leasing association (LLA), as well as the public financial statements of ALTUM, cooperative agribusiness companies, commodity traders (vendors) and non-bank lenders. The estimates are based on the outstanding volumes of loans, leasing and other credit.



Table 5: Approximate market shares of the main finance providers in Latvia at the end of 2017

Finance provider	Market share					
Banks:						
SEB banka*	26%					
Swedbank*	21%					
Luminor*	17%					
Citadele banka*	9%					
ALTUM	9%					
Leasing companies:						
OP Finance	4%					
UniCredit Leasing	2%					
Cooperative agribusiness companies:						
LATRAPS	4%					
VAKS	1%					
Commodity traders (vendors):						
Linas Agro	2%					
Scandagra Latvia	2%					
Baltic Agro	1%					
Agrochema Latvia	1%					
Non-bank lenders:						
AgroCredit	1%					

Source: Estimations based on FCMC, LLA, etc.

\* Including their leasing subsidiaries.

**ALTUM is specialised in addressing market failures** that cannot be solved by private financial institutions. It is a state-owned institution with specific positioning in the market, providing support for access to credit. It has an approximate market share of 9%, if only the loans directly issued by ALTUM are counted. However, ALTUM also provides credit guarantees. Therefore, its actual market portfolio/share is higher as the market shares of banks include banks' loans secured by ALTUM guarantees.

**Most leasing companies are subsidiaries of banks** and their market shares are included in the market share of banks. There are leasing companies that operate independently in Latvia. The largest two are OP Finance and UniCredit Leasing, and they have a combined market share of approximately 6% of total leasing, whilst the market shares of the other independent leasing companies are rather insignificant in comparison. Leasing companies specialise in financing the purchase of agricultural machinery and equipment.

There are two main cooperative agribusiness companies that provide financing to farmers - LATRAPS and VAKS. Their market share is approximately 5%. LATRAPS and VAKS specialise in trade credit (vendor financing) to their members (crop farmers). Considering that financial statements represent the outstanding loan volume at the end of year, whilst loans are generally repaid after the harvest, the actual share of these cooperatives could be larger.

The total market share of the **main commodity traders (vendors)**, Linas Agro, Scandagra Latvia, Baltic Agro, and Agrochema Latvia, is approximately 6%. These companies provide vendor financing mainly for crop farmers.

**AgroCredit is a specialised non-bank lender** that provides mainly short-term financing for crop farmers and has a market share of approximately 1%. Some other non-bank lenders also finance farmers, but their lending activities are mainly focused on households, not farmers, so their market share is negligible.

**Finance providers also include cooperative credit unions**. There is no official information on their lending activities in the agriculture sector, but according to FCMC data, the total volume of their outstanding loans was EUR 22.3 million (0.3% of the total banks' value) at the end of 2017. The share of loans to private non-financial corporations (all sectors) was 0.01%, hence the role of credit unions can also be considered as negligible.



## 2.3.1.2. Financial products

Banks offer various financial products: short-term loans<sup>38</sup>, medium-term loans, long-term loans, credit lines and overdrafts. Long-term loans are granted for up to ten years, with the exception of the purchase of land as that is up to 20 years maturity. Though it is hard to obtain a non-land loan for the period longer than five years. Loans are typically secured by collateral (e.g. mortgage, commercial pledge, and guarantees). Some of the loans are secured by credit guarantees granted by ALTUM (including guarantees by COSME and and EaSI). Swedbank also has a contract with the European Investment Fund (EIF) and offers loans secured by COSME guarantees without the involvement of ALTUM. Banks (via their subsidiaries) also offer leasing products such financial leasing and operating leasing, as well as reverse leasing (sale and lease-back).

The COSME Loan Guarantee Facility provides a capped portfolio guarantee for new SME financing portfolios to commercial banks, promotional banks, guarantee societies, leasing companies, etc., with a maximum guarantee rate of 50%. Agriculture can also benefit from COSME guarantees, except for the production of and trade in tobacco, as well as distilled alcoholic beverages and related products.<sup>39</sup> As of end of 2018, about 25.50% of the COSME guarantee recipients in Latvia were from the agriculture, forestry and fishing sectors, which demonstrates the need for such products in the market (approximately 131 SMEs benefitted from the facility for a total of EUR 17.1 million)<sup>40</sup>.

Financial product	Financing limits	Maturity	Interest rate	Collateral and other requirements
Loans to small rural and fisheries enterprises	up to EUR 100 000 total (up to EUR 35 000 for working capital)	up to 10 years (up to 15 for construction)	4-8%	<ul> <li>own-funding 10% (from EUR 7 000);</li> <li>up to EUR 25 000* suretyship (personal guarantee);</li> <li>otherwise - mortgage up to 74% and suretyship (personal guarantee).</li> </ul>
Loans for working capital	EUR 7 000 – 1 000 000 for farmers (up to EUR 2 850 000 for cooperatives)	up to 2 years	fixed, from 4%	<ul> <li>up to EUR 25 000* suretyship (personal guarantee);</li> <li>otherwise - mortgage up to 74% and suretyship (personal guarantee).</li> </ul>
Loans for the development of SME	up to 1 000 000 (working capital); up to 2 850 000 (investment)	2-5 years (working capital); 2-15 (investment)	From 3% + 6 EURIBOR	<ul> <li>own funding at least 10%;</li> <li>up to EUR 25 000* suretyship (personal guarantee);</li> <li>otherwise - mortgage up to 74% and suretyship (personal guarantee).</li> </ul>

Table 6: Financial Instruments/products offered to farmers by ALTUM

38 Loans up to 12 months are commonly understood as short-term loans in Latvia.

<sup>39</sup> As of 31 December 2018, 5.8% of the total volume of COSME financing provided in the EU 28 was for agriculture, forestry and fishing and equalled EUR 1.3 billion (Ciprian Cristea, 2019, COSME Financial Instruments Guarantees for SMEs).

<sup>40</sup> EIF, June 2019, Competitiveness of Enterprises and SMEs-Loan Guarantee Facility: Implementation Up-date.



Loans for purchase of agricultural land	up to EUR 430 000	up to 30 years	~2.7%	<ul> <li>purchased land as collateral.</li> </ul>
Credit guarantees	up to EUR 1 000 000 for farmers (up to EUR 3 500 000 for cooperatives)	up to 10 years	-	<ul> <li>guarantee volume can be up to 80% of loan.</li> </ul>
Reverse leasing of agricultural land (land purchase with the entitlement to rent and buy- back by the previous owner)	90% from the estimated market price of the land	5 years	5% (rent rate) + difference (margin) between the land's buy- back and purchase price	<ul> <li>the land involved in the deal (lease) serves as a collateral.</li> </ul>

Source: ALTUM, 2019.

\*Provided that EaSI and COSME guarantees are used.

Additionally, the **Employment and Social Innovation (EaSI) guarantee instrument** is also available for farmers. In Latvia, as of the end of 2018, the EaSI financial instrument had facilitated access to finance to 61 SMEs in the agriculture, forestry and fishing sector for a total of EUR 0.6 million (30.7 % of the total portfolio), which shows its rather significant impact and importance to the sector.<sup>41</sup>

ALTUM implements national support programmes to compensate some market failures and provides support mainly in the form of financial instruments and **offers two main types of financial products to agriculture:** 

- (i) specialised loans; and
- (ii) credit guarantees (Table 6).

These loans include short-term loans (to finance working capital), medium and long-term loans (to finance investment). There is a special type of loan used for the purchase of agricultural land. ALTUM loans have more favourable terms (mainly with lower requirements for collateral), and they are targeted at farmers that cannot access loans or other financing from private financial institutions. The latest product which provides loans to small-sized rural and fisheries enterprises, was introduced mid 2018 in order to promote the involvement of rural inhabitants in the economic activity. To be eligible for the loan, the farm turnover in the previous year should not exceed EUR 70 000.

According to the interviews, this product has turned out to be very popular. The conditions are outlined in Table 6. The average loan amount is approximately EUR 20 000, whilst the range has been from EUR 2 000 to EUR 99 000. The share of very small loans (up to EUR 7 000) is approximately 20% of the total approved applications, and although these small projects will not form a notable part in the total agricultural production (at least for some time), they can contribute to a more effective use of land resources and to encourage inhabitants to remain in the rural areas. Also, guarantees target farmers which cannot receive loans from banks or other lenders due to insufficient collateral. In those cases, farmers may apply for a ten-year guarantee (and in some exceptions for a longer period), allowing them then to obtain the desired loans. To obtain the loan guarantee, beneficiaries have to pay a one-off premium (between 0.5 and 2%) when the credit is granted.



A special financial product offered by ALTUM is the so-called reverse leasing of agricultural land (land purchase with the entitlement to rent and buy-back by the previous owner). A farmer sells the agricultural land he owns to ALTUM, continues to rent and use the land for agricultural purposes, with the rights to re-purchase it back within five years. This product serves as a financing of last resort if other financing is not available to a farmer. As EAFRD financial instruments were not programmed in Latvia for the period 2014-2020, the products of ALTUM were funded from other (national) sources.

## Credit Fund (2007-2013)

The now discontinued 2007 – 2013 EAFRD supported Credit Fund<sup>42</sup> was introduced as a supplement to the EAFRD and EFF investment grants to solve investment constraints faced by potential grant recipients during the 2007-2013 programming period, at the time of the economic crisis. Through its low-interest loans, the Credit Fund supplemented existing national instruments by giving RDP investment grant recipients the finance to implement their investment project. In total, the Credit Fund financed 58 projects with 71% of the EUR 44.7 million allocation. Funds repaid by the recipients were returned to the Member State's budget, and partially used to finance ALTUM's national financial loan products to small-sized rural and fisheries enterprises as of 2018 (EUR 6.1 million of EAFRD's and EUR 1.7 million of EFF's reflows).

**Leasing companies offer typical leasing products** such as financial leasing and operating leasing, as well as reverse leasing (sale and lease-back). These products are typically medium-term products. Usually leasing is available to finance the purchase of agricultural machinery and equipment.

**Cooperative agribusiness companies and commodity traders (vendors) offer short-term trade credit** (vendor financing) so that crop farmers can buy mineral fertilisers, pesticides and other commodities from them. Crop farmers usually settle the accounts after the harvest. The terms of vendor financing offered by cooperative agribusiness companies and commodity traders are quite similar although cooperative agribusiness companies usually offer more flexible terms (for example, including the option to prolong financing).

AgroCredit (a private specialised non-bank lender) mainly offers short-term loans to crop farmers to finance their purchases of mineral fertilisers, pesticides, seed, etc. The repayment of these loans typically occurs after the harvest.

<sup>42</sup> *fi-compass*, 2015, The Latvian Credit Fund, Case study, https://www.fi-compass.eu/publication/case-studies/case-study-latvian-credit-fund.



## 2.3.1.3. Description of the financing market

Banking sector statistics provide information on agriculture together with forestry and fishing. The dynamics of the bank loans in the period 2015-2018 indicate that **despite the decrease in the total amount of bank loans, loans for agriculture sector are increasing** both in terms of amount and the share in the total loan amount (Table 7).

Indicators	2015	2016	2017	2017/2018*
Total loans**, outstanding (at the end of year) in EUR	14 676.6	15 128.9	14 440.4	14 194.4
of which Agriculture, forestry and fishing in EUR	412.0	495.3	548.2	576.3
Share of Agriculture, forestry and fishing loans as a % of total outstanding loans	2.8%	3.3%	3.8%	4.1%

 Table 7: Dynamics of bank loans for agriculture in Latvia, 2015-2018, EUR million

Source: Calculations based on FCMC.

\* Period from the 3rd quarter of 2017 to the 2nd quarter of 2018.

\*\* Loans granted to non-financial sector.

In order to examine the potential of banks to increase their credit supply, loan-to-deposit ratio (LDR) is calculated for the total amount of loans and for different maturities (Table 8). The LDR is below 1 (although generally rising) for the total portfolio, demand and short-term loans, indicating that banks have some surplus of deposits and a potential to increase the credit supply.

There are high (above 1) and even very high (significantly above 1) values of the LDR for medium and longterm loans. In addition, the levels of LDR tend to increase for medium and long-term loans. These high levels of LDR indicate that **the potential of banks to increase medium and long-term credit supply can be limited** as banks should finance these loans by short-term money (demand and short-term deposits, etc.) and undertake the risk of refinancing.

**Table 8**: Loan-to-deposit ratio for agriculture in Latvia, 2015-2018

Indicators	2015	2016	2017	2017/2018*
Total loans / total deposits	0.63	0.71	0.71	0.81
Demand loans / demand deposits	0.11	0.13	0.15	0.20
Short-term loans / short-term deposits	0.20	0.14	0.07	0.06
Medium-term loans / medium-term deposits	2.65	3.13	3.23	3.68
Long-term loans / long term deposits	36.34	37.51	46.23	53.03

Source: Calculations based on FCMC, 2019.

\* Period from the 3rd quarter of 2017 to the 2nd quarter of 2018.

Most bank loans (as well as leasing products) for the agriculture sector are loans with a floating interest rate. Typically, a three-month or six-month EURIBOR is used as a reference (benchmark) rate, whilst



fixed rate loans (or leasing products) are less common. Furthermore, the interest rate on bank loans could be fixed for up to five years and no fixed rate long-term bank loans are available.

**Collateralised short-term loans are issued at a 4% interest rate on average, whilst for collateralised medium and long-term loans is more volatile and oscillates between the 6 to 8% band<sup>43</sup>. Over 2015-2017, the margin between the interest rates on loans and a three-month EURIBOR was in the range of 3.8-5.0% for short-term loans, and 4.8-8.9% for medium and long-term loans. Data on the interest rates specifically in agriculture is not available, but according to interviews with bank representatives, the average margin over the base rate (a three or six-month EURIBOR) is approximately 3-4% which indicates that the margin in agriculture is lower than in other sectors of the economy. The margin for loans granted by ALTUM is higher, typically it is 5 to 6% or even more over the base rate (the price of the State Treasury resources or EURIBOR). The higher interest rate stems from the higher risk profile of enterprises served by ALTUM.** 

Almost all bank loans granted in agriculture are secured by collateral and/or guarantees. The typical collateral is a mortgage on agricultural land and public guarantees (e.g. COSME, EaSI for micro-sized enterprises, the state guarantees by ALTUM). Collaterals, such as mortgage on agriculture buildings, commercial pledge and suretyship (personal guarantee), are not recognised by banks. However, banks tend to require such collaterals as complementary ones. Commercial pledge on livestock is regarded as a very low-quality collateral, and usually banks do not accept it. The loans granted by ALTUM are also secured by collateral, although collateral requirements are somewhat reduced: for example, suretyship and commercial pledge are regarded as a basic collateral. Furthermore, if the loan is up to EUR 25 000, farmers can apply for COSME or EaSI guarantees and receive loans without other collateral. The financing provided by cooperative agribusiness companies and commodity traders (vendors) are without collateral. Nevertheless, farmers are obligated to supply grains to these companies.

A significant challenge for young farmers and new entrants is their lack of financial (credit) history. Banks in Latvia require at least three years' worth of financial history if a farmer applies for a loan, something young farmers and new entrants cannot offer. According to a small survey of young farmers<sup>44</sup>, 36% of the respondents applied for a long-term loan, 36% applied for leasing and 27% applied for a medium-term loan in 2017. The average amount of the application was approximately EUR 49 000. The breakdown of the respondents by the amount of application is as follows: 36% of the respondents applied for a loan up to EUR 10 000, 18% applied for a loan in the range EUR 10 000-25 000, 45% applied for a loan in the range EUR 25 000-100 000 and 9% applied for a loan in the range EUR 10000-250 000.

## 2.3.2 Analysis of the supply of finance

There is no comprehensive information on the composition of the outstanding loan portfolio for agriculture between the different types of bank loans and other financial products available. In this section, an analysis is attempted for the period 2015-2017, based on the information which could be acquired from the interviews with the representatives of ALTUM and banks.

Detailed information on loans and guarantees granted by ALTUM is available only for 2018. The information on the amount of newly granted loans and the average amount of loan, as well as the breakdown by maturity, industry and type (working capital, investment) is presented in (Table 9).

<sup>43</sup> Only general statistics on the average interest rates of bank loans are available from the Bank of Latvia. The statistics is incomplete for newly granted loans with volume exceeding EUR 250 000 due to the low number of deals. Therefore, the interest rate statistics on bank loans with volume up to EUR 250 000 and secured by collateral or guarantees are used to describe Latvia's financial market.

<sup>44</sup> Small survey carried out, in the framework of this study, by the Ecorys in June 2019, with 17 young farmers participating. It should be noted that 59% of the respondents represented large-sized farms (UAA above 100 ha), 29% - mediumsized farms (UAA 20-100 ha) and 12% - small-sized farms (UAA less than 20 ha), thus, this small survey is skewed towards large-sized farms.



#### Table 9: Newly granted loans by ALTUM in 2018

Loans	Total amount of loans, EUR million	Share	Average amount of Ioan			
Loans by maturity:						
Short-term*	0.3	0.8%	22 000			
Medium-term	8	25.4%	42 000			
Long-term	23.3	73.7%	66 000			
Total	31.6	100.0%	57 000			
Loans by sector:						
Field crops	14	44.3%	65 000			
Dairy farming	7.8	24.8%	86 000			
Cattle rearing and fattening	2.4	7.6%	33 000			
Horticulture and permanent crops	1.7	5.4%	42 000			
Other farming	5.6	17.8%	41 000			
Total	31.6	100.0%	57 000			
Loans by type:						
Working capital	6.6	20.9%	69 000			
Investment	25	79.1%	54 000			
Total	31.6	100.0%	57 000			

Source: Calculations based on the data provided by ALTUM.

\* Loans up to 12 months.

The information on the loans granted by ALTUM characterises mainly the supply of finance to farmers with restricted access to finance. The majority of these loans are medium and long-term loans. The low 0.8% share of short-term loans does not necessarily mean that the supply of short-term financing is low as there are a lot of alternative short-term finance providers, as already described. Approximately 69% of the loans are granted to two sectors, field crops and dairy farming. The dominance of these two sectors is consistent with the information acquired from the banks, as well as corresponding to their leading role in agricultural production. Overall, banks express a positive attitude towards agriculture, but they are cautious to work with applicants from other sub-sectors, except for the dominating segments such as crops and dairy farming. No quantitative information is available on ALTUM's loans by farm size, but according to the information from ALTUM, most of the loans are granted to farms having agricultural land above 100 ha.

**Table 10**: Newly granted guarantees by ALTUM in 2018, EUR million

Loans	Amount of guarantees	Share	Average amount of guarantee
Short-term	0	0%	0
Medium-term	1.3	31%	0.14
Long-term	2.9	69%	0.32
Total	4.2	100%	0.22

Source: Calculations based on the data provided by ALTUM.

**Information on the guarantees granted by ALTUM** and their breakdown by maturity is presented in (Table **10**). The average amount of guarantee is higher than the average amount of ALTUM's loan (EUR 221 000 versus EUR 57 000), which indicates that the average value of banks loans is much higher than the average value of loans provided by ALTUM. Due to the lack of information, it is not possible to analyse the supply of ALTUM's guarantees by industry and by farm size.



According to the information provided by ALTUM, there were no loans with **COSME guarantee** coverage granted to agriculture in 2018. The amount of loans with the **EaSI guarantees** coverage granted by ALTUM to agriculture was approximately EUR 100 000 in 2018.

Furthermore, in 2018 the total amount of **deals of reverse leasing of agricultural land was approximately EUR 6.8 million** and the average amount of a deal stood at EUR 112 000 (61 such deals were signed). These figures indicate that this product plays a considerable role in the supply of finance to agriculture sector.

The amount of ALTUM loans considerably exceeds their guarantees granted. The reason for a lower use of the guarantee instruments might be partially due to the investment grants in agriculture (from RDP) that reduce the demand for guarantees, as well as the problem of risk. Banks request a guarantee if a farmer has a moderate risk level, mainly because of insufficient collateral. When the problem of risk is higher, banks usually reject the loan application. In such cases the only option for a farmer is to apply for the loan offered by ALTUM. Thus, specialised loans by ALTUM are currently better suited to deal with the problem of risk in Latvia and they constitute an important option when access to bank finance is not possible.

**However, due to the higher risk, these loans are relatively expensive.** For example, young farmers point out that the interest rates are too high, although these loans have lower requirements for collateral (compared to bank loans). As a consequence, ALTUM's loans do not sufficiently close the financing gap for young farmers and new entrants.

**Currently, ALTUM offers individual loan guarantees**, whilst portfolio guarantees other than COSME are not available to the agriculture sector. According to ALTUM, the introduction of portfolio guarantees in the financing of agriculture could increase the efficiency of guarantees as a financial instrument, since it would be easier for banks to obtain already a portfolio rather than asking for a guarantee for each individual case.

ALTUM also offers co-financing (mezzanine) loans. However, this type of products is available for other industries, but not for agriculture. The co-financing (mezzanine) loan by ALTUM covers the gap if a bank requires greater participation than the entrepreneur is able to provide, and is subordinated to the bank loan. According to the interviewed bank representatives, as farmers have insufficient own resources, mezzanine finance might be explored as appropriate form for financing larger investment projects in agriculture, especially in higher risk sub-sectors (e.g. dairy, pig and poultry).

Some interviews have pointed out that there are occasions when farmers want to exit the sector and sell the whole farm, but there are no sector-specific financial instrument to support that. Such transactions would require large amount of financing as the business value of an operating farm is high, and buyers (young farmers and new entrants) lack own resources. In contrast, banks typically value such farms as only a set of assets, not as an ongoing business. Thus, it is impossible to finance such transfers by bank loans, especially if the buyer is a young farmer or a new entrant. As a consequence, a financial instrument would be necessary in order to provide integrated loans for the purchase of functioning farms, based on the value of the ongoing business as a collateral. This could also facilitate the generation renewal in agriculture.


# 2.4. Financing gap in the agriculture sector

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

## Key elements of the financing gap in the Latvian agriculture sector

- The financing gap is estimated between EUR 17.4 million and EUR 31.8 million.
- The most constrained segment is the long-term financing of small-sized farms.
- The key constraints to the demand are insufficient collateral, difficulties in receiving financing from banks for young farmers and new entrants, lack of ability and knowledge from small-sized farms and young farmers in presenting farming practice to banks. Along with difficulties in receiving finance if the sector is not field crops or dairy farming and bank requirements can be discouraging.
- The main constrains to the supply are market concentration, lack of fixed interest rate loans, inadequate supply of long-term loans, banks focus on financing field and crops and dairy farming. And the calculations based on the survey results suggest that ALTUM instruments are currently not sufficient to close the gap.
- The special case of the financing gap is new entrants and young farmers, with whom banks practically do not work with due to their lack of credit history, experience and skills point towards the need for technical assistance.

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 Latvian farms and statistics from Eurostat (see Annex A.4 TG I: *fi-compass* survey for more information). The methodology used for calculating the gap is described in Annex A.3 Methodology of financing gap calculation

# The financing gap arises from unmet financing demand from economically viable farms<sup>45</sup>. 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 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 (nonnegative) turnover growth and no cost increase in the previous year can be considering as viable.
- The upper bound gap is calculated under the hypothesis that all enterprises which reported a stable (nonnegative) turnover growth can be considered as viable.

<sup>45</sup> 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 financing gap for the Latvian agriculture sector is estimated between EUR 17.4 million and EUR 31.8 million (Table 11). However, unmet financing needs are concentrated in specific agriculture segments.

The financing gap mainly concerns small-sized farms. The type of loans for which the gap is the largest are long-term loans. Small-sized farms have more restricted access to finance due to their scale, and the supply of long-term loans is quite restricted, especially for loans with maturity of more than ten years (Table 11).

		Total	Short-term Loans	Medium- term Loans	Long-term Loans	Credit lines/bank overdrafts
	Small-sized farms	17.6	1.3	3.2	11.9	1.2
Upper	Medium-sized farms	8.2	0.7	1.3	5.6	0.6
bound	Large-sized farms	6.0	0.7	1.1	3.3	1.0
	Total	31.8	2.7	5.6	20.8	2.7
	Small-sized farms	9.7	0.5	1.3	7.3	0.5
Lower bound	Medium-sized farms	4.5	0.3	0.5	3.5	0.2
	Large-sized farms	3.2	0.3	0.5	2.0	0.4
	Total	17.4	1.1	2.3	12.8	1.1

 Table 11: Financing gap by farm size and product, 2017, EUR million

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





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

In summary, a number of factors that cause farmers' viable loan applications to be rejected, refused or farmers to be discouraged from applying, have been identified. The main problems hindering (small-sized) farmers' access to finance are related to insufficient collaterals and lack of credit history that could be regarded as discouraging. Their management practice is also often considered not sufficient by banks. The supply of finance to agriculture is constrained by:

- High concentration of banks supporting the sector and limited choice amongst banks and other lenders;
- The absence of fixed interest rate loans, which forces farmers to undertake interest rate risk; and
- Inadequate supply of long-term loans causing problems to finance the construction of buildings and the purchase of land.

Although the *fi-compass* survey does not provide elements to analyse in detail the specific situation of young farmers, interviews revealed that banks practically do not work with new entrants and young farmers, due to their lack of credit history, experience and skills. In addition, they have sometimes difficulties in presenting their farming practice as a viable business plan, and typically have weak financial literacy.

Feedbacks from stakeholders suggest that **difficulties to access finance in Latvia might be higher** than suggested by the *fi-compass* survey, and that **the actual financing gap might be higher**. In particular, rejection of viable enterprises might be much higher, especially for small-sized farms and young farmers. There is also **a significant for Latvia amount of private finance** requested by farmers (i.e. financing provided by friends or family) in Latvia. According to the *fi-compass* survey, 8.7% of the respondents requested finance from private individuals and 2.5% have used private and bank financing. In Latvia, private finance has been estimated to be around EUR 19.3 million<sup>46</sup>. This is particularly important considering that private financing is mainly used by small-sized farms (EUR 12.3 million according to our estimates, or about two-third of all private financing), which have been identified in the report as the segment facing the main difficulties in access finance.

The **financing gap is expected to persist** if the existing problems constraining farmers' access to finance are not tackled. As the agriculture sector in Latvia is lagging behind the EU 24 average on efficiency and productivity, the need for investments is expected to continue. Whilst farmers are constantly seeking the possibilities to reduce the level of costs per unit produced, the increase in the agricultural production volumes requires a growing amount of working capital, as well. At the time of writing, a significant portion of finance for working capital is provided by agricultural cooperatives. As these short-term loans are not guaranteed by any collateral, cooperatives have to undertake financing and farming risks. Priority changes in the cooperatives' investment policy might facilitate the coverage of the unmet demand for finance of working capital.

Currently, the proposal for the implementation of CAP Strategic plan 2021-2027 is being discussed, and envisages the continuation of the existing support measures for small-sized farms, complemented by the introduction of a financial instrument and maybe its combination with a grant, which may positively impact on the financing for agriculture and reduce further the gap.

<sup>46</sup> Private finance has been estimated based on the *fi-compass* survey responses. The methodology used to estimate private finance is similar to the one used to estimate the financial gap. Except that instead of considering percentage of rejected and discouraged application, the methodology is using the percentage of share of respondents who received and who partially received a private finance. The additional change from the original calculation methodology is that the standard amount of private finance application has been estimated at EUR 5 000 for all farm size.



# 2.5. Conclusions

This report has identified a number of constraints, on both the demand and the supply side of the market, which cause viable loan applications by farmers to be rejected or refused, or farmers to be discouraged from applying. The main problems that hinder farmers' access to finance are related to insufficient collaterals, lack of credit history, and lack of creditworthiness expressed via insufficient experience in management practices and existing current liabilities. The supply of finance to agriculture is constrained by the high concentration in banks, limited choice amongst banks and other lenders, absence of fixed interest rate loans, and inadequate supply of long-term loans.

The analysis shows also that difficulties in access to finance, in particular for small-sized farms and young farmers, might exceed the estimated financing gap, which is calculated to be between EUR 17.4 million and EUR 31.8 million. The presence of significant for Latvia private financing coming from friends and relatives could also contribute to this.

Farmers demand for medium and long-term finance is highly influenced and facilitated by the RDP 2014-2020 investment support. Overall, CAP support improves significantly the availability of finance for agriculture and the demand for investments considerably exceeds the available EAFRD resources.

Currently, the main financial instruments in Latvia are funded from national sources. Latvia currently has no ex-ante assessment. As the national budget possibilities are reviewed, implementation of EAFRD financial instruments along with investment grants under CAP Strategic plan 2021-2027 are currently being discussed.

Several recommendations for public interventions could be considered:

- Despite the fact that ALTUM offers specialised loans to young farmers and new entrants, these groups still face restricted access to finance. Young farmers point out that the interest rates are too high although these loans have lower requirements for collateral (compared to bank loans). Consequently, ALTUM's loans do not sufficiently close the financing gap for young farmers and new entrants. Specialised loans with reduced interest rates could close the financing gap for young farmers, new entrants and small-sized farms more efficiently.
- Currently, ALTUM offers only so-called individual guarantees, whereas portfolio guarantees, which are more flexible for banks, are not available to the agriculture sector. The introduction of portfolio guarantees in the financing of agriculture could increase the efficiency of guarantee type of financial instruments.
- There are occasions when farmers want to exit the sector and sell the whole farm, but there are no sector specific financial instruments to support such transactions. It would be necessary to provide integrated loans for the purchase of functioning farms, especially for new entrants, and thus facilitating the generation renewal in agriculture.
- Due to a high loan-to-deposit ratio required for medium and, especially, long-term loans, the supply of bank medium and long-term credit is limited. The provision of long-term loans by ALTUM doesn't seem to be sufficient to cover the financing gap, and seems to be in any case more targeted to large-sized farms. Loans with maturity of over ten years are non-existent but they are essential to finance long-term investments, such as the construction of agricultural buildings, purchase of agricultural land, etc. Therefore, it is worth considering the development of financial instruments (e.g. specialised public loans to banks or intermediate loans) that would support the supply of long-term loans in the market in particular for small-sized farms.
- The majority of loans are floating rate loans and farmers bear interest rate risk, whilst at the same time operate in a risky sector. Therefore, it is necessary to develop financial instruments that promote fixed-rate loans, especially for medium to long-term products.
- Considering the share of small-sized farms that uses informal financing from family members or friends, a micro-credit instrument (in the form of a guarantee or a risk sharing loan fund) might be an appropriate solution to promote their financial inclusion.
- Lack of management experience and existing current liabilities hinder the success of the loan applications. Possibilities to promote business ideas and exchange of management experience between farmers could be helpful.



# 3. PART II: AGRI-FOOD SECTOR

# 3.1. Market analysis

## Key elements on the Latvian agri-food sector

- Manufacture of food products and beverages had a 2.33% share in the Latvian GVA in 2017.
- The leading sub-sectors in terms of turnover in 2018, were the manufacture of dairy products (21%), the processing of meat (20%) and the manufacture of beverages (16%).
- Overall, approximately 65% of the food and beverage sectors' turnover is sold on the domestic market.
- In 2018, the main products in agri-food export were beverages (27%), cereals (16%) and dairy products (11%).
- The average turnover per enterprise in food and beverage production was EUR 1.6 million in 2018.
- Manufacturers of food products experienced a decrease in the producer prices of output until 2016, followed by a notable increase since 2017.

Manufacturers of food products and beverages<sup>47</sup> had a 2.33% share in the GVA of the country in 2017. The employment in the manufacturers of food products and beverages accounted for 2.9% (or 25.45 thousand units) of the total employment in the country in 2017<sup>48</sup>. The sector is still labour-intensive, with low labour productivity, compared to the EU 28 average. Although productivity has been generally increasing, in 2017 it stood at 32% of the EU 28 average<sup>49</sup>.

**The number of agri-food enterprises is increasing thanks to a higher number of small producers.** There were 1 230 enterprises<sup>50</sup> operating in the food and beverage sectors in Latvia in 2018, 27% more than in 2013. This increase was mainly due to small producers entering the sector, as the average size of enterprises decreased from 26.5 persons employed in 2013 to 19.5 in 2018<sup>51</sup>. Owing to traditions and knowledge on how to produce quality products, small producers have been able to enter the sector. In fact, most food and beverage sub-sector producers are small-sized enterprises with less than 50 persons employed (91%), while the share of large-sized enterprises (250 and more persons employed) was 1.3% in 2017<sup>52</sup>.

**Overall, the Latvian food and beverage sector is still fragmented and dominated by small-sized manufactures lacking efficiency**. In 2018, the average turnover per enterprise in food and beverage production was EUR 1.6 million (EUR 42 million per large-sized enterprise in 2017), the average value-added at factor costs reached EUR 363 000 (EUR 7.9 million per large-sized enterprise in 2017), whilst the average gross investment amounted to EUR 69 000<sup>53</sup>. However, concentration of production is displayed in the leading sub-sectors such as grain processing enterprises, as well as meat processing and dairy sub-sectors, where the four largest enterprises produced respectively 50% and 57% of the output<sup>54</sup> in 2018.

- https://ec.europa.eu/eurostat/web/structural-business-statistics/data/database.
- 49 Calculated as a value added at factor costs per person employed. Eurostat, 2019, Structural Business Statistics, https://ec.europa.eu/eurostat/web/structural-business-statistics/data/database.
- 50 This figure includes fish processing enterprises which are outside of the scope of this study.
- 51 Central Statistical Bureau of Latvia, 2019, https://www.csb.gov.lv/en/statistika/db.
- 52 Ibid.

53 Ibid.

54 Ministry of Agriculture.

<sup>47</sup> Data for Manufacture of food products; beverages and tobacco products (there is negligible production of tobacco). 48 Eurostat, 2019, Structural Business Statistics,



The turnover of Latvian manufactured food products<sup>55</sup> and beverages was EUR 2.0 billion in 2018, according to CSB structural business statistics<sup>56</sup>. The leading sub-sectors in Latvia in terms of turnover are the manufacture of dairy products (21%), the processing of meat (20%) and the manufacture of beverages (16%).

**Overall, approximately 65% of the food and beverage sector's turnover is sold on the domestic market**<sup>57</sup>. Small-sized producers offer a wide variety of specific, small-scale quality products, mainly for local market. Whilst targeted export development can be observed in grain processing, in 2018 fruit and vegetable processing registered the highest export share (54% of the production), followed by dairy product manufacturing (28% of export share) and meat processing (22%)<sup>58</sup>. The domestic market is important for food processing, but is limited and shrinking, so the development of the industry strictly hinges on the development of export.

**Latvia's export value of agri-food products** <sup>59</sup> **was EUR 2.3 billion in 2018,** while imports stood at EUR 2.5 billion. The main products in agri-food export are beverages (27%), cereals (16%) and dairy products (11%). The latter also includes a high share of raw milk exports. Main foreign trade partners are the neighbouring Baltic countries and Russia, as well as Poland, Germany, Spain and The Netherlands.

Meat processing is characterised by the weakest link between locally produced agricultural products and processing, as it has typically been using imported raw material. Similarly, enterprises operating in the manufacture of beverages mostly use imported intermediate products.

**Manufacturers of food products experienced a decrease in producer prices of output until 2016, followed by a notable increase in 2017**. Output prices also grew slightly in 2018, resulting in approximately a 3% higher price level than in 2013. Overall, producer prices in the manufacture of beverages exhibited a different trend, although in 2018 they were also slightly growing by 2% compared to 2013<sup>60</sup>. Alongside price changes of agricultural products used as raw materials, the agri-food sector has been strongly impacted by the increase in labour costs, as average gross wages and salaries increased by approximately 9% annually since 2013. Despite the growing wages and salaries, the lack of workforce is an important problem for the sector.

55 Statistics on total production and structure of the food manufacturing sub-sector include data on fish manufacturing enterprises, which are outside of the scope of this study.

59 CN codes 01-23.

<sup>56</sup> Central Statistical Bureau of Latvia, 2019, https://www.csb.gov.lv/en/statistika/db.

<sup>57</sup> Based on the sales data of enterprises employing 20 or more persons or having turnover of EUR 500 000.

<sup>58</sup> Central Statistical Bureau of Latvia, 2019, https://www.csb.gov.lv/en/statistika/db.

<sup>60</sup> Central Statistical Bureau of Latvia, 2019, https://www.csb.gov.lv/en/statistika/db.



# 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 analysis of the type of enterprises which face more constraints in accessing credit. The examination of the demand for agri-food finance is based on the findings from Agri-food survey results of 50 Latvian enterprises, as well as interviews with key stakeholders in the agri-food sector combined with national statistics.

## Key elements on finance demand from the Latvian agri-food sector

- The demand for investment loans is driven by (i) the need to increase production efficiency and production process automation (labour shortage has been a problem in the sector), (ii) capacity expansion, as well as (iii) the development of new products, and (iv) product promotion and export development.
- Another important reason for applying for loans is the need to finance working capital. More than half of the total liabilities of food producers are short-term loans, and these constitute the main type of financial products used to finance the production of beverages.
- In 2018, most investments have been made in the manufacture of dairy products (24% of the total gross investment), meat processing (18%), followed by the production of beverages (17%). These were also the leading sub-sectors in terms of output.
- Medium-term loans were the most requested bank products by the agri-food business in 2018, and they were also characterised by the highest rejection rate.
- Access to finance (bank loans) for investment has been reported as problematic by 13% of the enterprises, while access to finance for working capital represented the main difficulty for 11% of the firms, mainly small-sized agri-food businesses. These percentages were slightly above and equal to the EU average, respectively.
- The total unmet credit demand in the Latvian agri-food sector is estimated at EUR 28.6 million.
- The most important problems constraining enterprises' access to finance are insufficient own resources and insufficient collaterals. In addition, the amount banks offer through working capital loans is often insufficient to meet firms' needs, and the maturity of these bank products is typically too short.
- Banks seldom work with start-ups and are cautious with companies oriented towards the local market. They often impose excessive collateral requirements for loan applications.
- 41% of agri-food enterprises expect an increase in the demand for finance in the upcoming years.
- Due to the existing unmet demand, there is room for new financial instruments in the Latvian agri-food sector.

# 3.2.1 Drivers of total demand for finance

### Gross investment in tangible goods in the manufacturing of food products and beverages amounted

**to EUR 85.3 million in 2018.** Investments accounted for 19% of the value added at factor costs of the sector, which is a drop from the share of 24% reported in 2017, when the same share in the EU 28 was 17%. In 2018, most investments were made in the manufacture of dairy products (24% of total gross investment), meat processing (18%), followed by the production of beverages (17%)<sup>61</sup>. According to the available investment structure in 2017, investments were made mainly in building and structures (EUR 50.1 million or 52.3% of the total investments in 2017) and machinery and equipment (EUR 41.2 million or 44.0%). Recent investment trends in the sector are presented in Figure 13 below.



Buildings and structures

-GI as % of GVA, % rhs

Land

15%

10%

5%

0%

2017



2016

#### Figure 13: Gross Investment structure in the Latvian agri-food sector, 2013-2017, EUR million

## Source: CSB, 2019.

2013

60

40

20 0

## Investment in the Latvian agri-food sector is mainly driven by:

2015

- The need to expand production capacity, production efficiency and production process automation (driven by a labour shortage);
- The development of new products (e.g. organic products);
- Product promotion on the market (e.g. new packaging);

2014

- Export development; and
- Working capital.

**Investments in capacity expansion is a dominant driver behind the need to apply for financial resources in Latvian food processing**. According to the Agri-food survey, 79% of the enterprises applying for finance declared investments in capacity expansion to be the main reason for financing, which is slightly higher than the EU 24 average of 71% (Figure 14). 26% of food processing companies mentions the need to finance inventory and working capital, making it the second most important reason (slightly below the EU 24 average of 30%). Thirdly, loans are requested for the development of new products (20%), which is above the EU 24 average (16%).

### Figure 14: Purpose of bank loans in the agri-food sector in 2018



### Source: Agri-food survey.

**Working capital needs are very important in the Latvian food and beverage sector.** The total purchase of goods and services (used for production and resale) in the manufacture of food products and beverages was EUR 1.5 billion in 2017, the same level as in 2013. In addition, personnel costs amounted to EUR 245.1 million, increasing by 19.7% from 2013. Both results from interviews and information gathered from



the analysis on firms' liabilities structure reveal that the need of working capital represents one of the main drivers of the demand for finance in the sector.

**More than 60% of all liabilities of food producers are short-term liabilities** (Table 12). The liabilities-to-assets ratio in the Latvian agri-food sector was 57.9% in 2017 (decreasing from 62.7% in 2013). The debt level reached 62.9% in food production, whilst it was 39% for the manufacture of beverages. During the interviews, representatives from the sector also repeatedly stressed the importance of loans for working capital (which can account for up to 80% of total loans in an enterprise) in running and developing their businesses.

Sector	Total assets, EUR million	Total liabilities, EUR million	Short-term liabilities, EUR million	Medium and long-term liabilities, EUR million	Liabilities to assets ratio, %	Short-term to total liabilities ratio, %
Food products	1 037.0	652.2	343.2	309.0	62.9%	52.6%
Beverages	273.7	106.8	78.8	28.0	39.0%	73.8%
Total	1 310.7	759.0	422.1	336.9	57.9%	55.6%

 Table 12: Assets and liabilities in manufacture of food products and beverages in Latvia, 2017

Source: Calculation based on CSB, 2019.

Short-term liabilities to current assets (along with the share of equity capital in the balance sheet) are one of the viability criteria used in the evaluation of investment projects submitted for public grant support within RDP. In 2017, short-term liabilities-to-current assets in the manufacturing of food products and beverages was 73% (the RDP requirement is for the ratio to be below 100%), whilst the share of equity capital in the balance sheet amounted to 42%, against a requirement of at least 20% (meaning that the liabilities-to-assets ratio cannot exceed 80%)<sup>62</sup>.

Access to qualified labour and high costs of production were the main difficulties having an implication for the sector's demand for finance in 2018 (Figure 15). Approximately half the enterprises faced these problems in Latvia, against an EU 24 average of 28% and 35%, respectively. Regarding the difficulties in accessing qualified labour, interviews confirmed the deficit of employees faced by Latvian enterprises operating in food processing. A remarkable share of Latvian firms was also challenged by low purchase prices. Although producer price index of output in the manufacture of food products and beverages in 2018 was higher than in the previous years, purchasing prices relative to firms' costs were lower. The Agri-food survey shows that whilst selling price increased for approximately 40% of the enterprises, an increase in production costs was experienced by 52% of the firms in the sector.

Additionally, access to bank loans for investment has been reported as problematic by 13% of the enterprises, whilst access to finance for working capital constituted a problem for the 11%. Interviews with sector representatives confirm that the difficulties constraining the access to finance are mainly due to bank requirements (e.g. the need for own financing and collateral), whilst the main reasons behind the constrained access to finance for working capital are due to the insufficient amount granted and short maturity.

<sup>62</sup> Central Statistical Bureau of Latvia, 2019, https://www.csb.gov.lv/en/statistika/db.



#### Figure 15: Difficulties experienced by agri-food enterprises in 2018



Source: Agri-food survey.

**Close to half of Latvian food processing enterprises consider that affordable loans/credit lines would help reducing the difficulty for companies to access finance** (Figure 16). Popular possible solutions also include loan/credit schemes with longer maturity (32%), loan/credit schemes with flexible repayment conditions (31%), as well as public guarantees to reduce collateral requirements (30%). Furthermore, affordable equity funding, insurance products and other solutions have been mentioned quite often by Latvian enterprises. Latvian food processing companies see a larger potential in alternative solutions, such as insurance products and loans with long-term maturity, compared to the EU average.

Figure 16: Solutions to reduce difficulties in accessing finance, 2018



Source: Agri-food survey.

**Some policy measures currently contribute to improving the access to finance in Latvia.** The main measure the food processing enterprises can benefit from, in terms of finance availability, is the EAFRD support through sub-measure 4.2 Support for investments in processing/marketing and/or development of agricultural products, provided by Latvia's RDP 2014-2020. The sub-measure was introduced as Latvian processing enterprises still lack in efficiency and therefore need to continue investing in modern technologies,



and strengthening horizontal and vertical integration by introducing innovative and biological food products. According to the interviews, this is also the most preferred measure by the sector.

Sub-measures	Amount under the RDP calls (EUR million)	Amount requested by all submitted applications (EUR million)	Amount that could not be supported (EUR million)	Number of applications received	Number of approved for support applications	Number of applications not approved for support
4.2 Support for investment in processing, marketing and development of agricultural products**	136.4	158.3	21.9	620	368	252

Table 13: Implementation of the Latvian RDP sub-measure 4.2, total public financing, 2014-2019

Source: Ministry of Agriculture, 2020. Preliminary data, including also national top-ups.

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.

As Table 13 shows, the demand for the measure's support is enormous. In total EUR 21.9 million has not been available to satisfy the demand of all submitted applications by the end of 2019. Similarly to sub-measure 4.1 supporting farmers, significant number of applications were not approved or did not reach the available budget of EUR 136.4 million under the three grant calls. As already explained, this type of investment support is one of the leading ones under the Latvian RDP in terms of execution.

The most popular sub-sectors amongst all approved projects in 2015-2018 have been the processing of fruit and vegetables, meat and milk. In monetary terms, the largest public support was granted to the processing of milk, meat and grains. A number of projects were carried out for the development of organic production, including one strategic project<sup>63</sup> for the development of organic dairy products (for a total public support of EUR 4.8 million). Another strategic project aimed at the development of the manufacture of organic cereal products (for a value of EUR 6.8 million).

**Investment support can be complemented by national support of partial interest rate compensation**<sup>64</sup>, for which EUR 0.6 million was allocated to loans in processing of agricultural products in 2018. This State Aid can be received for actual interest cost related to short and long-term loans, as well as for financial leasing. The aid amount should not exceed the annual interest rate of 4%, or the actual interest rate, if lower than 4%.

Support measures are also available to help food processing enterprises to enter foreign markets, through different funding sources. Funding provided by European Regional Development Fund (ERDF)

<sup>63</sup> Investment projects that are important for the sector development, provides the processing of local agricultural products, and promotes the increase in the value added.

<sup>64</sup> National support programme granted in line with the EC Decision SA.41387. https://ec.europa.eu/competition/elojade/isef/case\_details.cfm?proc\_code=3\_SA\_41387.



supports the promotion of international competitiveness<sup>65</sup>. A national support programme<sup>66</sup> (including support for market promotion) also covers activities such as participation in international fairs, trade mission, etc. In addition, two EU programmes<sup>67</sup> provide currently support for the promotion of dairy products, processed cereal products, eggs, chocolate, and confectionery in third countries (another dairy campaign ended in 2019). Finally, food processing enterprises can also get support for the participation in food quality schemes<sup>68</sup>.

Furthermore, R&D for new products and technologies can be carried out through the Food Competence Centre of Latvia (with an approved ERDF funding of EUR 3.2 million for 2016-2018, and of EUR 4.7 million for 2019-2021), as well as within cooperation projects (EAFRD funding) amongst the food and beverage sector and research institutions, and other partners.

In addition, there are public support programmes implemented as financial instruments by the state-owned development finance institution ALTUM (for more details see section 3.3.1.2).

## 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, the unmet demand for the agri-food sector in Latvia is estimated at EUR 28.6 million.

The most important source of finance for agri-food enterprises is own funding. According to the Agrifood survey, 95% of the enterprises in Latvia (76% in the EU on average) rely on own funds as the main source of finance (Figure 17). Generally, it is not possible to obtain a bank loan in Latvia without putting any own funding for the project. Financing companies' needs without own funds is only possible in case of other loans (for example, private loans and loans from a parent company). With regards to other sources of finance, longterm loans and credit lines are the most important (15% each), closely followed by the other types of financing products. However, the importance of bank loans turns out to be lower in Latvia than in the EU, as in the case for the agriculture sector.

- 65 National support programme granted in line with the EC Decision SA.41387 http://www.liaa.gov.lv/lv/fondi/2014-2020/starptautiskas-konkuretspejas-veicinasana/u
- 66 Likumi, 2018, Noteikumi par valsts atbalstu lauksaimniecībai, https://m.likumi.lv/doc.php?id=263434&version \_\_date=03.11.2018.

67 European Commission, 2019, Campaigns maps and statistics, https://ec.europa.eu/chafea/agri/en/campaigns/mapand-statistics-targetcountries?field\_year\_value%5Bmin%5D=2010&field\_year\_value%5Bmax%5D=2020&field\_country\_beneficiary\_tid% 5B%5D=155&field\_program\_type\_value=All&field\_eu\_organisation\_value=All&field\_is\_chafea\_value=All&items\_per\_ page=5

68 Likumi, 2018, Noteikumi par valsts atbalstu lauksaimniecībai, https://m.likumi.lv/doc.php?id=263434&version\_date=03.11.2018



#### Figure 17: Most important financing instruments to agri-food enterprises in 2018



Source: Agri-food survey.

**In 2018, approximately one third of Latvian agri-food enterprises applied for bank financing.** The Agri-food survey reveals that this percentage is lower than the EU 24 average (46%). Furthermore, according to the interviews, amongst the Top 100 largest Latvian enterprises (in terms of turnover), including the ten largest companies in each agri-food sub-sector, approximately 70% of enterprises use bank finance, whilst the remaining 30% rely on their own funds. Amongst other enterprises outside the 100 largest ones, approximately half rely on finance from banks.

**Medium-term loans were the most requested bank products** by Latvian agri-food enterprises in 2018 (45% of respondents). They were followed by long-term loans and credit lines (Figure 18). There has been a very small activity in the application for short-term loans in Latvia, which is considerably different than the EU 24 average. According to interviews, short-term loans are being replaced by credit lines as they offer more flexibility and ensure more stable cash flow.





Source: Agri-food survey.

In 2018, the key reason for enterprises not to apply for a loan was the availability of sufficient own funds (between 36% and 43% of respondents, depending on the maturity the financing product). This share is lower than the EU 24 average for all loan maturities (Figure 19). Part of the enterprises do not ask for bank



finance, as they rely on their own funding thanks to the rather good profits registered over the past years. Nevertheless, the availability of own financial resources does not necessarily imply reluctance of the companies to borrow additional financial resources from banks. The issue is whether the lending conditions are acceptable.

The share of enterprises discouraged to apply for finance is overall slightly lower in Latvia than in the EU 24. Data shows that the share of companies that did not apply because of fear of rejection was 4% for credit lines, 3% for medium and long-term loans, and 2% for short-term loans compared to 7-9% in the EU 24. In addition, between 6% and 8% of the non-applications were due to unfavourable terms and conditions, whereas 10% of the non-applications for short-term loans were due to excessive length of the evaluation procedure. Case study evidence showed that even large-sized companies may not ask for bank finance due to the existing unacceptable collateral requirements, although borrowed money would allow faster development.



Figure 19: Reasons for not applying for loans in the agri-food sector in 2018

Source: Agri-food survey.

The rejection rate for loan products in the Latvian agri-food sector was much higher than the EU 24 average (18% against an EU 24 average of 8%) (Figure 20). There was no rejection for credit lines/overdrafts compared to an EU 24 average of 8%. These results are in line with those reported by the SAFE survey<sup>69</sup> in 2018, according to which 12% of Latvian enterprises' loan applications were rejected bank loans, while a 0% rejection rate was reported for credit lines/bank overdrafts. In the same survey, respondents who did not apply for bank loans or credit lines, because of possible rejection, were 8% respectively.

Access to finance is more challenging for small-sized businesses. Information from interviews reveal that the rejection rate for enterprises outside the Top 100 Largest Latvian enterprises is approximately 50%. In general, approximately 20% of the applications of these enterprises are accepted from the off-set, approximately 30% are accepted over a longer period of time, whilst the remaining applications are likely to be rejected. SMEs applying for ALTUM medium and long-term loans typically report a rejection rate between 20-25%. In addition, interviewed enterprises indicated that the problems regarding the access to working capital financing relates to the insufficient loan amount offered by banks, which is typically lower than the one enterprises apply for. This is mainly due to the low value at which inventory and debtors are evaluated for

69 European Commission, 2018, Survey on the Access to Finance of Enterprises (SAFE), https://ec.europa.eu/growth/access-to-finance/data-surveys\_en.



collaterals. In general, this is also reflected in the 28% of respondents to the SAFE survey who received less than the requested credit line. Another problem is that credit lines are granted for one year, whereas the need usually spans across multiple years.



Figure 20: Results from loans applications in agri-food sector in 2018

Source: Agri-food survey.

No refusals by enterprises have been recorded by the Agri-food survey. This is in line with the information gathered by interviews with banks, pointing to the possibility of Latvian firms to refuse banks' loan conditions and apply again in another financial institutions offering better lending conditions. Information from ALTUM reveals that approximately 30% of their clients with approved projects refuse the loan because either they are not ready to borrow at the offered conditions, or they have alternative sources for project financing. However, part of these clients typically come back to ALTUM later. It has to be considered, that the effect of unfavourable lending conditions not captured in the rate of refusals, might instead be expressed by the 6-8% of enterprises who declared not to have applied for finance due to unfavourable terms and conditions (Figure 19). This might be the consequence of previous applications or of consultations with banks without the submission of a formal application.

Rejected medium-term loan applications reported in the Agri-food survey were due to insufficient collaterals/guarantees and to the existence of other loans (Figure 21). Especially for medium-term loans, the Latvian respondents reported that their loan application was rejected due to the lack of collateral. No answers for the reason of rejection were provided by respondents for long-term loans<sup>70</sup>.



Figure 21: Reasons for loans' rejection in the agri-food sector in 2018

Source: Agri-food survey.

70 Agri-food survey.



Interviews with banks revealed that the main reason for the rejection of investment loan applications is insufficient own funding. Despite the investment support received under the RDP and the existence of ALTUM credit guarantees, banks also demand equity capital. Typically, own funding is required to contribute to at least 30% of a total investment value. Own co-financing is also an important requirement for start-ups.

Another reason why loan applications are rejected is the insufficient collaterals that agri-food companies can offer. Contrary to agriculture, the agri-food sector has limited secondary market for fixed assets, which significantly impacts the value that is considered for collaterals. Collateral value of Latvian agri-food firms' real estates is evaluated as 55-60% of its market value, while equipment is evaluated at 30%. For inventory and debtors, the collateral value typically ranges between 0-20% of their balance sheet value, depending on their type. Also, as banks do not want to deal with separate elements of a mortgage, they are eager to put a mortgage on the whole entity, which could be an excessive requirement.

Lack of credit history and experience might be an obstacle for new entrants. For the evaluation of the application banks also take into account the credit history (which should be at least three years), financial performance indicators, as well as experience of the whole team of an enterprise and the business idea.

Despite the above hiccups, a sound demand for investment and for finance can be expected in the agri-food sector in Latvia as the productivity in the sector is still lagging behind the EU average. There are also several challenges that the food and beverage sector have to face, which will require additional investment. To name some of them:

- Increasing environmental requirements (for example, Plastic Directive, other climate change driven requirements);
- Bioeconomy and no-waste technologies;
- Changing nutrition habits, which require new recipes (for example, food reformulation);
- Acquisition of new markets, etc.

The growing need for finance has also been confirmed by the Agri-food survey revealing that 41% of the enterprises expect that their financial needs will increase over the next two-three years (which is more than in the EU on average), whilst only 8% of respondents in Latvia expect their needs for finance to decrease.



Figure 21: Agri-food companies' expectations on future financing needs, 2018

Source: Agri-food survey.

The demand for finance could grow in the Latvian agri-food sector if most local processors focus on locally produced food with inputs from local agricultural products. Currently most of the grain production is exported from Latvia, unprocessed. The share of raw milk exports constitutes more than 35% of the total milk deliveries, and exports of live pigs and bovine animals are more than 20% and 30% of the respective meat productions. There is a growing trend in the production of organic food in Latvia, which can also drive further the need for investment. At the same time, insufficient own capital is the main limiting factor for the



implementation of large strategic investment projects (projects with the amount of investment EUR 50 million, EUR 75 million and more) which could create a more integrated national value chain.

**Export orientation is an important factor that banks consider when assessing a loan application**<sup>71</sup>. As the Latvian food market is rather saturated, the possibilities for new entrants to produce for the local market are quite limited. The growth potential for the processing capacities of the Latvian agri-food sector mainly relates to exporting enterprises. In order to become an export-oriented enterprise, interviewed companies expressed the need of support to enter foreign markets. At the same time, there are a lot of (very) small-sized agri-food enterprises producing a wide variety of specific, small-scale quality products, mainly for the local (regional/national) market. Banks are typically cautious about working with this type of firms. Start-ups in the Latvian agri-food sector are rarely export-oriented and can seldom prove an export orientation in the early years of their life.



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

This section provides an overview of the financial environment in which the agri-food sector in Latvia 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 Latvian agri-food sector

- The main finance providers for the agri-food sector are banks, the state-owned development finance institution ALTUM and leasing companies. The market share of the main four banks (including their leasing subsidiaries) is approximately 70%.
- Existing financial instruments are managed by ALTUM (based on national funding), and they consist mainly of specialised loans and credit guarantees.
- The amount of outstanding bank loans to the agri-food sector declined over the period 2015-2018.
- The majority of bank loans have floating interest rates. The average margin over the base rate is approximately 3%. However, the interest rates on bank loans for part of the enterprises can be higher as the margin for loans granted by ALTUM is typically 5% or 6% over the base rate.
- The supply of long-term loans to the agri-food sector is constrained, especially for investment in assets with long life cycle. The supply of financing is constrained for working capital, as well.
- Banks do not generally finance start-ups.
- The potential of banks to increase medium and long-term credit supply can be limited.
- Supply constraints for finances that contribute to the unmet demand in the Latvian agri-food sector leave room for a possible public intervention.

# 3.3.1 Description of finance environment and funding availability

## 3.3.1.1. Finance providers

The main finance providers of the agri-food sector in Latvia are banks, the state-owned development finance institution ALTUM and leasing companies. The estimates of approximate market shares are presented in Table **14**. The estimates for market volume size and market shares of individual participants are made on the basis of the data by the Financial and Capital Market Commission (FCMC), Finance Latvia Association (FLA), Latvian Leasing association (LLA), as well as public financial statements of ALTUM and banks. The estimates are based on the outstanding volumes of loans, leasing and other credit.

There are four active banks serving the agri-food sector: Swedbank, SEB banka, Luminor bank and Citadele banka. The total market share of these banks (including their leasing and factoring subsidiaries) is approximately 70%. These banks are universal banks and offer a wide range of financial products. As mentioned in the agriculture section, Luminor is affected by the process of merger and, thus, is less active currently. The market share of the other banks is much smaller. According to the Danske bank annual report for 2018, Baltic countries are considered as non-core business, and the Danske bank is winding its Baltic branches up. As a result, the market share of Danske Bank Latvia branch network will decrease. OP Corporate Bank is quite active in the agri-food sector and its market share can increase. The core business of Rietumu banka and BlueOrange Bank is not related to the agri-food sector, so the market share of these two banks will probably remain very small.



Table 14: Approximate market shares of the main finance providers for the agri-food sector in Latvia, at the end of 2018

Finance provider	Market share <sup>72</sup>
Banks:	
Swedbank*	23%
SEB banka*	19%
Luminor bank*	16%
Citadele banka*	12%
OP Corporate Bank Plc Latvia branch*	3%
Danske Bank Latvia branch*	3%
Rietumu banka*	2%
BlueOrange Bank*	1%
ALTUM	4%
Leasing companies:	
UniCredit Leasing	1%

#### Source: Own estimations, 2019.

\* including their leasing and factoring subsidiaries.

**The approximate market share of ALTUM is 4%**. This figure accounts only for the loans granted by ALTUM. However, ALTUM also provides credit guarantees.

**Most leasing and factoring companies are subsidiaries of banks** and their market shares are included in the market share of banks. However, some leasing companies operate independently in Latvia. The market share of UniCredit Leasing is approximately 1%, whilst that of other independent leasing companies is negligible. Leasing companies specialise in the financing of transport vehicles and their equipment. The leasing of industrial equipment is less common.

**Finance providers also include non-bank lenders and cooperative credit unions.** The lending activities of non-bank lenders mainly focus on households and not agri-food enterprises. Furthermore, these lenders offer so called high interest rate loans, so their market share is negligible. There is no reliable information on the lending activities of cooperative credit unions in the agri-food sector, but according to the FCMC data, the market share of credit unions can also be regarded as negligible.

## 3.3.1.2. Financial products

**Banks offer various financial products** such as short<sup>73</sup>, medium and long-term loans, credit lines and overdrafts. It should be noted that short-term loans are very rare, and usually have also some flexible features similar to those of credit lines/bank overdrafts. Long-term loans (loans with maturity of more than five years) are not wide-spread in the agri-food sector (see section 3.3.1.3). Loans are typically secured by collateral (mortgage, commercial pledge, guarantees, etc.). Parts of loans are secured by credit guarantees granted by ALTUM (including guarantees backed by COSME and EaSI). Swedbank also has a contract with European Investment Fund (EIF), and offers loans secured by COSME guarantees without the involvement of ALTUM. Banks (via their subsidiaries) also offer leasing products such as financial leasing and operating leasing, as well as reverse leasing (sale and lease-back), as well as factoring.

ALTUM implements the state support programmes regarding the finance availability and provides support mainly in the form of financial instruments. As for the agriculture sector, ALTUM offers two main types of financial products to agri-food sector: specialised loans for enterprises and credit guarantees. These loans include short-term loans (to finance working capital), medium and long-term loans (to finance investment). ALTUM loans have favourable terms due to the lower collateral requirements, and are targeted at enterprises that cannot access loans or other financing from private financial institutions (see also section 2.3.1.2).

<sup>72</sup> Total does not sum to 100 as shares are approximated.

<sup>73</sup> Loans up to 12 months are commonly understood as short-term loans in Latvia.



As EAFRD financial instruments were not programmed in Latvia for the period 2014-2020, the products of ALTUM are funded from other sources.

A special loan product offered by ALTUM is co-financing (mezzanine) loans. These loans are intended as additional co-financing when banks require greater participation than entrepreneurs can provide. They are subordinated to the bank loans. Also, credit guarantees are targeted at enterprises which cannot receive loans from banks or other lenders due to insufficient collateral.

**ALTUM also offers export credit guarantees.** This product allows enterprises to manage (reduce) commercial and political risks in export markets. Therefore, this is a risk management product rather than a financial product. However, export credit guarantees can indirectly improve the creditworthiness of the enterprises by reducing risks related to accounts payable (debtor risk). ALTUM also offers venture capital products (see section 3.2.2).

**Leasing companies offer typical leasing products** such as financial leasing and operating leasing, as well as reverse leasing (sale and lease-back). These products are typically medium-term products. Usually leasing is available to finance the purchase of transport vehicles and related equipment. The leasing of industrial equipment is rarely offered.

**Factoring is typically offered by bank subsidiaries** (usually leasing and factoring subsidiaries). This financial product is used mainly by large-sized enterprises and some medium-sized enterprises who are export oriented.

## 3.3.1.3. Description of the financing market

Official banking statistics do not provide information on the lending to the agri-food sector. The information is available only for the whole manufacturing sector. Therefore, bank loans for the agri-food sector are estimated by combining the banking statistics (FCMC data) and the statistics on enterprises' finances (CSB data on enterprises' total liabilities). The dynamics of the bank loans in the period 2015-2018 indicates that the **loans to the agri-food sector are decreasing more than the total amount of bank loans** (Table 15).

Indicator	2015	2016	2017	2017/2018*
Total amount of loans** outstanding (at the end of period), EUR	14 676.6	15 128.9	14 440.4	14 194.4
including, manufacturing	857.5	807.6	744.9	719.2
including, agri-food sector	168.4	158.1	144.3	143.6
Share in the total amount	1.1%	1.0%	1.0%	1.0%

Table 15: Dynamics of bank loans in Latvia, 2015-2018, EUR million

Source: Calculations based on FCMC and CSB, 2019.

\* Period from the 3<sup>rd</sup> quarter of 2017 to the 2<sup>nd</sup> quarter of 2018.

\*\* Loans granted to non-banks.



In order to examine the potential of banks to increase their credit supply, the loan-to-deposit ratio (LDR) was calculated both for the total loan amount and for different maturities (see section 2.3.1.3). Overall, banks have some surplus of deposits and the potential to increase the credit supply, but only for short-term loans. **The potential of banks to increase medium and long-term credit supply can be limited** as banks should finance these loans by short-term money (demand and short-term deposits, etc.) and undertake the risk of refinancing.

**Most bank loans (as well as leasing) to the agri-food sector are floating interest rate loans.** Typically, the three-month EURIBOR or the six-month EURIBOR are used as reference (benchmark) rates, whilst fixed rate loans (or leasing) are less common. Furthermore, banks offer fix the interest rates for a period of up to five years, so no fixed rate long-term bank loans are available.

The Bank of Latvia only provides general statistics on the average interest rates on bank loans (see section 2.3.1.3). The interest rates are quite volatile, especially for medium and long-term loans. In the period 2015-2018, the spread between the interest rates on loans and the three-month EURIBOR was 3.8-5.0% for short-term loans, and 4.8-10.8% for medium and long-term loans. No data is available on the interest rates in the agri-food sector, but according to the interviews with bank representatives, the **average margin over the base rate (3-month or 6-month EURIBOR) is approximately 3%**, which indicates that the margin in agrifood is lower than generally. The margin for loans granted by ALTUM is higher, typically, 5%, 6% and higher over the base rate (the price of the State Treasury resources or EURIBOR). The higher interest rate stems from the higher risk profile of enterprises served by ALTUM.

Almost all bank loans granted to the agri-food sector are secured by collateral and/or guarantees. The typical (main or basic) collaterals are mortgages on real estate (industrial buildings) and public guarantees (COSME, EaSI, the state guarantees by ALTUM). Public guarantees are regarded as the best (most liquid) collaterals by banks. Industrial buildings are valued at quite high discount as collaterals (typical valuation is 60% of fair market value). Commercial pledge on equipment and inventories are also accepted by banks. However, the valuations of these assets are very low, 30% of book value/market value (for equipment) and 0%-20% of book value (for inventories). Leasing represents an exception: the valuation of equipment can be up to 80% of book value/market value (if this equipment is regarded as liquid). Collaterals as mortgages on land without buildings, commercial pledges on other assets (e.g. accounts receivable) and suretyship (personal guarantee) are regarded by banks as inferior collateral. However, banks tend to require such collaterals as complementary collateral. Accounts receivable are used as collateral in factoring. The loans granted by ALTUM are also secured by collateral. Nevertheless, collateral requirements are reduced to some extent (basic collaterals are considered, e.g. suretyship and commercial pledge<sup>74</sup>).

The main constrain of the supply of finance in the agri-food sector is due to the fact that **banks typically offer only medium-term loans for investment**. Even the loans to finance the construction of buildings and similar investment have a maturity of five-seven years (ten years is the maximum and quite the exception). Furthermore, if loans are granted for a longer period (e.g. seven years), banks usually split the term into two parts (e.g. 4+3) and reserve the right to reassess the loan and the borrower at end of the first part of the term. Thus, enterprises face the risk of being forced either to repay or refinance the loan before the term.

The supply of finance for working capital mainly comprises of credit lines and bank overdrafts. Shortterm loans also similar flexible features, such as the possibility to receive the loan in different tranches, flexible repayment, etc. Therefore, it is complicated to separate short-term loans from credit lines and bank overdrafts. Banks usually regard these financial products as one group.

The main challenge faced by start-ups is the lack of financial (credit) history. Banks require at least three-years of financial history if an enterprise applies for a loan, which new entrants lack. The general position of banks (with rare exceptions) is that they do not finance (grant loans or similar products) start-ups.

<sup>74</sup> Suretyship is a personal guarantee; commercial pledge is a registered pledge on movable assets (vehicles, equipment, etc.).



# 3.3.2 Analysis of the supply of finance

As there is no comprehensive information on bank loans and other financial products available for the agrifood sector, an estimated breakdown of bank loans for the manufacture of food products and the manufacture of beverages has been prepared (Table 16). Due to the lack of publicly available information, it was not possible to prepare a detailed breakdown by sub-sectors, even as a rough estimate.

According to the estimate, in 2015-2018, the **decline in the amount of bank loans to the manufacture of beverages was sharper than in the manufacture of food products** (see section 3.3.1.3) for outstanding loans. At the same time, the turnover of these sectors has been growing in this period<sup>75</sup>.

 Table 16: Breakdown of outstanding bank loans by sector in Latvia<sup>76</sup>, 2015-2018, EUR million

Indicator	2015	2016	2017	2017/2018*
Manufacture of food products	138.5	135.1	123.9	121.4
Manufacture of beverages	29.9	23.0	20.3	22.2
Total	168.4	158.1	144.2	143.6

Source: Calculations based on FCMC and CSB.

\* Period from the 3rd quarter of 2017 to the 2nd quarter of 2018.

The information acquired from the interviews with ALTUM and banks representatives is used as a proxy to analyse loans and other financial products. The amount of newly granted loans in 2018 and the average amount of loans, as well as the breakdown by maturity, enterprise size, sector and type (working capital, investment) are presented in Table 17.

<sup>75</sup> Central Statistical Bureau of Latvia, 2019, https://www.csb.gov.lv/en/statistika/db .

<sup>76</sup> The FCMC data on loans and newly granted loans to the manufacturing sector was split by the ratio of liabilities within the sector obtained from the CSB data on liabilities. FCMC: https://www.fktk.lv/statistika/kreditiestades/ceturksna-parskati/ and CSB: http://data1.csb.gov.lv/pxweb/en/uzn/uzn uznemfin ikgad/UFG060.px/table/table/iewLayout1/.



Table 17: Newly granted loans by ALTUM in 2018, EUR million

Loans	Amount of loans,	Share	Average amount of loan						
Loans by maturity:									
Short-term*	0	0.0%	0						
Medium-term	2.1	42.5%	0.09						
Long-term	2.8	57.5%	0.11						
Total	4.9	100.0%	0.10						
Loans by en	terprise size:								
Micro	1.1	21.9%	0.03						
Small	1.5	31.4%	0.21						
Medium	2.3	46.7%	0.32						
Total	4.9	100.0%	0.10						
Loans by sector:									
Processing and preserving of meat and production of meat products	0.09	1.9%	0.05						
Processing and preserving of fish, crustaceans and molluscs	0.15	3.1%	0.15						
Processing and preserving of fruit and vegetables	1.4	29.3%	0.08						
Manufacture of dairy products	1.5	31.1%	0.25						
Manufacture of bakery and farinaceous products	0.10	2.0%	0.02						
Manufacture of other food products	0.33	6.9%	0.04						
Manufacture of beverages	1.2	25.6%	0.13						
Total	4.9	100.0%	0.10						
Loans	by type								
Working capital	2.1	42.5%	0.17						
Investment	2.8	57.5%	0.07						
Total	4.9	100.0%	0.10						

Source: Calculations based on the data by ALTUM. \*Loans up to 12 months.

The information on the loans granted by ALTUM primarily characterises the supply of finance to enterprises with restricted access to finance. There are no short-term loans granted by ALTUM. **The share of medium and long-term loans is 42% and 58%, respectively**. More than a half of the loans (approximately 53%) are granted to micro-sized enterprises (less than 10 persons employed) and small-sized enterprises (10-49 persons employed): 22% and 31%, respectively. The share of medium-sized enterprises is approximately 47%. ALTUM does not have granted loans to large-sized enterprises.

Approximately 61% of the loans are granted the processing and preserving of fruit and vegetables<sup>77</sup> sub-sector and the manufacture of dairy products<sup>78</sup> segment. The share of manufacture of beverages<sup>79</sup> is also quite high: approximately 26% of the loans granted by ALTUM (while the share of manufacture of beverages in the newly granted bank loans is smaller, approximately 15%). The share of the other sectors is quite low. The breakdown of the loans by maturity is the same as the breakdown of the loans by type.

The composition of ALTUM's loan portfolio and the type of loans for which agri-food enterprises turned to the fund indicate that the **supply of bank finance is restricted for medium-term loans and, especially, for long-term loans**. The information available also suggests that enterprises have a strong need to finance working capital via medium-term loans and to finance investment through long-term loans. However, banks typically offer short-term loans to finance working capital, and medium-term loans to finance investment.



Guarantees	Amount of guarantees	Share	Average amount of guarantee			
Guarantees by enterp	rise size:					
Micro	0.17	3.7%	0.08			
Small	1.9	43.1%	0.39			
Medium	2.4	53.2%	0.61			
Total	4.6	100.0%	0.41			
Guarantees by se	ctor:					
Processing and preserving of meat and production of meat products	0.62	13.6%	0.15			
Processing and preserving of fish, crustaceans and molluscs	3.9	85.8%	0.79			
Manufacture of other food products	0.03	0.7%	0.03			
Total	4.6	100.0%	0.41			
Guarantees by type:						
Working capital	4.0	86.9%	0.57			
Investment	0.6	13.1%	0.15			
Total	4.6	100.0%	0.41			

#### Table 18: Newly granted guarantees by ALTUM in 2018, EUR million

Source: Calculations based on the data by ALTUM.

The information on the guarantees granted by ALTUM and their breakdown by firm size, sector and type is presented in Table 18. Due to lack of information, it is not possible to analyse the supply of ALTUM's guarantees by maturity. However, according to the information provided by ALTUM, **short-term guarantees are very rare and almost all the guarantees are medium to long-term guarantees**. As ALTUM guarantees usually secure bank loans, this indirectly allows an estimate of the supply of bank loans. The average amount of guarantee is higher than the average amount of ALTUM's loan (EUR 419 000 versus EUR 101 000). Thus, the average amount of bank loan is probably also higher.

The amount of loans granted by ALTUM is slightly higher than the amount of the guarantees. Banks typically request a guarantee if they consider the enterprise moderately risky, mainly because of insufficient collateral. However, if the risk is perceived as higher, banks usually reject the loan application. In such cases, the only option for an enterprise is to apply for the loan by ALTUM. Thus, specialised loans by ALTUM mainly deal with the problem of risk in Latvia. At the same time, these loans are comparatively expensive in case of other alternatives, although they remain a valid option when access to bank loans is not possible.

**ALTUM in cooperation with venture capital funds also offers products of venture capital funding.** However, these products are intended for enterprises with high growth potential. The amount of granted venture financing for the agri-food sector was EUR 1.7 million in the period 2013-2018, and only three projects were funded.



# 3.4. Financing gap in the agri-food sector

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

## Key elements of the financing gap in the Latvian agri-food sector

- The financing gap is estimated to be EUR 15.3 million.
- The most constrained segment is the long-term financing of small-sized enterprises.
- Important constraints exist also for large-sized enterprises and in accessing short-term financing.
- The key constraints are insufficient collaterals and limited access to finance for working capital.
- Start-ups and new entrants face particular difficulties in accessing finance.

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 Latvian firms (see Annex A.5 TG II: Agri-food survey 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 Methodology of financing gap calculation).

The financing gap arises from unmet financing demand from economically viable firms<sup>80</sup>. As explained in section 3.2.2, 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 Latvian agri-food sector is estimated to be approximately EUR 15.3 million (Table 22). However, unmet financing needs are concentrated in specific segments of the sector. Around 47% of the gap value relates to small-sized agri-food enterprises (below 50 employees). In terms of financial products, almost 50% of the gap relates to long-term investment loans. However, important constraints also exist for large-sized enterprises and short-term financing.

This market gap is comprised of separate components:

- The first component of the financing gap is constituted by the estimated value of loan applications submitted in the past year by viable enterprises, which were rejected by banks, or which translated into loan offers refused by the applicants due to non-acceptable lending conditions. According to the Agri-food survey results, this financing gap component accounts for almost one third of the total.
- The second component of the gap relates to the estimated value of loan applications that are not submitted by enterprises considered viable due to fear of possible rejection. The Agri-food survey results reveal that

<sup>80</sup> 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.



this part of the financing gap is dominating. Discouragement mainly relates to bank requirements, in particular collaterals.

Feedback from stakeholders suggest that difficulties to access finance in Latvia might be higher those suggested by the *Agri-food survey* and that the actual financing gap might be substantially underestimated. In particular, rejection of viable enterprises might be much higher, especially for small-sized enterprises.

The estimated financing gap represents approximately 6% to 11% of the total outstanding bank loan volume to the sector.

Table 19: 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	9.4	0.7	1.9	5.3	1.6
Medium-sized firms	4.8	0.5	1.0	2.5	0.8
Large-sized firms	1.1	0.1	0.2	0.6	0.2
Total	15.3	1.3	3.1	8.3	2.6

Source: Agri-food survey.

Figure 22: Financing gap by product in the agri-food sector, 2018, EUR million



Source: Agri-food survey.

In summary, a number of **constraints driving the gap** on the demand and supply side of agri-food financing have been identified. On the demand side, the main problems hindering enterprises' access to finance are related the lack of sufficient contribution of own funding, and the lack of sufficient collaterals. Additionally, bank requirements for loans are sometimes excessive (especially regarding collateral), thus discouraging enterprises from applying for a loan.

The supply of finance to the agri-food sector is constrained by high concentration in the financial market that limits the choice amongst banks and other lenders, by the absence of fixed rate loans which forces enterprises to undertake interest rate risk, and by inadequate supply of long-term loans. The latter makes investments in buildings and new constructions particularly difficult. Furthermore, the limited offer of long-term financing products also hinders the purchase of specific industrial equipment, as well as investments in other assets with long life cycle.

Furthermore, limited bank financing is available for enterprises operating solely on the domestic market, as the food market in Latvia is relatively small and shrinking. Finally, according to interviews, banks do not work with start-ups due to their lack of credit history, experience and skills, furthermore, start-ups can rarely prove their export orientation from the beginning.



There is also a constrained supply of financing for working capital as banks nearly always offer only loans or credit lines with a maximum 12 months maturity. Thus, enterprises have to undertake a permanent risk of refinancing when their needs for working capital are financed by bank loans or credit lines.

The **financing gap is expected to persist** if the existing problems constraining enterprises' access to finance are not tackled. The Agri-food survey reveals that approximately 41% of enterprises expect their financial needs to increase for the next two-three years. Also, the trends in gross investment reported by the agri-food sector, as well as the level of productivity still lagging behind the EU average allow to think that a sound demand for investment and, hence, for finance can be expected.

Also, the evolution of the financial gap could be affected by strategic directions of the sector. The first is related to the development of large-scale processing of local agricultural products, characterised by scale economy and export orientation. Currently, raw materials for the development of large-scale manufacturing is available for grain processing and possibly also for milk and meat processing. The creation of the necessary technological capacity would raise demand for long-term finance, likely to exceed banks' supply. The second strategic direction in the Latvian agri-food sector is related to local food production within the framework of the short supply chain system, characterised by small production volumes and regional/local market orientation. This direction covers a wide range of products and market niches and is suitable for small and very small-sized companies as well as start-ups, which all already account for a significant part of the financing gap in the sector. The potential of the development of organic food production in Latvia is possible within both strategic directions, and it will also require additional investments to create necessary technological capacity for separation of the product flows, etc. Due to the lack of companies' experience in organic food production, banks might value those as high risk loans.



# 3.5. Conclusions

This report has identified a number of constraints, on both the demand and the supply side of the market, which cause viable loan applications by agri-food enterprises to be rejected, refused or discouraged. The main problems relate to insufficient own funding and the lack of sufficient collateral. Excessive requirements for loans (especially regarding collateral), might discourage enterprises from applying to finance.

On the supply side, the main problem relates to market concentration in banks, absence of fixed interest rate loans and inadequate supply of long-term loans as well as some limitations on the provision of short terms loans and credit lines.

Feedback from stakeholders suggest that difficulties to access finance in Latvia might be higher than that suggested by the Agri-food survey, and that the gap is estimated to be EUR 15.3 million might be substantially underestimated.

Currently, the main financial instruments in Latvia are funded from national sources. As national budget possibilities are reviewed, implementation of financial instruments along investment grants under CAP Strategic plan 2021-2027 is currently being discussed.

Several **recommendations** for public interventions could be considered for the future:

- A significant problem for enterprises in the agri-food sector is the financing of working capital. Banks typically offer only loans and credit lines with a maximum 12-months maturity, whilst enterprises would need a more stable provision of funds for their capital needs. Therefore, there is a need for financial instruments (e.g. specialised loans, guarantees for medium-term credit lines, etc.) to address this market failure.
- The supply of bank medium and long-term credit is constrained. Banks are not willing to offer longer loan
  maturity for more than five-seven years, but loans with a maturity of ten years or more are necessary to
  finance the construction of buildings, the purchase of specific industrial equipment and investment in other
  assets with long lifecycles. Therefore, it is worth considering the development of financial instruments (e.g.
  specialised public loans to banks or intermediated loans) that would support the supply of long-term loans
  in the market. The specialised loans targeted at enterprises that undertake such investment projects can
  be the possible solution, as well.
- It is worth considering the development of financial instruments (e.g. specialised public loans to banks, including through the EAFRD) that would support the supply of loans with fixed-interest rates, particularly for medium and long-term maturity, for which there is a limited availability in the market.
- ALTUM's loans do not sufficiently close the financing gap for new entrants and start-ups, as banks reluctantly finance this segment. Specialised loans with reduced interest rates could stimulate the setting-up of new companies with new ideas and close the financing gap for start-ups more efficiently.
- A significant obstacle for start-ups and new entrants is the low level of own funds and equity that limits their creditworthiness. Therefore, it is worth considering improving equity financial instrument (e.g. some type of acceleration funding or venture funding) in the agri-food sector as the existing equity financial instrument are more indented for other industries.
- Another significant problem for the agri-food sector is the very constrained supply of finance to large strategic projects (projects with the amount of investment EUR 50 million, EUR 75 million and more). At present it is very difficult to raise financing for these projects, but such projects are essential to ensure the strategic growth in the agri-food sector. Public support to address this problem seems to be justified. Financial instruments could be used as long as a sufficient critical mass can be reached.

# ANNEX

# A.1 References

- 1. Agrochema Latvia, 2018, Annual report 2017.
- 2. AgroCredit, 2018, Annual report 2017.
- 3. ALTUM, 2018, Annual report 2017. Available at: https://www.altum.lv/lv/investoriem/darbibas-rezultati/finansu-parskati/.
- 4. ALTUM, 2019, Information on financial products. Available at: https://www.altum.lv.
- 5. ALTUM, 2019, Small loans in rural area. Statistics. Available at: https://www.altum.lv/lv/pakalpojumi/lauksaimniekiem/mazie-aizdevumi-lauku-teritorijas/atbalstasanemeji/.
- 6. ALTUM, 2019, Unpublished data on granted loans and guarantees.
- 7. AREI, 2018, FADN standard results. Available at: https://sudat.arei.lv.
- 8. Baltic Agro, 2018, Annual report 2017.
- 9. Bank of Latvia, 2019, Interest rate statistics. Available at: https://www.bank.lv/statistika/datistatistika/procentu-likmju-statistikas-raditaji.
- 10. Central Statistical Bureau of Latvia, 2017, 2018, 2019, Database. Available at: https://www.csb.gov.lv/en/statistika/db.
- 11. Citadele banka, 2018, Annual report 2017. Available at: https://www.cblgroup.com/ lv/investoriem/finansu-atskaites/.
- 12. European Commission, 2019, Factsheet on 2014-2020 Rural Development Programme for Latvia. Available at: https://ec.europa.eu/agriculture/sites/agriculture/files/rural-development-2014-2020/country-files/lv/factsheet\_en.pdf.
- 13. *fi-compass*, 2019, Survey on financial needs and access to finance of EU agricultural enterprises, Study report. Available at https://www.fi-compass.eu/sites/default/files/publications/ Survey\_on\_financial\_needs\_and\_access\_to\_finance\_of\_EU\_agricultural\_enterprises\_0.pdf.
- 14. *fi-compass*, 2018, Financial gap in the EU agriculture sector, Study report. Available at: https://www.ficompass.eu/sites/default/files/publications/Financial%20gap%20in%20the%20EU%20agricultural%2 0sector.pdf.
- 15. *fi-compass*, 2016, Methodological handbook for implementing an ex-ante assessment of agriculture financial instrument under the EAFRD. Available at: https://www.fi-compass.eu/sites/default/files/publications/209775\_EAFRD\_EXANTE\_ASSESSMENT\_HANDBOOK.pdf.
- 16. *fi-compass*, Country data for Latvia, https://www.fi-compass.eu/financial-instruments/latvia.
- 17. Eurostat, 2019, Database. Available at: https://ec.europa.eu/eurostat/data/database.
- 18. Financial and Capital Market Commission (FCMC), 2019, Credit Institutions statistics. Available at: https://www.fktk.lv/statistika/.
- 19. LATRAPS, 2018, Annual report 2018/2017.
- 20. Latvian Leasing association (LLA), 2019, Statistics. Available at: http://www.llda.lv/lv/par-asociaciju/statistika.html.
- 21. Linas Agro, 2018, Annual report 2017.
- 22. Luminor, 2018, Annual report 2017. Available at: https://www.luminor.lv/lv/finansu-rezultati.
- 23. Ministry of Agriculture, 2019, Latvia Rural Development Programme 2014-2020 (version 7.0). Available at: https://www.zm.gov.lv/public/files/CMS\_Static\_Page\_Doc/00/00/01/50/34 /Programme\_7.pdf.
- 24. Ministry of Agriculture, 2019, Unpublished data on the declared public funding of the RDP 2014-2020.
- 25. Ministry of Agriculture, 2018, Agriculture and Rural Area of Latvia 2017. Available at: https://www.zm.gov.lv/public/files/CMS\_Static\_Page\_Doc/00/01/33/19/Gadazinojums.pdf.
- 26. Ministry of Agriculture, 2017, Annual implementation report. Latvia Rural Development Programme. Available at: https://www.zm.gov.lv/public/ck/files/LAP\_2014-2020\_AIR\_2016.pdf.
- 27. Rural Support Service (RSS), 2019, Annual report. Available at: http://www.lad.gov.lv/lv/par-mums/vispariga-informacija/gada-publiskais-parskats/.



- 28. Rural Support Service (RSS), 2019, Operative information on submitted and approved projects. Available at: http://www.lad.gov.lv/lv/atbalsta-veidi/projekti-un-investicijas/operativa-informacija/.
- 29. Rural Support Service (RSS), 2018, Statistics on area payments. Available at: http://www.lad.gov.lv/lv/statistika/platibu-maksajumi/.
- 30. Scandagra Latvia, 2018, Annual report 2017.
- 31. SEB, 2018, Annual report 2017. Available at: https://www.seb.lv/par-seb/investoriem/finansuinformacija/gada-parskati.
- 32. State Revenue Service. Unpublished data on farm revenues from agriculture.
- 33. Swedbank, 2018, Annual report 2017. Available at: https://www.swedbank.lv/about /swedbank/financialResults/annualReport?language=LAT.
- 34. VAKS, 2018, Annual report 2017.



# A.2 Stakeholders interviewed

Type of Organization	Name of Institution					
Managing authority	Ministry of Agriculture of Latvia, Rural Development Support					
	Department (four experts)					
Managing authority	Ministry of Agriculture of Latvia, Market and Direct Support					
	Department, Food Industry Division					
Advisory service	Latvian Rural Advisory and Training Centre					
Financial institution	Citadele banka					
Financial institution	ALTUM (state-owned development finance institution)					
Farmers organisation	Latvian Young Farmers Club					
Farmers organisation	Latvian Pig Breeders Association					
Farmers organisation	Latvian Farmers Federation (Latvijas Zemnieku Federācija)					
Farmers organisation	Farmers Parliament (Zemnieku Saeima)					
Agricultural Cooperative	Latvian Agricultural Cooperatives Association; Cooperative VAKS					
	LPKS (grains)					
Food Industry organisation	Latvian Chamber of Commerce and Industry, Export Council					
Food Industry organisation	Latvian Federation of Food Companies					
Food Industry organisation	Latvian Chamber of Commerce and Industry, Food Council					
Financial institution	AS 'Swedbank'					
Food Industry organisation	Association 'Latvijas mājražotāji'					
Food enterprise	Grain processing enterprise					
Food enterprise	Fruit and vegetable processing enterprise					
Supplier	Supplier of equipment for food processing					
Leading farm organisation,	Association of Latvian Agriculture Cooperatives, cooperative					
cooperative agribusiness company	agribusiness company VAKS					
Leading farm organisation, farmer	Latvian Farmers Federation, SIA 'KROGZEME'					
Leading farm organisation	Latvian Farmers Parliament					
Government representative	Ministry of Agriculture					
Government representative	Ministry of Agriculture, Rural Support Service					
Consultant	EDO Consult, Ltd					
State-owned development finance	ALTUM					
institution						
Leading farm organisation	Latvian Farmers Parliament					
Leading farm organisation	Latvian Pig producers Association					
Leading entrepreneurs' organisation	Latvian Chamber of Commerce and Industry, Food Committee					
in food industry						
Bank	Swedbank					
Leading entrepreneurs' organisation	Latvian Federation of Food Companies					
in food industry						
Leading entrepreneurs' organisation	Central Union of Latvian milk manufacturers					
in food industry						
Consultancy	EDO Consult					



# A.3 Methodology of financing 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 <u>assumptions</u>:

- 1. *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.
- 2. **The share of** *Viable* **firms is measured by** the share of total firms that have a non-negative turnover growth<sup>81</sup> 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).
- 3. **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).
- 4. 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

**Rejection** Rate<sup>Viable</sup>: 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*.

*Discouraged Rate* <sup>*Viable*</sup>: 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*.

*Unmet demand Rate* <sup>*Viable*</sup>: The total share of survey respondents with unmet demand for finance is obtained by summing the two rates:

Unmet demand  $Rate_i^{Viable} = Rejection Rate_i + Discouraged Rate_i$ 

Step 2: Number of farms rejected or discouraged

*N*. of Farms in unmet demand<sup>Viable</sup>: 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 TGI, 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 EUR 8 000 EUR 4 000 or EUR 2 000 SO thresholds are used for countries with their 2017 PPI respectively above the 66<sup>th</sup> percentile, between the 33rd and 66<sup>th</sup> 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  $rejected_{ij}^{Viable} = Eurostat Farm population_i * Rejection Rate_i^{Viable}$ 

N. of Farms discouraged  $d_{ii}^{Viable}$  = Eurostat Farm population<sub>i</sub> \* Discouraged Rate<sub>i</sub> <sup>Viable</sup>

N. of Farms in unmet demand<sub>ii</sub><sup>Viable</sup> = N. of Farms rejected<sub>ii</sub> + N. of Farms discouraged<sub>ii</sub>

for *i* = *Small*, *Medium*, *Large* 

and *j* = *Short Term*, *Medium term*, *Long Term Loans*, *Credit lines*.

## Step 3: Standard Loan Application Size

*Application Size*<sub>*ij*</sub>: 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.

# Financial $Gap_{ij} = Application Size_{ij} \times N$ . of Farms in unmet demand<sup>Viable</sup><sub>ij</sub>

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 Latvia, Table 20 and Table 21 report the elements used in the calculation of the financing gap for the agricultural and agri-food sector, respectively.

	<u>_</u> .								
Table 20 <sup>.</sup>	Flements	for the	calculation	of the	financing	dan in	the a	ariculture	sector
	LIGHTOTICO		ouloulution	01 1110	manomy	gup in	i uno u	gnoundio	000101

		Short-term Loans	Medium- term Loans	Long-term Loans	Credit lines/bank overdraft
Lower bound: farms with a	Share of respondents rejected by creditor or farmer	0.00%	0.00%	0.19%	0.00%
non-negative turnover growth and no cost	Share of respondents that have not applied because of possible rejection	0.19%	0.19%	0.19%	0.19%
increase	Total (sum of rejected an discouraged)	0.19%	0.19%	0.38%	0.19%
Upper bound:	Share of respondents rejected by creditor or farmer	0.00%	0.00%	0.19%	0.00%
farms with a non-negative turnover growth	Share of respondents that have not applied because of possible rejection	0.45%	0.45%	0.43%	0.45%
	Total (sum of rejected an discouraged)	0.45%	0.45%	0.62%	0.45%
Total unmat	Share of respondents rejected by creditor or farmer	0.02%	0.00%	0.19%	0.00%
demand: all farms	Share of respondents that have not applied because of possible rejection	2.71%	2.71%	2.69%	0.64%
	Total (sum of rejected an discouraged)	2.74%	2.71%	2.88%	0.64%
Farms with	Small-sized farms	43	43	86	43
access to	Medium-sized farms	19	19	37	19
bound	Large-sized farms	6	6	12	6
Farms with	Small-sized farms	103	103	140	103
access to	Medium-sized farms	45	45	61	45
bound	Large-sized farms	14	14	20	14
	Small-sized farms	EUR 12 532	EUR 30 400	EUR 83 839	EUR 11 314
Standard loan application size	Medium-sized farms	EUR 15 878	EUR 28 894	EUR 91 035	EUR 12 550
	Large-sized farms	EUR 46 830	EUR 73 529	EUR 163 919	EUR 66 839

Source: fi-compass survey.



# Table 21: 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 overdrafts
Firms with a non-negative turnover growth	Share of respondents rejected by creditor or firm	0.00%	1.09%	0.98%	0.00%
	Share of respondents that have not applied because of possible rejection	1.09%	1.09%	1.09%	2.18%
	Total (sum of rejected an discouraged)	1.09%	2.18%	2.07%	2.18%
Total unmet demand: all firms	Share of respondents rejected by creditor or firmer	0.00%	3.93%	0.98%	0.00%
	Share of respondents that have not applied because of possible rejection	2.29%	2.29%	2.29%	3.38%
	Total (sum of rejected an discouraged)	2.29%	6.22%	3.28%	3.38%
Firms with constrained access to finance	Small-sized firms	12	24	23	24
	Medium-sized firms	1	2	2	2
	Large-sized firms	0	0	0	0
Standard loan application size	Small-sized firms	EUR 59 218	EUR 81 067	EUR 229 934	EUR 66 864
	Medium-sized firms	EUR 470 465	EUR 443 013	EUR 1 232 379	EUR 357 955
	Large-sized firms	EUR 463 924	EUR 775 911	EUR 2 178 100	EUR 728 000

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 the 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, Latvia, 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 22) reports the number of respondents by Member State.

Country	No. of Respondents	Country	No. of Respondents
Belgium	350	Latvia	315
Bulgaria	351	Lithuania	296
Czech Republic	309	Hungary	315
Denmark	302	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

 Table 22: fi-compass survey sample size per Member State

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 on average, 98% of all questions were answered. 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-agricultural-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 23 reports the sample size per country

Country	No. of Respondents	Country	No. of Respondents
Belgium	100	Latvia	50
Bulgaria	100	Lithuania	50
Czech Republic	66	Hungary	46
Denmark	50	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

Table 23: Agri-food survey sample size per Member State

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.

www.fi-compass.eu contact@fi-compass.eu © EIB (2020)

## European Commission

Directorate-General Agriculture and Rural Development B-1049 Brussels European Investment Bank Advisory Services *fi-compass* 98-100, boulevard Konrad Adenauer L-2950 Luxembourg