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

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DISCLAIMER

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Glossary and definitions

Expression	Explanation
AFIR	Agenț ia pentru Finanț area Investiț iilor Rurale
Agri-food survey	Survey of the financial needs of EU agri-food processing enterprises carried out in mid-2019 in the framework of study 'EU and Country level market analysis for Agriculture' and based on respondents' financial data from 2018.
APIA	*Agenţia de Plăţi şi Intervenţie pentru Agricultură* / Agency for Payments and Interventions in Agriculture
CAP	Common Agricultural Policy
CB	Credit Bureau
CCF	Central Credit File
CCR	Central Credit Register
COSME	EU Programme for Competitiveness of Enterprises and SMEs
EAFRD	European Agricultural Fund for Rural Development
EBA	European Banking Authority
EC	European Commission
EIB	European Investment Bank
EIF	European Investment Fund
ESIF	European Structural and Investment Funds
EU	European Union
EU 24	The 24 EU Member States covered by the *fi-compass* 'EU and Country level market analysis for Agriculture': Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.
EU 28	All EU Member States: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, The United Kingdom.
FADN	Farm Accountancy Data Network
fi-compass survey[1]	Survey on financial needs and access to finance of 7 600 EU agricultural enterprises carried out by *fi-compass* in the period April-June 2018 and based on respondents' financial data from 2017.
FNGCIMM	Romanian National Guarantee Fund for SMEs
FTE	Full-time equivalent
GDP	Gross Domestic Product

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

GF	Groups File
GFCF	Gross Fixed Capital Formation
GVA	Gross Value Added
ha	Hectares
IRCC	Consumer Credit Reference Index
LAG	Local Action Group
MADR	Ministerului Agriculturii şi Dezvoltării Rurale/Ministry of Agriculture and Rural Development Romania
NBFI	Non-Bank Financial Institution
NBR	Banca Națională a României/National Bank of Romania
NPL	Non-Performing Loan
p.a.	Per Annum
PNDR	Programul Naț ional de Dezvoltare Rurală/National Rural Development Programme
PRSL	Portfolio Risk Sharing Loan
RCGF	Rural Credit Guarantee Fund
RDP	Rural Development Programme
ROBOR	Romanian Interbank Offer Rate
RON	Romanian LEU
SAPS	Single Area Payment Scheme
SME[2]	Small and medium-sized enterprise
SO	Standard Output

2 Small and medium-sized enterprises (SMEs) are defined in the EU recommendation 2003/361. Micro enterprises have less than 10 employees, small enterprises have less than 50 employees and medium-sized enterprises have less than 250 employees. https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en.

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EXECUTIVE SUMMARY

This study gives an insight into agriculture and agri-food financing in Romania by providing an understanding of 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 Romania

The agriculture sector contributes 4.8% to the country's GVA and it is a major source of employment (20% of the working population), income and economic activity in rural areas. However, in recent years, agricultural output has stagnated.

The sector shows a low propensity to invest, as evidenced by a decrease in farmer's investments into tangible assets in recent years and a level of Gross Fixed Capital Formation[3] (GFCF) that was half that the EU 28 average in 2017. Investments are mostly made in buildings and new machines and other equipment.

Less than 7% of Romanian farmers applying for a loan in 2017. Instead, private financing (e.g. from family or friends) is an important source of finance for Romanian farmers. This informal lending market was estimated at almost EUR 1 billion in 2017.

Overall, there are three main drivers of the demand for finance in the Romanian agriculture sector:

(i) **Investment needs to modernise agriculture production,** including demand for medium and long-term finance for equipment and machinery. Besides agricultural machinery, farmers invested into irrigation facilities, which need was triggered by changes in rainfall patterns.

(ii) **Improvement of land, such as in improved plantations** (orchards, vineyards, etc.) required investments by farmers. For example, some farmers replaced old vines with new, high yielding vines, while others invested into greenhouses.

(iii) **Working capital for buying** inputs, such as seeds or seedlings, feed, fertiliser and fuel, and/or to cover labour costs.

CAP support, as well as national support, has an important role in stabilising and modernising the agricultural sector. It helps farmers' incomes and at the same time brings a stimulus for positive investment behaviour, Banks look positively towards these support mechanisms and are interested in supporting farmers through loans (e.g. for the private contribution) or take these support mechanisms into consideration when assessing farmers' repayment capacity. Increased competitiveness of the agriculture sector is one of the key priorities of the Romanian Rural Development Programme (RDP). The demand for investment and start-up grants exceeds the available budget of the RDP.

In addition, a Portfolio Risk Sharing Loan instrument (PRSL), funded from the European Agriculture and Rural Development Fund (EAFRD) and co-financed by the state from its national budget, was set up and offered to the agriculture sector. The target groups also include small farms and young farmers, and loans are given to complement grant projects under the RDP or for the stand-alone financing of activities.

3 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.

Financing is provided by banks, non-bank financial institutions (NBFI), and the Rural Credit Guarantee Fund. The 10 main bank institutions account for 83% of the banking sector's assets. The non-bank financial institutions (NBFI) play an important role for financing micro and small-sized farms. The Rural Credit Guarantee Fund also stimulates the interest of financial institutions to finance agriculture. The total outstanding loans to the primary agricultural, forestry and fishery sector have increased slightly over the last 4 years.

However, the financing needs of economic viable[4] farms are far from being met, showing the potential for further financial instruments. The analysis shows that a financing gap exists for the Romanian agriculture sector. For 2017, **this financing gap was estimated to be between EUR 2.3 billion and 5.3 billion**. The financing gap almost exclusively concerns small-sized farms and is the largest for long-term loans. The gap for loans with a maturity of less than 18 months is comparatively small, as short-term lending is often provided by private individuals or input suppliers.

This market gap is comprised of two components:

- **Loan applications submitted by viable enterprises, which were rejected by banks.** This financing gap component relates mostly to applications for medium and long-term investment loans, with Romanian farmers having a rejection rate that is significantly higher than the EU average. The key reason Romanian farmers had their loans rejected were due to that the banks considered the investment risks too high. In addition, a lack of collateral, lack of repayment capacity, being a new entrant (again associated to high risk), and the inadequate business and investment plans presented by farmers were other common reasons for rejections.
- **Loan applications that are not submitted by economically viable farmers, due to a fear of possible rejection by the bank**. Small-sized farms face the highest rate of discouragement, followed by medium-sized farms. The discouragement rate is also much higher for younger farmers. A key reason for discouragement is the lack of mutual trust and understanding between bankers and farmers.

At the same time, the supply side experiences constraints in providing finance to the agriculture sector. Financial institutions are generally considered to lack an understanding of farming operations. Many do not have dedicated agricultural finance strategies, products or teams. In addition, their presence in rural areas is limited and they are not located close to the potential customers. In addition, the provision of loans of limited amounts is considered to imply higher cost, due to higher impact of fixed cost for the application assessment and management, further decreasing the supply of finance to the agriculture sector. This greatly affects small farms which demand small loan amounts. The interest rates charged for agricultural lending, higher compared to enterprises in other sector, is a symptom of these factors.

Young farmers and new entrants experience even more difficulties in accessing finance. Many young farmers and new entrants are discouraged from applying for loans as they lack the needed financial literacy to effectively interact with financial institutions. Their loan applications are also often rejected as they lack assets that can be used as collateral and, given their limited years in business, financial institutions often view their businesses as being too risky.

RECOMMENDATIONS

The dimension of the gap and the several identified constraints suggest that further policy actions related to financial instruments might be considered:

- **Follow up of the implementation of the Portfolio Risk Sharing Loan (PRSL)**. It is believed that the PRSL will support farmers in accessing finance, reducing the high interest rates for agriculture loans. However, given the dimension of the identified gap and the budget of the instrument, it is unlikely that the instrument will be able to bring the market to normal functionality by the end of the current programming period. At a later stage, a review of the current set-up should be done to verify:
    - the adequacy of the available fund capital;

4 Viable has been proxied by non-negative turnover growth and no cost increase.

  - the concrete ability to address the constraints of young farmers and small-sized enterprises, which according to this analysis are the more constrained segments;
  - the opportunities offered by the new legal framework, such as the easier combination of financial instruments and grant support or the possibility to finance the purchase of land for young farmers, and how this could be embedded in any future financial instrument;
  - working capital finance;
  - risk coverage, and
  - performance aspects, including leverage.

- Assess the current public credit guarantee offering. Since lack of collateral is still reported to be a significant market constraint, the currently available guarantee instruments might be reviewed in order to verify their ability to improve market functionality. Based on the interviews conducted for the study for example, the adequacy of the available budget, the administrative procedures, the ability to concretely target small-sized enterprises and the impact on bank's regulatory capital requirements might be analysed, and where necessary, improved or eased for achieving higher impact on the market.

- **Designing and implementing further specific measures to target small-sized farms**. Considering the high share of farmers requesting finance from private individuals, a specific instrument for microfinance should be considered. This instrument might be more effective in addressing the gap for small-sized enterprises, considering the lack of interest and the reluctance due to high transactions cost which have been reported by banks interviewed for this study. The existing NBFIs that already have a track-record in financing small-sized farms might be a well-suited implementing partner. Also in this case, the possibility to combine EAFRD grant support with financial instruments might prove useful.

- **Technical support could be provided to farmers,** with the overall goal of strengthening their financial literacy and business planning capacity. This would increase the chances of their application for finance being approved.

- **Capacity building dedicated to financial intermediaries,** might increase the bank's level of knowledge in the sector, which according to this analysis is considered insufficient.

Financing gap for the agri-food sector in Romania

The agri-food sector is an important contributor to rural development to the overall economy in Romania. However, the sector is characterised by high fragmentation, with a vast number of micro and small-sized enterprises (92.6 % of all agri-food enterprises), and only accounts for about 11.4% of the GVA in the manufacturing sector.

The investment trend in the agri-food sector is positive, having rebounded significantly since 2016. However, the overall investment levels are comparatively low, considering the needs of the sector to modernise and increase competitiveness.

Investments in the agri-food sector are driven by:

- **The need to modernise, through investments in machinery, equipment and facilities**. Across the different sub-sectors, investments have been made to expand capacity and to replace old and obsolete machinery, as well as by increasing storage capacities, sorting, calibration, and packaging facilities.
- **Attracting new clients and markets by developing new products**. For example, in order to satisfy customer needs, dairy manufacturers have made investments in the development of new types of cheese and other products, while meat processors have developed new types of sausages.

Investment trends are also being supported by the EAFRD through the RDP and mostly via the sub-measure for processing and marketing activities. Many agri-food enterprises that have obtained support need to borrow from financial institutions in order to provide the own financial contribution that is needed to complement the grant. Therefore, the support provided also influences in a positive way the demand for finance by agri-food companies.

Financing to the agri-food sector is mainly provided by banks, although they tend to focus on large-sized enterprises. While NBFIs have a clear focus on smaller enterprises, their outreach in the sector is limited. In addition, the Rural Credit Guarantee Fund and the Romanian National Guarantee Fund for SMEs (FNGCIMM), a state-owned company that provides guarantees to SMEs that lack collateral, facilitate access to finance. The agri-food sector also has access to the Portfolio Risk Sharing Loan instrument, co-funded by EAFRD.

The financing gap for the Romanian agri-food sector is estimated to be EUR 482 million. The financing gap mainly concerns small-sized firms. In terms of products, the gap is the largest for long-term loans, followed by medium-term loans.

A significant number of agri-food enterprises perceive the loan application process as being too long and complicated. In addition, small agri-food enterprises find it particularly challenging to demonstrate their creditworthiness. As a result, they are discouraged from applying for loans as they fear they will be rejected.

Many loan applications by agri-food enterprises are rejected due to a lack of collateral, low profit margins, and a lack of financial literacy in smaller enterprises. For start-ups, an absence of credit history is a significant hurdle. As is their lack of collateral.

Financial institutions' also experience constraints in lending to the agri-food sector. They admit that their knowledge of the agri-food sector is limited. In addition, the supply of finance is affected by high levels of non-performing loans for the segment, which limits the interest of financial institutions.

The future financial needs of Romanian agri-food enterprises are expected to increase. This is due to improvements in market integration and increased cooperation among different agri-food enterprises.

RECOMMENDATIONS

Financial instruments to support the sector are already available under the EAFRD and national funds. Nevertheless, considering the outcome of this analysis and the magnitude of the financing gap, further policy actions, similar to the ones already recommended for the agriculture sector, should be considered:

- **Follow up of the implementation of the Portfolio Risk Sharing Loan (PRSL)**. It is believed that the PRSL will support agri-food enterprises in accessing finance, partially reducing interest rates. However, given the dimension of the identified gap, it is unlikely that the instrument will be able to bring the market to normal functionality by the end of the current programming period. At a later stage, an assessment should in particular aim to verify:
  - the adequacy of the available fund capital;
  - the concrete ability to address the constraints of micro and small-sized enterprises and start-ups, which according to this analysis are the more constrained segments;
  - the opportunities offered by the new legal framework, such as the easier combination of financial instruments and grant support, might offer interesting opportunities to increase the effectiveness of the instrument towards those segments;
  - risk coverage, and
  - performance aspects, including leverage.
- **Assess the current public credit guarantee offering**. Since lack of collateral is still reported to be a significant market constraint, the currently available guarantee instruments might be reviewed in order to verify their ability to improve market functionality. Based on the interviews conducted for the study for example, the adequacy of the available budget, the administrative procedures, the ability to concretely target small-sized enterprises and the impact on bank's regulatory capital requirements might be analysed.
- **Technical support could be provided to micro and small-sized enterprises,** with the overall goal of strengthening their financial literacy and business planning capacity.
- **Capacity building dedicated to financial intermediaries,** might increase bank's level of knowledge in the sector, which according to this analysis is considered not sufficient.

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 Romania. The assessment is based on the identification and evaluation of the supply of and demand for financing, on the one hand, and on the quantification of the currently unmet demand for financing for the two sectors, on the other hand. This report aims to contribute to a better understanding of the potential need for continuing currently operating financial instruments, or the creation of new or additional ones, supported by the European 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 has adopted the following three-step approach:

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

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

(i) lending applied for (by the viable enterprises), but not obtained, as well as

(ii) lending not applied for (by the viable enterprises) due to expected (by the same enterprises) rejection of the application (by a financial institution).

The analysis draws on the results from two comprehensive and representative 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 latter survey was undertaken as part of this study. The analysis is further elaborated by desk research and enriched with secondary data from EU and national data sources.

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

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

Report structure

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

2. PART I: AGRICULTURE SECTOR

2.1. Market analysis

Key elements on the Romanian agriculture sector
• Romanian agricultural output was EUR 17.2 billion in 2018. The sector accounts for 4.8% of the country's total GVA. • Romania has over 3.6 million farms, of which almost 92% are smallholder farms on less than 5 ha. • Crop production is the largest sub-sector, accounting for 75% of the value of agricultural output, followed by animal production, which accounts for 23%. • The sector output has been stagnating over the last 8 years. • In 2017, Romania had an agriculture trade deficit of EUR 568 million. • The agriculture sector has an ageing workforce, with 44.3% of farm managers over 65 years old and only 7.6% below 40 years old in 2016.

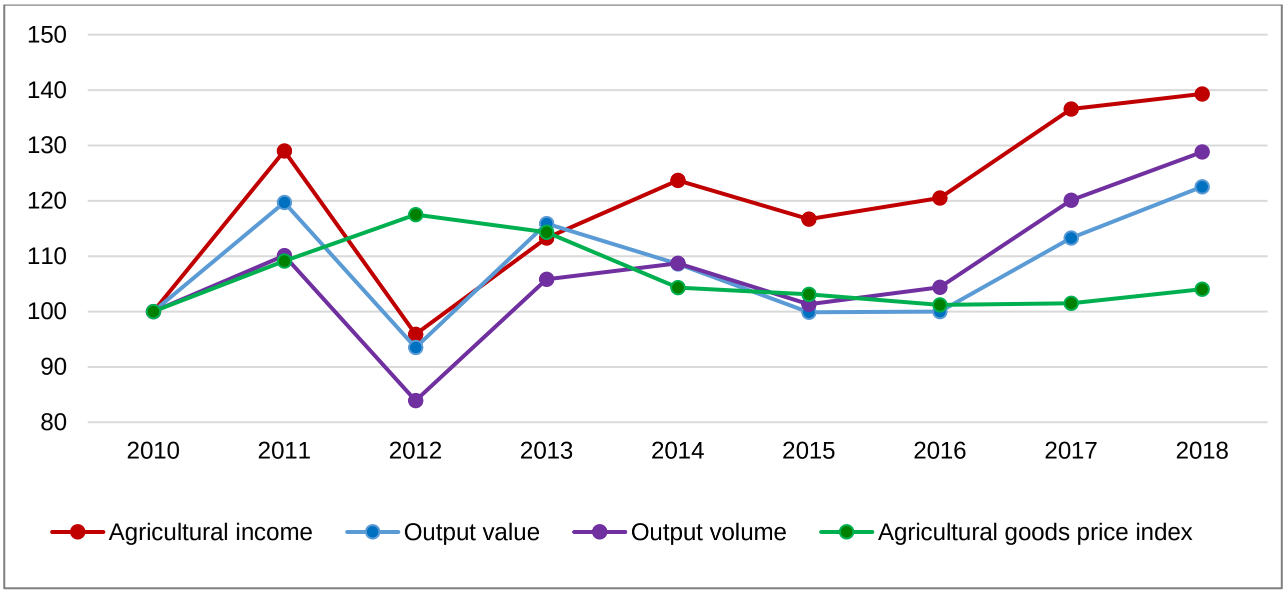
Romania remains a predominantly rural country, with agriculture representing a significant part of the economy, both in terms of output and employment. The Romanian agriculture sector accounts for 4.8% of the country's total Gross Value Added (GVA). In 2018, agricultural output totalled EUR 17 198 million and accounted for 4.1% of the total EU 28 output.[5] About 20% of Romania's population is employed in agriculture, which is the highest share in the EU 28. While rural areas are richly endowed with natural resources, they are marked with high rates of poverty and a significant urban-rural divide in social and living standards.

Overall, agricultural production is well diversified within a strongly polarised farm structure. At one extreme, 91.8% of all farms (approximately 3.14 million) are smallholders farming on less than 5 ha; at the other extreme, 0.4% of all farms (around 12 300) are large-sized farms farming on more than 100ha.[6,7] Crop production is the largest sub-sector, accounting for 75% of total agricultural output. The main crops produced are wheat, grain, maize, vegetables and horticulture crops. Animal production is the second largest sub-sector, accounting for 23% of total agricultural output, with milk and pigs being the most significant products.[8]

While Romanian agricultural production has been growing steadily since 2016, prices for agricultural output have stagnated. This development is worth mentioning following the severe financial and economic crisis in 2012, which reduced the demand for agricultural products and raw materials. The recovery of the agriculture sector was underpinned by an increase in the volume of output, rather than an increase in prices. In 2018, output was almost 29% higher than 2010 levels, while prices were only 4.0% higher (Figure 1).

5 Eurostat, 2018, Agriculture, forestry and fishery statistics.
6 European Commission, DG AGRI, June 2019, Statistical Factsheet for Romania.
7 The farm structure of Romania is important to bear in mind for the forthcoming analysis in this report, where the *fi-compass* survey results will be analysed. The analysis of the survey divided farms into small-sized farms (below 20 hectares), medium-sized farms (20-100 hectares), and large-sized farms (>100 hectares).
8 European Commission, June 2019, Statistical Factsheet for Romania.

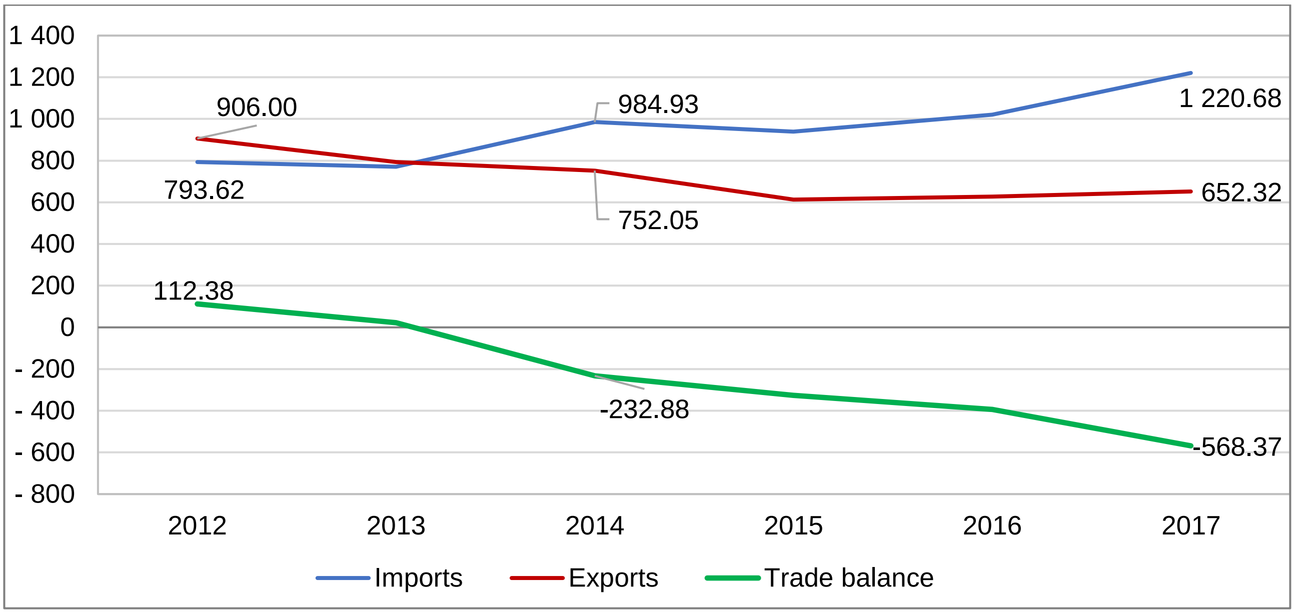
Figure 1: Development of Romanian agricultural income, output value, output volume, and producer prices 2010-2018



Source: Eurostat, 2019.

Low productivity and low value-added are the main drivers of Romania's widening agricultural trade deficit. In 2012, Romania actually had a small trade surplus of only EUR 112 million.[9] However, in 2017, the trade deficit had reached EUR 568 million, with imports of EUR 1.2 billion and exports of only EUR 652 million (Figure 2). This is due to the fact that Romania imports higher value-added processed products, such as meats, protein meals, dairy, fruits and sugar, while exporting lower value-added, raw products, such as wheat, corn, sunflower seeds and rapeseed).

Figure 2: External trade of agriculture products, EUR million



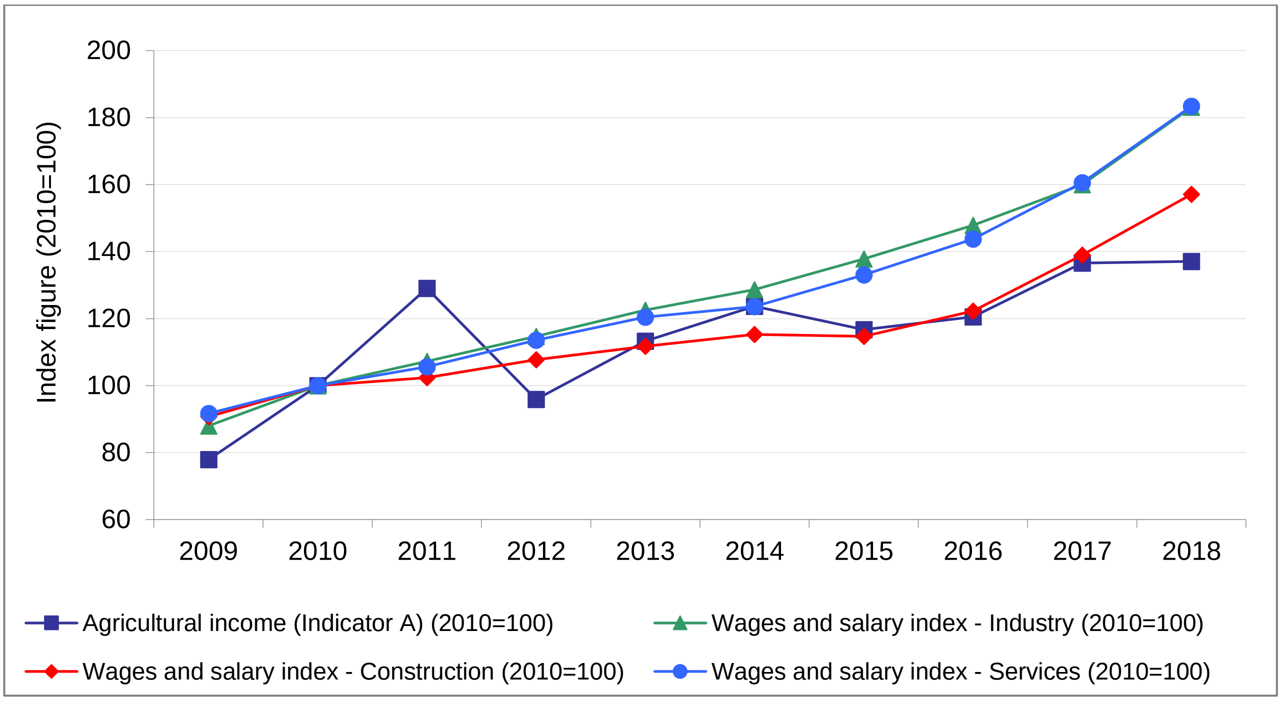
Source: Eurostat, 2019.

9 Eurostat, 2019.

The sector is characterised by an ageing workforce, which is another constraint to innovation and productivity improvements. In 2016, almost half (44.3%) of Romanian farm managers were aged over 65, while only 7.6% were below 40 years old.[10]

Over the last 7 years, agriculture income has been below the average income levels of other sectors of the economy. The income levels in the industry and services sectors, in particular, have been much higher than for agriculture. While agricultural income level has been increasing slightly over the least three years, it still has not reached its most recent 'ten year' peak of 2011 (Figure 3).

Figure 3: Evolution of agricultural income compared to wages and salaries in other sectors of the economy, 2009-2018

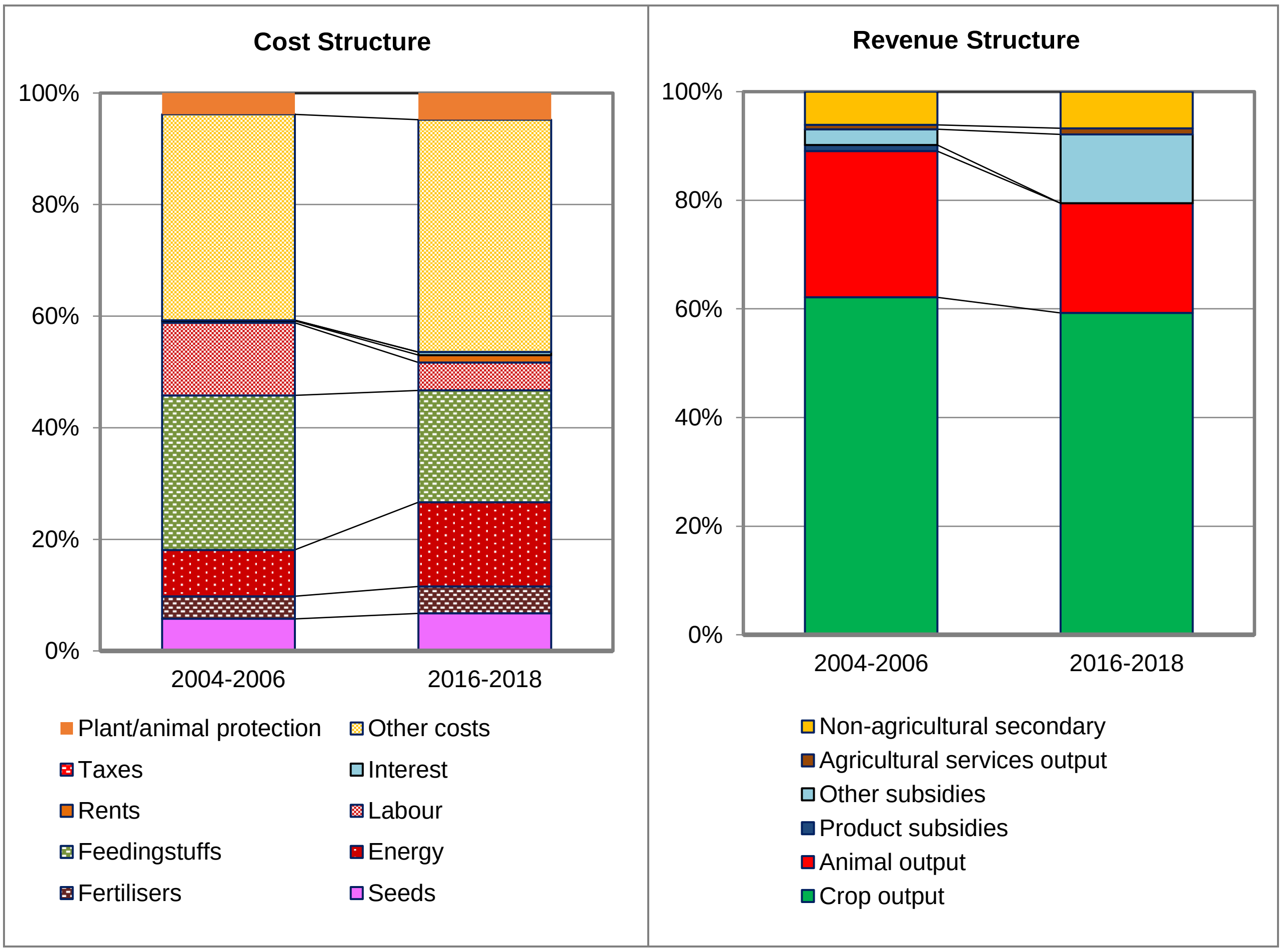


Source: European Commission, DG AGRI, June 2019, Statistical Factsheet for Romania.

Over the 2004-2006 to 2016-2018 period, there have been significant changes in the cost and revenue structure of the sector. For example, the costs for feedstuffs and labour have decreased over the last 7 years, while other costs and taxes have increased. In terms of revenue, over the last 15 years the importance of other subsidies has increased, while revenue from crop and animal output has decreased (Figure 4).

10 Eurostat, https://www.profit.ro/povesti-cu-profit/agribusiness/o-treime-din-fermele-din-ue-sunt-in-romania-dar-aduc-doar-3-din-productia-ue-18199096, based on Eurostat data.

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



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

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

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

This section describes the drivers of demand for finance in the agriculture sector and analyses and quantifies met and unmet demand. It seeks to elaborate the main reasons why farm enterprises request financing and identify the agricultural sub-sectors displaying the largest need for finance. The section also provides an analysis of the type of producers who face the greatest constraints when accessing credit. The examination of the demand for agricultural finance is based on the findings from the *fi-compass* survey of 350 Romanian farms, as well as interviews with key stakeholders in the agriculture sector, combined with information obtained from the Farm Accountancy Data Network (FADN).

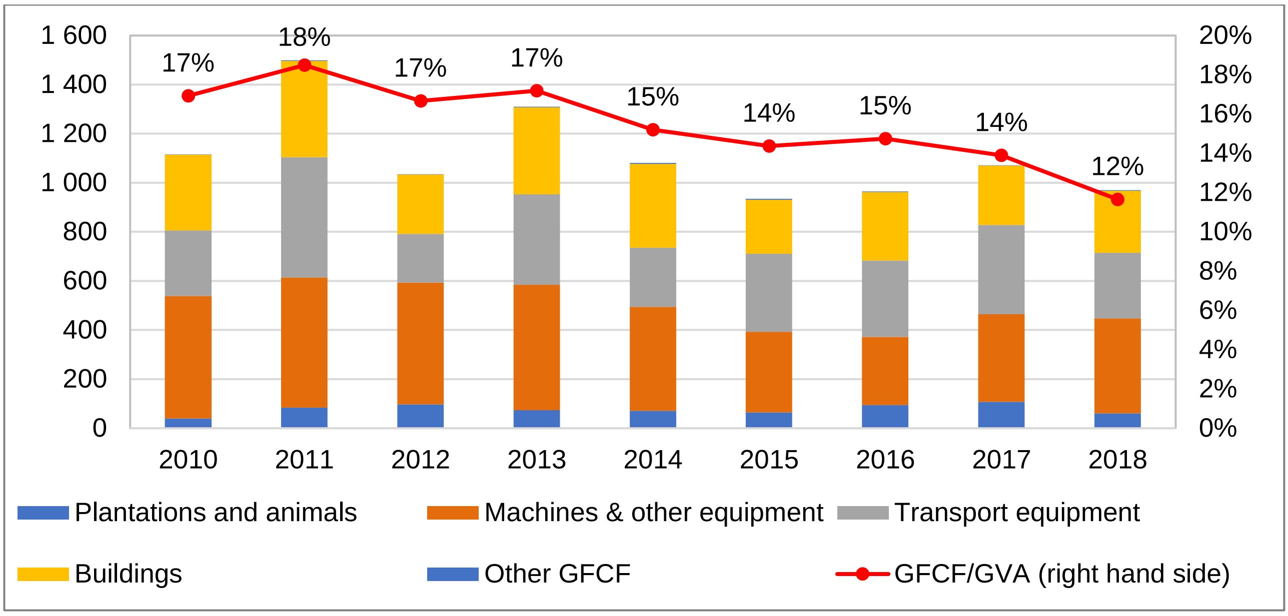
Key elements on finance demand from the Romanian agriculture sector

- Investments in the agriculture sector are decreasing - in 2018, the Gross Fixed Capital Formation was 35% below the 2011 level.
- The drivers of demand for finance in the Romanian agriculture sector are the need to modernise farms (e.g. investments in new machinery, equipment or other facilities) and investments on land and in working capital.
- Direct payments from the CAP provide an important contribution to farmers' income. Banks also view CAP payments as an important source for re-payments, which facilitates farmers' access to finance.
- The EAFRD is stimulating the demand for finance, as farmers demand bank loans to co-finance grants for agricultural and non-agricultural rural investments.
- A Portfolio Risk-Sharing Loan instrument co-funded by the EAFRD was set up in 2017, which is expected to benefit at least 350 Romanian farmers and agricultural businesses.
- Romanian farmers' demand for loan products of all maturities is lower than that of the EU 24. The demand is highest for long-term loans.
- Many farmers are discouraged from applying for finance, largely due to a lack of mutual trust and understanding between bankers and farmers.
- More than 25% of loan applications are rejected by Romanian banks, which is almost twice the EU 24 average.
- Loans are mainly rejected due to (i) a lack of collateral, (ii) the low profit and repayment capacity of farms, and, in particular small farms, (iii) insufficient farm management skills and low-quality business plans and loan applications.
- Young farmers and new entrants have difficulties accessing finance primarily due to a lack of collateral, but also due to a lack of financial literacy and the technical skills.

2.2.1. Drivers of total demand for finance

Since 2011, investments in the Romanian agriculture sector have been declining, both in absolute terms and as a percentage of agricultural GVA (Figure 5). In absolute terms, Gross Fixed Capital Formation (GFCF) was EUR 970 million in 2018, which was 35% below 2011 levels. The decline in investment is even more striking in terms of its percentage of agriculture's GVA. In 2011, its share was 18.5% whereas in 2018 its share was only 11.7%. This compares to a share of 30.7% for the EU 28 average. All components of GFCF, including machines and other production equipment (- 40%), transport (- 28%) and buildings (- 26%) have declined since 2013, with the exception of investments in plantations and animals (+45%). For 2018, however, investments into plantations and animals decreased by more than 56% compared to 2017. The decrease in investment must be attributed, in part, to the economic and financial crisis that begun in 2012.

Figure 5: Gross Fixed Capital Formation in the Romanian agriculture sector 2010 - 2018, EUR million



Source: Eurostat, 2019.

The three main drivers of the demand for finance in the Romanian agriculture sector are:

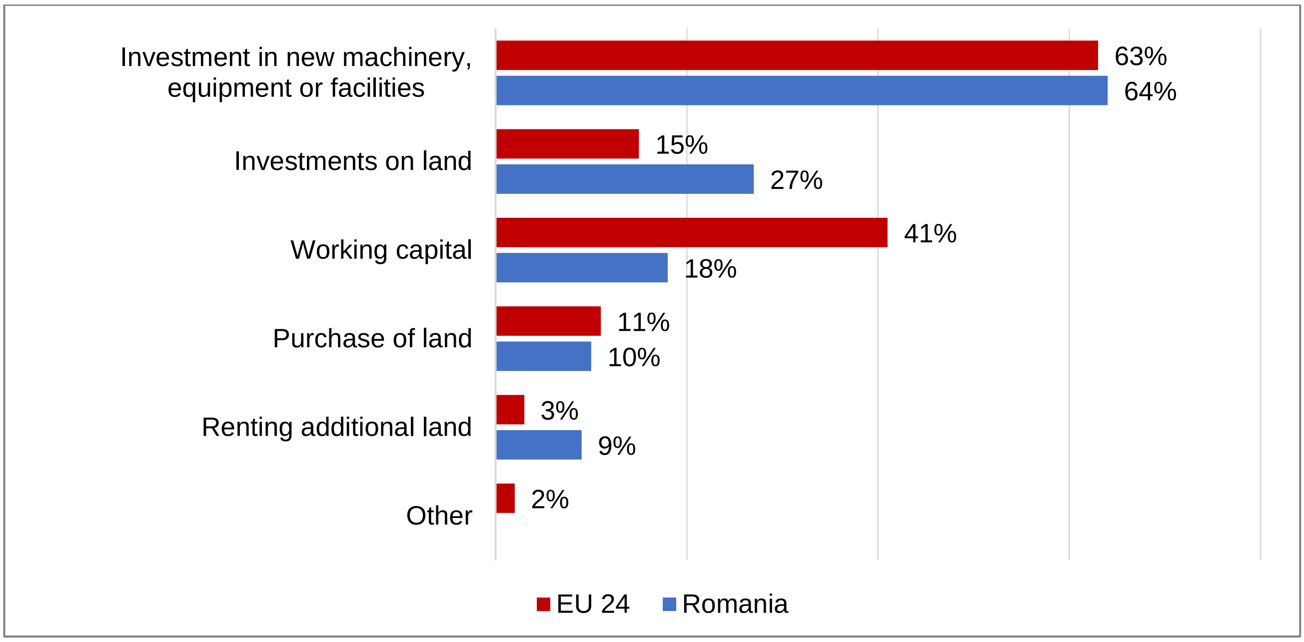
(i) investments in new machinery and equipment,

(ii) investments on land (improvements of land already owned/rented), and

(iii) working capital investments.

Figure 6 shows the main purposes of bank loans received by Romanian farmers. The majority of farmers used the loans for investments in new machinery and equipment of facilities (64% of respondents). They also invested into their land (27%) and used funds for working capital needs (18%).

Figure 6: Purpose of bank loans in the agriculture sector, 2017



Source: fi-compass survey.

The need to modernise and to remain competitive drives farmers' investments into agricultural production technology*.* The farmer representatives interviewed emphasised that many farmers are still not utilising modern machinery or equipment. This also applies to infrastructure and technical facilities, and the capacity for on-farm processing (value-addition) of agricultural products.

However, upgrading of agricultural machinery is becoming a key focus in the sector. Farmers buy new tractors, ploughs, mechanical cultivators, sowers, sprayers, dusters, etc. Some farmers also buy combine harvesters or presses for straw and hay packaging. Romanian farmers have a need to invest in new equipment as estimates show that around two-thirds of the currently existing farm equipment has exceeded its lifespan. For example, in Romania a tractor is used for an average of 100 000 hours compared to 3 000 to 4 000 hours for the European average.[11]

Farmers specifically mentioned that they invested in irrigation, as rainfall has decreased as a result to climate change in recent years. More than 30 years ago, Romania had the third largest irrigated surface (over 3 million ha) of Europe (following closely Spain and Italy)[12]. As of 2016, only about 34% of Romania's irrigable land and 22% of its agricultural area were being irrigated. The irrigation facilities available are old and require to be rehabilitated and they have high water extraction and energy requirements (majority of irrigation systems require pumps). In addition to the high costs that this poses to farmers, it also has a negative impact on Romania's already low water reserves.[13] New irrigation technologies, such as drip irrigation or water storage facilities, have thus been purchased by farmers.

Investments in orchards and greenhouses were other key reasons for borrowing, particularly as the fruit sub-sector is a very investment-intensive sector. As Romania is importing a high share of vegetables, and consumers increasingly demand locally grown and safe food, greenhouse production is increasing. While most farmers have invested in more classical steel and glass structures, some, mostly large-sized farms, have invested in state-of-the art systems that include irrigation and heating.[14] Hydroponic agriculture, where plants are being grown without soil, is also gaining popularity.

Investments in vineyards are also taking place. Most of the Romanian wine makers sell their wine in bulk on the domestic market (few produce high quality, certified wines that are being exported). They have focussed on replacing the old vines with new, higher yielding vines and ones that are closer to the consumers' taste. Some winemakers have also borrowed to change the site of their vines so that the vines can benefit from more favourable climatic conditions. Wine makers have also made investments into support systems (e.g. by replacing wires).

Working capital needs are another key driver of finance. While the demand for working capital finance among Romanian farmers (18%) is much lower than for the EU 24 average (41%), it is still significant. Farmers borrow money to purchase inputs, such as fertilisers and seeds, and to pay for labour and/or transport expenses. Farmers also borrow to keep their business financially sound during lean months.[15]

Investment patterns largely depend on the size of the farm. In interviews, farmer representatives said that small-sized farms mainly require finance for working capital of about EUR 420 to EUR 630 (RON 2 000 to RON 3 000)[16] per ha per year, while medium-sized farms mainly use finance to invest in equipment and technology (such as tractors or combined harvesters) and large-sized farms to invest in new facilities that allow for better market integration (e.g. investment in storage facilities, distribution and processing) in addition to the investments in machinery.

11 Bădan, Daniela-Nicoleta, 2017, Analysis regarding the fleet and the farm equipment in Romania compared to the European Union.

12 World Bank, 2018, Romania Water Diagnostic Report, Moving towards EU Compliance, Inclusion and Water Security.

13 Business Review Romania, 2019, Irrigation: How Romania managed to destroy its main agricultural weapon against drought.

14 Based on interviews and focus group.

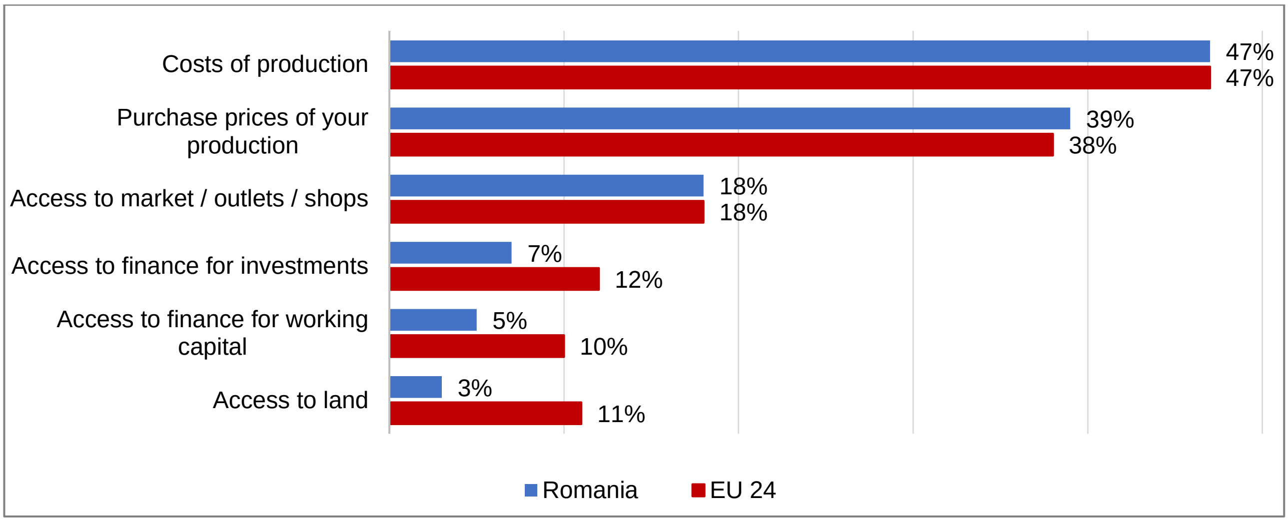
15 Based on interviews.

16 Unless otherwise indicated, the following exchange rate is being used: INFOEURO at December 2017, 1 RON = 0.21533 EUR.

The main concerns for Romanian farmers, like those in the rest of the EU 24, are the rising costs of production (for 47% of all farmers) and the stagnating prices of production (39%). This is further worsened by difficulties in accessing markets, shops, and clients (for 18%; Figure 7).

While access to finance is not the main concern of Romanian farmers, a substantial number of them still face considerable difficulties in receiving loans. According to the *fi-compass* survey, access to investment finance was a difficulty for 7% of Romanian farmers, while access to working capital was a difficulty for 5%. Access to land, however, is not a major problem for Romanian farmers (3% face difficulties)

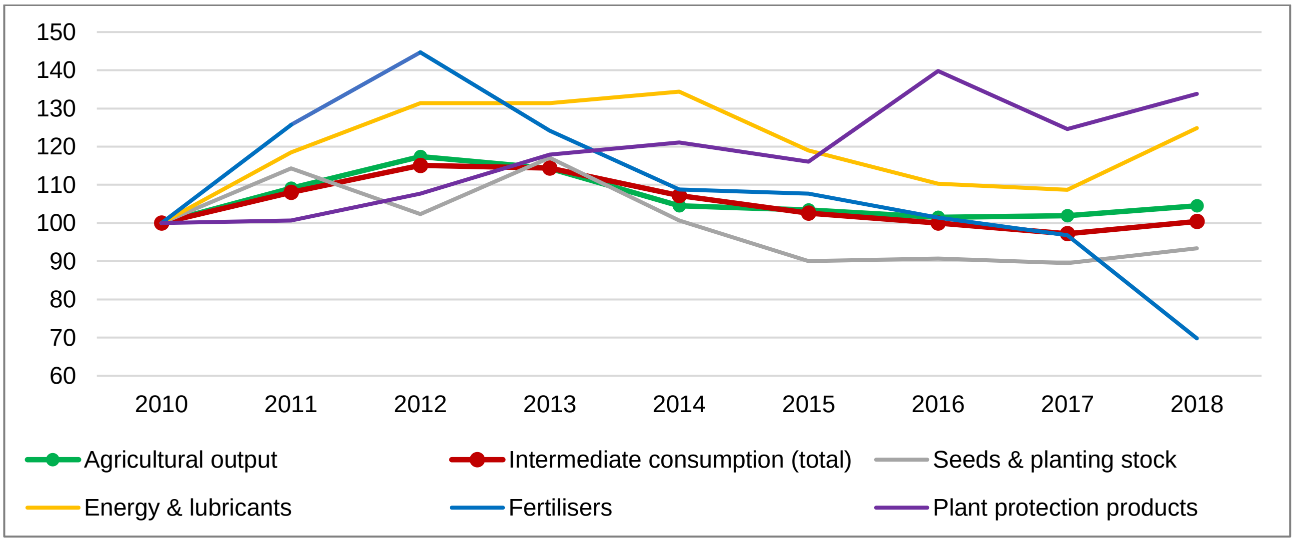
Figure 7: Difficulties experienced by farmers in 2017



Source: fi-compass survey.

Romanian farmers are concerned about the volatility of input prices over time. According to Eurostat statistics for agriculture (Figure 8), the evolution in the price of inputs (i.e. intermediate consumption) has been similar to that of outputs (Figure 9). In fact, the price index of outputs has increased slightly faster than that of inputs since 2015. However, what may explain farmers' concerns is that the price of specific inputs can vary significantly over time. For example, in 2018, the price of energy and lubricants was almost 15% higher than in 2017.

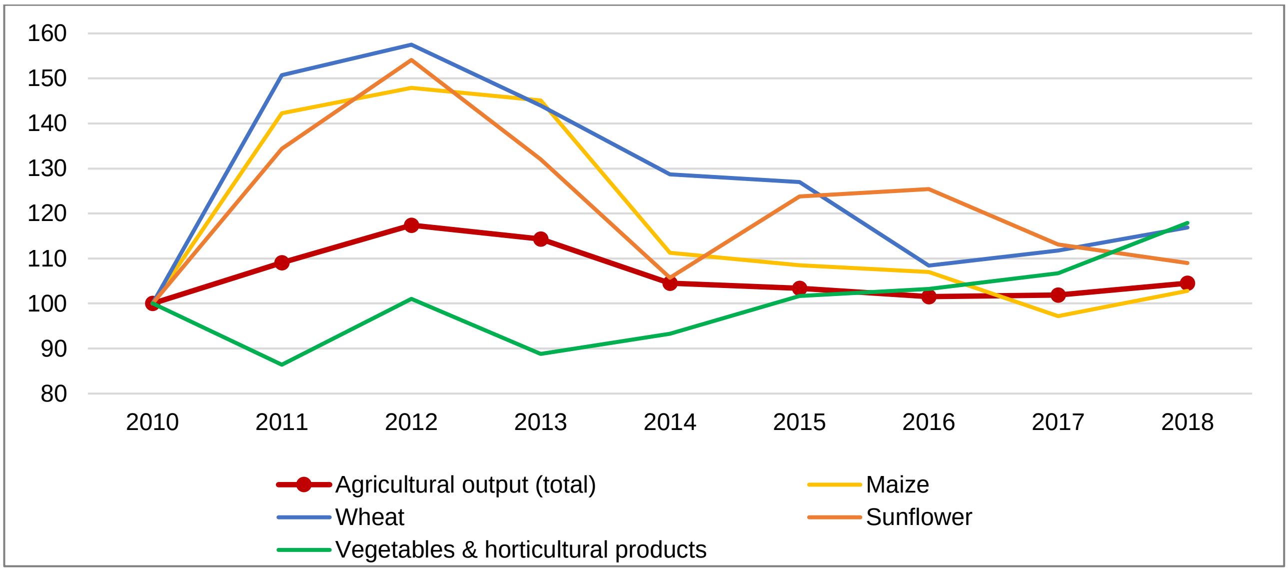
Figure 8: Agricultural output and input prices, 2010-2018



Source: Eurostat, 2019.

Selling prices can also see wide fluctuations (Figure 9). Globally, the average agricultural output price index has been almost flat (104 in 2018, on a basis of 100 in 2010), especially since 2014. But the price of Romania's two main crops, maize and wheat, has been on a decreasing trend since 2012. The lack of organisation in the value chain, with cooperatives playing a marginal role, also puts farmers in a weak negotiating position with both their suppliers and buyers, and this further increases the variability of their income.

Figure 9: Agricultural output prices, Romania, 2010-2018



Source: Eurostat, 2019.

Common Agricultural Policy (CAP) plays an important role in the Romanian agriculture sector. The CAP funds provide an income support, while also supporting the overall development of the sector. The measures available include the Single Area Payment Scheme, redistributive payment, payment for agricultural practices beneficial to the climate and the environment, payment for young farmers, payment for small farms, the coupled support scheme for the vegetable and livestock sub-sectors, and rural development support.

The direct payments (Pillar I) and grants under the Rural Development Programme (Pillar II) stimulate farmer's investment behaviour and make their access to finance easier. This is because they not only increase farmers' income levels, but because financial institutions look positively at those payments when they evaluate loan applications and assess farmers' repayment capacity. Direct payments to Romanian farmers amounted to EUR 1.7 billion in 2018, with most payments being de-coupled direct aids (74%).[17] In 2018, 866 749 crop farms and 185 767 livestock farms benefited from the direct payment scheme. Support under market measures amounted to EUR 35.9 million in 2018. This support was mostly focussed on the wine sector (46.1% of the category) followed by milk and milk products (13.1%).

The Rural Development Programme (RDP) for Romania received a budget of EUR 9.44 billion for the 2014-2020 period. This includes EUR 8.13 billion from the EU budget (including EUR 112.3 million from the CAP direct payments), and EUR 1.31 billion of national co-financing. The RDP supports actions under all six of the EU Rural Development priorities, and one of the key priorities for Romania is the increase in the competitiveness of the agriculture sector.[18,19]

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

18 The four biggest RDP measures in terms of budget share (total public funding) are: Measure 4 (EUR 2.5 billion for Investments in physical assets), Measure 13 (EUR 1.3 billion for payments to areas facing natural or other specific constraints), Measure 7 (EUR 1.3 billion for Basic services and village renewal in rural areas) and Measure 6 (EUR 900 million for farm and business development).

19 Further measures to strengthen Romanian farmer's competitiveness include also the receipt of subsidies for the environment and climate through the Rural Development Programme (RDP) for Romania, funded under the European Agricultural Fund for Rural Development (EAFRD) and national contributions. Financing is related to Measure 10 Agri-

RDP support affects the demand for finance from the agriculture sector. Support from sub-measure 4.1 (M4.1), 'Support for investments in agricultural holdings'; sub-measure 4.1a, 'Support for investments in fruit growing holdings'; sub-measure 6.1, 'Business start-up support for young farmers'; and sub-measure 6.3, 'Business aid for small farms', all contribute to investments undertaken in the agriculture sector. Thus, they also stimulate the demand for finance, as farmers often take loans to meet the co-financing requirements to access the grants (particularly for M4.1 and M4.1a). The allocation of funds and the specificities regarding the various sub-measures are shown below in Table 1. For small farms, with a standard output[20] (SO) between EUR 4 000 and EUR 11 999, access to RDP investment support is limited due to the minimum SO requirement.

Table 1: Romania: RDP 2014 – 2020 Implementation of sub-measures 4.1 and 6.1, April 2020

Measures	Amount	Description
Sub- measure 4.1: Support for investments in agricultural holdings	- EUR 0.87 billion allocated. (public allocation) - All funds contracted (end April 2020).	• Beneficiaries are agricultural holdings (farmers, except non-authorised natural persons, as well as cooperatives and producer groups serving own members' interests) that have a minimum economic size (SO) of EUR 8 000. • As of the end of April 2020, 1 807[21] farmers signed contracts for receiving investment support, with the vast majority being medium-sized farms (SO of EUR 12 000 to EUR 250 000) — the investment support was granted for farm buildings, equipment and technical facilities, especially in the cereal sector. • Most of the contracts signed have been in the South Eastern region (Constanta). • 2 373 applicants of a value of EUR 1.3 billion were not financed. • One of the limitations cited in the interviews is that the investment support does not include the purchase or rent of land, and investments in animals or annual plants.
Sub-measure 4.1.a: Support for investments in fruit growing holdings	- EUR 290 million allocated (public allocation) - EUR 260 million contracted (end of April 2020).	• Beneficiaries are agricultural holdings (farmers, except natural persons as well as cooperatives and producer groups, serving own members' interests) that have a minimum economic size (SO) of EUR 4 000. • As of the end of April 2020, 485 farmers signed contracts for investment support under sub-measure 4.1.a, with 75% of them being medium-sized farms (SO of EUR 12 000 to 250 000) — the investment support was granted mainly for setting-up fruit growing plantations (78% of beneficiaries). • 694 applications with a value of EUR 416 million were not financed; • Again, one of the limitations cited in the interviews was that the investment support does not include the purchase or rent of land.

environment and Climate, Measure 11 Organic Farming, and Measure 13 Areas facing natural constraints or other specific constraints. In addition, transitional national aid is also available for the plant and livestock sub-sectors under the European Agricultural Guarantee Fund (EAGF).

20 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.

21 According to Managing Authority data 'Situatia Proiectelor depuse 30/04/2020'.

Sub- measure 6.1: Business start-up aid for young farmers	- EUR 437 million allocated. - All funds contracted (end of April 2020.	• The support is granted as a flat rate, with the objective of facilitating the setup of first-time young farmers, based on a business plan. • All relevant expenditure and activities for the implementation of the approved business plan may be eligible, including the purchase of farmland and livestock. • The farm must have a minimum economic size (SO) of EUR 12 000 to EUR 50 000 and must have a legal personality (authorised physical person, individual enterprise, family enterprise or Small and medium sized enterprises (SME)). • 4 153 applications with a value of EUR 172 million could not been financed.

Source: Ministry of Agriculture, Managing Authority data 'Situatia Proiectelor depuse 30/04/2020',

Note: The amount requested that has not been financed is calculated based on all received applications before any administrative check regarding eligibility or selection criteria have taken place, from which the budget under the calls has been deducted. 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. They could also be withdrawn by the beneficiary at a later stage (following the submission) or under ongoing evaluation by the Paying Agency.

The data in Table 1 clearly shows the additional resources needed by Romanian farmers and that demand exceeds what public authorities can offer. For sub-measure 4.1 alone, the initial demand under the submitted applications (before administrative checks) has been EUR 1.3 billion higher than the budgets that were made available under the grant calls. Similarly, unsatisfied demand is present for the start-up aid for young farmers and for agri-food processing. Regarding the specific focus on fruit production and processing, while it has its own specificities, the demand for finance overtakes the available budgets. The demand is especially significant for the primary production.

To highlight any existing markets failures and financial gaps in the Romanian agriculture sector, and to estimate the potential added value of implementing a financial instrument, the Managing Authority carried out an ex-ante assessment of finance to the sector. It identified areas that could benefit from the use of financial instruments in agriculture. The implementation of two types of financial instruments was recommended: (i) a guarantee scheme with individual guarantees and (ii) a risk sharing financial instrument.[22]

22 Ministerului Agriculturii şi Dezvoltării Rurale, Updated 2016, Evaluare ex-ante pentru implementarea de Instrumente Financiare în PNDR 2014-2020.

Main findings of the ex-ante assessment for the implementation of financial instruments in the RDP 2014-2020

The main results of the ex-ante assessment for the initial financial instruments were:
• The financing gap in the sectors concerned has been estimated at around EUR 2.36 billion, of which EUR 2.1 billion was in agriculture and EUR 0.2 billion in non-agriculture sectors in rural areas.
• The implementation of two types of financial instruments was recommended:
   o a guarantee scheme with individual guarantees; and
   o a financial instrument for credit with risk sharing.
• The priority in implementation was assigned to the guarantee scheme, in order to directly address the main cause of market failure. Namely, the lack of guarantees from credit applicants which are necessary to co-finance projects supported by the National Rural Development Programme. The implementation of the credit instrument was recommended in a subsequent implementation phase of the program.
• The need from public sources for the financial instrument was set at EUR 92.5 million. Through this allocation, a volume of credits representing 40% of the estimated financing deficit could be generated.
• The instrument would address exclusively the beneficiaries of grants from the National Rural Development Programme to ensure private co-financing.
An update of the initial Ex-ante assessment for the implementation of financial instruments in the National Rural Development Programme 2014-2020 was published in September 2016. This became necessary as a result of consultations with the financial sector and with farmers' representatives in 2016, which resulted in adjusting the following strategic priorities:
• Extending the applicability of financial instruments, making them also available as a source of finance independent form the grant support, while maintaining the possibility to co-finance projects for grant recipients.
• Prioritising the lending instrument with risk-sharing, while guarantees will still be available through guarantee schemes financed from the national budget.
As a result of this updated document, the risk-sharing instrument will provide support under the following measures in the NRDP:
   o Measure 4, 'Investments in physical assets', sub-measures 4.1 'Investments in agricultural holdings' and 4.2 'Investments for processing/marketing of agricultural products';
   o Measure 6, 'Development of holdings and enterprises', sub-measure 6.4 'Investments in the creation and development of micro and small non-agricultural enterprises';
   o Sub-measures 4.1 and 4.2 of the thematic sub-program for fruit growing; and
   o LEADER-funded projects that meet the objectives of the sub-measures set out above.
The total budget for the instrument will be EUR 92.5 million and the leverage effect of the EU resources is foreseen to be 1.4 times. Flexibility in the allocation of measures is recommended in order to better absorb the funding at the level of final beneficiaries.

Source: MADR: Evaluare ex-ante pentru implementarea de Instrumente Financiare în PNDR 2014-2020, 2016.

Romanian farmers can benefit from an EAFRD financial instrument − Portfolio Risk Sharing Loan (PRSL). This new financial instrument builds on lessons learned from the previous EAFRD supported financial instrument for the 2007-2013 period (the Rural Credit Guarantee Fund that provided uncapped portfolio guarantees on a loan-to-loan basis, and which was only available for projects already benefitting from grant support as required by then applicable legislation).[23] The PRLS was set up in November 2017 for the 2014-2020 programming period. The financial instrument implemented by the European Investment Fund (EIF) offers loans with a risk-sharing rate of between 50% and 70% (depending on the private banks' participation), which results in reduced interest rates to farmers and rural entrepreneurs, because the EAFRD part is provided for free (i.e. is not priced). In addition, two of the financial intermediaries participating to the

23 Romania's contribution to the new financial instrument was based on the remaining resources from the financial instrument implemented in the previous RDP period.

scheme, Banca Comerciala Romana and ProCredit Bank offer advisory services to the beneficiaries of the programme.

The PRSL aims at facilitating access to finance to final recipients under two implementation options[24]:

- loans for projects already selected for grant support for agricultural and non-agricultural rural investments, including investments financed under Leader; and
- stand-alone loans (i.e. not linked to grant support),

in accordance with the RDP objectives under sub-measures 4.1, 4.1.a (agricultural and fruit-growing holdings), 4.2, 4.2.a (processing and marketing of agriculture and fruit products), 6.4. (creation and development of non-agricultural activities).[25]

The PRSL is available for all eligible expenditures of the investment project and includes an embedded risk sharing element. The maximum loan amount that can be granted to eligible final recipients is EUR 1 million. In addition to support for investments, it also covers working capital needs (as part of an investment project and with limits to the share of working capital finance; see Article 45(5) of R 1305/2013[26]), livestock and annual plant purchases, investments in farm irrigation systems,[27] and land purchases under the conditions of Regulation 1305/2013 and Regulation 480/2014.[28] The PRSL places special focus on small farms, young farmers and investments in mountainous areas.[29]

Under the PRSL, six operational agreements have been signed with five financial institutions involved in the implementation of the financial instrument: Banca Comerciala Romana, Libra Internet Bank, ProCredit Bank, Raiffeisen Bank and UniCredit Bank. Table 2 outlines the eligibility criteria (Section 2.3.1.2 contains further details on the specific loan products).

24 See also: 'Support under the Romanian EAFRD financial instrument − Portfolio Risk Sharing Loan', a presentation by Adela Ştefan, EAFRD Managing Authority, Ministry of Agriculture and Rural Development, Romania delivered at the *fi-compass* 'Fifth annual EU conference on EAFRD financial instruments for agriculture and rural development in 2014-2020', Bucharest on 4-5 June 2019, available at https://www.fi-compass.eu/sites/default/files/publications/Adela%20%C5%9Etefan_Support%20under%20the%20Romanian%20EAFRD%20financial%20instrument.pdf.

25 Ibid.

26 REGULATION (EU) No 1305/2013 of The European Parliament and of The Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005.

27 Subject to receipt of a certificate issued by the national authorities to the final recipient that the project is eligible.

28 Commission Delegated Regulation (EU) No 480/2014 of 3 March 2014 supplementing Regulation (EU) No 1303/2013 of the European Parliament and of the Council laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund. Source: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0480&from=en.

29 EAFRD Managing Authority, Ministry of Agriculture and Rural Development, Support under the Romanian EAFRD financial instrument − Portfolio Risk Sharing Loan, 2017. Presentations delivered at the *fi-compass* Third annual EU conference on EAFRD financial instruments for agriculture and rural development in 2014-2020, Paris, 10 October 2017, Source: https://www.fi- compass.eu/sites/default/files/publications/Adela%20%C5%9Etefan_Support%20under%20the%20Romanian%20EAFRD%20financial%20instrument.pdf.

Table 2: Summary of the main eligibility conditions for the PRSL facility beneficiaries

Final Recipients	- Legal entities organised according to Romanian law are eligible, including Individual Enterprises, Family Enterprises, Associations, Limited Liability Companies, agricultural companies / cooperatives, and producer groups in the vegetable, livestock, and fruit and vegetable sub-sectors etc. - Entities that meet the requirements corresponding to the sub-measures of the National Rural Development Program 2014-2020. - Legal entities in financial difficulty (liquidation, bankruptcy, insolvency, etc.), operating in restricted areas (e.g. tobacco) or companies with records of outstanding debts are not eligible.
Main Activity	Applicants must pursue one of the following activities: - primary agriculture, including fruit growing; - processing of agricultural products and related marketing activities, including in the fruit-growing sector; and - initiate and develop non-agricultural activities in rural areas.
Supported Operations	- Transactions can support tangible assets (e.g. machines and equipment) intangible assets (e.g. software, patents, licenses) as well as working capital. - The loans can support investments for the setting-up, extension and/or modernisation of livestock farms, fruit growing farms and nurseries, on-farm processing activities, investments in processing and marketing including packaging and labelling capacities as well as investments in non-agricultural products and services, including agri-tourism and other recreational activities, etc. - Investments in production and the use of renewable energy sources for own consumption and investments in irrigation projects[30] are also possible. - Eligible costs include VAT, general costs, land purchases up to 10% of the total eligible costs, purchase of live animals and annual plants, etc.

Source: Author's research and banks' websites.

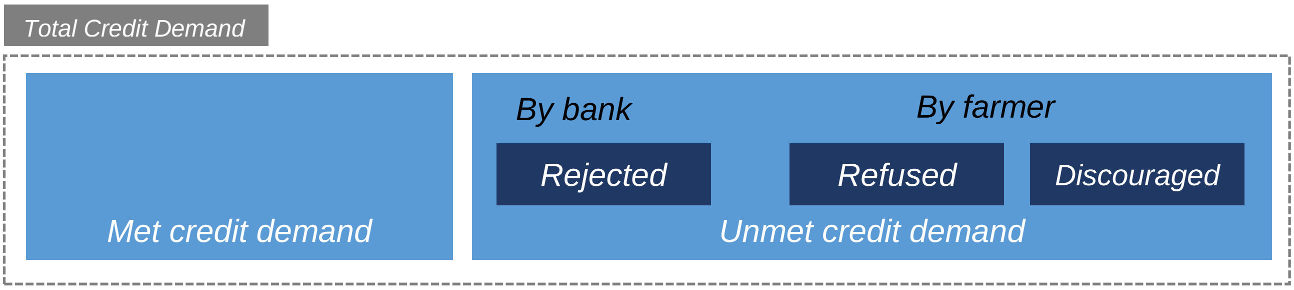
In terms of results, it is expected that at least EUR 160 million of new loans will be originated (mostly in national currency) to more than 350 farmers and agricultural enterprises. The leverage to be achieved is about 1.8. As of December 2019 (within less than 1.5 years of operations), 276 loans had been signed with a total value of EUR 36 million. The average loan amount was EUR 133 000.[31]

2.2.2. Analysis of demand for finance

The potential total demand for finance combines both met and unmet demand. The met demand consists of the value of all applications for finance, which were accepted by the financial institutions in the relevant year. The unmet demand consists of the assumed value of applications rejected by a financial institution, offers of credit refused by farmers, alongside cases where farmers are discouraged from applying for credit due to an expectation of rejection or refusal (Figure 10).

30 Subject to art. 46 of the Regulation1305/2013 and receipt of a certificate issued by the national authorities.
31 European Investment Fund (EIF), 2019, EAFRD RO FoF− Portfolio Risk Sharing Loan. Presentation delivered at the Fifth annual EU conference on EAFRD financial instruments for agriculture and rural development in 2014-2020, Source: https://www.fi-compass.eu/sites/default/files/publications/Liliana_Rodean_EAFRD%20RO%20FoF_Portfolio%20Risk%20Sharing%20Loan.pdf.

Figure 10: Schematic overview of the demand side of agriculture sector



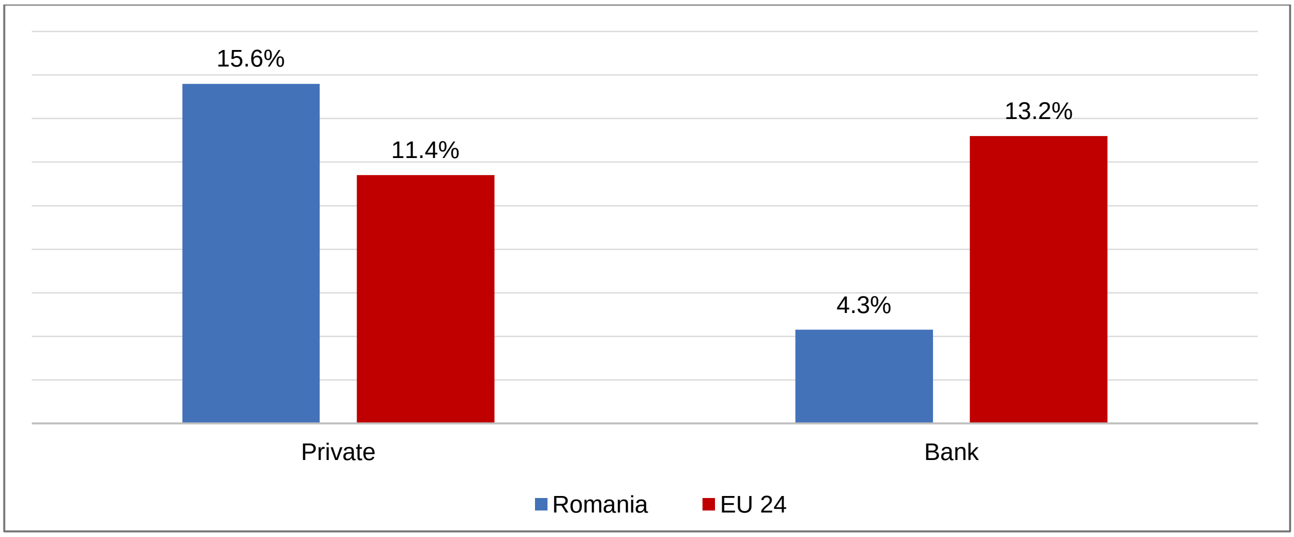
Source: Ecorys, 2019.

According to the *fi-compass* survey, the unmet demand for the Romanian agriculture sector is estimated to be EUR 3 billion.

The focus group pointed out that the unmet demand mainly concerns small and medium-sized enterprises as large farmers in Romania have a relatively easy access to bank finance.

Most Romanian farmers rely on private financing from friends and family. The total value of private financing in Romania has been estimated to be EUR 947 million.[32] About 80% of all farmers who used financing indicated that they relied exclusively on private sources, such as friends and family. Only 4.3% of the survey respondents applied exclusively for bank finance (three time lower than the EU 24 average of 13.2%) (Figure 11). In interviews, farmers and their support organisations said that they mostly use private funding for working capital needs, while bank finance is used for longer-term investments.

Figure 11: Farms applying for finance in 2017



Source: fi-compass survey.

In addition to family and friends, input suppliers also provide finance to the Romanian farms.[33] Input suppliers provide seeds, fertilisers or pesticides at the beginning of the season, and farmers only pay for those inputs after the harvest of their crops.[34] Those input supplier credit schemes are of particular relevance for small and micro-farms, as they do not involve much bureaucracy and the decision about the farmer's

32 Assuming an average loan amount of EUR 5 000. Author's calculations based on *fi-compass* survey.

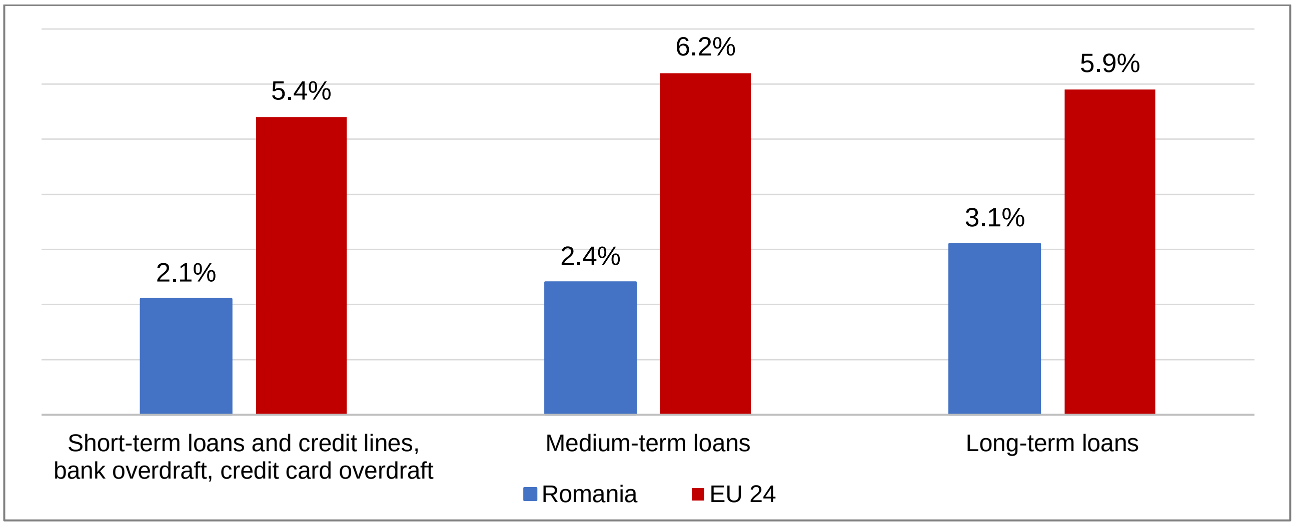
33 Interviews with farmers and Non-Bank Financial Institutions, 2019.

34 One of the largest input suppliers in Romania is Agricover SA. Through a complete portfolio of inputs - phytosanitary products, seeds, fertilisers, diesel, innovative solutions – the firm covers the full input needs of partner farmers. They have a huge sales team covering the entire country. In 2018, they served more than 5 700 farmers working on more than 1.9 hectares of arable land.

creditworthiness is mostly made on the spot. It is usually the farmers that have a long track-record with the input supplier that benefit from such an informal scheme. Often, a simple promissory note is signed by both parties. Many input suppliers do not require collateral and sometimes even repurchase unused inputs. Interviews with Non-Bank Financial Institutions (NBFIs) suggest that some input suppliers have even developed scoring systems to better assess farmers' requests for finance.

Among the Romanian farmers that applied for loans in 2017, the highest demand was for long-term loans. According to the *fi*-compass survey, 3.1% of farmers applied for loans with a duration of more than 5 years (Figure 12). Short-term (up to 18 months) and medium-term loans (18 months to 5 years) were requested for by 2.1% and 2.4% of respondents, respectively. This is less than half the EU 24 average. The low scores for short and medium-term bank lending can be explained by Romanian farmers' orientation towards private finance as explained above. Loan amounts are usually smaller than in the case of long-term loans, and this facilitates the borrowing from private individuals.[35]

Figure 12: Farms applying for finance in 2017, by financing product



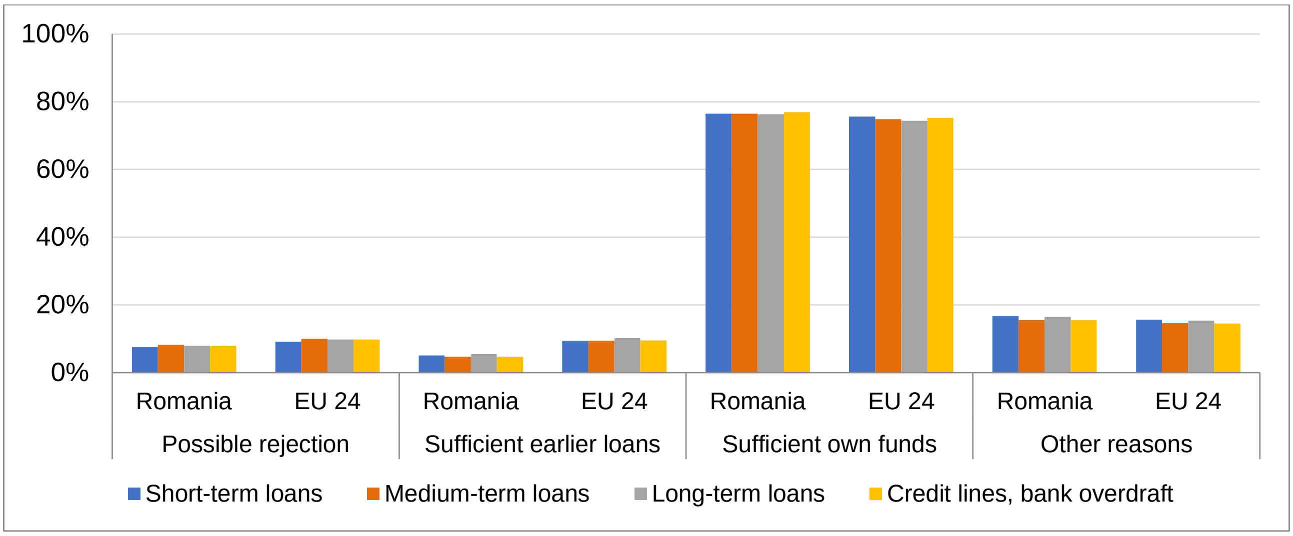
Source: fi-compass survey.

Around 7.5% of Romanian farmers did not apply for loans due to a fear of being rejected (Figure 13). Farmers were mostly discouraged in applying for finance for investment loans. Interviews suggested that a lack of mutual trust and understanding between bankers and farmers is a key reason for discouragement. Bankers are afraid of the risk of default of the borrower, while farmers believe that the bank does not understand their business. At the same time, farmers consider the process of getting a loan as being very complicated and cumbersome, and they are not used to keeping financial records for their activities, which further complicates their conversations with banks.[36]

Overall, the main reason not to apply for finance in Romania was the availability of sufficient own funds. More than 76% of Romanian *fi-compass* survey respondents did not apply for finance because they considered themselves to have sufficient own funds to finance their needs. No major difference could be observed across the different loan products. For about 5% of the Romanian farmers, loans that had been taken before 2017 were enough for their business needs.

35 Newspaper articles (Romania Business Review) and interviews conducted.
36 For banks' perspectives on financing small-sized farms please see Section 2.3.1.3.

Figure 13: Reasons for not applying for loans in the agriculture sector in 2017

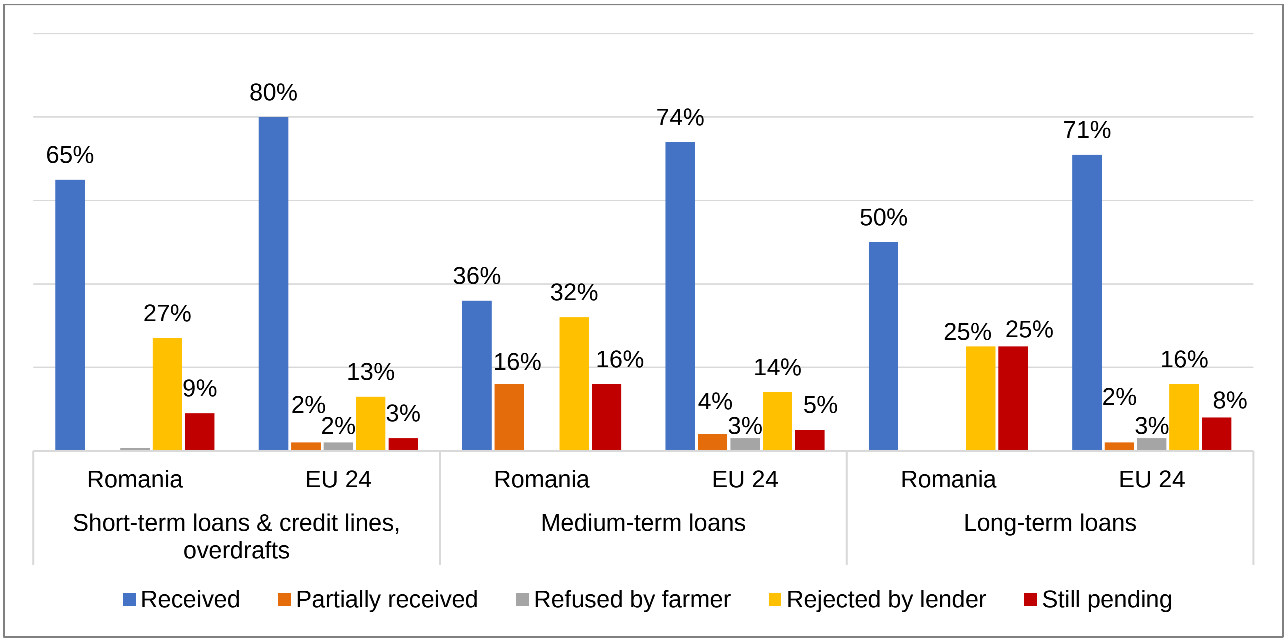


Source: fi-compass survey.

Rejection rates in Romania are high and well above the EU 24 average (Figure 14). For all products, rejection rates are above 25%. Rejection rates are highest for medium-term loan applications - 32% are rejected, while 16% are approved for a lower loan amount than the one requested. The approval of a reduced loan amount indicates that banks are trying to find an offering that corresponds to the client's repayment capacity. At the same time, it has to be ensured that the investment can still be pursued in a meaningful way, so that the farmer can generate the turnover necessary to repay the loan.

Interviews with banks and farmer organisations highlighted that rejection rates are higher for livestock farmers. This is due to the perceived higher risk of the sector, owing to its high historical default rates, market (including price) risks and the occurrence of animal diseases. Livestock farmers are also seen as particularly vulnerable, especially smaller farms, due to climate change risks and a lack of income diversification.

Figure 14: Result from applications for finance in the agriculture sector in 2017

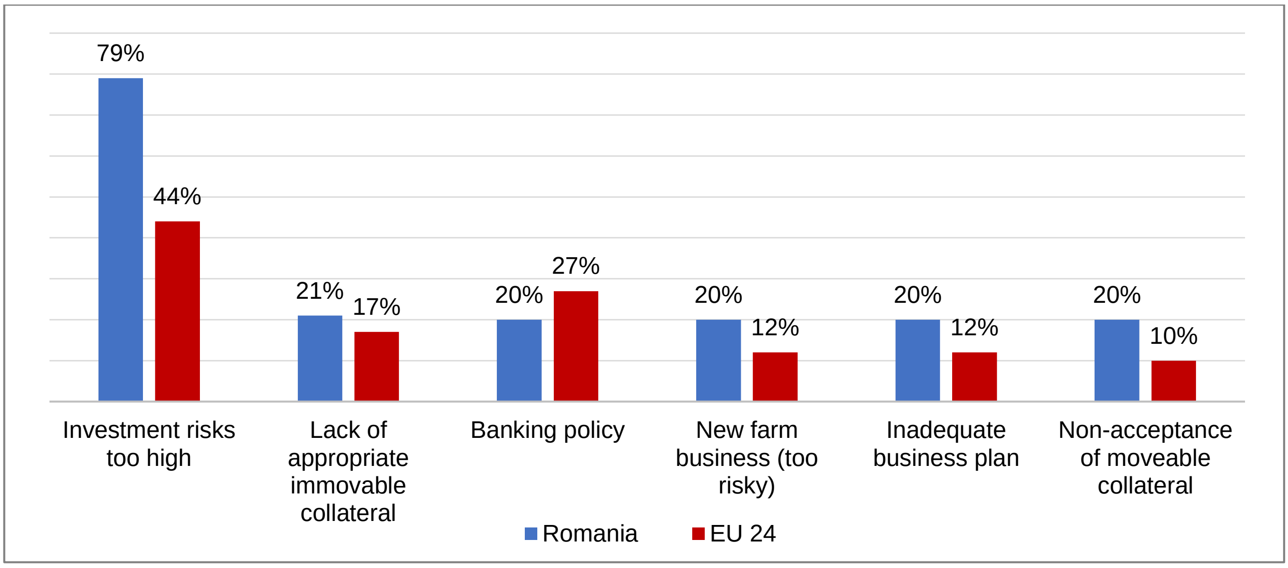


Source: fi-compass survey.

Loan applications are mostly rejected by banks because they consider the investment risks to be too high (Figure 15). A significant number of farmers (79%) mentioned that this explanation was provided to them when their bank rejected their application. This is almost twice the average level of the EU 24. Other reasons for rejection include the lack of collateral, a lack of an adequate business plan and being a new entrant to the sector which could also be associated with a higher risk. Except for ‘banking policy’, all reasons for rejection were mentioned more often than for the EU 24. The interviews with farmers’ representatives highlighted that many financial institutions lack a general understanding of farming operations and, thus, do not feel comfortable lending to agriculture. At the same time, financial institutions prefer to focus on larger loans in urban areas as the transaction costs are generally lower.

Farmers often do not have sufficient levels of assets to meet the collateralisation and debt service cover ratio requirements of financial institutions. This is because land is fragmented, the market value of assets is low, or the market is illiquid. This is particularly the case for small farms, young farmers and new entrants (Figure 15).

Figure 15: Reasons for the rejection of finance applications in the agriculture sector in 2017



Source: fi-compass survey.

The ex-ante assessment on financial instruments carried out by the Ministry of Agriculture, before the setting up of the financial instrument supported by the EAFRD, provides further evidence on the causes of loan rejections of farmers in Romania. It identified the following main causes, which are similar to those mentioned above:

- poor loan applications;
- poor financial statements of farmers;
- lack of practical experience of farmers in project implementation;
- investment projects not adapted to market conditions;
- high level of farm debt; and
- too long a duration of farm debt recovery in case of default.

The assessment also mentioned indirect factors such as structural challenges that result in the lack of viability of farmers (reducing or prohibiting their repayment capacity) and a number of external factors that contribute to the risk associated with the sector (e.g. fluctuation of prices of finished products, non-insurance of agricultural crops for all risk categories, lack of retail markets, and lack of a well-functioning agricultural land cadastre).[37]

37 Ministerului Agriculturii şi Dezvoltării Rurale, 2016, Evaluare ex-ante pentru implementarea de Instrumente Financiare în PNDR 2014-2020.

Higher loan rejection rates are also driven by structural changes in banks and by bank's low level of interest in the agriculture sector. Interviews with banks and NBFIs[38] confirmed some of the reasons illustrated above and provided additional explanations for the rejection of loan applications by farmers:

- **Financial institutions themselves acknowledge their lack of expertise in agriculture, with some of them expressing no interest in the sector.** Additionally, the undergoing restructuring of many bank networks implies that they have reduced their presence in rural areas.
- **Many of the small farmers lack repayment capacity** because they operate with very small profits and depend on subsidies. In many instances, farmers will not be able to repay the loan due to their low income and/or low productivity. A number of external factors contribute to sector related risks, such as price fluctuations of agricultural outputs, lack of access to markets, lack of cadastral register for agricultural land, and an undeveloped insurance market that potentially further weakens the repayment capacity of a borrower.
- **Farmer's, in particular small and medium-sized farms, cannot provide supporting business plans or cash-flow projections.** This means bank's struggle to assess the repayment capacity of borrowers, because they cannot rely on financial statements and existing account records.
- **There's a lack of cooperation and organisation in the supply chain.** Financial institutions mentioned that increased cooperation among small and medium-sized farms would strengthen their bargaining power (so they could materialise higher prices) and they could then supply higher quantities of specific products (so farmers could strengthen their supply base and could maybe even export their products). However, according to banks' experience farmers are not very interested in increased cooperation among each other.
- **There are technical weaknesses in farm management and operation practices.** Farms lack the technical knowledge needed to operate their business effectively and, as such, their proposed investments are considered high risk. This is especially the case for small-sized farms. In addition, many farmers still lack the practical experience needed to adequately comply with RDP grant requirements for the implementation of projects.

The above-mentioned challenges particularly apply to micro and small-sized farms. These farms lack the financial and business understanding necessary to compile their financial indicators and make sound and convincing business plans. Given the very small size of their farms, these farmers also tend to lack assets that can be used as collateral. In cases where they have equipment or machinery, it is often outdated and no longer has a commercial value.

Young farmers and new entrants face particular difficulties in accessing finance. They often lack the resources necessary to invest into their farm (working capital and fixed assets) to turn it into a successful business. They also often lack collateral, as their business is often new and not sufficiently capitalised.[39] Young farmers are also disproportionally affected by discouragement. Many have not been exposed to financial institutions and therefore lack the needed literacy to effectively interact with them. They may lack experience in managing a business and in financial planning. Therefore, financial institutions often view young farmers as too risky of a client.

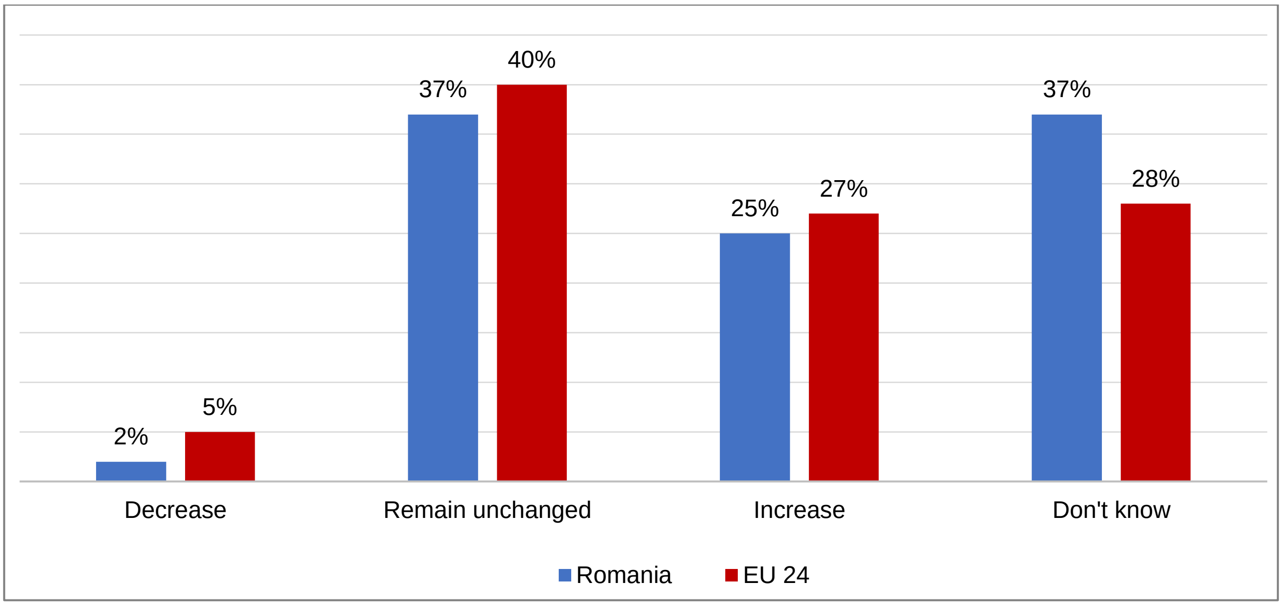
In terms of the financial needs over the next 2-3 years, the majority of Romanian farmers said that they would remain unchanged (37%) or that they do not know (37%).[40] A quarter (25%) of the farmers that forecast increased financial needs for the same period (compared to 27% for the EU 24 average). Only 2% of respondents expected their financial needs to decrease, which is below the EU 24 average of 5% (Figure 16).

38 Non-bank financial institutions (NBFI) are supervised by the National Bank or Romania but Law no. 93/2009 explicitly prohibits them from taking deposits. In order to be registered with the General Register, a NBFI should have a share capital of at least the equal amount in RON of EUR 200 000, while NBFIs that envisage granting mortgage credits should have a share capital of at least the equal amount in RON of EUR 3 000 000.

39 Euractive, 2019, Young people and women in EU farming.

40 This behaviour is consistent with Romanian enterprises working in other sectors: the vast majority of respondents believe that the demand for loans will remain unchanged.

Figure 16: Farmers' expectations on future financing needs, 2017



Source: fi-compass survey.

The provision of advisory and support services would be of benefit to the sector, especially for small-sized farms, young farmers and new entrants. Several of the problems Romanian farmers are faced with are related to their low level of know-how and lack of knowledge. Hence, the provision of additional advisory and support services would benefit the sector. Those measures should aim at increasing the financial literacy of farmers, especially in the area of business planning and overall financial management, so that farmers can prepare those statements for financial institutions' usage.

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 Romanian agriculture sector 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 and the FADN database.

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 of the supply of finance to the Romanian agriculture sector

- The supply of agricultural finance is dominated by a few banks, as well as 5 non-bank financial institutions (NFBIs). Banks usually finance large-sized farms, while NBFIs mostly service small and medium-sized farms. The Rural Credit Guarantee Fund issues guarantees to the sector.
- Typical products include short-term working capital loans, credit lines and overdraft facilities, and investment loans.
- The agriculture sector is perceived as too risky by many banks. However, banks also have limited knowledge of the sector.
- In general, interest rates are high. For working capital loans and credit lines they are higher for small-sized farms than for large-sized farms.
- Banks have decreased their presence in rural areas. They also have a limited interest in providing small loans, due to high transaction costs, which means that small-sized farms experience more problems in accessing finance. This attitude translates also into higher interest rates for farms compared to enterprises operating in other sectors.
- Microfinance institutions are found to be more open to financing the agriculture sector than banks, in particular for small-sized farms.
- Total outstanding loans for the agricultural, forestry and fishery sector was EUR 3.9 billion (RON 18.646 million) in November 2019.

2.3.1. Description of finance environment and funding availability

This analysis is based on data from national statistics and from an overview (including interviews) of the key financial institutions in Romania who offer financing to the agriculture sector.

2.3.1.1. Finance providers

Agricultural finance in Romania is provided by the following financial institutions:

- private and national banks (credit institutions);
- non-bank financial institutions (NBFIs);
- the Rural Credit Guarantee Fund (RCGF), which stimulates the interest of financial sector players in agriculture; and
- credit unions.

As of June 2019, the Romanian banking sector had 34 banks, including:

- 2 banks with the total or majority of their capital held by the Romanian state;
- 4 credit institutions with a majority of Romanian private capital;

- 21 banks with a majority of foreign capital; and
- 7 branches of foreign banks.

Almost 75% of the assets in the Romanian financial sector are held by banks.[41] Just 10 institutions hold more than 80% of the sector's assets.[42] The territorial coverage of the Romanian banking industry declined by one-third between 2008 and 2018, from 6 552 offices to 4 341 offices. Bank staff also dropped by a quarter in this period, from 71 622 employees to 53 737 employees.[43] As only 11.6% of bank offices (branches and agencies) remained located in rural areas, access to finance for many farmers worsened.[44]

The Romanian banking landscape consists of 14 banks that provide financial services to agriculture.[45] The main ones are considered to be:

- CEC Bank, a state-owned bank that is the dominant player in agriculture finance. It is the oldest Romanian bank and has the largest network in the territory. Its market share, in terms of total assets, was 6.5% as of end-2018.
- Transylvania Bank, a private local bank which, over the last few years, has increased its network of offices and diversified its product agriculture finance range (Section 2.3.1.2 contains further details). It is the largest bank in Romania (after taking over BankPost in 2018), with a market share of 16.5%.
- Patria Bank, a small private bank (1.0% market share) that, as part of its mission, aims to serve the rural sector through Patria Credit NBFI (a microcredit organisation).

Interviews suggest that the foreign-owned banks which dominate the Romanian market (with some of the largest banks including BCR (Erste), BRD (Société Générale), Unicredit, Raiffeisen, and ING) generally consider the agriculture sector as too risky. However, publically supported loan instruments, such as the PRSL, can increase their interest in funding Romanian agriculture. This is because a large part of the risk is taken by the EAFRD and the combination of grants further ensures the success of the project.

Non-bank financial institutions (NBFIs) play a particularly important role in agriculture finance. In addition to banks, there were 183 non-bank financial institutions (microcredit organisations) registered in the National Bank Register as of end 2018. 81.4% of them conduct 'multiple lending activities', with a focus on consumer lending and leasing. Some NBFIs are active in the agriculture sector, such as Patria NBFI, AgriCover NBFI, Good Bee NBFI, Mikro Kapital NBFI, and Vitas NBFI.

Generally, microfinance institutions are found to be more open to financing the agriculture sector (and especially small-sized farms) given that they have:

- adjusted credit analysis, with a focus on assessing farmers' repayment capacity and adapting their collateral requirements;
- adapted delivery channels and a higher presence in rural areas; and
- simplified credit procedures, with less bureaucracy and fewer documents required.

For small-sized farms located in the rural areas, credit unions are of critical importance. There are about 3 000 credit unions with about 3 million members in total. Credit unions cannot take deposits (and are not supervised by NBR) and are instead funded through members' social funds. They mainly offer working capital loans.[46]

41 Romanian Association of Banks, 2019.
42 National Bank of Romania, 2018, Financial Stability Report 2017.
43 Dino, Cornel: Trei grafice care dezvăluie cel mai bine cicatricile crizei de pe trupul industriei bancare ş i cum taxa pe lăcomie le poate retransforma în răni deschise, 25 February 2019, https://www.bankingnews.ro/retea-angajati-banci-taxa-lacomie.html.
44 Ministerului Agriculturii şi Dezvoltării Rurale, 2016, Evaluare ex-ante pentru implementarea de Instrumente Financiare în PNDR 2014-2020.
45 Those are: Banca Comerciala Romana, Banca Transilvania, BRD – Groupe Société Générale, UniCredit Bank, Raiffeisen Bank, CEC Bank, Alpha Bank, OTP Bank, Libra Internet Bank, Banca Comerciala Intesa Sanpaolo, Patria Bank, Credit Agricole Bank, Pro Credit Bank, Banca Centrala Cooperatista Creditcoop. Information on market shares in agriculture financing is not publicly available.
46 World Bank, 2018, Financial Sector Assessment Romania.

In addition, **the Rural Credit Guarantee Fund (RCGF)** NBFI was established in 1994 as a joint stock company. RCGF provides guarantees for farmers and agri-businesses and for both natural and legal persons. The shareholding consists of three commercial banks that have equal shares (BRD from Groupe Société Générale, Romanian Commercial Bank - BCR, and Raiffeisen Bank) and of the Romanian State through the Ministry of Agriculture and Rural Development Romania (MADR). The RCGF has funds of EUR 114 million (provided by MADR). So far, the RCGF has concluded agreements with 19 credit institutions and two NBFIs. More details on the RCGF's products can be found in the subsequent sections of this report.

2.3.1.2. Financial products

Romanian banks offer loans to farmers for both investment and working capital purposes. There are several types of loan products available to farmers. These range from working capital loans to investment loans of mixed purposes. Overall, the product offering of banks and NBFIs is quite comparable. The target group, however, differs; while banks tend to have a focus on large-sized farms, NMBFIs focus on small-sized farms. The detailed terms of the products are outlined in Table 3.

Table 3: Overview of financial products offered to farmers by banks

Type of Product	Purpose	Maturity	Interest Rates %	Currency	Collateral
Working Capital Loan / Credit Lines	Cash flow management for various agricultural activities: field crops, fruit trees, wine, livestock (poultry, sheep, goats, livestock) and beekeeping. Some banks require a minimum loan amount (e.g. EUR 7 000 for Raiffeisen Bank) or minimum land to be cultivated (e.g. minimum 100 ha for Banca Transilvania).	Short-term: 12-18 months.	12-20% p.a. for small-sized farms.[47] 10-15% p.a. for large-sized farms.	Mostly RON; sometimes EUR or USD.	Collateral mix: guarantees, land, buildings, guarantee funds, equipment, and future harvest.
Working capital loan in partnership with input suppliers (input credit / contract farming)[48]	Cash flow management. Banca Transilvania is providing loans of up to EUR 86 000 to farmers that have signed contracts with input suppliers (they are providing inputs and buy farmers' agricultural outputs).	Short-term: 12-18 months.	12-20% p.a. for small-sized farms. 10-15% p.a. for large-sized farms.	Mostly RON.	Contract with the buyer.
Investment Loans	Land acquisition, equipment, buildings construction or modernisation. Flexible repayment schedule, depending on the seasonality of activities. Some banks require a minimum loan amount to be lent (e.g. EUR 1 000, or RON 4 000) or minimum farm size (100 ha of cultivated land, or minimum 50 milking cows, 1 000 pigs, 50 000 items of poultry or 30 000 egg laying hen). Other banks set ceilings for the amount to be lent (maximum EUR 108 000 for Libra Internet Bank).	12-120 months. 6-36 months grace period is offered (vineyard, orchards).	15-25% p.a.	Usually in RON; sometimes EUR, USD.	Collateral mix.
Loans for pre-financing APIA (Agency for	Working capital required for the performance of the current activities, up to the moment APIA payments are made.		Variable, consisting of	RON. Loan amount is about	• Mortgage on the amounts to be received from APIA.

47 Interest rates vary tremendously and range between 12-15% (EaSI guarantee), 12-17% (Rural Guarantee fund) and 17-20% (farmer assets guarantee or crop).
48 Only 3 banks developed financing schemes in partnership with agricultural value chain actors: Banca Transilvania, Patria Bank and Banca Agricola.

Payments and Interventions in Agriculture) SAPS subsidies			ROBOR 6M + 1.95%-2.5%. Management fee of 0.35%-0.95% is charged.	80%-90% of the sum to be received from APIA for the single payment scheme, such as Single Area Payment Scheme (SAPS)/ RDP subsidies.	• Mortgage on the current accounts opened at the bank. • Surety contract signed by the entrepreneur/ representative of the individual enterprise/ family-owned business. • Guarantees issued by Guarantee Funds.

Source: Interviews and financial institutions' websites.

NBFIs also provide loans to agricultural producers. Their product offering is outlined in Table 4.

Table 4: Overview of financial products offered to farmers by NBFI

Type of Product	Purpose	Maturity	Interest Rates %	Currency	Collateral
Working Capital Loan	Cash flow management. Maximum loan amount EUR 20 900 (RON 100 000) (Vitas NBFI).	Up to 12 (Vitas NBFI) or 24 months (Patria Credit NBFI).	12-20% p.a.	RON	Up to a certain amount (EUR 6 270-12 540; RON 30 000-60 000, depending on institution). NBFIs do not require collateral (just a personal guarantor).
Mixed purpose	Cash flow management and investment (land acquisition, equipment, buildings construction or modernisation). Maximum loan amount EUR 12 540 (RON 60 000) (Patria Credit NBFI).	Up to 48 months (Patria Credit NBFI).	12-20% p.a.	RON	Up to a certain amount (EUR 6 270-12 540; RON 30 000-60 000, depending on the institution). NBFIs do not require collateral (just a personal guarantor).
Investment needs	Investment (land acquisition, equipment, buildings construction or modernisation). Maximum loan up to EUR 52 250 (RON 250 000) (Vitas NBFI).	Up to 60 months (Vitas NBFI) or 120 months (Micro Kapital NBFI).	15-25% p.a.	RON	Up to a certain amount (EUR 6 270-12 540; RON 30 000-60 000, depending on institution). NBFIs do not require collateral (just personal guarantor).

Source: Interviews and financial institutions' websites.

Value chain finance models exist, but play a limited role. As outlined in Table 3, Banca Transilvania, Patria Bank and Banca Agricola offer value chain financing. Against the provision of an off-take agreement between the farmer and a reputable input supplier, the farmer can receive a short-term working capital loan. The purpose of this arrangement is to overcome liquidity and collateral constraints on the side of the farmer. The bank assesses whether the farmer has the capacity to repay the loan (following their policies and procedures) and, if that is the case, the bank accepts the off-take agreement as collateral.

The RCGF provides guarantees to Romanian farmers and agribusinesses.[49] Its product offering includes guarantees for loans dedicated to:

- the financing of working capital;

49 A breakdown of guarantees in terms of farm categories and farming activities as well as number of agri-food enterprises cannot be presented. According to the interview with RCGF, participating banks do not keep such records.

- the purchase of agricultural land;
- the financing of investments in agriculture, without financing from the EAFRD/RDP; and
- the financing of investments of public and private beneficiaries of the EAFRD/RDP and approved of AFIR (Agenț ia pentru Finanț area Investiț iilor Rurale) for the advance payment.

RCGF can guarantee up to 80% of a loan being disbursed to private farmers and agri-enterprises (that need to comply with the SME definition), on a loan-by-loan basis. The maximum amount to be guaranteed cannot exceed EUR 2.5 million per beneficiary. The RCGF charges a fee of 1.6% of the guaranteed value of any agricultural activity or agribusiness (but the fee varies for working capital).[50]

Many requests for guarantees come from the banks providing co-financing loans for RDP investment measures. During the 2007-2013 programming period, the EAFRD managing authority (Ministry of Agriculture and Rural Development) launched its first ever EAFRD financial instrument (Guarantee Fund) and selected RGCF as Fund manager. The objective was to complement grant projects under the RDP as the legal basis was not allowing for EAFRD Financial instruments to provide stand-alone support.[51] In total, over EUR 3 000 guarantees were provided, amounting to EUR 835 million (RON 4 billion), which resulted in EUR 1.04 billion (RON 5 billion) being disbursed to beneficiaries.[52] Most of the applications came from the CEC Bank.

Small-sized farms have difficulties in accessing the public guarantees offered by RCGF.[53] Although RCGF guarantees can, in principle, be used for loans to small and medium-sized farms, this segment of the sector does not currently benefit sufficiently from this instrument. This is largely due to the fact that banks are often reluctant to finance small-sized farms independently from the availability of a public guarantee.

Banks generally appreciate the RCGF for its efficiency in both the analysis and default stage. However, some banks signalled that there is a substantial administrative work linked to the access to the guarantee. In addition, banks mentioned that the guarantee does not provide capital relief, according to NBR regulation. The entire loan value is subject to regulatory capital provisioning, even though a part of it benefits from RCGF guarantees.

The Romanian National Guarantee Fund for SMEs (FNGCIMM) is a state-owned company acting under the supervision of the central bank that has been providing guarantees to SMEs that lack collateral since 2002.[54] To date, FNGCIMM has concluded contracts with 26 financial institutions.[55] Its national network consists of four representative offices, four branches, and three affiliated Local Guarantee Funds, all of which provide information, support and advice to local SMEs.

FNGCIMM has a specific agriculture guarantee product. The product is issued at the request of the partner financing institution for approved financing, and is based on the analysis of the documents presented by the financier.

The eligible beneficiaries include Natural (farmers) or legal persons (commercial companies and agricultural associations established, according to Law no. 36/1991, natural persons authorised as agricultural producers, farmers and farmers' associations, established according to the law), who carry out activities in the crop/ livestock and aquaculture fields, respectively.

The beneficiary must meet the eligibility criteria of the financier, not have outstanding debts to the consolidated state or local budget, not be prohibited from issuing checks at the date of the guarantee application, not have outstanding credits or major incidents with promissory notes in the last 6 months prior to the date of the

50 For processing activities, the fee is 1.25-6.3%, depending on the rating of the applicant.
51 See also: *fi-compass*, 2015, Rural Credit Guarantee Fund Case Study, https://www.fi-compass.eu/sites/default/files/publications/case_study_rural_credit_guarantee_fund_romania_0.pdf.
52 FGCR, 2019, http://fgcr.ro/en/despre-noi/ .
53 RCGF guarantees are being provided to banks. Farmers submit their loan application to the financing institution. The financing institution analyses the credit documentation and establishes the repayment capacity of the borrower (it also verifies that the applicant cannot provide sufficient levels of collateral). The financing institution forwards the request for a guarantee to RCGF. RCGF analyses the documentation submitted and, within a maximum of 5 working days of receipt of the guarantee documentation, provides feedback to the financing institution. On the basis of the approval of RCGF, the financing institution shall sign the credit agreement with the farmer, with a view to drawing up and signing the guarantee/guarantee agreement issued.
54 FNGCIMM also acts as manager of various guarantee funds/schemes of the Ministry for Agriculture and Rural Development as well as state agent of the Ministry of Public Finance for a number of guarantee programs, such as the 'Prima Casa' program.
55 FNGCIMM, 2019, https://www.fngcimm.ro.

guarantee request, not be in economic difficulty, and, in the case of SME beneficiaries, appear in the records of APIA/ANPA as a farmer.

The FNGCIMM guarantee can cover up to 80% of the loan value and has a maximum value of EUR 2.5 million per beneficiary. It is issued at the request of the crediting Financial Institution. The guarantee can ensure the financing of working capital for agricultural production, investments in the agricultural and aquaculture fields, and the acquisition of agricultural land. Loans for the purchase of agricultural land can also be financed with the exception of lands privately owned by the state and administered by the State Domains Agency, until a cumulative ceiling of 750 ha is reached.

The guarantee fee starts from 1.1% annually, depending on the rating given by the financier and the value. The commission can be paid in instalments.

In the last few years, the usage of FNGCIMM has been decreasing. While operations had been growing tremendously prior to the 2012 crisis, guarantee requests reduced when the lending activities of the financial sector reduced. Banks also perceived the FNGCIMM as having a very bureaucratic approach and reported delays or refusals in processing payment requests. At the end of 2017, the leverage ratio was 1.1 versus a legal maximum of 7.[56] Specific information on the level of activity of FNGCIMM in the agriculture sector could not be found.

Romanian farmers can also benefit from the EU Competitiveness of Enterprises and SMEs (COSME) guarantees, if these are activated by banks (Table 5). The COSME Loan Guarantee Facility provides a capped portfolio guarantee for newly generated SME financing portfolios (commercial banks, promotional banks, guarantee societies, leasing companies, etc.) with a maximum guarantee rate of 50%, except for the production of and trade in tobacco and distilled alcoholic beverages, and related products. In Romania, as of the end of 2018, COSME had provided access to finance for 850 SMEs in the agriculture, forestry and fishing sectors[57] for a total of EUR 47.8 million (20.3 % of the total portfolio).

Additionally, the EU Employment and Social Innovation (EaSI) guarantee instrument is also, in principle, available for farmers. In Romania, as of the end of 2018, EaSI had provided access to finance for 992 SMEs in the agriculture, forestry and fishing sector for a total of EUR 24.1 million (37.7 % of the total portfolio).

Since 2017, an EAFRD instrument managed by the European Investment Fund (EIF) has been implemented, which is facilitating access to finance for the agriculture sector. As described under Section 2.2.1, the Portfolio Risk Sharing Loan (PRSL) credit facility, which involves risk sharing between the bank and the EIF, has a total budget of EUR 92.5 million.

Nearly all PRSL implementing banks (except for Unicredit bank, which advertises a range of financial products for agriculture but not a specific financial product for the program) have designed and advertised specific products for the program. They offer information to potential borrowers on the benefits of the EAFRD PRSL, as well as specific eligibility criteria for this program. A detailed analysis of the financial products created for PRLS by each implementing bank is depicted in Table 5.

56 World Bank, 2018, Financial Sector Assessment Program, Financial Sector Intermediation, Technical Note.

57 Including agri-food companies.

Table 5: Overview of bank products offered that benefit from the PRSL financial instrument

Financial product characteristics	BCR – Erste Bank	UniCredit Bank	Raiffeisen Bank	Libra Internet Bank	ProCredit Bank (PCB)
Main benefits compared to the other financial products	- The EIF guarantee is free; - Interest and commissions reduced by 70%. - Dedicated BCR specialists in corporate business centres.	- Short and long-term financing options, either to finance current expenses of the farm or to finance the acquisition of machinery, agricultural equipment, production lines or construction/modernisation of the farm. - Revolving or fixed term loans. - Provided in RON, EUR or USD.	- Loans with reduced guarantee requirements, for investments or working capital/current expenses.	- Those accessing the program benefit from 70% European financing and guarantee, with sources from the National Rural Development Program, without interest and guarantee fee for the 70% share.	- A partially subsidised interest rate, reduced by 50% compared to the standard level. - The need for partially subsidised guarantees, reduced by 50%, without any additional cost. - Lending period of a minimum of 12 months and a maximum of 10 years, depending on the purpose. - Support for business and professional financial advice services from PCB employees, specialised and dedicated client advisors.
Summary of financial product terms	Investment loans for investments compliant with the National RDP 2014-2020 sub-measures. Working capital loans for the financing of operations, if they are linked to an investment loan associated to the EIF guarantee. - Currency: RON.	Crop financing with flexible reimbursement schedules. Funding will cover the purchase of: seeds, insecticides, pesticides, salaries, harvest and transport cost, storage cost, etc. Stock financing to finance part of grain and oilseed stocks for trading activities, feeding resources for livestock farms or raw	- Maximum amount granted: EUR 968 000/ RON 4 645 000. - Currency: RON. - Duration: minimum 12 months, maximum 120 months. - Guarantees: 50% of the loan amount represents the guarantee of the EIF; – other	- Maximum value of the loan: RON 2 000 000 (EUR 416 000). - Financing and guarantee of 70% from the EIF. - No guarantee fee.	Financing of investments and working capital, including the VAT part related to them: - Credit facilities available in RON or EUR; - Grace period: seasonal instalments; - Maximum amount granted EUR 1 000 000/ RON 4 600 000; - If loans are granted for the co-financing of RDP investment support, the loan amount may be up to

	- Maximum loan amount: ○ for investment loans: EUR 1 000 000 / RON 4 600 000; ○ for working capital loan: EUR 200 000 in equivalent RON or 30% of the value of the eligible working capital expenses of the investment project, whichever is higher. - Interest: variable. - Maturity: minimum 1 year, maximum 10 years, depending on the type of loan. - Collateral: in addition to the EIF guarantee (70% of the loan amount), other guarantees (real estate, furniture, personal, risk-free guarantees) may be requested on a case-by-case basis. - Grace period: variable.	materials for processing activities. - Maturity: maximum 12 months. - Disbursement and repayment: according to financing needs. Agricultural land financing: - Maturity: long term loan, the maximum financing period will be determined after the analysis; - Client contribution will be a minimum of 15% of the V.A.T. free amount + the V.A.T of the transaction. Agricultural Projects Financing: - Bridge loan for the grant value to be received from the authorities; - No material guarantees required for acquisition of equipment/ machinery/production lines with a value up to EUR 218 000 / RON 1 000 000; - Investment loan for meeting the RDP investment support co-financing value; and - Loan for the non-eligible expenses from the project.	guarantees, according to the bank's internal policies (for example, the asset financed, personal guarantees).		EUR 4 600 000 / RON 21 000 000.

Eligibility criteria for PRLS's beneficiaries	- Entities that meet the requirements corresponding to the sub-measures of the National RDP 2014-2020: • sub-measure 4.1 and 4.1a: farmers, agricultural companies/cooperatives, producer groups in the vegetable, livestock, fruit and vegetable fields; • sub-measure 4.2 and 4.2a: food processing companies, except bakery, confectionery; • sub-measure 6.4: micro-enterprises and small-sized enterprises in rural areas with non-agricultural production and services.	- Financing solutions adapted specifically to farm needs.	- Main activity of the beneficiary has to be in: • primary agriculture, including fruit growing; • processing of agricultural products and related marketing activities, including in the fruit field; • creation and development of non-agricultural activities in rural areas.	- Entities that meet the requirements corresponding to the sub-measures of the National RDP 2014-2020. - Entities that pursue one of the following activities: • Investments in agricultural holdings. • Investments in processing/ marketing of agricultural products. • Investments in fruit farms. • Investments in the processing/marketing of agricultural products in the fruit sector. • Investments in the creation and development of micro and small-sized non-agricultural enterprises.	- Small-sized enterprises located in rural areas and operating in the field of production or provision of services and small and medium-sized enterprises with activity in agriculture or fruit growing or processing and marketing of agricultural products.

Source: Author's research and banks' websites.

2.3.1.3. Description of the financing market

As a result of the global financial crisis (mid 2007 to early 2009), lending to SMEs and to rural areas contracted sharply. This is because most foreign-owned banks had started to focus on the household segment, including both consumer and housing loans. Given the high non-performing loan ratios in the SME sector, loans to micro-enterprises experienced a Compound Annual Growth Rate of -8.4% in the period 2008-2016, while loans to SMEs grew more slowly than GDP.[58]

The financial sector tends to consider agricultural finance as too risky and costly. Historically, Romanian financial institutions have been focussing on the urban environment, with their main objective being the financing of trade and industry. While the partnership between the banks and RGCF have contributed to facilitating farmers' access to credit, financial institutions still tend to focus on other client segments, such as industry and services. However, given increased competition in the urban market (with many urban enterprises being able to choose from a number of financial service providers), the financial sector has begun to look at increasing their financing of agricultural activities.

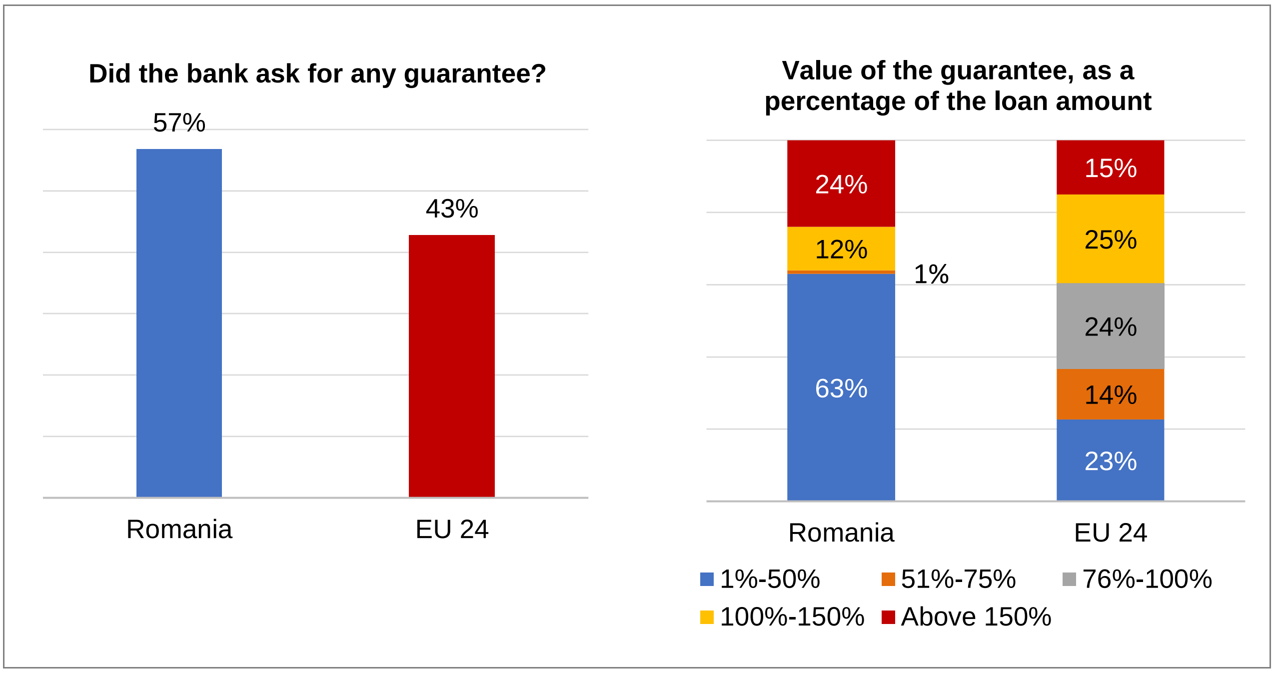
There are high transaction costs to providing small loans in dispersed rural areas. The Romanian agriculture sector is characterised by small farmers with modest financial needs. Satisfying those needs impacts banks' operational costs (especially cost of sales). In general, fixed cost for the application assessment have higher impact on loans with lower amounts, reducing banks' margin and interest.

The majority of financial sector interviewees do not focus on funding agriculture. Therefore, they often lack an overall strategy on how to approach the sector (i.e. what agricultural products to finance, in what regions to finance agriculture, what financial products are needed by the agriculture sector, etc.). Consequently, many do not have special agricultural loan products (e.g. that consider the seasonality of agriculture) nor associated policies and procedures. Financial institutions' staff lack a general understanding of agriculture.

Collateral requirements are relatively high for agriculture loans, as banks tend to focus on collateral based lending (as opposed to cash flow based lending) (Figure 17). For 24% of Romanian respondents, the collateral value was above 150% of the loan amount. This compares to only 15% of respondents for the EU 24 average. The high collateral requirements make access to credit particularly difficult for young farmers and new entrants.[59]

58 World Bank, 2018, Financial Sector Assessment Romania.
59 Interviews, 2019.

Figure 17: Information related to guarantees requested by Romanian agriculture producers in 2017



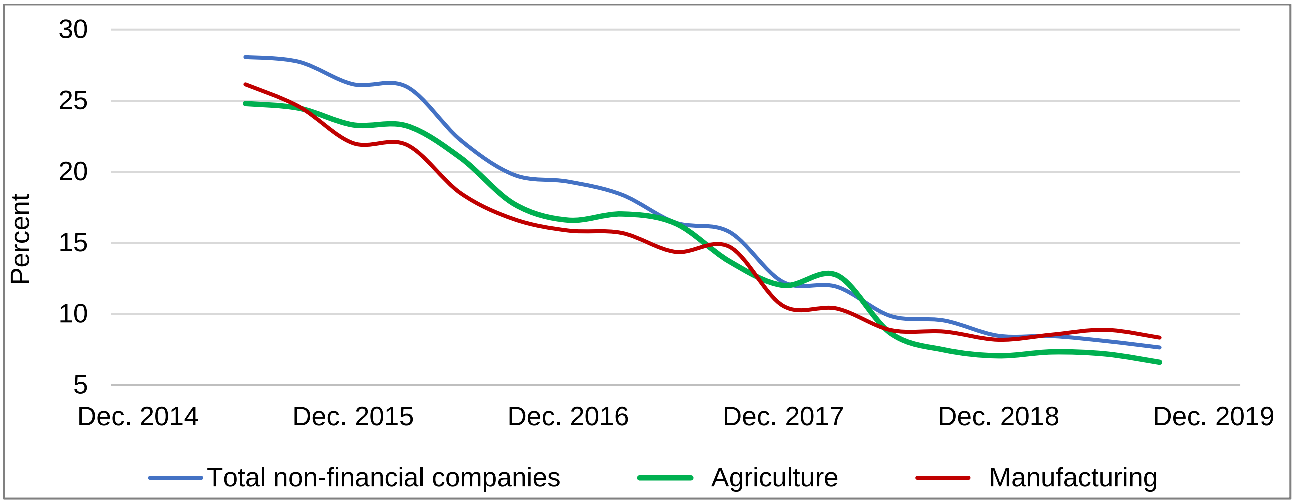
Source: fi-compass survey.

The interest rates charged for agricultural loans are higher than for other sectors. The average interest rates for local currency denominated loans has been constantly decreasing after May 2008. While in 2008 the average interest rate for new loans was above 20% per annum, it was down to 7.5% in January 2019.[60] In contrast, the average interest rates for agricultural loans are still ranging between 12% and 20% per annum. Agriculture loans are more expensive across all products due to the higher costs and risks involved (according to the banks interviewed), despite the decreasing level of non-performing loans (NPLs). Interest rates within the agriculture segment also vary widely, with young farmers having to pay around 25% p.a., compared to only 6% for farmers over 40 years.

The credit risk of farmers is declining, and the performance of agricultural loans is improving. As of September 2019, the NPLs rate for agriculture stood at 6.6%,[61] compared to 24.5% in September 2015 (Figure *18*). The high levels of NPLs were originally caused by the economic effects of the financial crisis that lasted from 2009 to 2011. A large part of the NPL portfolio was considered uncollectable and thus from 2014 onwards, financial institutions wrote them off. Some portfolios were also sold to specialised financial debt recovery companies. In 2015, the calculation methodology of 'the non-performing loan ratio' was adjusted to comply with the technical standards for reporting forborne and non-performing exposures issued by the European Banking Authority (EBA)62 (implemented in the national legislation in the FINREP reports at solo level). It is important to note that the NPL rate for agriculture is below the average of all other sectors, except for services.

60 IMF, August 2019, Article IV Consultations Romania, IMF Country Report No. 19/278.
61 National Bank of Romania, 2017, Financial Stability Report.
62 Commission Implementing Regulation (EU) 2015/227 of 9 January 2015 amending Implementing Regulation (EU) No 680/2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council.

Figure 18: Non-performing loans in Romania, by sector, 2014 - 2019



Source: NBR, 2019.[63]

Similar observations were made in the EAFRD ex-ante assessment for a financial instrument from 2014-2020. The report concluded that, overall, financial institutions are very cautious in financing the agriculture sector, as banks consider the sector risky. Historically, banks have instead had a focus on financing trade and industry. Service provision also often focusses on the urban areas as transactions costs are high to finance small farmers with low demand for loans. The ex-ante assessment also outlined that farmers cannot provide business records or sufficient levels of guarantees, which leads to their loan applications being rejected.[64]

2.3.2. Analysis of the supply of finance

The total outstanding loans for the agricultural, forestry and fishery sector was EUR 3.9 billion (RON 18.7 billion) in November 2019. This was a 47% increase compared to 2015 (total outstanding loans in 2015 were EUR 2.7 billion). Total bank lending in Romania also grew during the same period, with the total value of bank loans increasing by 18% (from EUR 69.4 billion to EUR 77.8 billion). The higher growth in agricultural finance, compared to other sectors, confirms the increasing banks' interest in the sector, despite the still cautious approach described in the previous section. The agriculture sector financing now represents 4.3% of the total financing provided by Romanian banks (which is close to agriculture's 4.8% share of Romania's GVA).[65]

NBFIs play a crucial role in providing access to finance, particularly for small and medium-sized farms. While in absolute terms, NBFI lending to agriculture is only 55% of bank lending, the share of agriculture in the portfolios of NBFIs ranged between 17% and 21%. This indicates the strong presence and importance of NBFIs in the supply of finance to agriculture. During the 2015-2018 period, the value of loans disbursed by NBFIs to agricultural, forestry and fishery sector increased by 81% (from EUR 1.1 billion to EUR 1.8 billion),[66] while their total value of loans rose by 48%.

The various financial instruments introduced in Romania have contributed to the overall bankability of the agriculture sector, particularly for small-sized farms and young farmers. However, a significant market gap is persisting, and the needs of many farms are still unmet.

63 National Bank of Romania, https://www.bnr.ro/NBR's-role-3275.aspx.
64 Ministerului Agriculturii şi Dezvoltării Rurale, 2016, Evaluare ex-ante pentru implementarea de Instrumente Financiare în PNDR 2014-2020.
65 Author's calculations based on National Bank of Romania figures.
66 It should be mentioned that the overall lending figures remain relatively small. The increased attention of NBFIs to the sector has resulted in this strong growth.

2.4. Financing gap in the agriculture sector

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

Key elements of the finance gap in the Romanian agriculture sector
• The total financing gap for the Romanian agriculture sector was estimated to be between EUR 2.3 billion and EUR 5.3 billion. • The financing gap mainly concerns small-sized farms and long-term loans. • For loans with a maturity of less than 18 months, the gap is comparatively small, as short-term lending is often provided by private individuals or input suppliers. • The key drivers of the financing gap are (i) the low economic margins of many farms, which leads banks to doubt their repayment capacity, (ii) the lack of business management capacity among many farm managers, including financial planning, and (iii) farmers' lack of collateral. • Constraints also arise from the financial sector's lack of understanding of the agriculture sector and the high transaction costs for providing loans of limited amount to a large number of small-sized farms. • Small and very small-sized farms have major difficulties in accessing finance. • About one third of the financing gap might be attributed to young farmers. • While the various financial instruments introduced in Romania have contributed to the overall bankability of the agriculture sector, farmers still have additional financing needs, which might justify further actions.

This section presents an estimate of the total value of unmet financing needs of financially viable agricultural enterprises, defined as the 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 firms 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 Romanian farms and statistics from Eurostat (see Annex A. 4 for more information). The methodology used for calculating the gap is described in Annex A. 3.

The financing gap arises from unmet financing demand from economically viable farms[67]. As explained in section 2.2, the unmet demand for finance includes:

(i) lending applied for but not obtained; or
(ii) a lending offer refused by the potential borrower; and
(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 boundary:

67 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 **lower bound** gap is calculated under the hypothesis that only enterprises which reported a stable (non-negative) 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 (non-negative) turnover growth can be considered as viable.

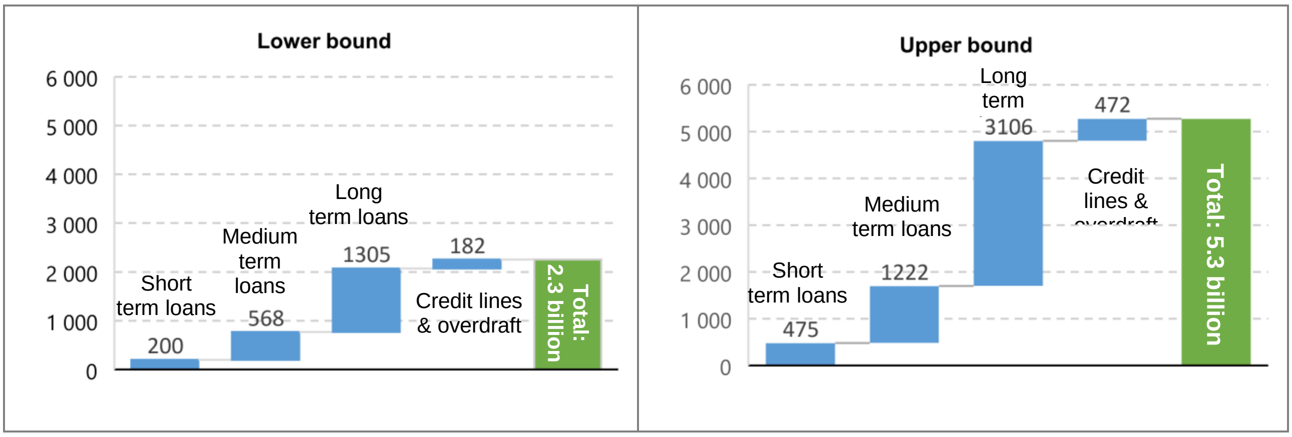
The financing gap for the Romanian primary agriculture sector is estimated to be between EUR 2.3 billion and EUR 5.3 billion, and almost exclusively concerns small-sized farms (Table 6*:* and Figure 19). The type of loans for which the gap is the largest are long-term loans. This is not surprising given that small-sized farms need to make substantial investments to commercialise their operations, such as investments into irrigation or machinery and equipment, and because banks require collateral, such as land and buildings, that small-sized farms as well as young farmers and new entrants lack. Short-term lending is often provided by private individuals or input suppliers, which is why the gap for loans with a maturity of less than 18 months is comparatively small.

Table 6: Financing gap by farm size in the agriculture sector in 2017, EUR million

		Total	Short-term Loans	Medium-term Loans	Long-term Loans	Credit lines/ bank overdraft
Upper bound	Small-sized farms	**5 007**	444	1 165	2 967	432
	Medium-sized farms	**123**	13	25	74	11
	Large-sized farms	**146**	19	32	66	29
	Total	**5 275**	**475**	**1 122**	**3 106**	**472**
Lower bound	Small-sized farms	**2 141**	186	541	1 246	167
	Medium-sized farms	**52**	5	12	31	4
	Large-sized farms	**62**	8	15	28	11
	Total	**2 255**	**200**	**568**	**1 305**	**183**

Source: fi-compass survey, and project calculations.

Figure 19: Financing gap by product in the agriculture sector in 2017, EUR million



Source: fi-compass survey and project calculations.

The ex-ante assessment for the 2014-2020 period concluded that the gap for the agriculture sector was about EUR 2.1 billion in 2015 (while the remaining gap for non-agriculture sectors in rural areas was EUR 0.2 billion).[68]

Small-sized farms face by far the highest levels of rejection and are the most discouraged from applying for finance. In Romania, 96% of all viable farms with unmet demand are small.[69] This unmet demand is predominantly caused by the farms' challenges in business planning and farm management as well as their lack of collateral (particularly for medium and long-term loans). However, there is also a lack of understanding, particularly in terms of agricultural cycles and farm cash flows, on the side of financial institutions. The overall fragmentation of the Romanian agriculture sector, and the resulting high transaction costs related to the provision of loans of limited amount to small-sized farms is also a constraint.

The low unmet demand for large-sized farms on the contrary, is due to the fact that they tend to have comprehensive business plans, financial and farm management skills and experience, and are well integrated into value chains. Many also have diversified production, therefore minimising any price, market or weather risks. They also have better access to collateral. NBFIs seem to be in a better position to serve small-sized farms, with more appropriate tools and a better understanding of the sector.

Unmet demand for finance is very high for young farmers.[70] Importantly, **out of the total number of farmers who were rejected for a loan, 87% were young farmers**. The same trend is seen for the percentage of young farmers discouraged in applying for a loan, with the rate being much higher for young farmers (25%) compared to farmers over 40 years (6%). The total financing gap for young farmers is EUR 1 069 million, which represents 32% of the total gap.

The interviews conducted reflect the need for additional financial resources in all agricultural sub-sectors. Interviewees also confirmed that the drivers of the gap include:

- **Poor repayment capacity**: particularly for small-sized farms that do not generate sufficient profits to repay a loan. The repayment capacity is further negatively impacted by the comparatively high interest rate levels.
- Uncertainty surrounding the management capacity of farmers and the **absence of supporting business plans or cash-flow projections.**
- **Lack of collateral**: farmers often do not have sufficient assets to meet the collateral and debt service cover ratio requirements of financial institutions.
- **Financial institutions are reducing their presence in rural areas**: as they do not focus on farmers, financial institutions often do not provide services in rural areas.

68 The estimation of the financing deficit for the enterprises in the processing and marketing sector, including also the Romanian agricultural holdings and the non-agricultural SMEs in the rural area, was made based on the methodology used in similar analyses (Ex-ante evaluation of the EU Initiative for SMEs, 2014). In order to estimate the financing deficit, the number of viable economic entities that did not obtain financing was multiplied by the value of the average credit in the respective sector. Source: MADR, 2016, Evaluare ex-ante pentru implementarea de Instrumente Financiare în PNDR 2014-2020.

69 The breakdown of rejected or discouraged farms which are financially viable was determined using the *fi-compass* survey results by multiplying the share of unmet demand for each loan maturity category by the number of farms per farm-size category.

70 The young and old farmer ratios (as a % of total population) are derived from the results of the *fi-compass* survey 2018.

2.5. Conclusions

This study gives a clear insight into agriculture financing in Romania, by providing a better understanding of investment drivers, financing demand and supply, financing difficulties, and the existing financing gap within the sector.

The agriculture sector plays an important role in Romania's economy. It contributes 4.8% to the country's GVA and it is a major source of employment (20% of the working population), income and economic activity in rural areas. However, in recent years, agricultural output has stagnated. This is also reflected in the decreasing levels of investment in the sector, with GFCF declining in absolute terms and as a percentage of agriculture's GVA.

The three **main drivers of demand for finance in the Romanian agriculture sector are:**

(i) Investment needs for modern agricultural production technology. This includes medium and long-term finance for equipment, infrastructure and technical facilities, as well as developing on-farm processing and value-added agricultural products.

(ii) Expansion of plantations (orchards, vineyards etc.) that require high investments, which farmers need to finance.

(iii) Working capital to cover seasonal input expenses for seeds, fertilisers, labour, etc.

Romanian farmers often rely on private lending for their short-term needs. The value of private financing in Romania has been estimated at EUR 947 million. One of the causes of the low usage of formal financial institutions are the low financial literacy levels of farmers, particularly among small-sized farms.

Financial institutions play a role in financing longer term investments, but generally focus on medium and large-sized farms. In general, banks consider the agriculture sector as too risky and believe that it is too expensive to serve numerous small-sized farms that are dispersed across the entire country and request normally loans of limited amount. However, NBFIs finance farms and have dedicated agricultural finance experience and skills and are a more accessible source for small-sized farms.

CAP and the financial instruments funded from the EAFRD stimulate positively the investment behaviour of farmers. The EAFRD Portfolio Risk Sharing Loan Fund 2014 - 2020 is expected to originate at least EUR 160 million of new loans and EUR 36 million in new loans is already achieved. Farmers can co-finance RDP grants for agricultural and non-agricultural rural investments or can carry out investments supported by the PRSL on a stand-alone basis.

Two other credit guarantee funds are operating in Romania, addressing the issue of lack of collateral on the side of the borrower. Both, the Rural Credit Guarantee Fund as well as the Romanian National Guarantee Fund for SMEs, target the agriculture sector.

A financing gap of between EUR 2.3 billion and EUR 5.3 billion has been identified for Romania. The gap is largest for small-sized farms, which lack access to finance for their investment needs.

Small-sized farms face by far the greatest levels of rejection and are the most discouraged from applying for finance. 96% of all viable farms with unmet demand are small-sized enterprises with less than 20 ha of UAA. The total financing gap for young farmers adds up to EUR 1 069 million, which represents 32% of the total gap.

The key drivers of the financing gap are the low economic margins of many farms, which reduces their repayment capacity and increases banks' risk perception. The lack of collateral also represents a significant constraint, together with the lack of business management capacity among many farm managers (including financial planning).

The dimension of the gap and the several identified constraints suggest that further policy actions related to financial instruments might be considered:

- **Follow up of the implementation of the Portfolio Risk Sharing Loan (PRSL)**. It is believed that the PRSL will support farmers in accessing finance, reducing the high interest rates for agriculture loans. However, given the dimension of the identified gap and the budget of the instrument, it is unlikely that the instrument will be able to bring the market to normal functionality by the end of the current programming period. At a later stage, a review of the current set-up should be done to verify:
    - the adequacy of the available fund capital;
    - the concrete ability to address the constraints of young farmers and small-sized enterprises, which according to this analysis are the more constrained segments;
    - the opportunities offered by the new legal framework, such as the easier combination of financial instruments and grant support or the possibility to finance the purchase of land for young farmers, and how this could be embedded in any future financial instrument;
    - working capital finance;
    - risk coverage, and
    - performance aspects, including leverage.
- **Assess the current public credit guarantee offering**. Since lack of collateral is still reported to be a significant market constraint, the currently available guarantee instruments might be reviewed in order to verify their ability to improve market functionality. Based on the interviews conducted for the study for example, the adequacy of the available budget, the administrative procedures, the ability to concretely target small-sized enterprises and the impact on bank's regulatory capital requirements might be analysed, and where necessary, improved or eased for achieving higher impact on the market.
- **Designing and implementing further specific measures to target small-sized farms**. Considering the high share of farmers requesting finance from private individuals, a specific instrument for microfinance could be considered. This instrument might be more effective in addressing the gap for small-sized enterprises, considering the lack of interest and the reluctance due to high transactions cost which have been reported by banks interviewed for this study. The existing NBFIs that already have a track-record in financing small-sized farms might be a well-suited implementing partner. Also in this case, the possibility to combine the EAFRD grant support with financial instruments might prove useful.
- **Technical support could be provided to farmers,** with the overall goal of strengthening their financial literacy and business planning capacity. This will increase the chances of their application for finance being approved.
- **Capacity building dedicated to financial intermediaries** might increase bank's level of knowledge in the sector, which, according to this analysis, is considered insufficient.

3. PART II: AGRI-FOOD SECTOR

3.1. Market analysis

Key elements of the Romanian agri-food sector
• In 2018, the Romanian agri-food sector comprised of 9 950 businesses, plus an estimated 5 000 individual enterprises.[71] Approximately two-thirds of the businesses (70.8%) were micro-enterprises of less than 10 employees, while only 1.3% were large-sized enterprises of more than 250 employees. • The sector employed 185 370 persons in 2018, accounting for 15.4% of the total employment in the manufacturing sector. • The main sub-sectors are meat processing (23.2% of total sector turnover), followed by beverages (22.6%), bakery products (13.2%), dairy products (8.6%) and oils and fats (7.9%). • Total turnover in 2018 was EUR 13.5 billion, representing 14.5% of the total manufacturing sector turnover. The GVA in 2017 was EUR 2.136 billion, representing 11.4% of the manufacturing sector, and slightly below the EU 28 average of 12.7%.[72] • Romanian exports of food products increased from EUR 2.4 billion in 2010 to EUR 5.1 billion in 2018. • However, as Romania has continued to import higher valued processed foods, its trade deficit for manufacture of food and beverage has also widened and stood at EUR 1 billion in 2017.

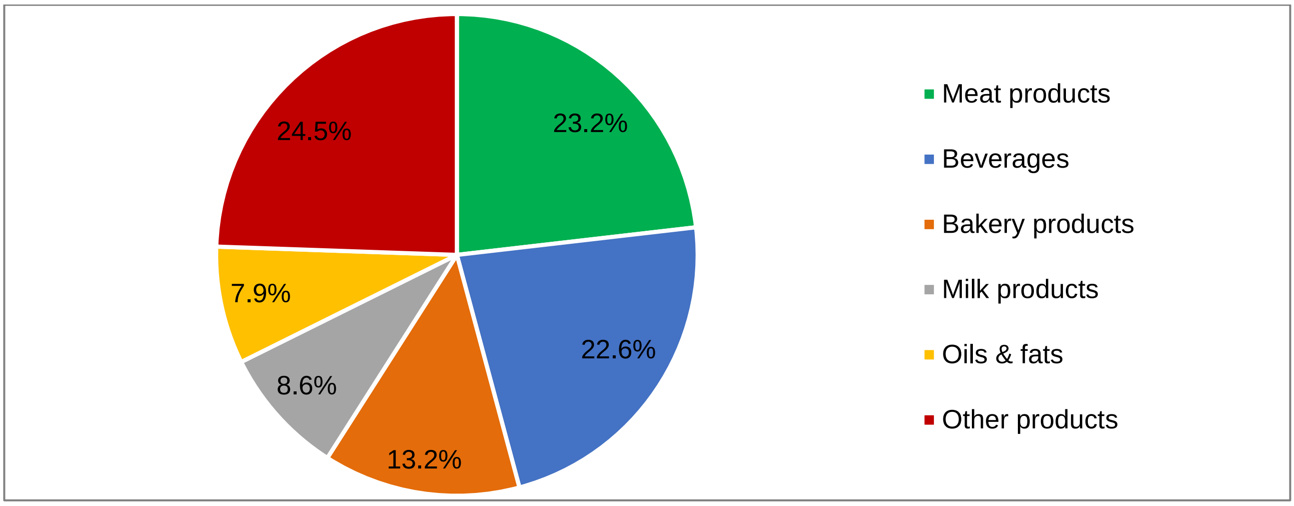
Agri-food manufacturing is a major contributor to the Romanian economy in terms of turnover, employment and value added. In 2018, the sector comprised of 9 950 businesses (9 251 in food industry, 686 in beverage industry, and 13 in tobacco processing), with 185 370 employed persons. It represents 15.4% of total employment in the manufacturing sector. The total turnover was EUR 13.5 billion, which represented 14.5% of the manufacturing sector's total turnover.

The sector is dominated by micro-enterprises with under 10 employees, who accounted for 70.8% of all firms in 2017. This was followed by small-sized enterprises with 10-49 employees (22.1%), medium-sized enterprises with 50-249 employees (5.7%), and large-sized enterprises with over 250 employees (1.3%). However, most of the value added is produced by large-sized enterprises. Large-sized enterprises accounted for 61.8% of total value in 2017, followed by medium (21.3%), small (13.9%) and micro-enterprises (3.0%).

Within the agri-food sector, meat processing is the largest sub-sector, accounting for 23.2% of total output in 2017. However, its share is declining, and its gross operating margin has been negative since 2015. Beverages is the second largest sub-sector, accounting for 22.6% of total output, followed by bakery products (13.2%), milk products (8.6%) and oil and fats (7.9%) (Figure 20).

71 All the figures in this section: Eurostat, 2019, unless otherwise mentioned.
72 2018 figures not available yet.

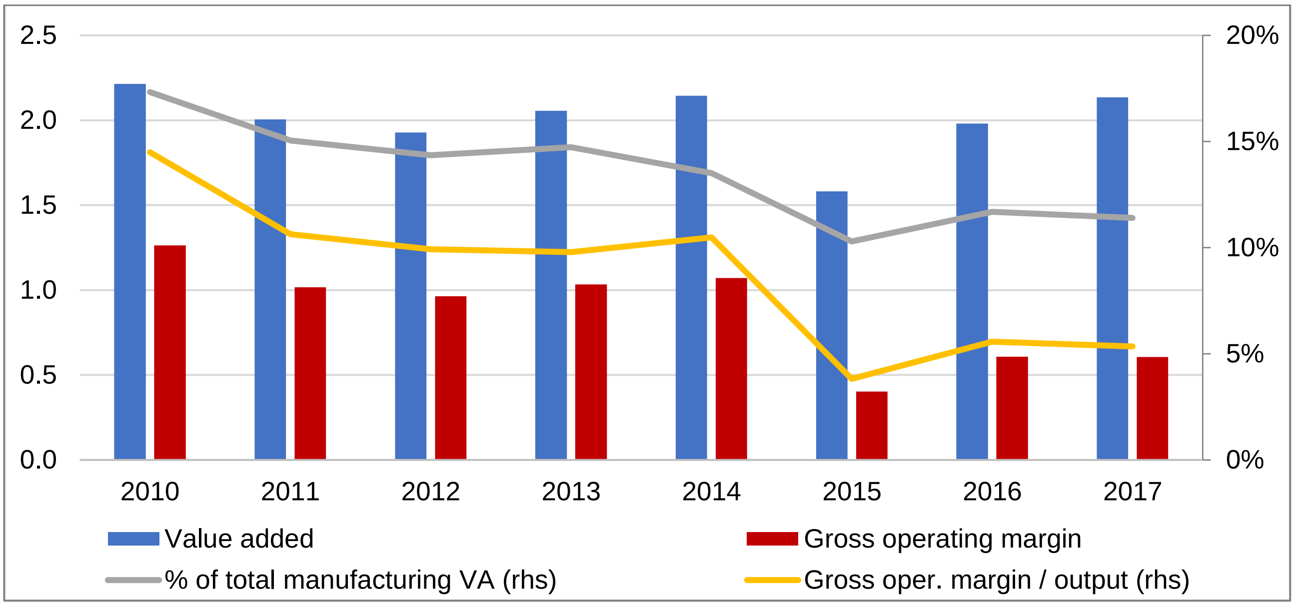
Figure 20: Structure of the output of the Romanian agri-food sector, 2017



Source: Eurostat, 2019.

As a whole, the Romanian agri-food sector is in poor financial shape (Figure 21). In 2017, the sector achieved a GVA at factor cost of EUR 2.1 billion. While it represents 11.4% of the manufacturing sector (similarly to the EU 28 average of 12.7%), this share has declined since 2010, when it represented 17.3%. Its value added is stagnating, and its gross operating margin ratio feel from 14.5% in 2010 to 5.3% in 2017. In addition, 85% of this gross operating margin is now concentrated in the beverages and tobacco sub-sectors. Other important sub-sectors, such as meat processing (dominated by large-sized enterprises) and bakery products (mainly small and medium-sized enterprises) have registered negative margins since 2015. In addition, productivity is low in most sub-sectors and uncompetitive overall.[73]

Figure 21: Selected financial indicators of the Romanian agri-food industry, EUR billion



Source: Eurostat, 2019.

73 Productivity was EUR 9 800 per person employed.

Nevertheless, since EU accession in 2007, the share of agri-food exports in Romania's total exports has more than doubled. Most of these agri-food exports (58% by value) are destined for the EU market. In 2016, more than 70% of Romania's agri-food exports were lower value primary products, such as cereals, maize, rapeseed and sunflower. At the same time, there has been a long-term parallel increase in agri-food imports, especially of higher value fresh and processed products such as horticulture and dairy. Romanian exports are performing better in non-EU markets, where a positive trade balance has been observed since 2010. However, the sector's dependence on individual markets (e.g. Japan, Moldova and Turkey[74]) shows its vulnerability. The domestic food market is characterised by the rapid growth of modern retail outlets, with the total number of hypermarkets, supermarkets and discount stores increasing from 498 in 2009 to 1 964 in 2017.

Romania has a EUR 1 billion trade deficit for food and beverage products.[75] Although Romanian exports of food and beverage products have constantly been increasing and stood at EUR 1.2 billion in 2017, food imports have been growing even faster, especially since 2015. Finally, and although there is no specific figure related to the agri-food industry, R&D is particularly low in Romania. According to an EIB study,[76] Romanian companies rank last in terms of R&D intensity compared to their European peers.

74 The three mentioned countries were the most important outside EU28 markets in 2018 according to WITS statistics https://wits.worldbank.org/CountryProfile/en/Country/ROM/Year/LTST/TradeFlow/Export/Partner/by-country/Product/16-24_FoodProd.

75 Eurostat, 2019.

76 European Investment Bank, European Investment Report 2018/2019.

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 the Agri-food survey results of 150 firms, as well as interviews with key stakeholders in the agri-food sector, combined with national statistics.

Key elements on finance demand for the Romanian the agri-food sector

- Measuring GFCF to GVA shows that investment levels were 39.4% of value added in 2017, (compared to 16.5% for the EU 28 average in 2016), although this seems to be mostly due to the low value-added of the sector.
- The main drivers of investments are the need to invest in new machinery, equipment or facilities, and new product development.
- The use of bank loans is higher for investments that benefit from EAFRD investment support measures.
- The level of firms discouraged from applying for bank loans is twice as high in Romania compared to the EU 24 average level. Many Romanian agri-food enterprises have a fear of possible loan rejection and thus do not apply for finance.
- Every fourth loan application from the agri-food sector was rejected by a Romanian financial institution.
- Rejections are mostly due to agri-food enterprises lacking collateral. However, rejections are also driven by the sector’s high risk, due to low profitability and lack of financial literacy among smaller enterprises. The lack of sector knowledge on the side of financial institutions is also a reason.
- Start-ups and new entrants face particular difficulties in accessing finance, given their lack of collateral and credit history.

3.2.1. Drivers of the demand for finance

While the Romanian agri-food sector is lacking competitiveness, investments have been stagnating. Between 2010 and 2014, investments were between EUR 600 and EUR 700 million per year, before falling to EUR 477 million in 2015.[77] However, they have rebounded to above EUR 800 million since 2016. The 2015 drop can be explained by the fact that foreign direct investment fell dramatically in 2015 (down 64% compared to 2009). [78] In addition, the availability of raw materials contracted and the consequent higher purchasing costs meant the companies' available financial resources fell, with gross operating surplus falling from EUR 1.1 billion in 2014 to EUR 400 million in 2015.

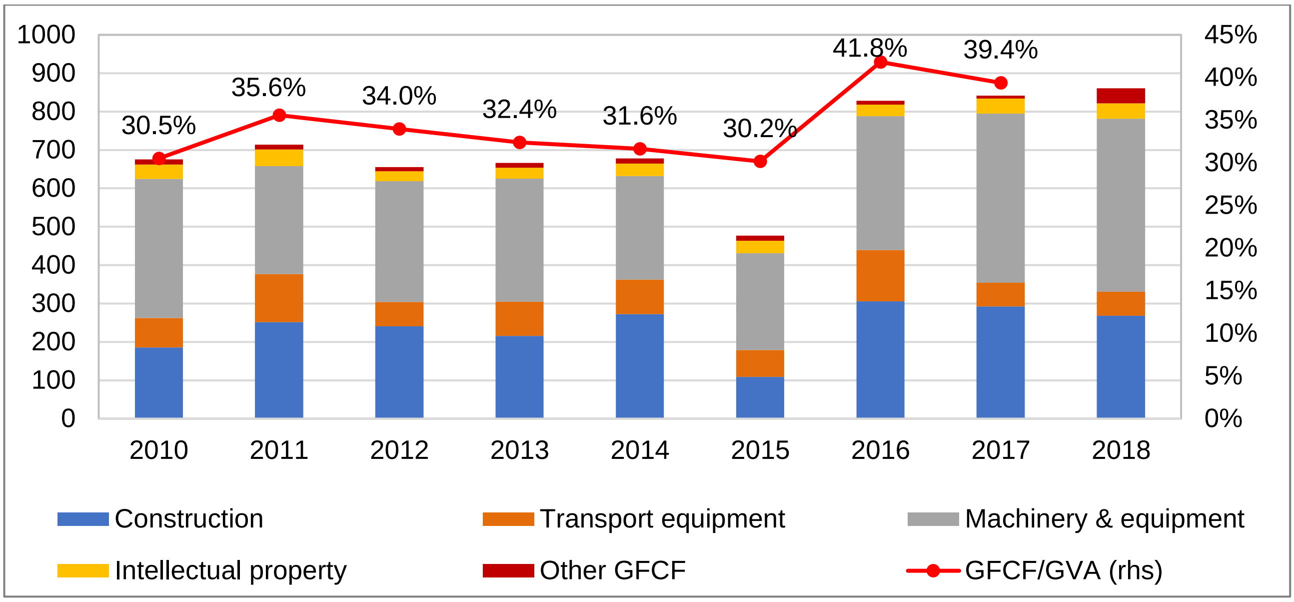
Still, the food and beverages sector's investment rate (measured as the ratio of GFCF to GVA) is much higher in Romania than for the EU 28 average. Romania had an investment rate of 39.4% in 2017, compared to 17% for the EU 28. However, this ratio is high in Romania mostly due to the low value added. The ratio of GFCF to turnover might be a more suitable indicator, and even though Romania remains above EU 28 average, the difference is much smaller: 7.1% for Romania and 5.5% for EU average. Nevertheless, as mentioned above, a rebound in absolute figures has been observed since 2016, which is a very positive development.

The main component of GFCF is investment in machinery and equipment, with a total of 49% for the 2016-2018 period (Figure 22). This is followed by investments in buildings (34.3%) and transport equipment (10.2%).

77 Source for all the figures on investment: Eurostat, 2019.

78 Gabriela Anghelache & Mirela Panait, December 2016, Analysis of the evolution of capital investment in Romania, Romanian Statistical Review Supplement, Romanian Statistical Review, vol. 64(12), pages 44-54.

Figure 22: Gross Fixed Capital Formation in the Romanian agri-food sector 2010 - 2018[79], EUR million



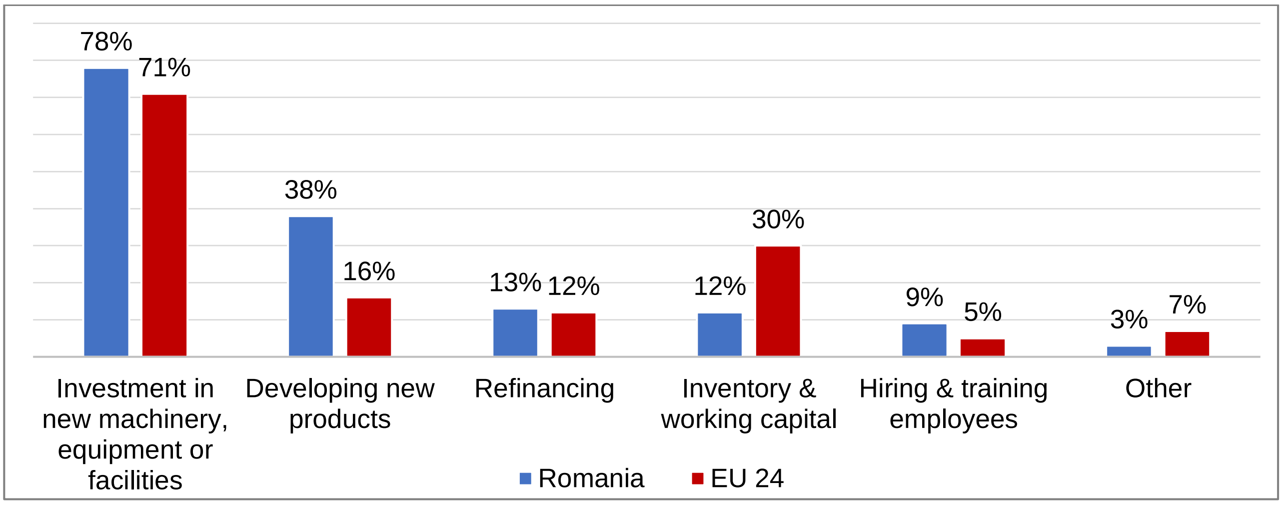
Source: Eurostat, 2019.

Based on the findings of the Agri-food survey, the interviews and focus groups, **the demand for finance in the Romanian agri-food sector is mainly driven by**:

- the need to invest in new machinery, equipment or facilities and
- new product development.

According to the Agri-food survey, 78% of respondents purchased machinery and equipment (including transport equipment) and financed the construction of facilities (Figure 23). The need to borrow money for the development of new products was twice as high as the EU 24 average (38% of total applicants, compared to 16%, respectively). Other purposes of borrowing in Romania included refinancing other loans (13% of all applicants), working capital (12%), and hiring and training employees (9%).

Figure 23: Purpose of bank loans in the agri-food sector in 2018



Source: Agri-food survey.

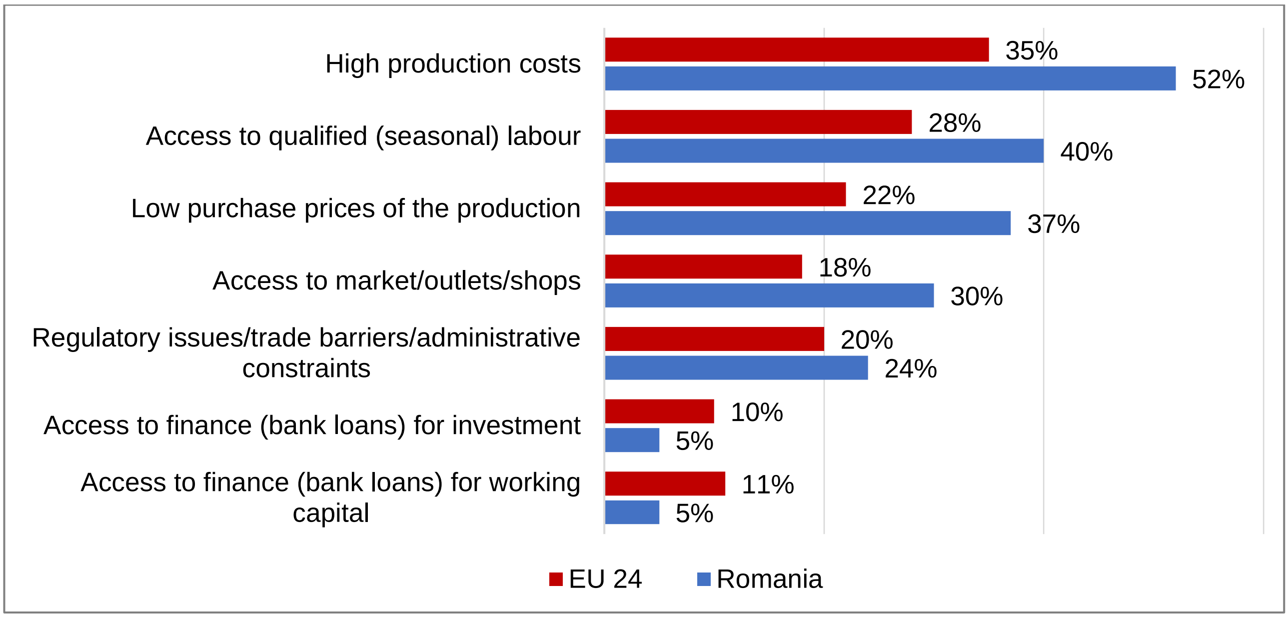
79 As of April 14, 2020, no figures for GVA 2018 available on Eurostat.

To strengthen their competitiveness and business viability, farmers are expanding their production by establishing processing facilities through the purchase of equipment and machinery, buildings and transport equipment. They have a permanent need to upgrade and expand their production. Interviews highlighted that, for example, larger pig farmers invested into equipment for integrated production, including pig production but also pig meat processing. For bakeries, investments are related to capacity expansion. Investments with a similar purpose in the horticulture sub-sector include building new warehouses and sorting, calibration, and packaging facilities, particularly for apples and pears. Fruit growers are also investing into processing technology for juice and jams.

To attract new customer segments, some Romanian agri-food enterprises invested into the development of new products to satisfy new food trends. In the interviews and the focus group, it was mentioned that, for example, dairy producers invested in white and yellow cheeses, as well as yoghurt and kefir products. Meat processors, irrespective of their size, are investing in new equipment allowing them to produce raw-dried sausages.

The high cost of production is the key challenge for the Romanian agri-food sector (Figure 24). This is also the key challenge for the EU 24, but the proportion is significantly higher in Romania (52% compared to 35% for the EU 24). In addition, 73% of the Romanian agri-food enterprises observed that these costs are rising, causing low profits and negative gross operating margins in most sub-sectors (Section 3.1).

Figure 24: Difficulties experienced by the agri-food enterprises in 2018



Source: Agri-food survey.

The second most important difficulty for the sector is the lack of access to qualified labour as stated by 40% of the surveyed companies. The sector is not considered very attractive, because the salaries are low.[80] However, it is often one of the very few sectors alongside agriculture offering work opportunities in rural areas.

The above findings are further strengthened by the results from a SMEs survey conducted semi-annually by the National Bank of Romania (NBR).[81] It also shows increasing labour and production costs, and a shortage of skilled labour for agriculture and industry as a whole. The NBR report also mentions high taxes and an unpredictable fiscal environment as factors negatively affecting agri-food and business development.

80 Labour cost per employee and per year for full-time equivalent (FTE) are EUR 7 600 in the food industry compared to an average of EUR 9 700 in manufacturing. The beverages sub-sector is an exception, with labour cost per employee FTE of EUR 13 900.
81 National Bank of Romania, 2019, https://www.bnr.ro/Regular-publications-2504.aspx.

Other problematic aspects are the low purchase price of the production and market access difficulties. Both are related to meeting international quality standards, which is a major challenge for the Romanian agri-food sector. Romanian public sources[82] and interviews for this study confirmed that difficulties in meeting the quality standards of the EU export market are common and that there is a need to invest in the modernisation of the sector. Domestic producers of food products currently have difficulties competing with international suppliers, which has led to higher imports in the agri-food sector. One main weakness is the absence of an integrated value chain for agricultural products. Thus, currently farmers are encouraged to sell their raw materials instead of adding value to them through processing. However, increasing the competitiveness of the sector is a strategic objective of the Romanian authorities in medium and long-term perspective.[83]

Investments by Romanian agri-food enterprises are also supported by the EAFRD. Financing of the sector is mainly available from sub-measure 4.2, 'Investments for processing/marketing of agricultural products', Sub-measure 4.2.a, 'Support for investments in processing/marketing of orchards sector', and, marginally, from Measure 19, 'Support for LEADER local development'.

The EAFRD / RDP support for the Romanian agri-food sector is significant. Under sub-measure 4.2, EUR 495 million had been allocated for general investments in processing/marketing of agricultural products and 509 applicants, with projects of a value of EUR 386 million, were contracted as of the end of April 2020[84]. The budgets made available until now have not been sufficient as initial demand (before administrative checks) has been with EUR 386 million higher than the budget available under the grant calls. Similarly, although the process of contracting is still ongoing, fruit processing attracts enough attention and the allocated resources will be fully committed (Table 7).

Table 7: Romania: RDP 2014 - 2020 Implementation of sub-measure 4.2, April 2020

Sub-measure 4.2	- EUR 495 million allocated (public allocation) - EUR 386 million contracted (end of April 2020).	• Beneficiaries are enterprises, cooperatives and producer groups. • Support is granted for processing of agricultural products covered by Annex I to the Treaty on Operation of the European Community (TFEU). The result may be either an Annex I product or a product not included in Annex I to the TFEU (non-Annex 1). • As of the end of April 2020, 509 contracts were signed for receiving investment support for processing of agricultural products. • 554 applications of EUR 393 million could not be financed.
Sub-measure 4.2a	- EUR 47 million allocated (public allocation) - EUR 7 million contracted (end of April 2020).	• Beneficiaries are enterprises, cooperatives and producer groups. • Support is granted for processing of fruits. The result may be either an Annex I product or a product not included in Annex I to the TFEU (non-Annex 1). • As of the end of April 2020, 15 contracts were signed for receiving investment support for processing of fruits.

Source: Ministry of Agriculture, 2020, according to Managing Authority data 'Situatia Proiectelor depuse 30/04/2020'.

Note: The amount requested that has not been financed is calculated based on all received applications before any administrative check regarding eligibility or selection criteria to have taken place, from which the budget under the calls has been deducted. 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. They could also be withdrawn by the beneficiary at a later stage (following the submission) or under ongoing evaluation by the Paying Agency.

82 E.g.: www.romalimenta.ro.
83 National Strategy for Romania's Sustainable Development 2030, 2018, Department of Sustainable Development.
84 According to the Managing Authority data 'Situatia Proiectelor depuse 09/01/2020'.

According to the interviews and focus group discussions, the demand for finance is stronger at the time when the RDP investment support sub-measures (M4.2 and M4.2.a.) offer support. This can be explained by the need for processors to provide the private co-financing required to be able to receive the grants.

As outlined in Section 2.2.1 agri-food enterprises can also benefit from the EAFRD co-funded PRSL financial instrument. The PRSL is providing support on a standalone basis or complementing RDP grants for investments covering eligible expenditure related to the private co-financing part under sub-measure 4.2/4.2a for the processing and marketing of agriculture and fruit products.

3.2.2. Analysis of the demand for finance

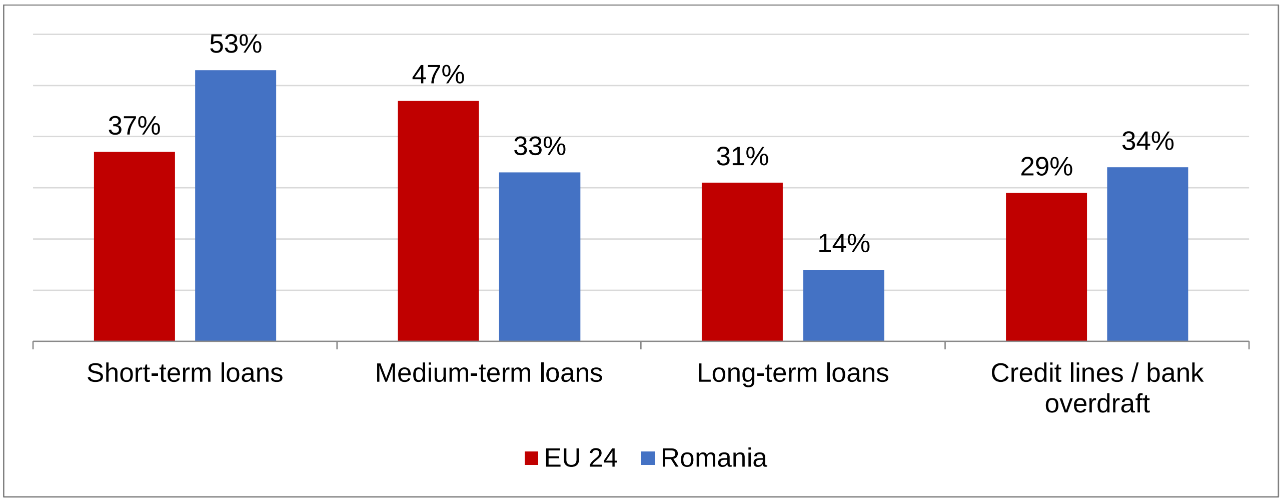
The potential total demand for finance combines both met and unmet demand. The met demand consists of the value of all applications for finance, which were accepted by the financial institutions in the relevant year. The unmet demand consists of the assumed value of applications rejected by a financial institution, offers of credit refused by agri-food enterprises, 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 Romania is estimated at EUR 594.6 million.

Only 16% of Romanian agri-businesses applied for finance in 2018, which is significantly below the EU 24 figure of 50%. In interviews, agri-food enterprises and banks pointed out that micro and small-sized agri-food enterprises, in particular, are sometimes reluctant to borrow from banks because of a lack of trust in the banking system. In fact, for 97% of Romanian agri-food enterprises, the most important source of finance in the last three years has been their own funds. This is followed only distantly by bank products.

When using bank products, most Romanian agri-food enterprises apply for short-term loans (53%) and credit lines/bank overdraft (34%). Only 14% of enterprises borrow for long-term purposes. (Figure 25).

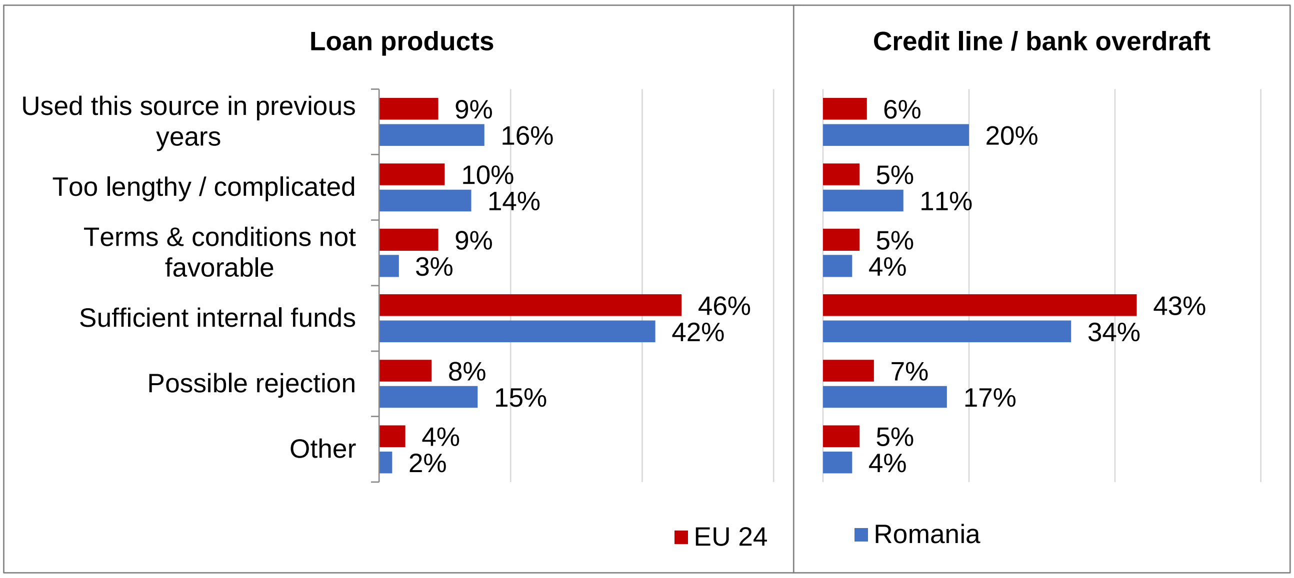
Figure 25: Romanian agri-food enterprises applying for finance, by financing product in 2018



Source: Agri-food survey.

A significant number of Romanian agri-food enterprises have been discouraged from applying for bank loans and credit lines and overdrafts (Figure 26). For bank loans, the level of discouragement was 15%, and it was even higher for credit lines and overdrafts at 17%. This is far above EU 24 levels of 8% and 7%, respectively. A large group of respondents said that the application process is too long and complicated (14% for bank products and 11% for credit lines and overdraft). Interviews with agri-food enterprises and banks confirmed that micro and small-sized agri-food enterprises, in particular, are afraid of being rejected by banks as they are unable to demonstrate their creditworthiness. The main reasons for not applying for a bank loan in 2018, however, were due to having sufficient existing resources or a previous loan that covered their needs.

Figure 26: Reasons for not applying for loans in the agri-food sector in 2018

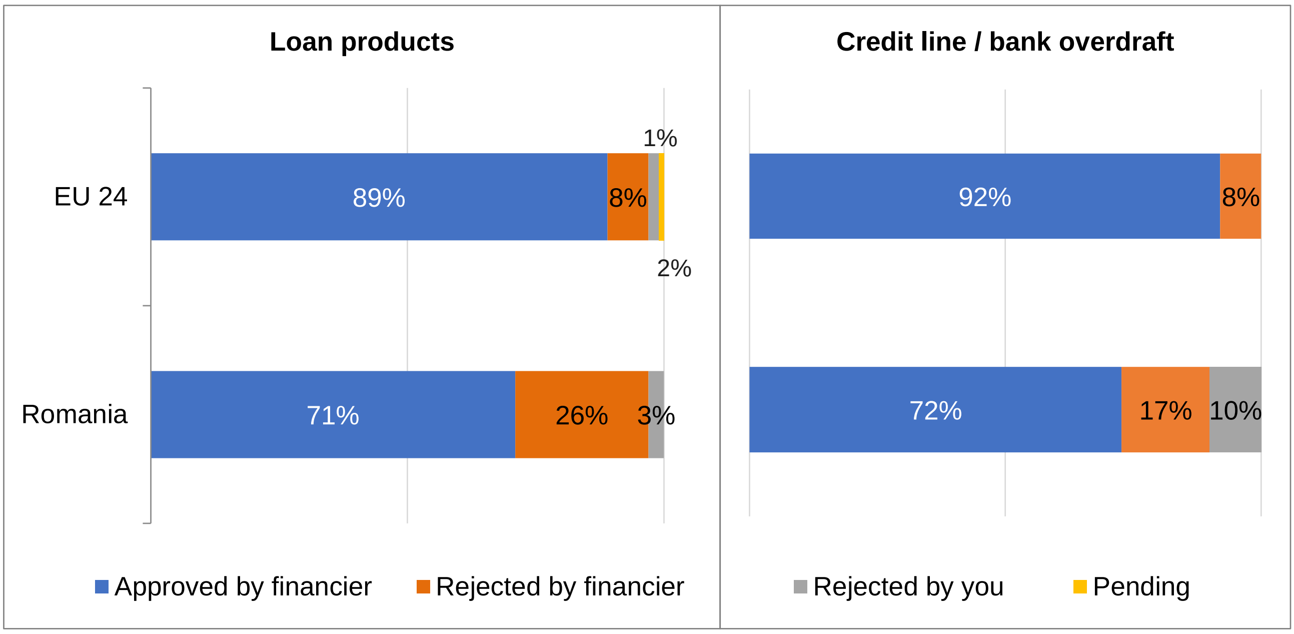


Source: Agri-food survey.

Almost every fourth bank loan application (26%) by a Romanian agri-food enterprise is rejected (Figure **27**). The share is slightly lower for credit lines and bank overdrafts. The approval rates by banks are lower in Romania than for the EU 24 average across all categories. The survey results further show that rejections are higher in the agri-food sector than for the SMEs operating in other sectors of the economy, if compared to the SAFE survey.

Few Romanian agri-food enterprises refused a bank loan, compared to the 10% that refused a credit line. No conclusive answer could be provided in interviews as to why this is the case, but it was suggested that the terms and conditions might have been considered excessive to the applicants.

Figure 27: Results from loan applications in the agri-food sector in 2018

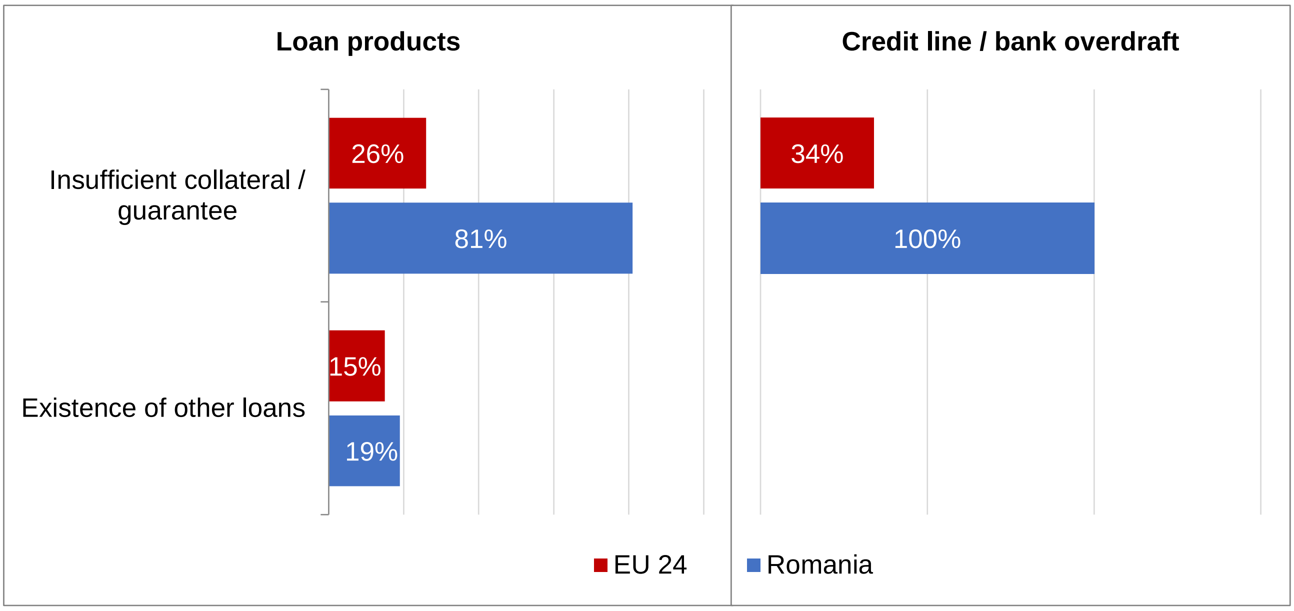


Source: Agri-food survey.

The Agri-food survey revealed that a lack of collateral is the main reason why agri-food enterprises have their bank loan applications rejected (Figure 28). That this is a key challenge and was also confirmed during the interviews with financial institutions. Many Romanian agri-food enterprises use outdated equipment or technology. Those assets are hence very low in value and financial institutions will hardly ever be able to sell them and to receive a price that will cover the outstanding loan amount.

Lack of collateral is causing loan applications from start-ups to be rejected more often. New enterprises often lack sufficient levels of collateral to secure the loan amount. The existence of other loans has also led to rejections (for 19% of Romanian agri-food applicants).

Figure 28: Reasons for loans rejection in the agri-food sector in 2018



Source: Agri-food survey.

The perceived high risk of the agri-food sector was mentioned by financial institutions as an important reason for rejection. This perception is driven by the fact that many agri-food enterprises, particularly micro and small-sized agri-food enterprises, cannot demonstrate their long-term viability due to the low economic margins of the sector. In addition, smaller Agri-food enterprises often cannot demonstrate structured long-term sales channels, so financial institutions find it risky to provide finance.

Lack of financial literacy is another important reason for rejection. Micro agri-food enterprises in Romania have challenges preparing and presenting their investment projects with a sufficient level of detail that banks can understand.

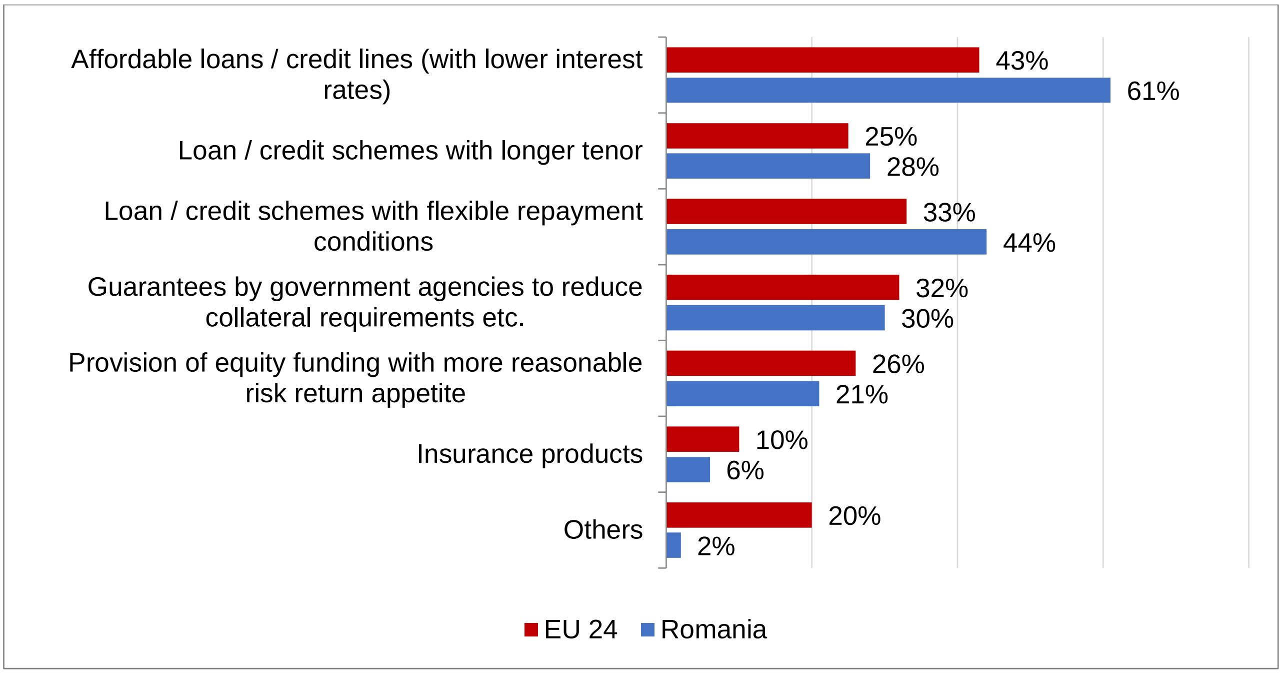
Financial institutions acknowledge that their knowledge of the agri-food sector is limited and that their overall expertise is weak. The interviewed financial institutions are aware that they do not have tailored products for this specific client segment. They also lack a strategy on the best way to approach the segment. The absence of such a strategy makes it challenging to have a dedicated approach and to implement it accordingly. The elimination of the banks' branch network in rural areas is certainly also worsening this lack of understanding of the business cycles of agri-food enterprises.

The regulatory environment contributes to postponed investments, particularly for small-sized firms. In recent years there have been several changes to the fiscal code and enterprises have had very little time to adjust to those changes.[85] The focus group mentioned that this has created uncertainty and caused them to postpone investment.

85 Such as Emergency Ordinance no. 79 of November 8, 2017 coming into effect on 01 January 2018 by which 97 Articles of the Fiscal Code were amended/supplemented. In 2018 alone, entrepreneurs were required to know and implement important numerous amendments/completions, for a total of 236 Articles of the Fiscal Code.

More tailored and better funding conditions offered by banks (in terms of interest rates, loan duration and repayments schedules) may increase the access to finance of Romanian agri-food entrepreneurs (Figure 29). The focus group confirmed that loan conditions should better reflect the specificity of the activity pursued. This may also be reflected in the repayment schedule: given the dependency on raw material supply, agri-food enterprises are faced with supply seasonality (requiring elevated plant capacities and resulting in varying levels of resource utilisation) and, hence, fluctuating levels of output. In the Agri-food survey, most Romanian enterprises mentioned that they would greatly benefit from lower interest rates. Other requirements include loans with more flexible repayment conditions, guarantees supported by public entities, and loan schemes with longer tenor.

Figure 29: Solutions to reduce difficulties in accessing finance, 2018



Source: Agri-food survey.

There is no significant difference between Romanian agri-food companies and their EU peers regarding the expected financial needs in the near future. 37% of Romanian enterprises expect their financial needs to remain the same (40% in the EU 24), while 40% of them expect their needs to increase (38% in the EU 24) and 19% expect them to decrease (14% in the EU 24).

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

This section provides an overview of the financial environment in which the agri-food sector in Romania 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. 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 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 Romanian agri-food sector

- Banks and NBFIs are the main financial providers to the agri-food sector.
- The Romanian financial sector is competitive, with low levels of concentration.
- The product offer includes standard business loan products; few specific products are available to the agri-food sector.
- The credit products offered address working capital needs of up to 36 months and investment needs of up to 180 months. Most NBFIs offer mixed purpose loans.
- RDP investment support contributes to increased demand for finance as agri-food enterprises often need bank loans to meet their own contribution requirements.
- Overall, banks have limited outreach to rural areas.
- Lending to the industry slightly increased over the 2015-2019 period and outstanding loans and commitments to the food and beverage manufacturing sector were estimated to be EUR 2 billion in 2019.
- A number of constraints have been identified in the supply of finance to the sector, including (i) banks' low interest and limited sector knowledge, (ii) bank's lack of specific policies and procedures for lending to start-ups, (iii) the high level of non-performing loans in the sector, and (iv) the lack of coverage of small loans in the credit information system.
- NBFIs are more active in lending to micro-enterprises, but their role in financing the agri-food sector is overall very limited.

3.3.1. Description of finance environment and funding availability

3.3.1.1. Finance providers

Most financial institutions do not offer a specific loan product to the agri-food sector. Instead, they serve agri-food enterprises using their standard business loan product offering. A description of the key finance providers – banks and non-bank financial institutions – has been provided in Section 2.3.1.1. The three most dominant banks in Romania are Banca Comerciala Romana (15.8% market share), Banca Transilvania (13.9%), and BRD – Groupe Société Générale (12.5%).

The key financial institutions also serve the agri-food sector. SMEs and corporate markets are mainly served by banks and only very small-sized businesses are served by non-bank financial institutions (NBFI) registered in the National Bank Register. For example, one of the most active organisations for the agri-food sector is BT Mic NBFI, linked to Banca Transilvania.

3.3.1.2. Financial products

Romanian banks and non-bank financial institutions offer working capital and investment loans to agri-food enterprises. These range over the short, medium and long-term and have varying interest rates based on the client, loan purpose and maturity. The typical types of loan products offered are described below in Table 8.

Table 8: Overview of financial products offered to agri-food enterprises by banks

Type of loan	Loan Amount	Loan Maturity and repayment schedule	Currency	Interest rate	Collateral
Working capital loans/ credit lines/ credit cards/ overdrafts/ factoring for financing operating expenses of the entire production cycle.	• Up to 30% of a company's turnover. • If enterprise has less than 12 months of activity, a ceiling on the loan amount might be imposed. • Some banks impose a minimum amount to be disbursed (e.g. EUR 7 000 for Raiffeisen).	• 12-36 months. • The repayment schedule is flexible, agreed upon with the client.	• Usually RON.	• ROBOR 1M or 3M plus 4-5%.	• Mix of immovable and movable guarantees. • Some banks might not require collateral up to a certain loan amount (e.g. Banca Transilvania, up to EUR 10 000).
Investment loans for acquisition of equipment, means of transportation, buildings constructions (and land).	• Up to 75-85% of the value of the investment project (without VAT). • Also, for investment loans, some banks impose a minimum amount to be disbursed. • Other banks set ceilings for the amount to be disbursed (e.g. for Banca Transilvania the maximum is EUR 105 000 for uncollateralised loans up to 60 months, and maximum EUR 315 000 with collateral up to 120 months).	• Usually 60 months for investments in movable assets, or 120 months for the purchase of immovable assets. • Some banks offer investment credits up to 180 months (CEC Bank, Libra Bank, OTP Bank). • Flexible repayment schedule, depending on activity, agreed upon with the client.	• Usually RON.	• ROBOR 6M or 12M + 4-5%. • A grace period might be offered in correlation with the investment project implementation schedule.	• Collateral is a mix of guarantees.

Source: Banks' websites and interviews, 2019.

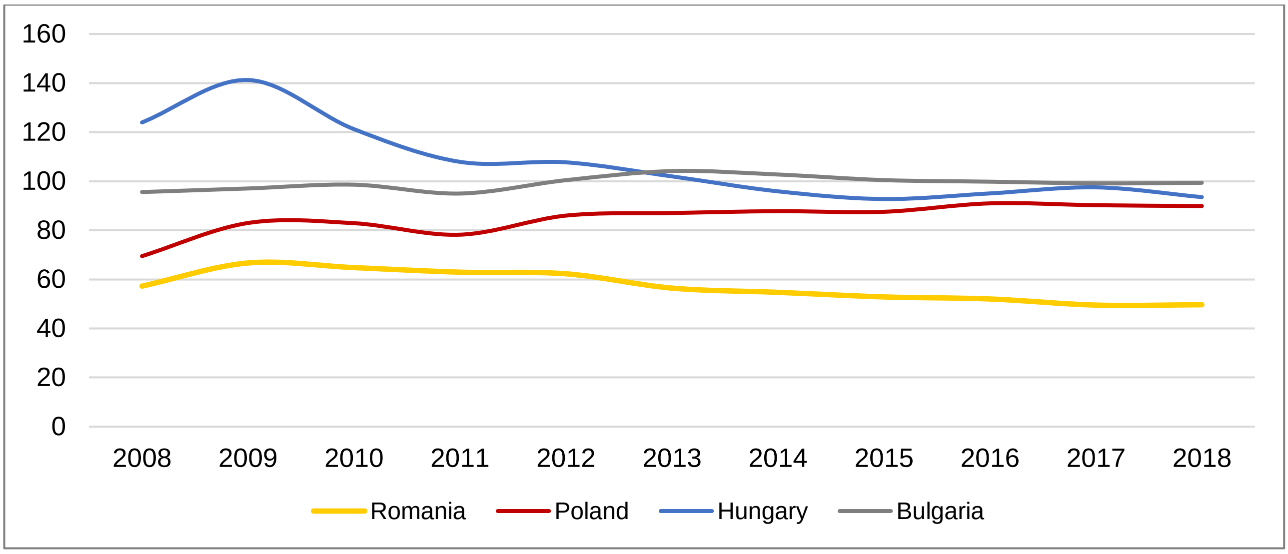
NBFIs offer working capital loans, investment loans or loans with a mixed purpose. Maturities across the bank products vary. Working capital needs are financed with loans of up to 24 months and investment needs are financed with loans of up to 120 months. Mixed purpose loans of up to 48 months are also available. The maximum loan amount granted, depending on the NBFI, is EUR 52 000 and is offered to companies that should have a minimum of 3 months' activity. Up to a certain amount, depending on the institution, NBFIs do not require tangible collateral, but rather a personal guarantor contract. NBFIs finance up to 100% of the proposed project, considering the real repayment capacity of the enterprise. The repayment schedule is flexible and adjusted to the seasonality of the business (if existing).

Agri-food enterprises can also benefit from the **PRSL instrument established under the RDP already described in the first part of this report**. Also, the guarantees from the RCGF and the FNGCIMM are available for the sector. Specific information on the level of support provided to the sector could not be found. For an analysis of the activity of the two institutions see Section 2.3.1.2.

3.3.1.3. Description of financing market

While financial intermediation in Romania stabilised in 2018, it has reduced in comparison to the Romanian economy.[86] At 49.7% of GDP, the ratio is well below its level in all Central European countries (Figure 30). After the 2008 financial crisis, the credit supply was restricted, especially for SMEs and in rural areas where operating branches are less profitable. The conclusions of the 2018 Romanian financial sector assessment report reflect that financial intermediation relative to the economy is low and declining. Credit needs remain limited overall, due to low enterprise density, the poor health of the enterprise sector, and the high number of foreign owned firms (compared to EU peers). The economic growth had a positive spill over in the enterprise sector, but this did not translate into increased investment activity, despite an unprecedented low interest rate environment.

Figure 30: Total financial sector assets / GDP (% of GDP end of year), 2008-2018



Source: NBR Financial Stability Report, 2018.

NBFIs that mostly finance very small and small-sized enterprises only play a minor role in financing agri-food enterprises. NBFIs were strongly affected by the 2008 financial crisis. Over the 2008-2016 period, NBFIs' assets decreased by 3.6%.[87] While the assets are increasing again, with loans to non-financial corporations increasing to 17.4% of total lending, NBFIs continue to have a small market share (3.6% as of 2018).[88]

86 National Bank of Romania, 2018, Financial Stability Report.
87 World Bank, 2018, Financial Sector Assessment Program, Financial Sector Intermediation, Technical Note.
88 National Bank of Romania, 2018, Financial Stability Report.

Micro and small-sized enterprise loans are not recorded in the Romanian credit information system, leaving financial institutions with knowledge gaps on prospective small-scale borrowers. The Romanian credit information sharing system is made up of the Central Credit Register (CCR), established in 2000 and operated by the National Bank of Romania, and the Credit Bureau (CB), a joint stock company established in 2004 with 25 banks as shareholders.

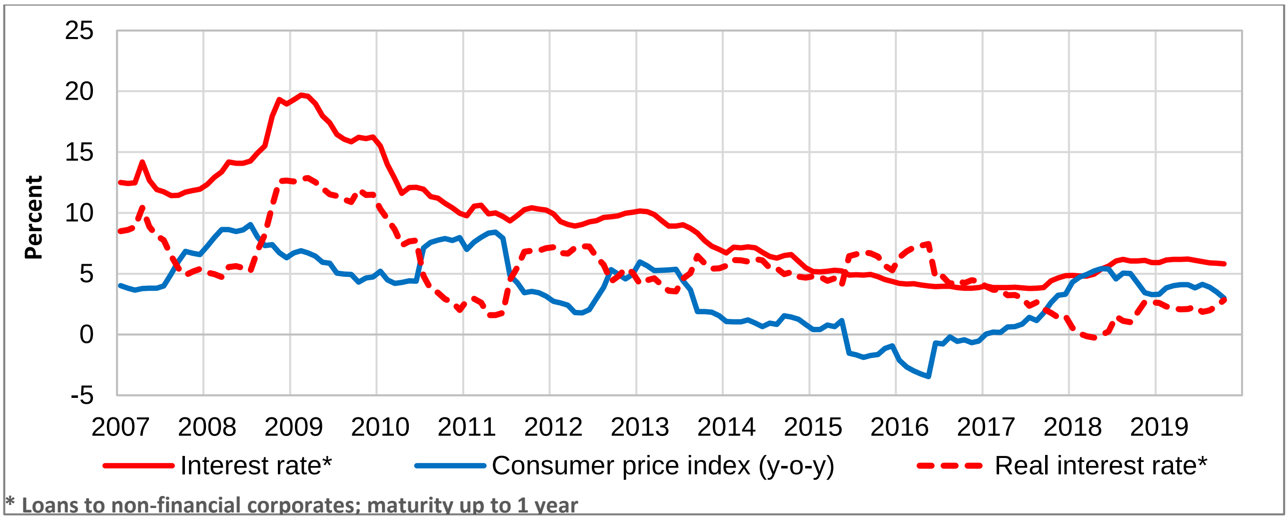
The CCR is a specialised system that collects, stores and compiles information on the exposure of each reporting institution: banks and NBFIs, electronic money institutions and payment institutions enlisted in the National Bank of Romania's Special Register (with significant lending activity) in Romania. It provides information on borrowers (legal entities and individuals) benefiting from loans above EUR 4 200 (RON 20 000), as well as information on fraud perpetrated by cardholders.

Information on borrowers reported by reporting institutions is provided unconditionally, while information on clients that are potential borrowers is conditional on their prior consent.[89]

The CB does not cover legal entities. Also, non-traditional data providers, such as mobile network operators, electricity companies and other utilities, are not included in the credit information sharing system. This is despite the fact that this could increase knowledge on borrowers' payment behaviour.[90]

Real interest rates across sectors in Romania have been fairly moderate since 2015, and are now between 2% and 2.5% (accounting for inflation, Figure 31). The interest rate for new loans of up to EUR 1 million with a maturity up to 1 year (floating loan) to non-financial corporations is 5.84%.[91]

Figure 31: General interest rate development and prices in Romania, 2007-2019



Source: NBR, National Institute of Statistics, 2019.

In December 2018, Romania introduced a tax on bank assets that created uncertainty within the sector and increased the likelihood of higher costs of bank credit.[92] GEO 114/2018 introduced a sectoral tax on bank assets, increasing with the level of the Romanian Interbank Offer Rate (ROBOR). While modifications of the law have been made (delinking the tax from ROBOR; tax for new loans is based on interbank transactions-based index (IRCC), based on average inter-banking transaction rates two quarters earlier), the law could still contribute to distortions in the allocation of credit and resources as it could negatively affect the cost of bank credit to the private sector (including the agri-food sector).[93]

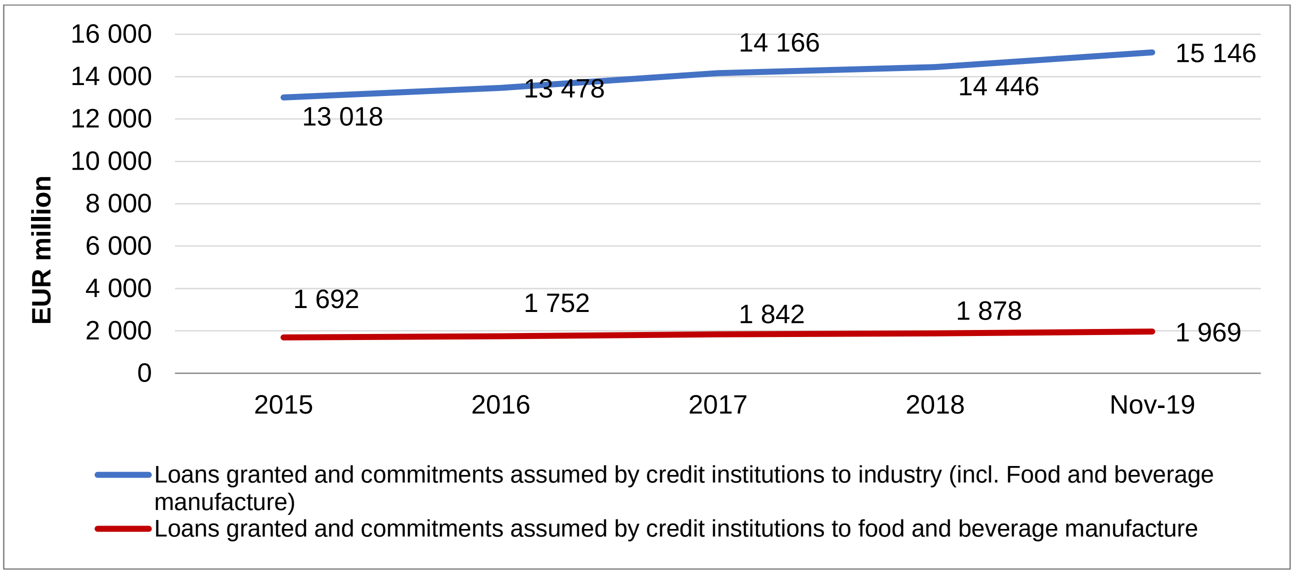
89 National Bank of Romania, 2019, https://www.bnr.ro/Central-Credit-Register-2786.aspx.
90 World Bank, 2018, Financial Sector Assessment Program, Financial Sector Intermediation, Technical Note.
91 National Bank of Romania, 2019, Statistics report Interest rates – RON-denominated loans and deposits.
92 The new tax was announced by surprise (as an emergency ordinance) and might impact the predictability of business environment and legislative stability.
93 IMF, 2019, Article IV Consultation - Press Release, Staff Report; Staff Supplement; and Statement by the Executive Director for Romania.

3.3.2. Analysis of the supply of finance

Lending to the industry sector slightly increased over the 2015-2019 period (Figure 32). While the Romanian National Bank does not publish disaggregated lending figures for the agri-food industry, it publishes lending to general industry including agri-food. As of November 2019, the outstanding loans and commitments of credit institutions was EUR 15.1 billion (RON 72.5 billion).[94]

The exact figure for the loans to the agri-food sector cannot be presented. But the evolution of loans to industry may be used as a proxy for the evolution of loans to the agri-food sector. It is assumed that, in line with the share of food products and beverages in total manufacturing production (that was 13.90% in 2019),[95] the agri-food sector accounts for 14% of the loans. Hence, the outstanding loans and commitments to the sector can be estimated to have been EUR 2 billion (RON 15.2 billion) in 2019 (Figure 32).

Figure 32: Loans and commitments assumed by credit institutions to industry and to food and beverage manufacturing



Source: National Bank of Romania, Monthly Bulletin, November 2019.

Micro and small-sized enterprises still face challenges in accessing finance, as banks lack competence in assessing their repayment capacity, and/or they have a poor financial state. Micro businesses in Romania mostly operate using cash-based operations. Therefore, banks find it challenging to adequately assess and the risks associated with financing those enterprises. In addition, NPL levels for this client segment remain high.[96] During the financial crisis, NPLs to gross loans for all clients rose from 2.7% in 2008 to 21.6 % in 2013 (mostly caused by corporate loans). While overall NPL levels have decreased to 6.4%,[97] NPL ratios remain high for micro and small-sized enterprises (23.6% as of June 2017),[98] and this reduces the appetite of banks to finance them.

Non-performing loan levels also remain high for the industry segment (with agri-food manufacturing and food manufactures being part of it). Even though the NPL ratio for the industry sector has been decreasing

94 Romanian National Bank, 2019.
95 Eurostat, 2019.
96 A bank loan is considered non-performing when more than 90 days pass without the borrower paying the agreed instalments or interest. Non-performing loans are also called 'bad debt'. Source: European Central Bank: https://www.ecb.europa.eu/explainers/tell-me/html/npl.en.html.
97 NBR tightened its supervision and as banks implemented those measures, NPLs dropped to 6.4% at the end of December 2017. Banks also sold distressed assets to debt collecting agencies (local and foreign), which resulted in a decline in the value for outstanding loans on the banks' balance sheets.
98 World Bank, 2018, Financial Sector Assessment Program, Financial Sector Intermediation, Technical Note.

since the end of 2016, it remained at 10% as of September 2018, which is a relatively high level. The only sector with higher NPL levels is the real estate and construction sector (as of September 2018).[99]

Large-sized enterprises, be it in the agri-food sector or other sectors, are the preferred clients of financial institutions in Romania. Many of those enterprises have had relationships with banks for many years, and thus have a credit history, and many can often provide audited financial statements and high levels of collateral.

No commercial products exist purely for start-ups or new entrants. Based on the interviews conducted and on information on banks' websites, banks are reluctant to finance start-ups. This is due to the banks' lack of appropriate lending methodology to assess the risks of this sector and their lack of interest in financing small business loans. Nevertheless, some banks do finance start-ups and have signed cooperation agreements with the Business Environment, Commerce and Entrepreneurship Ministry to implement the Start-Up Nation Program. This program provides non-reimbursable financial aid from the state, with the maximum limit of EUR 42 000 to each new firm or business. The 'start-up bridge loan' offers future entrepreneurs a 100% bridge credit line for the non-reimbursable financial allocation, with a fixed interest rate of between 3.5-4.5% a year and a maturity of up to 24 months.

99 National Bank of Romania, 2018, Financial Stability Report.

3.4. Financing gap in the agri-food sector

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

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

- The financing gap for the agri-food sector is estimated at EUR 482 million.
- Small-sized firms have the most difficulties in accessing loans, regardless of the maturity of the loan.
- All segments of the sector experience difficulties in accessing long-term financing.
- General drivers of the gap are a lack of collateral, limited business know-how, and agri-food enterprises' generally poor financial shape.
- The financial sector is decreasing its presence in rural areas and overall lacks knowledge and interest to serve the agri-food client segment. This further contributes to the high unmet demand for the sector.
- The evolution of the financing gap in the agri-food industry will be partly related to the capacity of the agri-food sector to better organise the value chain. This will influence the economic margins of the companies, and therefore their repayment capacity, which in turn will influence banks willingness to lend to the sector.

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 firms X percentage of firms 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 Romanian firms (see Annex A. 5 for more information). The methodology used for calculating the gap is the same as the methodology used for the agriculture sector (see Annex A. 3).

The financing gap arises from unmet financing demand from economically viable firms[100]. As explained in section 2.2, the unmet demand for finance includes:

(i) lending applied for but not obtained, or;
(ii) a lending offer refused by the potential borrower, as well as;
(iii) lending not applied for due to expected rejection.

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

The financing gap for the Romanian agri-food sector is estimated at EUR 482 million (Table 9). The financing gap mainly concerns small-sized firms (66% of the total number of discouraged and rejected firms). In terms of product, the gap is the largest for long-term loans (EUR 240 million) followed by medium-term loans (EUR 95 million) (Figure 33).

The focus group highlighted that the demand for long-term loans is often not met, whereas the challenges for other loan products are less severe. They have also stressed that small-sized firms are the ones with the most difficulties in accessing finance.

100 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.

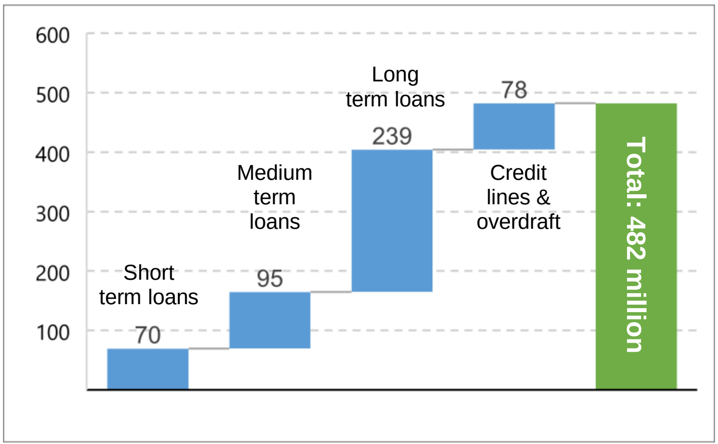
Small-sized firms have been particularly affected by the frequent changes in the business environment. For example, several changes in the fiscal code created uncertainty and postponed investment.

Table 9: Financing gap by firm size in the agri-food sector in 2018, EUR million

	Total	Short-term Loan	Medium-term Loans	Long-term Loans	Credit lines/ bank overdraft
Small-sized firms	**319.0**	42.6	63.6	161.1	51.7
Medium-sized firms	**121.0**	22.4	23.0	57.2	18.3
Large-sized firms	**42.3**	4.7	8.5	21.3	7.9
Total	**482.3**	**69.7**	**95.2**	**239.6**	**77.9**

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

Figure 33: Financing gap by product in the agri-food sector in 2018, EUR million



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

The three main drivers of the gap include lack of collateral, limited business know-how and agri-food enterprises' generally poor financial shape:

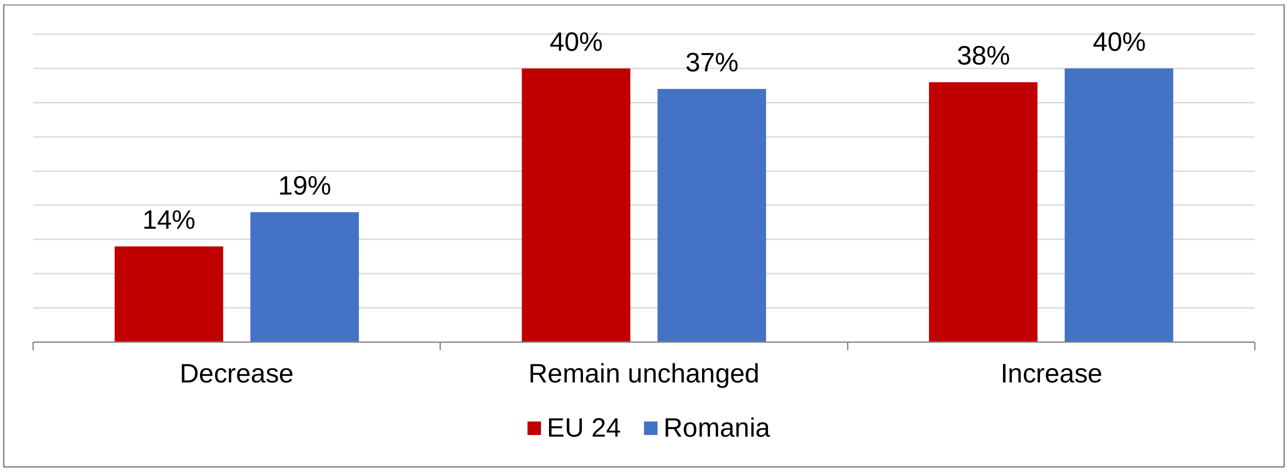
- **The absence of adequate levels of collateral** was mentioned as a key impediment to access to finance. Financial institutions require collateral as a security against the provision of finance. Many small-sized agri-food enterprises only have limited assets and often those are of little value as the items have exceeded their lifespan. For start-ups it is even more challenging to comply with the collateral levels required.
- **Many agri-food enterprises show low economic margins,** reducing their repayment capacity and banks' risk perception.
- **Micro and small-sized enterprises have particularly limited skills in compiling key business indicators** and presenting their business as viable. This also includes general business and financial management.

In addition, a lack of mutual trust and understanding between agri-food enterprises and financial institutions exists. Enterprises believe that borrowing from financial institutions involves a lot of complicated bureaucracy, while financial institutions perceive agri-food enterprises as being high risk clients.

Several constraints on the supply side are significant drivers of the gap. When looking at the supply side, one constraint relates to the decreasing presence of financial institutions in rural areas. In addition, many financial institutions do not have the required know-how to adequately assess the repayment capacity of small and micro-sized agri-food enterprises or start-ups. Given that many financial institutions still suffer from comparatively high levels of non-performing loans, they are very restrictive on the applicants they finance.

Demand for finance is likely to persist and, if no action is taken, the financing gap is likely to increase over the coming years. In the Agri-food survey, 40% of the firms expected their need for finance to increase in the coming years (Figure 34). Interviews outlined that this is partly built on the expectations that market integration and the building of linkages among various value chain actors will increase, which will strengthen the competitiveness of the sector. To be able to meet requirements in terms of product quality and quantity, small-sized agri-food enterprises will have to work together, either in groups or cooperatives, and will have to invest. Needs for on-farm processing will also increase, to benefit from higher levels of value added at the individual enterprise level. If agri-food enterprises can find a niche market position that increases their competitiveness, they will also have to pursue additional investments.

Figure 34: Agri-food companies' expectations on future financing needs, 2018



Source: Agri-food survey.

3.5. Conclusions

The agri-food sector is an important contributor to rural development to the overall economy in Romania. However, the sector is characterised by high fragmentation, with a vast number of small-sized enterprises (92.6 % of all agri-food enterprises), and only contributes about 11.4% to the GVA in the manufacturing sector.

The GFCF trend in the agri-food sector is positive, having rebounded significantly since 2016. Still, overall investment levels are comparatively low, considering the need of the sector to modernise and increase competitiveness. The bulk of GFCF investments are dedicated to machinery and equipment and buildings and structures.

The main drivers of the demand for finance are the need to invest in new machinery, equipment or facilities, as well as new product development. In order to upgrade and expand their production, various agri-food enterprises have made investments. For example, piggeries invested in meat processing facilities, bakeries invested in new bakery machinery with higher output, and orchards invested into value addition by building new warehouses, sorting, calibration, and packaging facilities. Borrowing has also enabled enterprises to offer new products to customers. For example, dairy enterprises have been able to provide new types of cheeses or other dairy products, while meat processors have developed new types of sausages. RDP investment support measures (particularly M4.2 and M4.2.a) have also contributed to the demand for finance. Beneficiaries often take loans to cover the co-financing needed to access the M4.2 and M4.2a grants. Request for support under RDP measures has largely exceeded the available budget.

A significant number of agri-food enterprises are discouraged from applying for bank loans. This is particularly the case for micro and small-sized agri-food enterprises, who perceive the application process as being too long and complicated. They also fear that they will be unable to demonstrate their creditworthiness to the banks. In addition, every fourth loan application is being rejected by a financial institution. While this is mostly caused by a lack of collateral, financial institutions have also pointed out that micro and small-sized agri-food enterprises often suffer from low profitability, a lack of financial literacy and an absence of credit history. Start-ups and new entrants face particular difficulties in accessing finance, given their lack of collateral and credit history.

Banks finance the agri-food sector using their standard business product offering. Lending to the industry sector slightly increased for the 2015-2019 period. However, financial institutions lack the know-how required to assess agri-food micro and small-sized enterprises, in addition to a focus on the urban market. NBFIs that mostly focus on this client segment have a very low level of financial intermediation.

There is a substantial financing gap in the agri-food sector in Romania, estimated at EUR 482 million. The gap mainly concerns **small-sized agri-food enterprises** (66% of the total gap) and **long-term loans** (50% of the gap).

Financial instruments to support the sector are already available under the EAFRD and national funds. Nevertheless, considering the outcome of this analysis and the magnitude of the financing gap, further policy actions, similar to the ones already recommended for the agriculture sector, should be considered:

- **Follow up of the implementation of the Portfolio Risk Sharing Loan (PRSL)**. It is believed that the PRSL will support agri-food enterprises in accessing finance, addressing the identified lack of collateral and reducing interest rates partially. However, given the dimension of the identified gap, it is unlikely that the instrument will be able to bring the market to normal functionality by the end of the current programming period. An assessment at a later stage could in particular aim to verify:
    - the adequacy of the available fund capital;
    - the concrete ability to address the constraints of micro and small-sized enterprises and start-ups, which according to this analysis are the more constrained segments;
    - the opportunities offered by the new legal framework, such as the easier combination of financial instruments and grant support, might offer interesting opportunities to increase the effectiveness of the instrument towards those segments;
    - risk coverage, and

  - performance aspects, including leverage.
- **Assess the current public credit guarantee offering**. Since lack of collateral is still reported to be a significant market constraint, the currently available guarantee instruments might be reviewed in order to verify their ability to improve market functionality. Based on the interviews conducted for the study for example, the adequacy of the available budget, the administrative procedures, the ability to concretely target small-sized enterprises and the impact on bank's regulatory capital requirements might be analysed.
- **Technical support could be provided to micro and small-sized enterprises,** with the overall goal of strengthening their financial literacy and business planning capacity. This will increase the chances of their application for finance being approved.
- **Capacity building dedicated to financial intermediaries,** might increase bank's level of knowledge in the sector, which according to this analysis is considered not sufficient.

ANNEX

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A. 2. Stakeholders interviewed

Type of Organisation	Name of Institution
Agriculture and Agri-food Advisor	Gerhard Mybes
Farmer Organisation and member farmers	Association ‘Young Farmer’ and member farmers
Financial Institution	Banca Romaneasca
Financial Institution	ING Bank
Financial Institution	Patria Credit NBFI
Financial Institution	Unicredit Bank
Government	RDP Management Authority / Ministry of Agriculture
Government	Financial instruments Unit / Ministry of Agriculture
Government	Agency for Financing Rural Investment, DG for Coordinating RDP 2014-2020
Government	Group of Local Initiative Marginimea Sibiului
Guarantee Fund	Rural Credit Guarantee Fund NBFI
Union of Cooperative	Union of Cooperatives in Vegetal Sector

A. 3. Methodology for financial gap calculation

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

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

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

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

The share of $\boldsymbol{Viable}$ **firms is measured by** the share of total firms that have a non-negative turnover growth[101] or a non-negative turnover and that are not in a situation of cost increase (these two criteria might be used to obtain an upper and lower boundary for the calculations).

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

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

Step1: Ratio of viable farms with unmet demand for finance

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

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

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

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

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

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

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

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

Step 2: Number of farms rejected or discouraged

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

For 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

[101] A turnover that has been stable or growing in the last year.

66th percentile, between the 33rd and 66th percentile, or below the 33rd percentile of the PPI index in the EU. We assume equal rates of rejections among small, medium and large-sized farms, and disentangle the share of farms with constrained in obtaining credit by financing product.

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

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

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

for $i = Small, Medium, Large$

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

Step 3: Standard Loan Application Size

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

Step 4: Financial gap across farm size and product type

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

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

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

for $i = Small, Medium, Large$

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

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

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

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

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

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

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

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

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

For Romania, Table 10 and Table 11 report the elements used in the calculation of the financing gap for the agricultural and agri-food sector, respectively.

Table 10: Elements for the calculation of the financing gap in the agriculture sector

		Short-term Loans	Medium-term Loans	Long-term Loans	Credit lines/bank overdraft
Lower bound: farms with a non-negative turnover growth and no cost increase	Share of respondents rejected by creditor or farmer	0.00%	0.38%	0.38%	0.00%
	Share of respondents that have not applied because of possible rejection	1.92%	1.92%	1.54%	1.91%
	Total (sum of rejected and discouraged)	1.92%	2.30%	1.92%	1.91%
Upper bound: farms with a non-negative turnover growth	Share of respondents rejected by creditor or farmer	0.00%	0.38%	0.76%	0.38%
	Share of respondents that have not applied because of possible rejection	4.58%	4.58%	3.82%	4.56%
	Total (sum of rejected and discouraged)	4.58%	4.95%	4.58%	4.94%
Total unmet demand: all farms	Share of respondents rejected by creditor or farmer	0.38%	0.76%	0.77%	0.76%
	Share of respondents that have not applied because of possible rejection	5.39%	6.15%	5.37%	6.13%
	Total (sum of rejected and discouraged)	5.77%	6.90%	6.15%	6.89%
Farms with constrained access to finance, **lower bound**	Small-sized farms	20 236	24 227	20 236	20 094
	Medium-sized farms	462	553	462	459
	Large-sized farms	230	275	230	228
Farms with constrained access to finance, **upper bound**	Small-sized farms	48 168	52 159	48 168	52 016
	Medium-sized farms	1 099	1 191	1 099	1 187
	Large-sized farms	548	593	548	591
Standard loan application size (EUR)	Small-sized farms	9 049	21 951	60 537	8 169
	Medium-sized farms	11 465	20 863	65 734	9 062
	Large-sized farms	33 815	53 093	118 360	48 263

Source: fi-compass survey.

Table 11: Elements used for the calculation of the financing gap in the agri-food sector

		Short-term Loans	Medium-term Loans	Long-term Loans	Credit lines/bank overdraft
Firms with a non-negative turnover growth	Share of respondents rejected by creditor or firm	0.79%	0.94%	0.47%	0.47%
	Share of respondents that have not applied because of possible rejection	11.49%	12.46%	11.49%	12.74%
	Total (sum of rejected and discouraged)	***12.28%***	***13.41%***	***11.96%***	***13.21%***
Total unmet demand: all firms	Share of respondents rejected by creditor or firm	0.79%	0.94%	1.26%	1.26%
	Share of respondents that have not applied because of possible rejection	13.07%	14.83%	13.86%	15.89%
	Total (sum of rejected and discouraged)	***13.86%***	***15.77%***	***15.12%***	***17.16%***
Firms with constrained access to finance,	Small-sized firms	995	1 086	970	1 070
	Medium-sized firms	66	72	64	71
	Large-sized firms	14	15	14	15
Standard loan application size (EUR)	Small-sized firms	42 787	58 573	166 134	48 311
	Medium-sized firms	339 924	320 089	890 428	258 633
	Large-sized firms	335 197	560 617	1 573 737	526 000

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 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 12 reports the number of respondents by Member State.

Table 12: *fi-compass survey* sample size per 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	**The Netherlands**	301
Germany	376	**Austria**	320
Estonia	310	**Poland**	320
Ireland	151	**Portugal**	349
Greece	350	**Romania**	350
Spain	354	**Slovenia**	300
France	350	**Slovakia**	312
Croatia	300	**Finland**	327
Italy	351	**Sweden**	300

Source: fi-compass survey.

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

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

For additional information, please refer to https://www.fi-compass.eu/publication/brochures/survey-financial-needs-and-access-finance-eu-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 questionnaires for each Member State. The minimum sample size obtained varied per country mirroring the differences in the size of the sector. Table 13 reports the sample size per country.

Table 13: Agri-food survey sample size per Member State

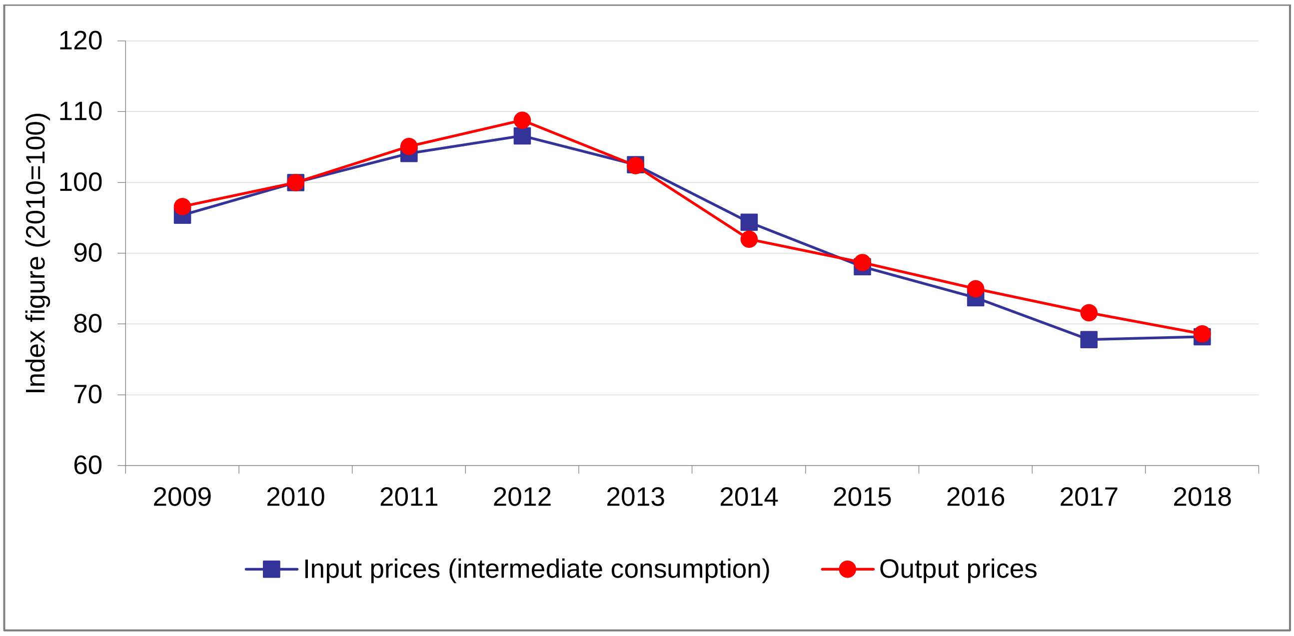
Country	No. of Respondents	Country	No. of Respondents
Belgium	100	**Latvia**	50
Bulgaria	100	**Lithuania**	50
Czech Republic	66	**Hungary**	46
Denmark	50	**The Netherlands**	80
Germany	186	**Austria**	50
Estonia	50	**Poland**	130
Ireland	50	**Portugal**	100
Greece	70	**Romania**	150
Spain	197	**Slovenia**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

Source: Agri-food survey.

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

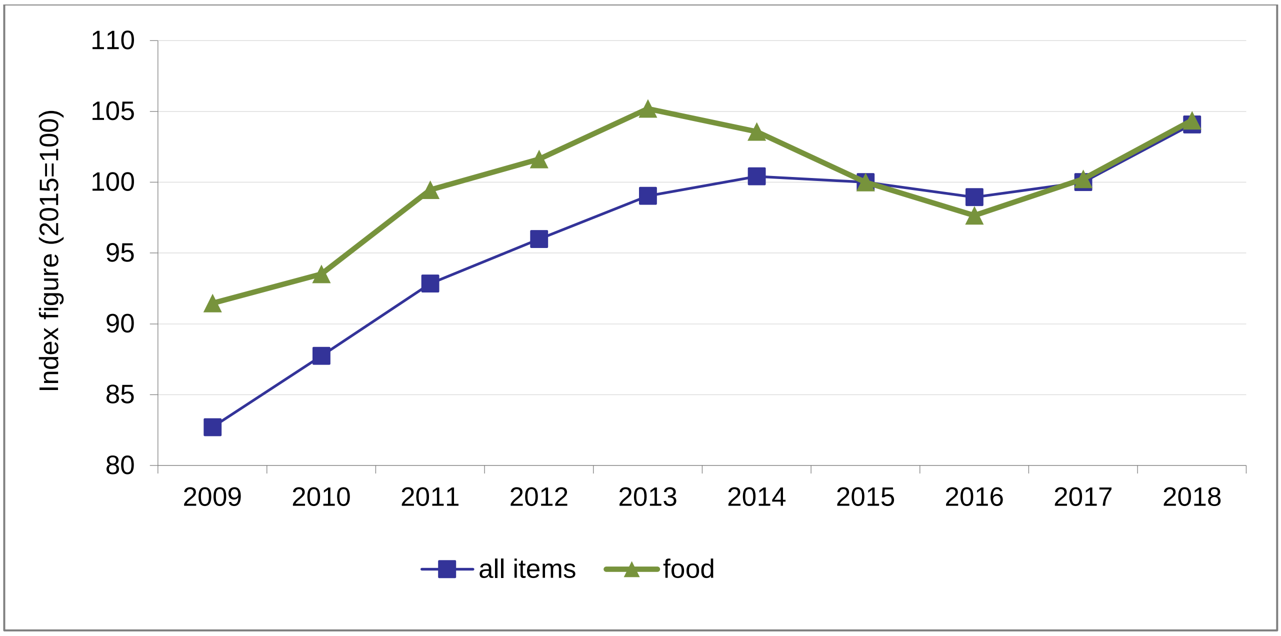
A. 6. Data from the agriculture statistical factsheet

Figure 35: Evolution of agricultural input and output prices, 2009-2018



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

Figure 36: Evolution of harmonised indices of consumer prices, 2009-2018



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

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