



Financial needs in the agriculture and agri-food sectors in the European Union



Summary report

November 2020





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Glossary and definitions

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

¹ 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 less than 250 employees, https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en.



NPL	Non-performing loans
RDP	Rural Development Programme
SME	Small and medium-sized enterprise
SO	Standard Output
UAA	Utilised Agricultural Area



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EXECUTIVE SUMMARY

This report summarises the findings of 24 studies that analysed agriculture and agri-food financing in 24 EU Member States² by providing an understanding of investment drivers, financing supply and financing difficulties, as well as the existing financing gaps for both sectors, at EU and national level.

The analysis draws on the results from two comprehensive and representative EU-level surveys carried out in 2018 and 2019, and their consecutive analysis at national level. These were the *fi-compass* survey on financial needs and access to finance of EU agricultural enterprises, and a survey of the financial needs of EU agri-food processing enterprises. The report does not take into account the impact of the ongoing COVID-19 health crisis and/or the effect of any new support scheme being set-up by the Member States 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 the EU

The EU holds a leading position in agriculture production, but the investment trend differs between Member States. The EU is the largest agricultural producer in the world, with a total agricultural production of EUR 181.7 billion in 2018. However, investments in the sector are, overall, on a decreasing trend. In 2018, the agricultural sector in the EU 24 invested EUR 54.1 billion in fixed assets, a decrease of 4% compared to year 2011. But there are big differences between Member States, and ten of them³ recorded a positive average annual growth rate of investments in the agriculture sector between 2011-2017.

The sector's generally low profit margins is the main incentive for EU farmers to invest in fixed assets, to increase the cost-efficiency and to modernise production. It is also the main reason why farmers seek additional working capital as they need financing to meet day-to-day costs, although agricultural cooperatives and input suppliers can cater to this need to some extent. Large-sized farms invest more than small-sized farms, and they are more dependent on external financing. Young farmers have a greater need to invest and, consequently, a greater demand for finance.

Compared to SMEs in other economic sectors, agriculture enterprises apply less for bank finance, and they face more difficulties in accessing finance when they do apply. In addition to the farmers who are denied credit by financial institutions, about 10% of all farmers in the EU 24 who need financing refrain from approaching banks for fear of rejection, compared to 5% of SMEs from other economic sectors. In many Member State, the main providers of finance to the agriculture sector are cooperative banks, which are often, in these Member States, closer to the farming community than commercial banks. However, in some Member States, commercial banks play a leading role. Financing is also provided by national promotional banks, agriculture cooperatives and leasing companies, among others. The lack of finance provided to the agriculture sector by financial intermediaries is, in some EU Member States, partly compensated by private finance, i.e. loans from friends and family.

Several factors influence farmers' access to finance. The general characteristics of the sector with low and fluctuating profit margins and cash flow, combined with the risks intrinsic to agriculture production – related to animal diseases, climate and weather-related fluctuations, and market crises – lead banks to be more hesitant in providing financing to farmers. In addition, low level of financial literacy, knowledge, and confidence of

² *fi-compass*, 2020, <https://www.fi-compass.eu/eafrd/fi-compass-study-financial-needs-agriculture-and-agri-food-sectors-24-eu-member-states>.

³ BG, CZ, IE, CY, LV, LT, HU, PT, SI, FI. Source: CAP Context indicators 2014-2020. 28. Gross Fixed Capital Formation in Agriculture, https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/cap-indicators-doc-c28_2018_en.pdf.



agriculture producers, as well as lack of accountancy and business records among small-sized farms also limit the access to finance. Some farmers also refrain from approaching banks due to a lack of trust in the banking system, mostly due to unattractive loan conditions, fears of rejections or previous negative experience in negotiating with banks.

Support from the CAP – both direct payments and rural development investment and start-up support – contribute to improving the situation by facilitating farmers’ access to lending, both short and medium-term, as the support stabilises their cash flow and loan repayment capacity. This has been widely supported by surveyed bank institutions and organisations. In addition, 11 Member States currently have at least one EAFRD funded financial instrument operational, or about to be operational, stimulating the investments undertaken by the agriculture sector by alleviating some of the unfavourable lending conditions on the market.

The concentration of lending to the agriculture sector may hamper the supply of financing as in 14 Member States the lending to the agriculture sector has been found concentrated to a very limited number of intermediaries, or even to a single intermediary, leaving these with strong market power which allows them to dictate loan conditions. In fact, the agriculture sector often faces higher interest rates than other economic sectors. In addition, half of the farmers applying for long-term loans must provide a guarantee. The guarantee level required by banks is often higher for the agriculture sector than for other economic sectors, no matter the viability of the project. In this context, small-sized farms and young farmers are particularly disfavoured. The 24 country studies also found that lack of agriculture specific expertise in banks further limits the supply of finance to the sector, a trend observed for several Member States⁴.

Even so, the credit provided to the agriculture sector by financial intermediaries is increasing in the 24 countries analysed in the reports series, and the increase in lending to the agriculture sector has outpaced the increase in lending to the overall economy for several countries. The increasing uptake of agriculture investment loans is in several Member States highly related to the increasing availability of investment support from the EAFRD as well as the availability of financial instruments⁵. At the same time, in some countries⁶, the agriculture sector has also gained attractiveness with in particular commercial banks over the last years leading to the positive credit development.

Bankers in several Member States have pointed out that they have a positive view of the agriculture sector due to the, in general, overall **high level of solidity** (adjusted equity/total capital) and **low level of default risk**, whereby the sector can be considered a good portfolio investment from the point of view of the banks. For 11 Member States⁷, the share of Non-Performing Loans (NPLs)⁸ for the agriculture sector was found to be lower than that of other economic sectors, whereas only for three Member States⁹ was the share of NPLs for the agriculture sector higher. For the 24 Member States analysed, bankers often claimed that farmers with viable project proposals and available balance sheets as well as with a proven repayment ability, do not face constraints in accessing finance.

The study has showed that access to collateral, previous experience from managing a farm, and previous banking relations/credit history are vital prerequisites for accessing financing. However, these are often not the characteristics of new businesses or small-sized farms, who therefore face greater constraints in accessing finance.

A financing gap for the agriculture sector has been estimated to be in the order of EUR 19.8 to EUR 46.6 billion for the EU 24. The gap represents financing sought by economically viable enterprises and

4 EE, IT, SI, BG, SE, PT, IE, HR, RO.

5 IE, ES, DE, CZ, RO, PL, AT, HU, BG, LT, SK, PT, FI.

6 ES, PT, LT.

7 CZ, HR, FR, HU, FI, SK, BE, LT, IT, SI, RO.

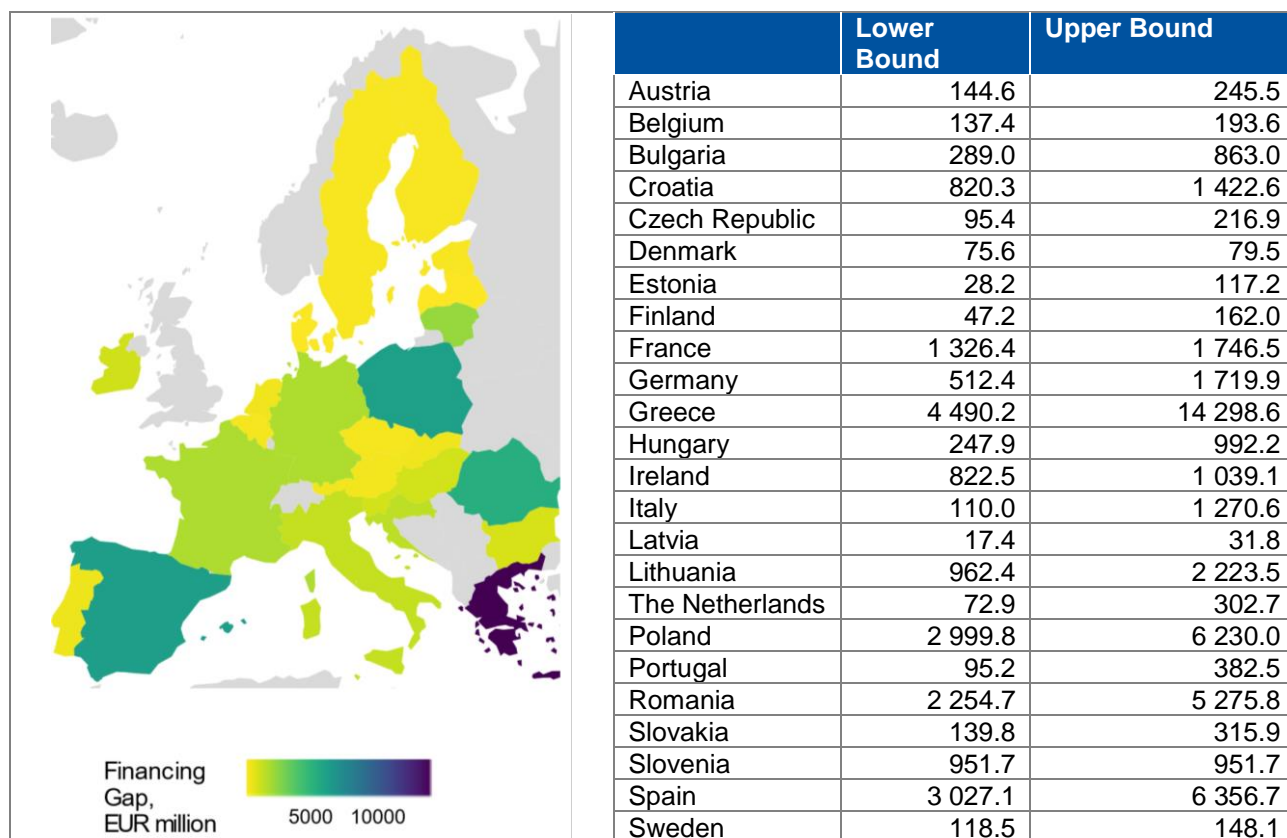
8 A loan in which the borrower is in default due to the fact that they have not made the scheduled payments for a specified period.

9 BG, EL, DK.



that is not granted. Small-sized farms, young farmers, new entrants, and innovative investments find it harder to access financing. Almost two thirds of the gap is due to difficulties in accessing long-term loans.

Table 1: Financing gap in the agriculture sector by Member State in 2017, upper and lower bound, EUR million



Source: Calculations based on the fi-compass survey.

Note: Upper bound used in the map.

The collaboration between the private and the public sector to facilitate farmers’ access to finance could be further strengthened, to make it possible for economically viable farms to undertake investments that are currently on hold:

- For the vast majority of the 24 Member States analysed, it has been recommended to the national authorities to set-aside further resources from the RDP in the upcoming programming period (2021-2027) to support credit guarantee instruments. This is expected to facilitate access to finance for farmers who cannot access loans because they are considered too risky, and/or because they cannot provide sufficient bankable collateral. The products recommended to be guaranteed are primarily investment loans with long-term maturities, but for several Member States also the provision of guarantees for working capital loans and credit lines is considered to be beneficial.
- In some Member States, depending on the specific market conditions, the use of loan funds with a risk-sharing structure has been recommended to increase access to credit through the provision of risk protection and liquidity to the banks as well as a higher interest rate reduction for the final recipients.
- In several Member States, managing authorities have been recommended to undertake further efforts to strengthen farmers’ financial literacy, which would contribute to increasing their bankability. Also, the provision of training to financial institutions on the particularities of the agriculture sector has been recommended, aiming at facilitating their credit assessment of the sector.



- For Member States with a high share of small-sized and micro holdings or where a high share of farmers relying on finance from informal sources (i.e. family or friends), financial instruments for micro-credit have also been suggested.
- Finally, all managing authorities have been invited to carefully evaluate the possibilities offered by the new legal framework (e.g. easier combination of financial instruments and grant support and use of interest rate subsidies, the possibility to finance the purchase of land for young farmers) to design dedicated support packages for the most affected target groups (notably young farmers and small-sized enterprises). In addition, the provision of stand-alone working capital finance allowed by the new EAFRD rules for 2021-2027 programming period can be a turning point for many farms facing price fluctuations and volatility.

The EU Green Deal will require farmers to undertake additional investments in the near future. The Farm to Fork and Biodiversity strategies, as essential parts of the EU Green Deal, aim at stimulating the increasing sustainability of the EU agriculture sector through a number of regulatory measures and will require farmers to undertake substantial investments in the near future. At the same time, the analysis showed that obtaining financing for investments related to climate change adaptation poses particular difficulties for farmers, as it is sometimes difficult to prove that these investments will render higher profit margins whereby banks are hesitant to lend for this purpose. Thus, **in order for the agriculture sector to be able to step-up to the expectations put on them by society, additional support in accessing finance provided by financial institutions is pivotal.**

In addition, the ongoing COVID-19 health crisis is expected to put even further strains on the investment capacity of the sector. Hence, although the impacts of the COVID-19 crisis on farmers' access to finance was not covered by the data that laid the ground for the conclusions of this study¹⁰, it can be assumed that the findings of the study, notably the size of the gap and the reasons for the existence of a gap, will be further exacerbated, in particular for some sub-sectors, by the ongoing crisis. As a result, the recommendations included in the 24 country reports can be understood to be even more pertinent against the background of the ongoing crisis. Indeed, some Member States have already implemented new financial instruments, or took on board the new flexibility offered by the EU legislation, targeted to the agriculture sector to cope with the COVID-19 crisis - an example that could potentially be relevant also for other Member States to follow.

Financing gap for the agri-food sector in the EU

The agri-food sector of the EU is an engine for growth and jobs. Generating 9% of the manufacturing industry's turnover, the agri-food sector is also the largest employer (7.5% of total employment) of the EU's 24 divisions of the manufacturing industry¹¹. The growth of the agri-food sector has positioned the EU to the world's largest agri-food exporter.

Consequently, the agri-food sector is an attractive industry for investments. Since 2011, the investment volume has increased by 27%. Capacity expansion stands out as the main driver for investments, but agri-food enterprises are also addressing through investments efficiency-gains for enhanced competitiveness. To deal with higher production costs, stagnating sale prices, and constrained access to skilled labour, recent investments of agri-food enterprises focus on automation. The uptake in digital technologies has also sparked demand for finance across several Member States.

¹⁰ The results presented in the report do not reflect the impact of the ongoing COVID-19 health crisis and/or the effect of new support schemes set-up by Member States 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. However, the COVID-19 crisis is generally expected to increase the difficulties of the agriculture and agri-food sector in accessing finance, although this would need to be subject to further analyses by interested stakeholders, administrations and/or researchers.

¹¹ Eurostat, Manufacturing Statistics – NACE Rev. 2, <https://ec.europa.eu/eurostat/statistics-explained/pdfscache/10086.pdf>.



Whilst larger agri-food enterprises have higher equity ratios, the SME-dominated agri-food sector still has a sizeable demand for finance. According to the Agri-food survey undertaken by us, 46% of the respondents stated that they applied for bank finance. Of those agri-food enterprises applying for finance, nearly half seek investment loans of medium-term maturity. The need for working capital appears as one of the main drivers of the demand for finance. This short-term financing helps agri-food enterprises better manage their daily operations, providing capital to buy raw material and repaying their liabilities once the processed foods are sold.

The European Agriculture Fund for Rural Development (EAFRD) is one of the most important financial vehicles to promote investments for the agri-food sector and may also catalyse demand for finance. Agri-food enterprises benefit from the Rural Development Programme (RDP) measure 'Support for investments of processing and marketing of agriculture products'. The studies reveal that the processing and marketing support provided under the RDP 2014-2020 contributes to positive investment behaviour.

The growth in outstanding loan volume reflects the positive attitude towards investments in the agri-food sector. Financial intermediaries across the EU 24 provide over sufficient liquidity. Still, the lack of specialisation of financial intermediaries for the agri-food sector and a concentrated banking sector implies limitations within the Member States. Whilst guarantee instruments are more common across the EU 24, especially SME's are challenged to provide sufficient collateral due to lower equity ratios.

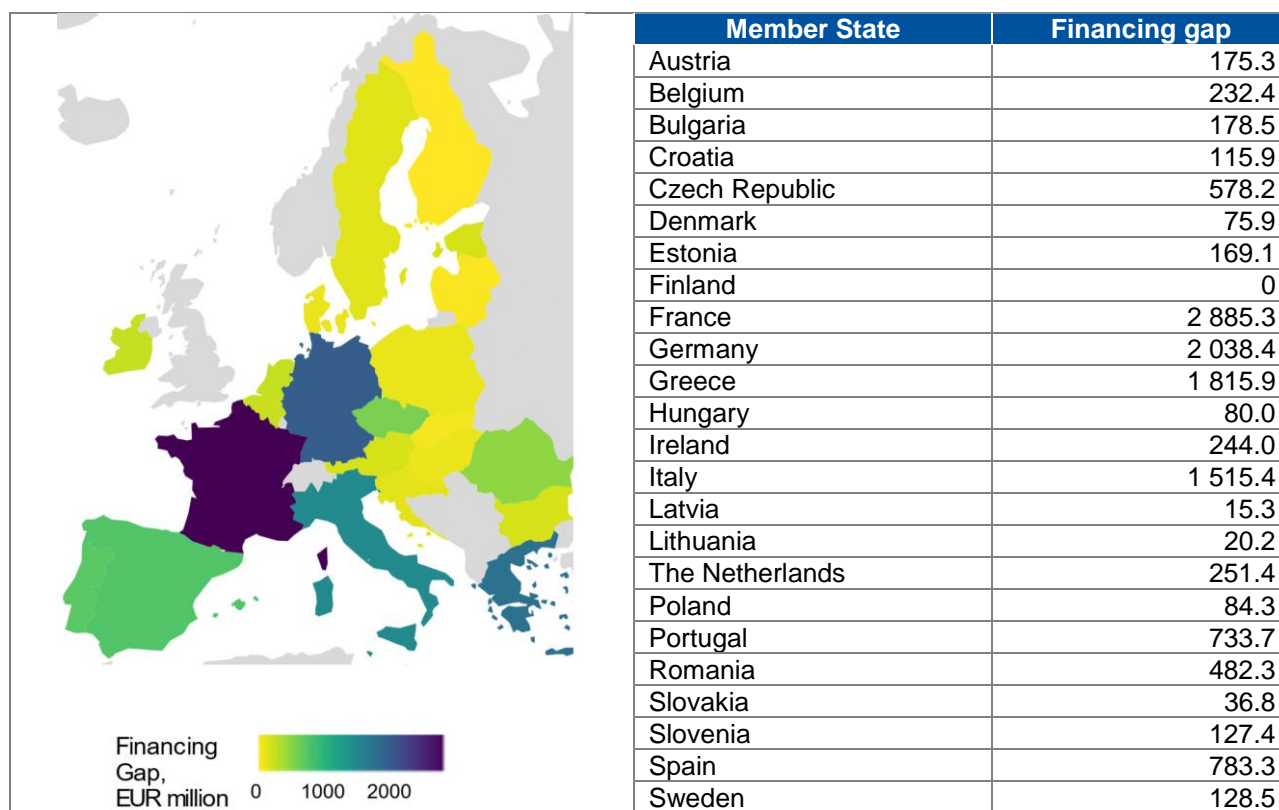
A financing gap has been estimated at EUR 12.5 billion for the agri-food sector in the EU 24. 78% of the gap affects small-sized agri-food enterprises and 57% is attributed to long-term loans. Start-ups, new entrants, and innovations find it difficult to attract finance support. Confronted with low equity ratios, financial intermediaries see innovations of smaller and new agri-food enterprises with scepticism, as they lack benchmark data to assess the credibility of the investment project. This is detrimental, as innovation in the agri-food sector lags behind other sectors of the economy¹².

The lack of collateral constrains the loan approval for small-sized agri-food enterprises. Whilst financial intermediaries' main reason for loan rejection lies in the high-risk of small-sized agri-food businesses, their insufficient collateral or guarantees also constrain the enterprises from receiving financing support. Also, unfavourable loan conditions and too complicated loan application procedures often lead to discouragements of agri-food enterprises.

12 European Investment Bank, 2019, Feeding Future Generations, https://www.eib.org/attachments/thematic/feeding_future_generation_en.pdf.



Table 2: Financing gap in the agri-food sector by Member State in 2018, EUR million



Source: Calculations based on the Agri-food survey.

Several Member States have recognised the need to further stimulate investments through financial instruments. Especially EAFRD-supported financial instruments have a proven track record in some Member States, facilitating the access to finance by subsidizing interest rates or bolstering the current guarantee offering for agri-food enterprises. While the cause for the financing gap in the agri-food sector has various causes, the following suggestions stand out, to improve the enterprises access to finance and thus, further support investments in the Member States:

- For the vast majority of the 24 Member States analysed, it has been recommended to the national authorities to use EAFRD resources to strengthen the guarantee instruments already in place or to create new ones more targeted towards the needs of the agri-food sector. The products recommended to be guaranteed are primarily investment loans with long-term maturities, but for several Member States also the provision of guarantees for working capital loans and credit lines is considered to be beneficial.
- In some Member States, depending on the specific market conditions, the use of loan funds with a risk-sharing structure has been recommended to increase access to credit through the provision of risk protection and liquidity to the banks as well as a higher interest rate reduction for the final recipients.
- An effort to increase the financial literacy of micro and small-sized enterprises has also been suggested in several Member States.
- For some Member States showing a higher attitude towards innovation and higher level of financial knowledge among enterprises, also the development of equity or quasi-equity instruments targeted to the sector has been suggested.
- Finally, as for the agriculture sector, all managing authorities have been invited to carefully evaluate the possibilities offered by the new legal framework (e.g. easier combination of financial instruments and grant support and use of interest rate subsidies) to design dedicated support packages for the most affected target groups.



1 INTRODUCTION

The European Union (EU), as the rest of the world, is facing times of significant transformation. Long-term challenges are coming to the fore and call for decisive action. Fast growing global population, increased pressures on natural resources, and a rapidly warming planet are setting a new operating environment. Ageing of the farm population and growing urbanization are adding to these challenges. As a consequence, all these have implications *inter alia* on farming, on the agri-food sector and rural livelihoods.

Agriculture and agri-food value chains are under significant pressure and will now also have to respond to unprecedented challenges as also the COVID-19 pandemic unfolds. Disruptions of domestic food supply chains are emerging as a pressing issue, necessitating the financing of a significant amount of new investments to support a transformation into a more resilient and adaptive agriculture model, including, for example, shorter and more robust local value chains, just-in-time deliveries, deployment of digital technologies, and the creation of information platforms for farmers and agri-food enterprises.

In the face of these challenges, the European Commission has put forward the European Green Deal¹³, which is setting the tone for the creation of an inclusive, competitive, and environmental-friendly future. The Green Deal encompasses the initiatives of the Farm to Fork Strategy¹⁴ and the EU Biodiversity Strategy for 2030¹⁵, which will have particular importance for the agriculture and agri-food sectors triggering needs for additional investments. Public and private actors must act collectively to override challenges and seize the new opportunities. As a key ingredient for inclusive growth and job creation, access to finance is one of the biggest hurdles that especially small-sized and family enterprises face, often preventing much needed investments. Consequently, better insights about the magnitude and nature of the financing gap in the agriculture and agri-food sectors are needed to address these challenges.

Objective

This report summarises the results of 24 EU country reports on the financing gap in the agriculture and agri-food sectors, which were published on June 11, 2020 by *fi-compass*¹⁶. It aims at capturing the main characteristics identified by these reports across EU Member States. The analysis is based on the identification and assessment of the supply of and demand for financing, and on the quantification of the unmet demand for financing for the two sectors. It also provides insights on the financial market development for EU farmers and agri-food processors. The 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

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, where the feedback of 7 600 farmers was obtained, and a survey of the financial needs of EU agri-food processing enterprises, where 2 150 agri-food enterprises were interviewed. The analysis is further elaborated by input from extensive interviews carried out with stakeholders in the 24 countries, by additional desk research, and enriched with secondary data from EU and national data sources.

13 European Commission, 'European Green Deal', https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en.

14 European Commission, 'From Farm to Fork', https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/farm-fork_en.

15 European Commission, 'EU Biodiversity strategy for 2030', https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/eu-biodiversity-strategy-2030_en.

16 *fi-compass*, <https://www.fi-compass.eu/eafRD/fi-compass-study-financial-needs-agriculture-and-agri-food-sectors-24-eu-member-states>.



Conducting the analysis of the potential financing gap in the agriculture and agri-food sectors, the study adopts the following three-step approach:

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

Per 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 results presented in the report do not reflect the impact of the ongoing COVID-19 health crisis and/or the effect of new support schemes set-up by Member States 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. However, the COVID-19 crisis is generally expected to increase the difficulties of the agriculture and agri-food sector in accessing finance, although 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 discusses financing for the agriculture sector; and Part II discusses financing for the agri-food sector. Each part is structured in four sections: 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 Analysis on the demand side of agricultural finance

This section summarises the results of the analysis of the demand in the 24 Member States reports. It describes the drivers of demand for finance in the agriculture sector and the type of finance demanded. It seeks to elaborate the main reasons for farm enterprises to request financing and identify the agriculture sub-sectors displaying the largest need for finance. The analysis of the demand for agriculture finance is based on the findings from the *fi-compass* survey of 7 600 farms in the EU 24, as well as interviews with key stakeholders in the agriculture sector from across Europe, combined with information obtained from the Farm Accountancy Data Network (FADN).

Key elements on the demand for finance from the agriculture sector

- Low profit margins is the most important trigger behind investments in fixed assets, with farmers looking to improve economies of scale or to reduce costs through increased mechanisation.
- Low and fluctuating profit margins also drive demand for working capital as farmers need financing to meet day-to-day costs, although agricultural cooperatives and input suppliers can to some extent offset the finance demand from financial institutions.
- Support from the CAP – both direct payments, investment support, and start-up support – facilitate farmers' access to lending by improving their cash flow and loan repayment capacities.
- Large-sized farms invest to a greater extent than small-sized farms, and they are more reliant on external financing.
- Young farmers show a greater need to invest, and a larger demand for finance.
- Animal producers register the highest demand for finance, topped by poultry and pork producers.
- Agriculture enterprises apply less for bank finance than SMEs in other economic sectors.
- The lower application rate for bank finance for the agriculture sector is in some Member States partly compensated by private finance, i.e. loans from friends and family. In the Member State where this is observed, young farmers and small-sized farms show a higher reliance on informal loans.

2.1.1 Drivers of demand for finance

Most farmers seek bank finance to invest in fixed capital. According to the *fi-compass*¹⁷ survey, 63% of the respondents reported that the main purpose of their loan was to invest in new machinery, equipment or facilities, whereas 41% intended to use the loan for working capital purposes. 15% responded that the purpose was to make an investment to improve land already owned or rented (such as investments in orchards, vineyards etc.), 11% aimed at using the loan for purchase of land, and another 3% represented financial needs related to the rental of additional land (Figure 1). In the following sub-section, the main dynamics behind the type of investments identified in Figure 1 are explored.

¹⁷ *fi-compass* survey.



Figure 1 : Purpose of bank loans in 2017 (% of respondents with a successful loan application)

WORKING CAPITAL FINANCE

General working capital (41%)

Renting additional land (3%)

Purpose of bank loans

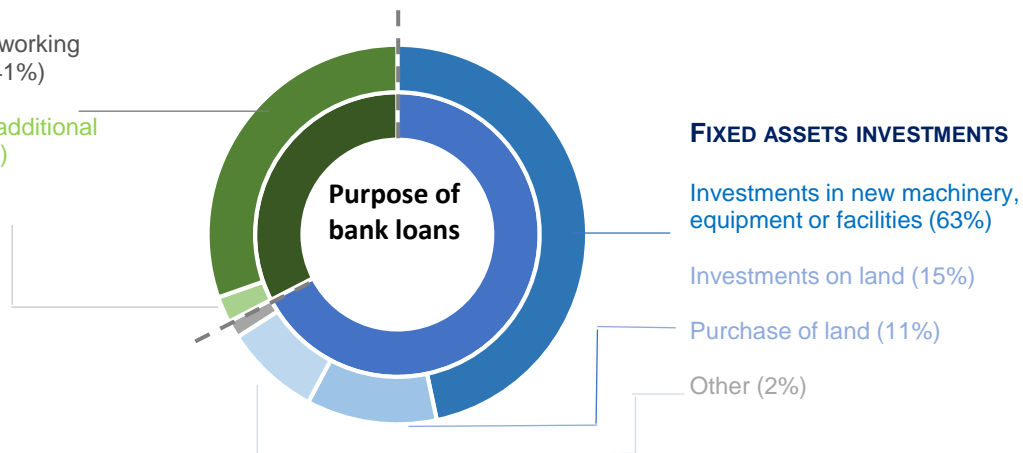
FIXED ASSETS INVESTMENTS

Investments in new machinery, equipment or facilities (63%)

Investments on land (15%)

Purchase of land (11%)

Other (2%)



Source: fi-compass survey.

Note: Categories sum to more than 100%. Multiple answers allowed (i.e. loan applications might serve different purposes).

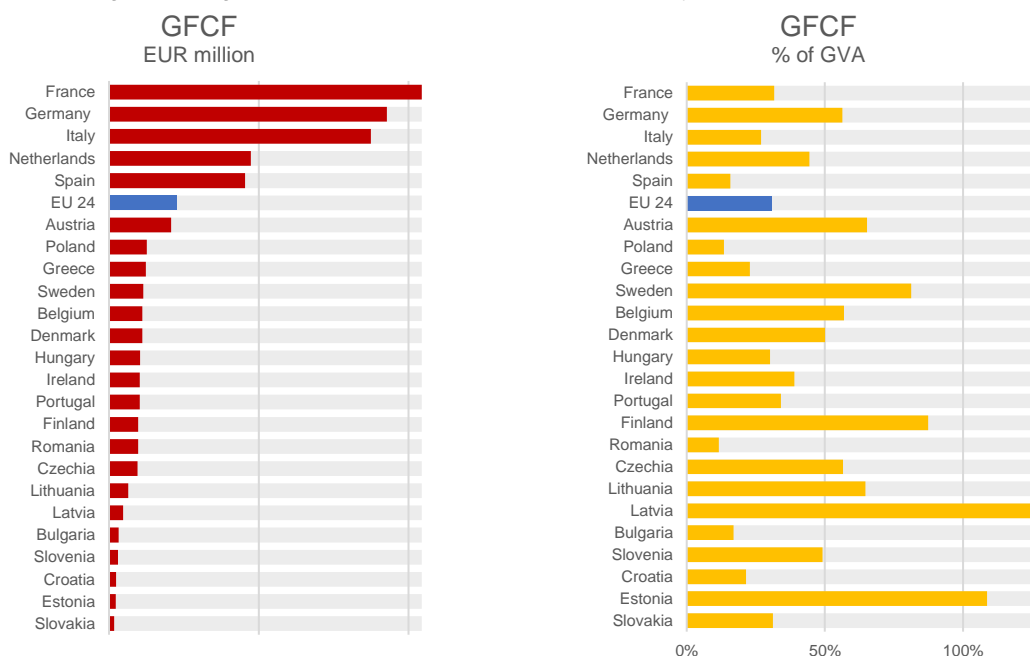


Box: Investment levels in the agriculture sector

Investments in the agriculture sector have decreased since 2011, but several of the countries that had low investment volumes one decade ago are now experiencing a rapid growth in investments. In 2018, the agricultural sector in the EU 24 invested EUR 54.1 billion in fixed assets, a decrease of 4% compared to year 2011. In absolute terms, France, Italy and Germany have accounted for the highest investment volumes. In total 10 Member States have recorded a positive average annual growth rate between 2011-2017, with Latvia showing the highest overall positive growth (87%), followed by Bulgaria (83%).¹⁸

Gross Fixed Capital Formation¹⁹ (GFCF) as a share of agriculture Gross Value Added (GVA) measures how much of the value added is invested in fixed assets rather than consumed, and it is a key element for indicating future competitiveness. In year 2018, the EU 24 GFCF accounted for 31% of the total agriculture GVA. In 2018, Latvia registered the highest share of investments as percentage of GVA for all EU (129%), followed by Estonia (109%), and Finland (87%).

Figure 2: Total investments in Gross Fixed Capital Formation in 2018, GFCF as share of agriculture GVA in 2018, and average annual growth of GFCF between 2011 and 2018, by Member State



Source: Eurostat, 2019.

Note: The data for the EU 24 has been calculated as the arithmetic average of the 24 Member States.

18 CAP context indicators 2014-2020. 28. Gross Fixed Capital Formation in Agriculture. https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/cap-indicators-doc-c28_2018_en.pdf.

19 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.



2.1.1.1 Drivers of investments in fixed capital and of working capital expenses

Agricultural investments are driven by three main dynamics: farm and machinery modernisation, expansion of the production (including purchase of land), and adaptation (of practices) to regulations, consumer preferences, and climate change.

MODERNISATION	EXPANSION	ADAPTATION
<ul style="list-style-type: none"> • Increase efficiency • Reduce costs • Competitiveness 	<ul style="list-style-type: none"> • Economies of scale • Purchase of land • Higher market share 	<ul style="list-style-type: none"> • Regulatory requirements • Consumer preferences • Climate change

MODERNISATION



Low profit margins is the most important trigger behind investments in more cost-efficient and modern agriculture production throughout the EU 24²⁰. The need to remain competitive on domestic as well as global markets drives investments in new machinery, modern production technologies and the upgrade of old infrastructure in all 24 Member States analysed. Increasing labour costs, often linked to the shortage of labour, is an important factor of the increasing production costs for the agriculture sector, and an important reason behind structural changes and capital investments. As a result, throughout the EU 24, farmers are increasingly shifting towards more modern and less labour dependent technologies. In the Czech Republic, Croatia, Estonia, Ireland, and Latvia, investments in modern production technologies was said to be foremost motivated by the need to reduce labour costs.

Investments in technology are increasingly important, as in particular precision agriculture, is gaining ground. In Denmark, France, Ireland, Spain and Portugal this was highlighted as an investment driver among large-sized farms, but can be observed across Europe.

However, the transformation from labour-intensive to capital-intensive agriculture is still ongoing in many countries, as observed for example in Poland, Croatia, Lithuania, Hungary and Portugal. In many Member States, the larger-sized – and to some extent medium-sized farm segment is investing in modern technology, while for the majority of the farms, who are small-sized and often lack modern equipment, productivity has not reached its full potential. This is also linked to many farmers' lack of knowledge of new technologies. Often, the management approach differs between smaller and large-sized enterprises. Small-sized farms tend to be family owned and rely to a greater extent on traditional farming methods. Often, smaller farms are also run on a part-time basis, therefore the willingness to invest in the agricultural activity may be limited.

EXPANSION OF PRODUCTION



Investing in the expansion of farm production is an investment driver in all 24 Member States, but in 13 of the countries analysed it was found to be of particular importance (as noted for Austria, Belgium, Croatia, Denmark, France, Hungary, Latvia, Lithuania, the Netherlands, Poland, Portugal, Slovakia, and Spain). Investments in the expansion of production is often motivated by the need to improve the profitability, hence the same reason as motivates the investments in the

²⁰ In the *fi-compass* survey, 47.5% of the farmers in the EU 24 considered high production costs to be the biggest challenge, followed by low selling prices (37.6%).



modernisation of the farm, and to increase the market share. Especially small-sized farms find it difficult to sustain their profits given the increase in expenses for rent of agricultural land and/or for wages of farm workers, whereby, in order to stay in business farmers are pushed to increase production and expand their business, as found for example in France, Germany, Belgium, the Netherlands and Spain. Despite the on-going structural change²¹, the EU agriculture sector still has an absolute domination of small-sized farms, with 87% of farms below 20 ha.²²

The fragmented land market, and the high demand for land leads to increasing land prices, which also causes farmers to have increasing demand for finance, in order to be able to purchase or rent land. In Estonia, the Czech Republic, Bulgaria, the Netherlands, and Slovakia, more than 25% of the farmers reported the purpose of the loan obtained to be land purchase, significantly higher than the EU 24 average of 11%. On the other hand, in Hungary, only 1% of the farmers intended to use the loan obtained for buying land. Also, few farms in Italy, Portugal, Greece, and Croatia (less than 7% of those that obtained loans in 2017) reported that the purpose of the loan was land purchase. Accessing land is difficult because of the fragmentation of land, the pressure from urbanisation, and the low liquidity of many land markets. The latter is caused by socio-economic reasons, as found for example for Greece, Spain, Portugal and Italy, and by regulatory limitations (found to be an obstacle in Hungary, Poland and Slovenia).

Young farmers often seek to expand their production leading them to request more finance than their older peers, and farm succession can be expected to continue to be an important driver of demand for finance in some Member States also in particular in the medium- to long-term. Young farmers tend to have lower capital-stocks and less land ownership (as they rent land to a greater extent than older farmers), whereby, in order to improve the scale or the efficiencies of the farm, they have a greater need to invest²³. In Belgium, Spain and the Netherlands, farm succession was identified as an important driver of demand for finance in the next ten to twenty years. In addition, agricultural stakeholders in Sweden and Finland have pointed out that the currently low profit margins lead many farmers to continue to use their farms without making the necessary investments in buildings and production as these are both costly and burdensome. This indicates that when young farmers gain ground in the sector, these two investment types have the potential to become the main driver of finance demand in these countries.

ADAPTATION TO REGULATORY REQUIREMENTS, CONSUMER PREFERENCES, AND CLIMATE CHANGE



Changing regulatory requirements is an important driver behind the investments undertaken, as noted especially for Germany, Denmark, Slovenia, Greece, Portugal, Slovakia, France, Hungary, the Netherlands, Croatia, Austria and Sweden. This is particularly the case for the livestock sector and is foremost related to animal welfare rules. Also environmental rules, standards related to farm safety improvements, as well as food safety and packaging requirements lead farmers to invest.

21 The structural change of farms that is taking place in several Member States leads the number of farms to decrease, whereas the average size of farms increase. At the same time, often the specialisation of farms increases. Mostly micro or small-sized farms disappear, and their assets are taken over by large-sized farms. This is also confirmed by the increasing average size of individual farms. Eurostat, 2018, Agriculture, Forestry and Fishery statistical book; https://ec.europa.eu/eurostat/statistics-explained/index.php/Agriculture,_forestry_and_fishery_statistics.

22 Eurostat 2018.

23 European Commission, 2017, Young farmers in the EU - Structural and economic characteristics, EU Agricultural and Farm Economic Briefs No 15, October, p.1.



Equally important are changing consumer preferences, pushing farmers to invest to remain competitive.²⁴ The growing popularity of organic produce, or other niche produce, among consumers is one important example of changing consumption preferences that have triggered investments from agriculture producers²⁵. In addition, new export markets is another segment that requires investments to adapt to product preferences.

Climate change adaptation requires major investments from the EU farming sector, as particularly highlighted in the analysis of 11 Member States²⁶. Investment strategies to mitigate the negative impact of climate change on agriculture and to increase resilience include investments in: (i) new agriculture practices²⁷, (ii) production diversification including short supply chains and direct sales²⁸, and (iii) climate change resilient production techniques²⁹. In Spain, Portugal, Romania, and the Czech Republic, growing investments in irrigation systems were noted, as a response to the increasingly dry and hot winters, shorter spring seasons, and heat waves in the summers. In addition, the need to reduce greenhouse gas (GHG) emissions require a major adaptation, particularly in the livestock sector. Investments geared towards the development of renewable energy sources and/or energy savings to improve heating facilities are also common, as discussed for example for Austria, Slovenia, France and Germany.

The Farm to fork and Biodiversity strategies will require farmers to undertake additional investments in the near future. For some Member States, such as Germany, Spain and Poland, it was noted that obtaining finance for investments related to climate change adaptation posed particular difficulties for farmers. These difficulties stem from the challenge to establish that these investments will render higher profit margins in the future. In light of the EU Green Deal initiative, in particular the Farm to fork and Biodiversity strategies, which will require the agriculture sector to undertake major investments in the coming years in order to adapt to new requirements, it is therefore of significant importance that the private and public sectors cooperate in order to ensure that financing is facilitated to cover the up-front costs allowing farmers to produce more sustainably.

WORKING CAPITAL FOR GOODS	WORKING CAPITAL FOR SERVICES
<ul style="list-style-type: none"> • Inputs, preparation and cultivation expenses (seed, fertilisers, pesticides, feedstuffs, etc.) 	<ul style="list-style-type: none"> • Salaries • Rents • Energy and electricity expenses • Interest costs

Overall, demand for investment finance is higher than demand for working capital finance, but some Member States show the opposite tendencies where low and fluctuating profit margins

24 Belgium, Denmark, France, Germany, Spain, Poland, Romania, Bulgaria, Portugal, the Netherlands, Finland, and the Czech Republic.

25 To convert to organic farming, farmers need, for example, to invest in additional land for pasture or for cultivation of fodder plants, as well as adjusting barns and stalls to meet organic farming requirements. Besides this, additional expenses for an organic certification and short-term liquidity during the transition phase can incur.

26 Including for example Austria, Slovenia, Germany, the Netherlands, Czech Republic, Denmark, France, Ireland, Poland, Slovenia and Romania.

27 E.g. winter coverage of agricultural land, no-tillage, hedge plantation.

28 Diversifying the agricultural activities can help improving farms resilience.

29 Such as irrigation and water reservoirs or investments in anti-hail nets, but also techniques based upon plant phenology and the adaptation of crops to the new circumstances.





explain the high demand for working capital. In Ireland, Greece, Denmark, and Hungary over 70% of the bank financing obtained is for working capital. Sweden, Italy, the Czech Republic, and Romania reported a very low use of bank loans for working capital purposes.³⁰ The low profit margins experienced by many agriculture sub-sectors push farmers to invest in fixed assets, as discussed above, but it is also an important driver behind demand for working capital, to allow the financing of day-to-day activities as found for example for Denmark and Greece. In France, Germany and Ireland it was found that fluctuating profit margins, partly related to increasing weather-related variations, push up demand for working capital.

The supply chain organisation influences farmers demand for short-term finance from banks, as input suppliers and agricultural cooperatives in many Member States finance part of the working capital needs of farmers³¹. Often, a type of lending relationship exists between farmers and input suppliers, or between associated farmers and agricultural cooperatives when the cooperatives provide inputs, which reduces the demand (to banks) for working capital loans. Input suppliers tend to finance the purchase of fertilisers, pesticides, and equipment against a discount on the purchasing price of the farm’s future produce (for more details, see section 2.2.2). Also, farmers can benefit from lower prices for their inputs from the bulk purchases of the cooperatives, as for example noted in Denmark and Sweden, which are then passed on to the associated farmers buying their inputs from the cooperative. Hence, in many countries, working capital requirements are to quite some extent financed by the upstream actors in the food value chain. However, on the other hand, to some extent it was observed from the literature that long payment deadlines or hold-ups from the down-stream actors in the food value chain (for example food processors, slaughterhouses, dairies, and retailers) lead to long payment cycles / delays for the production, which sometimes create cash flow problems for farmers.

2.1.1.2 Variation of investment by sub-sector and the role of the CAP

Farm enterprises’ needs for capital and technology depend on their product specialisation and their investment strategies as the level of generated revenues differ. This influences the possibility of investing, and the potential return from investments. It also affects the possibilities for finding external finance.

ANIMAL PRODUCTION 	PERENNIAL AND NON-PERENNIAL CROPS 
<ul style="list-style-type: none"> • Dairy • Beef • Poultry • Pork 	<ul style="list-style-type: none"> • Wine • Olives • Fruits • Vegetables • Field crops

Animal producers register the highest demand for finance, and poultry and pork producers have the highest use of loans. According to *fi-compass* survey results, 28% of the animal producers sought finance in 2017, compared to 24% for the growers of non-perennial crops, and 21% for growers of perennial crops.³² According to FADN data, the granivore sub-sector (poultry and pork) has the highest liabilities to assets, 39.3%, i.e. the highest reliance on external debt, followed by the dairy (34.0%) and horticulture (33.8%) sub-sectors. The wine sector has the lowest liabilities to assets, 13.6%. The low

³⁰ *fi-compass* survey.

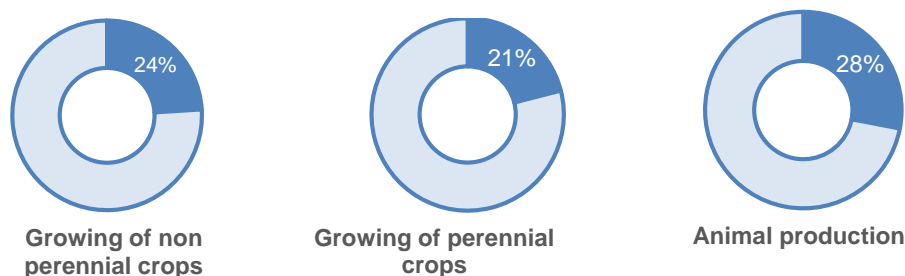
³¹ See: EL, EE, LV, SI, FR, HU, NL, LT, BG, FI, PL, DK, RO, IE, ES, SE.

³² The four sub-sectors identified are defined according to NACE 2 classification: NACE A01.1, NACE A01.2, NACE A01.3, and NACE A01.41 to A01.47 and parts of A01.49.



ratio for the wine sector is partly explained by the high degree of association to agricultural cooperatives for wine producers, where often the cooperative is the entity taking on external financing, not the individual producers, which is not reflected in the FADN data.

Figure 3: Share of farmers applying for finance (bank and private) by sub-sector in 2017



Source: *fi-compass survey*.

INVESTMENTS IN ANIMAL PRODUCTION



The abolishment of the milk quota system has, in some Member States, favoured investments among competitive dairy farms, whereas small-sized farms have difficulties in remaining competitive. Austria, Bulgaria, Ireland and Sweden noted positive investment developments for the sector. At the same time, decreasing margins over recent years linked partly to the Russian import embargo³³ and a significant decrease in the sale price of products, together with rising production costs has had a negative impact on the investments undertaken by the dairy sector as noted in Poland and Lithuania. In particular in EU 13 countries it was noted that the dairy and beef sectors are mostly made up of small-sized farms with farm managers close to or beyond retirement age, which further limit the investment drive and capacity compared to other sectors. A tendency observed to some extent across the EU is that land traditionally used for dairy and beef production is repurposed to crop production when soil characteristics allow. Large, intensive cattle farms on the other hand, and in contrast to their smaller more traditional counterparts, have the highest level of assets, liabilities and return on assets in many of the countries analysed, particularly noted in Belgium and Denmark. These large-sized farms are foreseen to continue driving the demand for finance.

Poultry consumption is on an increasing trend, driving investments in the poultry and egg production across the EU. In Austria, Belgium, Croatia, the Czech Republic, Poland, Slovakia, and Sweden the poultry sector was observed to have had the most positive investment trend of all sub-sectors over the last years. Poultry and pork production is often concentrated within large-sized farms with intensive production, and a high degree of vertical integration. As such, they often have higher investment possibilities than smaller farms.

The EU pork sector has suffered from – or benefitted from – the African Swine Fever. On the one hand, the impacts of the African Swine Fever have had strong negative effects in some Member States, for example in Austria, Bulgaria, Estonia and Lithuania, where the disease severely and negatively impacted the pig sub-sector, dragging down its performance and halting its investment growth. Many farms lost their livestock and had to respect strict hygiene rules. However, as of 2017, meat prices

³³ The Russian import ban on EU food products is in place since August 2014, and, at the time of writing set to expire on December 31, 2020. The decree prohibits import into the territory of the Russian Federation of certain agricultural products, raw materials and foodstuffs originating from certain countries. https://ec.europa.eu/food/safety/international_affairs/eu_russia/russian_import_ban_eu_products_en.



started to recover, whereby the need for restoring the lost pig production potential, alongside a new upswing of output market prices, positively affected the demand for investments in the sub-sector in some of the affected Member States³⁴. On the other hand, in countries like Belgium, Portugal and Spain, the investment growth of the pork sector has been very positive over the last years, to some extent taking advantage of the production loss in other Member States. Investments are related to farm infrastructure, like modernisation and expansion of stalls, to add value to the final product and adapt products to new markets, and to meet EU regulatory standards, for example related to manure spread, whereby farms purchase land in order to produce at a greater distance from urban areas³⁵.

INVESTMENT IN PERENNIAL AND NON-PERENNIAL



CROPS

Increasing production of high-quality wines and increasing consumption of olive oil and fresh and dried fruits are the main motivations behind the investments of the perennial sector. While in Spain and Portugal – leading olive oil producers – strong investments were noted for the olive sector, investments in vineyards were noted to be increasing in Austria, Bulgaria, Croatia, Portugal, Romania, and Slovenia. Demand for both fresh and processed fruits and vegetables, as well as dry fruits and berries is also increasing, leading several Member States to note positive investment tendencies for the fruit and vegetables sector.

The field crops sector has a stable investment pattern, often related to the direct payment support from the CAP which is linked to land. As a result, in general, cereal producers have a more stable economic situation, which makes it easier for this sector to invest as well as obtain finance. In Bulgaria, Hungary, and Slovakia, it was noted that the grain producers are possibly the most innovative farm segment, possessing the newest equipment and the highest level of technical know-how.

THE ROLE OF THE COMMON AGRICULTURAL POLICY

CAP direct payments have been found to positively influence farmers access to finance. Direct payments provide farmers with a basic income support, which improve farmers cash flow and loan repayment capacity, thereby increasing their viability and creditworthiness.

Investment support from the EAFRD³⁶ helps farmers to undertake more investments and to a higher amount than what would have been the case had there not been an investment support. In Member States with many small-sized farms, and where the modernisation needs are higher, the availability of EAFRD investment support is considered particularly important, as noted for several Southern and Eastern European countries, for example for Hungary, Latvia, Lithuania, Poland Estonia, Slovakia, Greece, Portugal, Romania, Croatia, Slovenia, and Bulgaria. In these countries, an RDP grant serves as a form of guarantee for the banks, and as a sign of the creditworthiness of the farm. As a consequence, banks are more likely to approve applications for investment loans for farmers who have had a grant approved. In addition, start-up support makes it possible for many young farmers to take over a farm and to undertake additional investments needed for stabilising their business.

34 Noted in Estonia and Lithuania.

35 As noted for Spain, Portugal, and Belgium.

36 The EAFRD finances through the national and regional rural development programmes (RDPs) two measures of particular relevance in influencing the level of investments and the access to finance for farmers. These are sub-measure 4.1 – support for investments in agricultural holdings – and sub-measure 6.1 – business start-up aid for young farmers. In addition, Member States/regions may opt for setting-up an EAFRD funded financial instrument to complement the grants. See section 3.2.2. for more details on financial instruments.



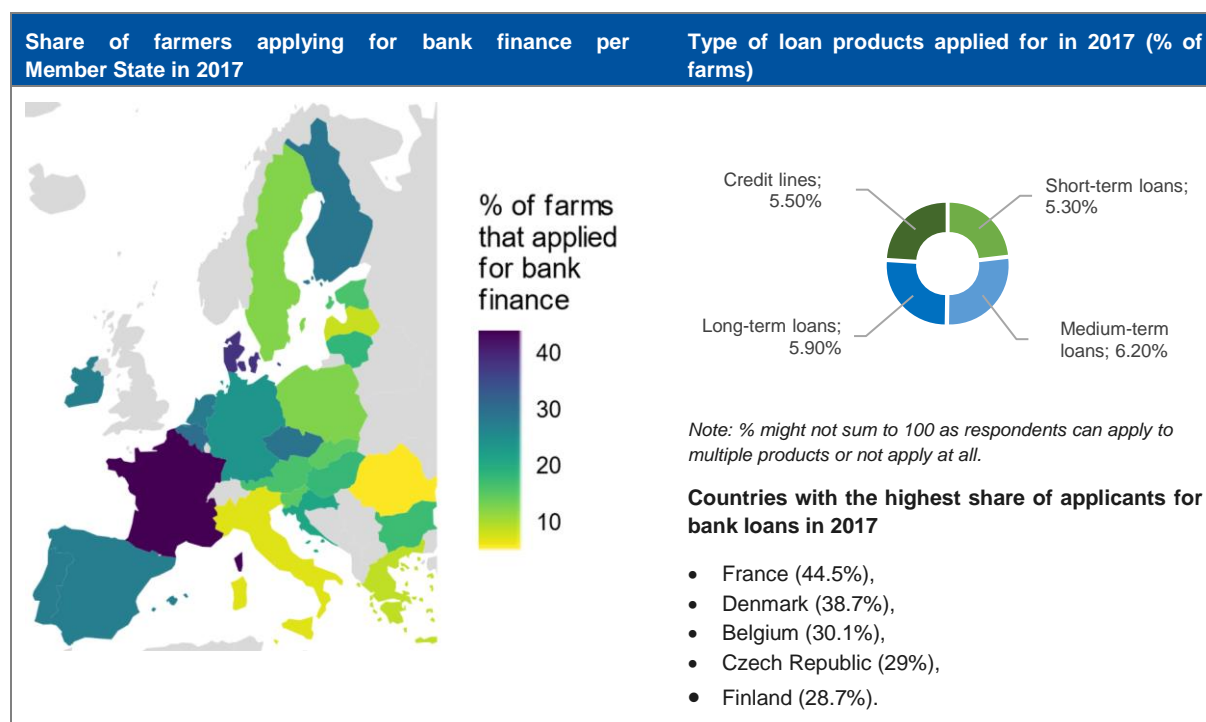
2.1.2. Analysis of the demand for finance

2.1.2.1. Demand for bank finance

Agriculture enterprises apply less for bank finance than SMEs in other economic sectors. In 2017, 17% of the agriculture sector applied for financing from banks, compared to 26% of SMEs from all economic sectors (year 2018).³⁷ The lower application rate for bank finance for the agriculture sector is often compensated by private finance, i.e. loans from friends and family (see section 2.1.1.2 Variation of investment by sub-sector and the role of the CAP).

Demand for finance differ significantly between Member States. The countries with the highest share of farmers applying for a bank loan were France (44.5%), Denmark (38.7%), Belgium (30.1%), Czech Republic (29%), Finland (28.7%) and the Netherlands (28%). However, when looking at the total demand for finance, including both bank lending and lending from private individuals (friends and family), Spain stands out, where almost 70% of farmers asked for finance in year 2017³⁸. This high total demand is unmatched by other countries. The Member State with the second highest share of farms applying for formal and informal finance is Hungary, where almost 60% of farms sought such financing.

Figure 4: Demand for bank finance in 2017



Source: *fi-compass survey*.

³⁷ *fi-compass survey* and European Central Bank, 2018, Survey on the Access to Finance of Enterprises (SAFE).

³⁸ 27.5% for bank finance, 29.4% asked for loans from friends and family, and another 11.3% requested finance from both sources in parallel.



Countries where the demand for bank finance was particularly low include Romania, where only 4.3% of the agricultural producers said to have applied for bank finance in 2017, followed by Italy (6.2%), and Greece (8.2%).

Denmark and France are the Member States where most farmers obtain bank financing. France and Denmark are the two countries that registered the highest share of farmers applying for bank loans in 2017³⁹, and they are also among the five countries with the highest success rate for loan applications⁴⁰. In France, 43.6% and in Denmark 38.2% of the farmers accessed bank financing for the year surveyed. This trend is further supported by the FADN data on overall liabilities compared to assets, broken down by Member State, reflecting the share of farmers that finance their activities with debts. Denmark has the highest liabilities over assets of all EU Member States, implying that the Danish farmers has the highest reliance on external debt to finance their activities. When breaking it down by sub-sectors, the Danish farmers pertaining to the grazing livestock, mixed farms, milk, granivores and field crops sub-sectors have the highest reliance on external debt among all EU farmers. France is the Member State with the second highest debt ratio overall and it registers the highest debt ratio for the wine sector, other permanent crops, and horticulture.

In terms of overall access to finance, Romania shows the lowest results. Romania had the lowest share of farmers applying for bank finance (4.3% of all Romanian farmers applied for bank loans in 2017), and out of these, only 72.5% were successful in obtaining the loan applied for⁴¹. In other words, only about 3% of the Romanian farmers were provided access to bank financing in 2017. The reasons behind the low or high access to finance are discussed in section 2.3.2.2.

Larger farms invest more, and rely to a greater extent on external financing. 49% of farms over 100 ha applied for bank finance in year 2017, compared to 14% for those under 20 ha,⁴² a relationship further confirmed by the country analyses where, in the majority of the Member State, a higher investment frequency for larger farms was noted.⁴³ The correlation between the structure of the agriculture sector and the finance demand observed is apparent. Three of the countries with the lowest share of farmers applying for bank loans – Romania, Italy and Greece – have a significant share of farms below 20 ha⁴⁴. On the other hand, three of the countries with the highest demand – Denmark, France and the Czech Republic – also have the highest share of farms above 100 ha⁴⁵. Hence, the strong demand in these countries may be related to the fact that they have a higher share of large, commercial farms.

The purpose with the financing differs depending on farm size. Small-sized farms invest more in working capital than larger farms⁴⁶. Large-sized farms on the other hand, invest more in new machinery, equipment, and facilities. Large-sized farms to a greater extent use the loan obtained for land purchases or land rental, whereas small-sized farms to a greater extent use the loan for investing in improving the conditions of the land already owned/rented⁴⁷ (Figure 5).

39 France 44.5%, Denmark 38.7%, fi-compass survey.

40 Countries with few rejected loan applications and refused loan offers include Portugal, Sweden, Denmark, Latvia, and France, all below or around 2% of unsuccessful applications.

41 fi-compass survey.

42 fi-compass survey.

43 IT, EL, RO, LT, EE, PT, LV, ES, HU, CZ, SK, BG, PL, SI.

44 99% for Romania, 96% for Greece, and 88% for Italy.

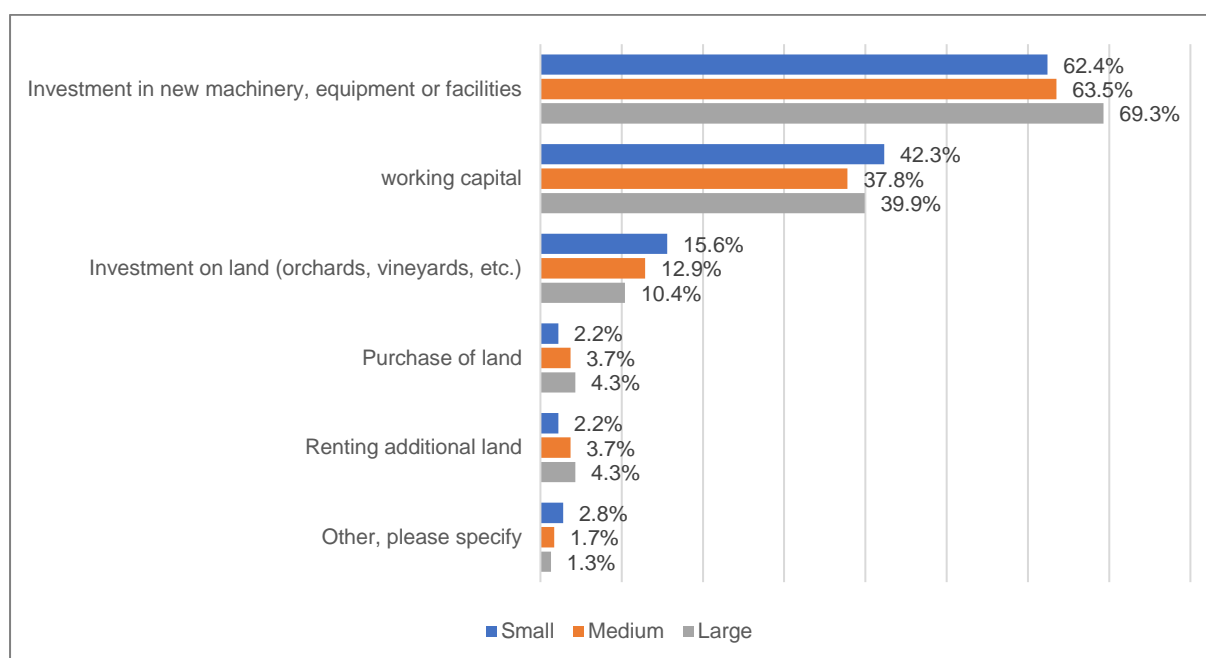
45 France and Denmark 22% respectively, Czech Republic 18%.

46 fi-compass survey and largely confirmed by stakeholders interviewed for the country analysis.

47 fi-compass survey.



Figure 5: Purpose of loans by farm size in 2017



Source: *fi-compass* survey.

These conclusions are further underpinned by FADN data on the share of liabilities compared to assets, when comparing farms based on their economic size. This data shows that, the bigger the farm the higher the liabilities/assets ratio. While it is 3% on average for farms with a Standard Output, SO⁴⁸, between EUR 2 000-8 000, it is 35.7% for farms with a SO above EUR 500 000. In other words, for the larger farms, a larger part of the assets is financed through debt. The smaller farms invest to a lesser extent than the larger farms, and they recur less to external financing for the investments undertaken. The FADN data further shows that the smallest farms (SO between EUR 2 000 to 8 000) has the highest share of short-term liabilities to total liabilities. In other words, the data implies that when the very small-sized farms rely on debt to finance their activities, this is mostly for working capital purposes.⁴⁹

Loans of medium and long-term maturities are more commonly applied for than loans of shorter maturity (Figure 4). When farmers apply for financing, the most common loan to apply for from banks were loans with a duration of between 18 months and five years (medium-term loan), which 6.2% of the EU 24 farmers applied for in 2017. 5.9% of the farmers applied in the same year for loans with a maturity of over five years (long-term loans), whereas 5.5% applied for credit lines, and 5.3% applied for short-term loans.

According to FADN data, on average, short-term liabilities account for 21.6% of total liabilities for the EU 24, across all sub-sectors. Countries with the highest short-term liabilities to total liabilities are Portugal 75%, Slovakia 63%, and Bulgaria 55%. The countries with the lowest share of short-term liabilities are Austria: 1.6%, Finland 7.7%, and Belgium 8.2%.

There are different reasons why short-term lending dominate over long-term lending in some countries. In some Member States, for example in Bulgaria, Italy and Ireland, short-term loans are

⁴⁸ As a measurement of economic size of a farm, Standard Output, abbreviated as SO, is used. The standard output of an agricultural product (crop or livestock) is the average monetary value of the agricultural output at farm-gate price, in euro per hectare or per head of livestock.

⁴⁹ For farms with a SO between 8 000 up to 500 000, the share of short-term liabilities is significantly lower, and increases with size, from 16% to 22%. For farms over 500 000 the share is 31%.



used to finance smaller investment projects. Agricultural stakeholders interviewed argued that sometimes farmers' financial demand is not satisfied with the requested loan product (i.e. medium or long-term loans), but instead farmers are offered short-term loans, leaving farmers with no choice if they want to access finance, due to their limited bargaining power. Farmers' limited bargaining power is linked to the small size of most farm operations. Banks are sometimes more confident providing short-term loans, as the perceived risks are lower. Banks feel more confident in making projections for the next 18 months than for a longer period, in particular when they have doubt about the business plan presented, or about the repayment capacity of the client.

In other countries, for example in Lithuania and Slovenia, the explanation behind the high demand for short-term loans compared to long-term loans, is farmers limited investment capacities. When farmers have restricted head room for considering investing in more long-term tangible assets, due to their low profit margins, the demand for loans instead reflect farmers need to pay for their daily business activities rather than investing in long-term assets. In addition, farmers' lack of capital to finance day-to-day operation may also mean that they are not able to guarantee their loan repayment, which in turn may stop them from asking for medium and long-term loans.

2.1.2.2 Loans from friends and family

Almost half of the farmers in need of finance rely on loans from friends and family, in total 14.8% of all agricultural producers in the EU 24. This demand represents a value of between EUR 3.3 billion and EUR 6.6 billion⁵⁰. Hence the occurrence of private lending currently taking place to farmers on the EU market may signal a potential for the expansion of the formal financial market. The share of farmers asking for private loans were particularly high in Spain and Hungary (over 40%). They were followed by Lithuania (25.5%), Estonia, Greece (approximately 24% for both countries) and Bulgaria (almost 20%). Financing from private individuals was of less importance to almost all Western and Scandinavian countries, and in Poland, Slovenia, Slovakia, and Czech Republic. In Austria and Poland none of the farmers surveyed responded that they had turned to friends and family for a loan. For Italy, France, and Sweden, fewer than 1.5% of the farming population had resorted to this type of financing for year 2017⁵¹.

Young farmers turn to a greater extent to friends and family members to request financing (16.2% compared to 14.3%). Young farmers are often less confident in approaching the banking system and are less successful in obtaining the requested finance (see section 2.3.2), whereby they turn to a greater extent to private sources. In addition, asking friends and family members for loans involves less hassle and paperwork compared to applying for bank loans, and family agreements with mortgages (similar to those required by banks) are a rare occurrence.

Furthermore, loans from family members may also be high when there is a family succession of the farm. In cases of family succession, often productive assets are transferred to the child by the parents. Productive assets can include land, machinery, and installations. The transfer of the productive assets may also be replaced by a direct transfer of money from the parents to the child. Often this contribution is a donation or an advance of the inheritance in order for it not to be remunerated, but on other occasions it is configured as a loan between individuals, or as a capital contribution to a mercantile society in which a remuneration of the capital is expected.⁵²

The studies found that small-sized farms are also more likely to request financing from friends and family (15% compared to 10% for large-sized farms). In many EU countries, family ties are still strong, and the combination of lack of higher education and financial literacy in the agriculture sector, particularly amongst farmers with small-sized farms, lead them to be more prone to ask for financing from non-financial institutions or individuals, which instil less fear, and is perceived as less complicated.

50 The lower and upper bound are computed by considering a standard volume of private finance lending of EUR 5 000 and EUR 10 000, respectively, adjusted by the country specific Purchasing Power Parity Index.

51 *fi-compass* survey.

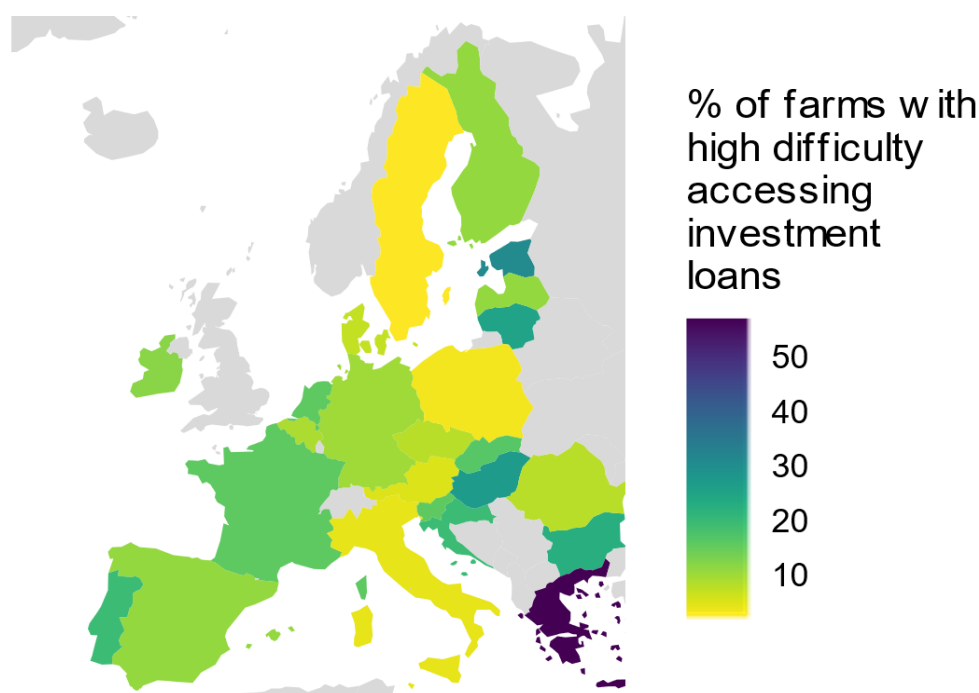
52 According to interviewees representing the agriculture sector in Spain and Belgium.



Loans between private individuals are often based on mutual trust and do not always require interest payments, nor the provision of collateral. At the same time, it was noted in Poland and Finland that cultural habits and the privacy of individuals was considered important reasons explaining why few farmers revert to private sources for loans, especially when compared to other EU countries.

More than 12% of the agricultural producers considered access to bank loans for financing investments problematic in year 2017, whereas access to finance for working capital was considered an issue by 10.4% of the EU 24 agriculture producers⁵³. Greece stands out as the country with by far the highest response rates for both types of loans. Overall, 58% (investment loans) and 56% (working capital loans) of the Greek farmers confirmed that access to finance was difficult for them. In general, where access to investment finance is considered difficult, also access to working capital proves difficult. The issue was more commonly raised, besides Greece, also in Estonia (31% vs 23%), Hungary (27% vs 25%), Lithuania (25% vs 23%), Bulgaria (22% vs 19%), Portugal (19% vs 21%), and Croatia (19% for both types of financing). Countries where access to finance was not considered very problematic include Sweden, Poland, Italy, and Austria (between 1-4% mentioned access to finance as problematic).

Figure 6: Share of farmers reporting difficulties in accessing bank loans for investments in 2017



Source: *fi-compass survey*.

⁵³ *fi-compass survey*.



2.2 Analysis on the supply side of agricultural finance

This section provides an overview of the financial environment in which the agriculture sector in the EU 24 countries operates. It describes and characterises the main financial providers operating on the agriculture finance market. It presents the main characteristics of the loan products and other financial solutions offered to the sector, including the currently operating financial instruments funded through EU resources, and in particular the EAFRD. 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, despite the presence of significant national specificities. The section draws its information from various sources among which interviews with financial institutions, specialised reports and national statistics.

Key elements on the supply of finance to the agriculture sector

- The main providers of finance to the agriculture sector include cooperative and commercial banks, public banks and credit guarantee institutions, credit unions, microcredit organisations, leasing companies and agriculture input suppliers and cooperatives.
- Cooperative banks are often closer to the farming community than commercial banks.
- Lending to the agriculture sector is in 14 EU countries concentrated to a very limited number of intermediaries that have strong market.
- Lack of agriculture specific expertise in banks limits the supply of finance to the sector, as noted for nine Member States.
- The typical bank products offered to the agricultural sector include short-, medium-, and long-term loans, as well as credit lines and bank overdrafts. The most common loan product specifically targeted to the agriculture sector are loans that offer pre-financing of public support measures, i.e. a non-risky financial operation for the banks.
- Leasing is available in all 24 Member States analysed, and is increasing in popularity.
- Guarantee instruments are widely used across the EU 24 at both regional, national and EU level, but with very different conditions and efficiencies. Basic guarantee products are often available on the market.
- 11 Member States currently have at least one EAFRD funded instrument operational or about to become operational in the period 2014-2020. That number may well increase with the impact of the Covid-19 crisis and the new options for financing stand-alone working capital loans for SMEs which were recently adopted.
- The credit provided to the agriculture sector from financial intermediaries in the 24 countries analysed is on an increasing trend, and the increase of lending to the agriculture sector has been higher than the increase of lending to the overall economy for several countries.
- In a number of Member States, the agriculture sector is characterised by relatively low default risk. For 11 Member States, the share of Non-Performing Loans (NPLs) for the agriculture sector was found to be lower than that of other economic sectors, whereas only for three Member States was the share of NPLs for the agriculture sector higher.
- Often the agriculture sector faces higher interest rates than other economic sectors, explained by high transaction costs for assessing loan applications of small loan volumes together with high market concentration where only few actors determine the loan conditions. Small-sized farms and young farmers are particularly disfavoured.
- Half of the farmers asking for long-term loans are asked to provide a guarantee, and the guarantee requested by financial institutions is often higher for the agriculture sector than for other economic sectors.



2.2.1 Finance providers and the agriculture financial market

2.2.1.1. Description of the main financial intermediaries

The establishment of the supply of finance to the agriculture sector vary significantly throughout the EU 24. The main actors are cooperative and commercial banks, followed by governmental financial institutions. In addition, leasing companies, input suppliers and agricultural cooperatives provide financing to various extent. Other actors include mortgage associations and microcredit organisations. Limited financing is provided by venture capital and private equity companies.

Cooperative banks are often closer to the farming community than commercial banks. Cooperative banks⁵⁴ and credit unions often see themselves as different from mainstream banks, with a mission to be 'community-oriented' and 'serve people, not profit'.⁵⁵ Cooperative banks are in general over-represented in lending to small and medium-sized businesses.⁵⁶ Cooperative banks include both very large market players, and smaller, local cooperative banks. In many cases, cooperatives rely on both the experience of their employees and their proximity to their clients to correctly assess the viability of farm businesses. This is in contrast to commercial banks, which often have non-sector specific scoring models for applications, hence the targeting of the products offered is less evident.

Cooperative banks frequently have a large presence in rural areas, and have many times stemmed from the agricultural cooperative tradition. In fact, they were to varying extent established to provide banking solutions to the agriculture sector. As a result, many cooperative banks have a long history of collaborating with, and providing services to, the farming community. As such, these cooperative banks have a first-mover-advantage, and they often have an agricultural expertise, which reduces the lending risk (the information asymmetry), by lowering the risk of non-performing loans. This is sometimes translated into better conditions for the agriculture sector compared to those offered by commercial banks (for example lower interest rates, and lower guarantee requirements), as noted for example for Slovenia and Finland. With this said, for many cooperative banks, the main client group has now shifted away from the agriculture sector to other economic sectors, as discussed for example for Portugal and Ireland.

The extent to which commercial banks have agriculture expertise or offer products targeted to the agriculture sector varies significantly between Member States. In Greece, one commercial bank is the main actor on the agricultural finance market, and in a few Member States, such as Spain and Portugal, commercial banks have over the last years come to consider the agriculture sector to be a strategic sector, leading them to invest resources into acquiring a larger share of the agriculture financing market by developing expertise of the sector and by offering targeted products.

In other Member States, such as, for example, Hungary, Slovakia, Romania, Germany and France, the commercial banks seem to show a greater interest in financing the larger farms, which fit better with the

54 Co-operative banks combine retail and commercial banking and are organised on a cooperative basis. Hence, co-operative banks differ from other financial institutions in that those who have accounts are its members and owners. They elect their board of directors, and follow the cooperative principle of one person, one vote, even if more strategic decisions may require approval from a central office. Co-operative banks are often regulated under both banking and cooperative legislation. They provide services such as savings and loans to non-members as well as to members.

55 The Credit Union Difference, National Credit Union Association, <https://www.nafcu.org/cu-difference>.

56 ILO, 2013, Resilience in a downturn: The power of financial cooperatives; https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---coop/documents/publication/wcms_207768.pdf.



general scoring models⁵⁷ applied to all economic sectors. Often, farm businesses are micro businesses, which are family run, and with the legal status of a natural person (rather than a legal entity, as is the case for most other SMEs). The larger farms are often easier to compare to enterprises from other economic sectors, explaining commercial banks' higher interest in this segment.

In Lithuania, Romania and Bulgaria credit unions play a particularly important role in providing loans of smaller amounts, which the commercial banks are less interested in approving. Credit unions generally show more flexibility towards the clients and adapt to their needs compared to the commercial banks. In Hungary, another solution has been developed to supply loans to small-sized farms, where actors known as "integrators" play an important role.⁵⁸

Micro credit organisations serve the small farms, for example, in Romania and Bulgaria. They can usually disburse both business and personal micro-loans and generally offer short-term credit products for working capital as well as investment purposes (with short maturity), and leasing. Generally, microfinance institutions are found to be more open to financing the agricultural sector, and especially small-sized farms, given that they have:

- adjusted credit analysis, with a focus on assessing farmers' repayment capacity and adapting collateral requirements, even if the farm is family owned and semi-professional;
- adapted delivery channels and a higher presence in the rural area; and
- simplified credit procedures, with less documents and bureaucracy.

Other financing providers with a minor role in financing the agriculture sector include mortgage associations and pension funds, for example in Sweden and Denmark. **Private equity plays a very limited role** in agricultural finance in the EU 24 countries as agricultural enterprises in general generate low returns on equity and normally have a much longer investment cycle than five years, which is usually not compatible with the private equity investment funds' exit strategy (within five years).⁵⁹ However, a few exemptions to this general trend have been observed in Spain and Denmark, where the presence of private equity and venture capital is limited, but interest is growing.

New digital technology has paved the way for the establishment of new banks and financial services companies, which has led to increased competition in the banking market. Financial services firms and banks that utilise new technology to provide innovative lending products are often based on Open Banking, such as crowd funding and peer-to-peer lending. This development, however, is based on isolated case-study evidence and has not yet reached the financial services for the agriculture sector to any greater extent, as in many countries, farmers are still encouraged to hold physical meetings with their local bank branch offices, as noted for example for Sweden and Belgium.

57 General conditions are applied through non-sector specific scoring models, applied in some of the Member States.

58 Integrators activities include buying and distributing seeds and chemicals, providing advisory services and selling the commodities of the farms that participate in the scheme. Integrators act as intermediates between the banks and the farmers. The integrator takes the loan with the bank, and then distributes it amongst its contracted producers. For the farmers, these loans are more expensive than normal loans as the farmer has to pay the interest rate plus the profit of the integrator. However, in many cases, many of the micro and small-sized farms have no other option to access a loan. This system of providing loans is beneficial to the banks and it allows them to concentrate larger loans with reliable enterprises, rather than to assess and provide several micro-loans. Hence, the integrators are able to finance farms, mostly micro and small-sized farms, which would not be eligible for bank loans, e.g. who cannot be assessed or lack sufficient collaterals.

59 With private equity, financing investors become joint owners of the enterprise and share profits and losses. These types of investments are done in mature companies, often with high annual returns on equity of around 10% and an investment horizon shorter than for regular bank loans, ranging from three to five years.



2.2.1.2. Agriculture finance market concentration and its consequences

Lending to the agriculture sector is in many countries concentrated to a very limited number of intermediaries, leaving them with strong market power. In 14 Member States⁶⁰, the overall competition on the agriculture finance market is limited. In five of these – the Netherlands, Slovenia, Finland, Austria, and Greece – one bank controls more than two thirds of the market. The dominant positions held by some banks allow them to be more selective with clients, and to set stricter lending criteria. The market power of individual banks on the agriculture finance market can therefore generate disadvantages for agricultural enterprises compared to other SMEs⁶¹. At the same time, it also provides benefits to farmers, as they can count on a knowledgeable counterpart when applying for credit. The high concentration is partly due to historical reasons, with some banks (in particular cooperative banks) having gained the reputation as the ‘farmers’ bank’ several decades ago, leading to the creation of a faithful clientele.⁶² The strong presence of these banks in rural areas have also led them to develop an expertise in agriculture financing, which competitors may find it difficult to catch up with. A lack of knowledge may in turn prevent other financial intermediaries from investing in the sector. In Italy and Ireland, it was also noted that agriculture specific expertise is decreasing within commercial banks.

Lack of agriculture specific expertise in banks limits the supply of finance to the sector. This was noted for nine Member States (Estonia, Italy, Slovenia, Bulgaria, Sweden, Portugal, Ireland, Croatia, Romania). Even for banks that have agriculture expertise through a specialised department (e.g. at their central bank office), local branch offices often process the application from the farmer. In these cases, a potential lack of familiarity with the sector among employees at local level may constitute an obstacle to approving lending. Overall, banks with low understanding of agriculture often lack a strategy for lending to the sector (i.e. what agriculture activity to finance, in what regions to finance agriculture, what financial products are needed by the agriculture sector, etc.). These banks lack an offer of products adapted to the agriculture production cycle, they lack assessment models adapted to the economic cycle of agriculture production (i.e. banks often use the same scoring models for agri-deals as for other deals), and they lack the possibility to adapt the terms and conditions of financial products for agriculture.

In addition, the rationalisation of the bank distribution network, leading to a decreasing presence in rural areas, (e.g. Spain, Poland, Ireland, and Romania), has been found to lead to a potentially greater financial exclusion of rural citizens, including farmers. Less relationship management services offered at local level may lead to lower level of familiarity with the singularities related to agriculture financing, potentially limiting and hampering loan provisions to some agriculture enterprises.

2.2.1.3. Public financing institutions

All 24 Member States analysed have a publicly funded credit institute which provide finance to SMEs and/or to particularly risky projects, often linked to innovation. However, the extent to which the public banks target the agriculture sector varies. In some Member States, for example Germany, an entire public development bank is dedicated only to the agriculture and agri-foods sectors. On the

60 CZ (3 banks control 83%), EL (1 bank 85%), FR (4 banks 97%), AT (1 bank 80-90%), HU (3 banks 70%), FI (4 banks 95%), LV (4 banks 72%), SK (3 banks 75%, 6 banks 100%), NL (1 bank 78%), IE (2 banks, 80-90%), LT (3 banks 84%), BG (3 banks over 65%), SI (1 bank 80%), EE (2 banks over 50%).

61 *fi-compass*, 2018, ‘Flexible financial instruments for the agricultural sector in the EU’, <https://www.fi-compass.eu/publication/factsheets/flexible-financial-products-agricultural-sector-eu>.

62 According to the *fi-compass* survey, between 61-72% (61% for long-term loans, 66% for investment loans, 65% for short-term loans, 72% for credit lines) of the EU 24 farmers that apply for a loan only apply to one bank. Survey reference.



other hand, in most countries, the agriculture sector can benefit from the general support for SMEs, which often does not follow the economic trend of the agriculture sector, i.e. the characteristics of the products offered, such as maturity, interest rates, etc., are not adapted to the agriculture circumstances. In other cases, the agriculture sector can benefit from specific product lines available from a general public bank. There is a lot of variation in the degree to which the financing is provided with better conditions than those offered by commercial banks.

Credit guarantee institutions are typically publicly owned, or at least have public participation, and they are active only on the regional/national market, not across country borders. All Member States analysed have either public guarantee funds, or development banks with a guarantee division, which target the agriculture sector to a varying extent. In 20 Member States there are schemes available specifically for the agriculture sector⁶³, funded either through EU and/or national funds. In Poland, France, Italy, Austria and Germany there are also regional guarantee funds. In most Member States, the guarantee institutions provide direct guarantees to banks, and direct guarantees are also often provided to non-bank financial intermediaries (e.g. leasing companies).⁶⁴

2.2.1.4. Agricultural cooperatives and leasing companies

Agriculture cooperatives and input suppliers finance predominantly working capital costs. In the majority of Member States⁶⁵ it is common practice that the input suppliers (of seeds, fertilisers etc.) do not expect payment until 30-60 days after the input has been delivered. In some cases, and in particular when the agricultural cooperative is the supplier, payment is even accepted once the farmer can put its products on the market, for example, once the produce has been harvested. When the agriculture cooperative is the buyer of the produce, the purchase of the input product can then sometimes be offset by the payment for the final produce. As such, agricultural cooperatives and input suppliers provide liquidity and short-term financing to farmers. The extent to which this takes place varies by country and sub-sector. Loans can either be informal or based on a formalised loan agreement.

In countries like Spain, France and Ireland, the agriculture cooperatives have credit sections as part of their business activity. In Ireland, the credit provided is limited to the members of the cooperative, but in Spain the credit is available also to non-members, and the cooperatives offer various types of financial products and services to all their clients.

Value chain finance products are also available to some sub-sectors in some Member States, for example in the Czech Republic, Denmark, Ireland, Italy, and Romania. Loan products are offered by processors, such as for example slaughterhouses or dairies, to their suppliers of raw products to ensure that the primary producers stay in business and work directly with them. They may facilitate deferred payments, give price guarantees and/or offer insurance funds to farmers. They also provide bank guarantees in some cases. Input suppliers (i.e. companies selling seeds, fertilisers or pesticides for example) may also facilitate leasing for the agriculture producer, as noted in Sweden. The supplier writes an agreement with a financial institution and takes on the responsibility to pay the difference in interest.

In most Member States, leasing is a common form of financing for farmers. Leasing companies are often part of banking groups, or part of manufacturers of agricultural equipment, machines and vehicles (e.g. John Deere, New Holland etc), but can also be independent companies. Leasing is an

63 This was found to be the case in 20 Member States: DE, IT, BE, LT, PT, NL, SK, LV, FI, HU, FR, PL, DK, RO, EL, HR, CZ, ES, IE, EE.

64 The findings from the 24 country analysis are further supported by evidence from *fi-compass*, 2018, 'Debt finance and use of credit guarantee instruments for agricultural enterprises in the EU', <https://www.fi-compass.eu/publication/factsheets/debt-finance-and-use-credit-guarantee-instruments-agricultural-enterprises>.

65 EL, EE, LV, SI, FR, HU, NL, LT, BG, FI, PL, DK, RO, IE, ES, SE.



attractive financing option for many farmers because it alleviates the need to provide collateral, which is a very common requisite when applying for medium and long-term bank loans, often used to finance expensive equipment and machines.

2.2.2 Financial products

2.2.2.1 Commercial loan products available to the agriculture sector

In all Member States, at least one bank active on the national financial market proposes a dedicated marketing offer to the agriculture sector although the advertised financial products may not differ from the offer to other economic sectors in terms of their financial structure. These products include credit lines, overdrafts, and short-term loans, mainly for working capital purposes, and medium and long-term loans for investment purposes.

Long-term loans (>5 years) are used to finance large investments, e.g. purchase of land, and construction and/or renovation of farm buildings, sheds, and warehouses. They are also used for investment financing for machinery, technology and farm modernisation, as well as to co-finance grants linked to EU funded projects (EAFRD).

The most common form of long-term loan products are instalment loans, with scheduled, periodic repayments, and with fixed or indexed interest rate. Land acquisition loans generally have the longest maturities and are often issued with a maturity of 20 years, although they are not available everywhere in the EU. When used to finance infrastructure investments (buildings such as barns, stables, storage rooms, etc.) these loans generally have a maturity from between seven to 20 years, depending on the tradition of the country and the economic life span of the project. For many countries it was observed that the provision of investment loans is highly correlated with the disbursement of investment support from the EAFRD⁶⁶, which can be considered a market limitation.

Medium-term loans (1.5-5 years) are used to finance small investments, e.g. purchase of livestock, agricultural machinery and equipment, irrigation plants, etc. Medium-term loans are mainly dedicated to investment projects, but can also provide working capital finance.

Short-term loans (up to 18 months) are used to finance farms operations, such as the purchase of inputs (seeds, fertilisers, chemicals, fuels, etc.), remuneration of workers, utility payments, etc. The frequency of use of standard short-term loans with regular instalments vary significantly between Member States. For example in Ireland, Italy, Lithuania and Slovakia, they are frequently used, whereas in other countries short-term financing is often resolved through credit lines or bank overdrafts. Short-term loans are to a greater extent available through non-bank lenders, including suppliers, cooperatives, but also from private specialised non-bank lenders and micro credit organisations.

Credit lines/overdrafts are used for short-term cash flow needs to cover temporary imbalances between revenues and costs of the farmer/ company. In several countries, particularly discussed for Austria, Belgium, Spain, France, Ireland, and Portugal, the provision of credit lines for financing agriculture working capital has a long tradition. The overdraft facility can be used to overcome seasonal or cyclical challenges which are common in agricultural production. Similar to a regular bank account, the credit line for working capital enables daily withdrawals and deposits. Due to its short duration, the interest rate for this type of financial product is usually higher compared to the other types of loans. In some Member States, revolving loans are available which are overdraft facilities designed for high volumes of working capital financing. These are available to farmers but generally more suited for large-sized enterprises.

The most common loan product specifically targeted to the agriculture sector are loans that offer pre-financing of public support measures, often linked to the pre-financing of direct payments

66 BG, PT, SK, HU, EL, LV, LT, PL, EE, SK, RO, HR, SI.



or investment support. This loan product is available across the EU, and discussed in detail in the reports for Denmark, Spain, France, Hungary, Italy, Lithuania, Portugal, Sweden, Slovenia, and Slovakia. Some farmers experience a cash flow gap between when the financing need is the highest (for example pre-harvest) and when the CAP direct payments are paid out (December) whereby these loans resolve issues linked to cash flow and liquidity constraints of farmers, and provide finance for pre-harvest activities. In the case of investment support, the support payment is made after the investment is completed, whereby the pre-financing loan provides a bridge financing for farmers. Typically, the loans provide a pre-finance between 80% and 100% of the approved direct payments and/or investment support. The duration is often maximum 12 months. When the grant is paid in full or in part, the loan is repaid accordingly. The pre-financing loans are often provided without guarantee requirements, as the receivable public funding acts as a guarantee for the bank. Interest rates are typically lower than for other short-term loans, often in the range of 1-2%.

Flexible financial products are available to a limited extent. There are three categories of flexible loan products available on the market:

- (i) products with 'on-demand' flexibility,
- (ii) products with 'self-adjusting' flexibility, and
- (iii) so called 'bespoke' products⁶⁷.

The first category are loans where the flexible conditions are agreed when the contract is signed between the finance provider and the borrower, but where the farmer can request to activate these conditions on demand. These can for example relate to flexible grace periods to address financial difficulties that might arise from price volatility, climatic disturbances, an animal disease outbreak, or other unforeseeable circumstances.

The second category are loan products where the repayment is automatically linked to market indicators, and hence not adapted to the individual farmer's needs.

The bespoke products are loans where the repayment schedule is structured around the specific characteristics of the borrower (e.g. need for longer maturity or adaptation to cyclical cash flows) and agreed before the disbursement, but the conditions cannot be modified during the lending period.

Flexible financial products were found to be available in ten Member States⁶⁸ although not very commonly used. According to a previous *fi-compass* study, financial intermediaries have showed an interest in offering additional flexible products, but at the same time underlined that borrowers often prefer simple or standardised products.⁶⁹ In a few Member States, such as Denmark and Spain, specific bank products available to young farmers and new entrants were identified. This type of loan targets young farmers who intend to purchase and develop an existing farm. It is a high-risk, early-growth type of finance that is particularly suited to the purchase of property and targets first-time buyers, who are under 40 years old.

Despite the offer of products tailored to the agriculture sector, in several Member States, many farmers only have access to the classical household products such as consumer and mortgage loans. This is discussed in depth for Lithuania, Poland and Slovenia, but it is a common phenomenon

67 *fi-compass*, 2018, 'Flexible financial instruments for the agricultural sector in the EU', <https://www.fi-compass.eu/publication/factsheets/flexible-financial-products-agricultural-sector-eu>.

68 For example in BE, EE, FR, IE, IT, LT, PL, ES, SI, SK. The findings from the 24 country analysis are further supported by evidence from *fi-compass*, 2018, 'Flexible financial instruments for the agricultural sector in the EU', <https://www.fi-compass.eu/publication/factsheets/flexible-financial-products-agricultural-sector-eu>.

69 *fi-compass*, 2018, 'Flexible financial instruments for the agricultural sector in the EU', Study report, <https://www.fi-compass.eu/publication/factsheets/flexible-financial-products-agricultural-sector-eu>.



in Member States dominated by small-sized farms. Banks often differentiate their customers according to the legal form of the entity that applies for the loan. As a result, often natural persons, such as farm operators and farm family members, and legal entities, such as sole proprietors and limited liability companies, have access to different products. Generally, family farmers are then regarded as consumers. The main problem for the banks is often how to assess the creditworthiness of the borrower, as natural persons in some Member States many times do not have records of a business history. Farmers without credit and/or business history are therefore treated like households by banks and have access only to mortgage and consumer loans.

Both financial and operational leasing is available.⁷⁰ Leasing of equipment and machines are the most common forms of leasing, but farmers also lease real estate to a limited extent⁷¹. Machine and equipment leasing allow to transfer the use of a certain asset to farmers for a certain period. The minimum term is often between 6 and 12 months, and with a very variable maximum term. However, most leasing companies seem to provide operations with terms up to about five years.

Guarantee instruments are widely used across the EU 24 at both regional, national and EU level, but with very different conditions and efficiencies. In all Member States, financial intermediaries can benefit from at least one credit guarantee scheme for agriculture, although in some cases this is not a scheme specifically designed for the agriculture sector⁷². The schemes normally provide credit guarantees for SMEs who cannot access loans because they are considered as too risky, and/or they cannot provide sufficient bankable collateral, thereby contributing to increasing the number of farmers/agriculture enterprises with access to finance. The products guaranteed are primarily investment loans, for the purpose of investing in land, equipment, and machinery, and they are usually loans with long-term maturities, or at least maturities above three years. The second most common products guaranteed are working capital loans and credit lines⁷³. The guarantees typically cover between 70-80% of individual loans⁷⁴, and most schemes are operated on a loan-by-loan basis, i.e. the guarantees are mainly offered on individual loans and not on a portfolio basis. In four Member States – Belgium, the Netherlands, Greece and Portugal – specific schemes are targeting young farmers and new entrants, often including the provision of a guarantee.

70 Operating lease is a lease in which all risks and rewards related to the asset remain with the lessor for the leased asset. Hence, the asset is returned by the lessee after using it for the agreed-upon lease term. Financial lease is when the risks and rewards related to ownership of the asset being leased are transferred to the lessee.

71 Real estate leasing is a form of finance that gives farmers the possibility of using a real estate property such as agricultural holdings, installation of agro-industries, warehouses, offices, and commercial spaces, for a fixed amount of time.

72 In Sweden, Slovenia, Austria and Bulgaria no specific guarantee schemes targeted at the agriculture sector were operating at the time of writing (May 2020). In Bulgaria an EAFRD guarantee instrument is currently being implemented.

73 While in all Member States guarantee schemes to finance investment loans were available, only for six Member States was the availability of working capital guarantees discussed: BE, PT, LT, HU, FR, RO. The findings from the 24 country analysis are further supported by evidence from *fi-compass*, 2018, 'Debt finance and use of credit guarantee instruments for agricultural enterprises in the EU', <https://www.fi-compass.eu/publication/factsheets/debt-finance-and-use-credit-guarantee-instruments-agricultural-enterprises>.

74 Only for 3 of the schemes analysed, operated in PT, EE, and FR, was the guaranteed amount below 70%. For none of the schemes analysed was the guaranteed amount above 80%.



2.2.2.2 EU-funded financial instruments

EAFRD funded financial instruments. Financial instruments are risk-bearing mechanisms – loans, microcredits, guarantees, equity – that support access to finance. Financial instruments can be co-funded by the European Structural and Investment Funds (ESIF), including the European Agricultural Fund for Rural Development (EAFRD) which supports investments in the agriculture and forestry sectors, as well as in the rural economy, including businesses and infrastructure. Specifically, the finance can be used to support the investment priorities outlined in national and/or regional Rural Development Programmes. Financial Instruments under the EAFRD are available to all potential recipients who are undertaking financially viable investment projects in the Member States and regions, in line with the eligibility rules defined in the respective measures in the RDP.

Setting-up an EAFRD funded financial instrument to complement the grants is a way to increase the leverage from the EAFRD budget and is a preferred option for many EAFRD managing authorities. The leverage from a financial instrument can be significantly higher than the leverage from grants, and thus responds to the lack of available budgetary resources to finance all viable enterprises seeking financing for investment projects. In addition, the benefits with financial instruments over grants is that it has fewer eligibility restrictions, and, importantly, allows access to working capital financing, which is not available through the investment grants. With the most recent legal changes, working capital loans could also be stand-alone when given to SMEs. In the context of the new CAP proposal, further benefits are offered among which are the absence of limitations on the support of purchase of land by young farmers⁷⁵. Furthermore, the resources dedicated to financial instruments are revolving, whereby the resources return to the Managing Authority after repayment from the client, to be used for a similar purpose.

Financial instruments have so far been programmed in 32 RDPs in 11 different Member States⁷⁶, for a total EAFRD budget of EUR 614 million and EUR 813 million of total public expenditure. These instruments are expected to produce a total loan amount for final recipients of between EUR 2 to 2.5 billion, although the impact of Covid-19 is yet unknown and it may slow down the credit demand from businesses due to the emerging economic crisis.

The Member States who have programmed financial instruments are Italy⁷⁷, Portugal, France⁷⁸, Spain⁷⁹, Poland, Romania, Croatia, Estonia, and Germany⁸⁰. Greece and Bulgaria are in the process of setting-up their new risk-sharing instrument, expected for the second half of 2020. Other instruments are currently under development also in Lithuania and in other regions in Spain (Andalusia and Extremadura). Almost all the instruments cover both farms and agri-food enterprises, although some of them extend the support to rural businesses⁸¹. Guarantee funds are predominant, but loan funds can

75 Based on the Commission regulation proposal for the CAP strategic plans post 2020 (COM(2018) 392 final): <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A392%3AFIN>. Within the applicable upper ceiling defined in the proposed Regulation.

76 Michael Pielke, 'EAFRD financial Instruments in the post-2020 CAP', presentation at the *fi-compass* webinar 'Financial needs in the agriculture and agri-food sectors in Spain', 16 October 2020

77 Four regional EAFRD financial instruments (two loan funds in Friuli Venezia Giulia and Lombardy, and two guarantee funds in Umbria and Puglia), and a recently launched EAFRD guarantee instrument managed by the European Investment Fund (EIF) where eight of the Italian regions joined forces and budgets (Calabria, Campania, Emilia-Romagna, Piemonte, Puglia, Toscana, Umbria and Veneto).

78 The Fonds Occitanie de Soutien Territorial aux Entreprises Régionales (FOSTER) is a Fund-of-funds created in 2017 by the Occitanie Region under two Rural Development Programmes 2014-2020 signed by the former regions Midi-Pyrénées and Languedoc-Roussillon. The region Nouvelle Aquitaine created the Fund-of Funds Alternative Nouvelle-Aquitaine (ALTER'NA). It aims to facilitate access to finance for the agricultural and agri-food sectors. Its implementation will start in mid-2020.

79 Castilla y Leon.

80 Mecklenburg-West Pomerania.

81 The instrument of Lombardy (IT) cover only agri-food enterprises.



also be found. The EAFRD has not supported equity funds so far as EAFRD managing authorities consider it a rather difficult area for development.

Figure 7: Overview of Member States with an EAFRD funded financial instrument operational (or under development)



Source: DG AGRI based on information provided by the relevant managing authority (September 2020).

COSME and EaSI. Agriculture can also benefit from the EU program for the Competitiveness of Enterprises and SMEs (COSME) guarantees, except for the production of and trade in tobacco, as well as distilled alcoholic beverages and related products. As of 30 June 2020, 5.7% of the total volume of COSME financing provided in the EU 28 was for agriculture, forestry and fishing and equalled EUR 2 billion⁸². The Member States with significant agri-transactions, i.e. agriculture focused financing under COSME include Ireland, Germany, Denmark, Latvia, the Czech Republic, Hungary, and Romania. Additionally, the Employment and Social Innovation (EaSI) guarantee instrument is also available for farmers. In Latvia and in the Czech Republic this instrument has facilitated access to finance for SMEs in the agriculture, forestry, and fishery sector, representing 31% and 5% of the total portfolio respectively.

To cope with the COVID-19 crisis, several Member States deployed new financial instruments targeted to the agriculture sector and financed with national resources. Examples include the instruments set up by Belgium and Estonia. In Belgium, the Flemish Agricultural Investment Fund activated a temporary working capital guarantee⁸³. The guarantee could be obtained to secure working capital loans and refinancing loans (guarantee duration of up to three years on loans of up to seven years). In Estonia, the Rural Development Foundation offered a loan to relieve the sudden liquidity

⁸² European Investment Fund, 2020.

⁸³ Vlaanderen, 2020, Departement Landbouw en Visserij, <https://lv.vlaanderen.be/nl/subsidies/vlif-steun/vlif-waarborgregeling-bij-uitzonderlijke-gebeurtenissen/vlif-waarborgregeling-0>.



shortage caused by the COVID-19 outbreak⁸⁴. Generally aimed at improving the working capital level, the loan was specifically designed to cover losses caused by the pandemic, and to refinance existing working capital and investment loans. The duration of the loan was up to six years for working capital loans and up to ten years when refinancing investment loans. Both loan facilities were activated rapidly in early 2020 and remained active until the last quarter of the year. Other Member States also deployed financial instruments not targeted to agriculture, but accessible to primary producers. An example is the case of Ireland with the Microfinance Ireland COVID-19 Business Loan⁸⁵. Small-sized businesses affected by the crisis, including farmers, could apply for loans of up to EUR 50 000 for a duration of up to three years.

At the time of publication of this report, a number of EAFRD managing authorities are progressing with the programme amendments related to their EAFRD-funded instruments or are already applying the new possibilities offered by the Community legislation. These changes will provide for the financing of stand-alone working capital loans to SMEs operating in agriculture, agri-food, forestry and rural non-agriculture businesses with which to reduce the negative impact on their operations and liquidity caused by the Covid-19 crisis.

84 MES, 2020, 'Covid-19 Laen', <https://www.mes.ee/covid-19-laen>.

85 Microfinance Ireland, 2020, 'New Covid-19 Business Loan Scheme', <https://microfinanceireland.ie/loan-packages-2/covid19/>.

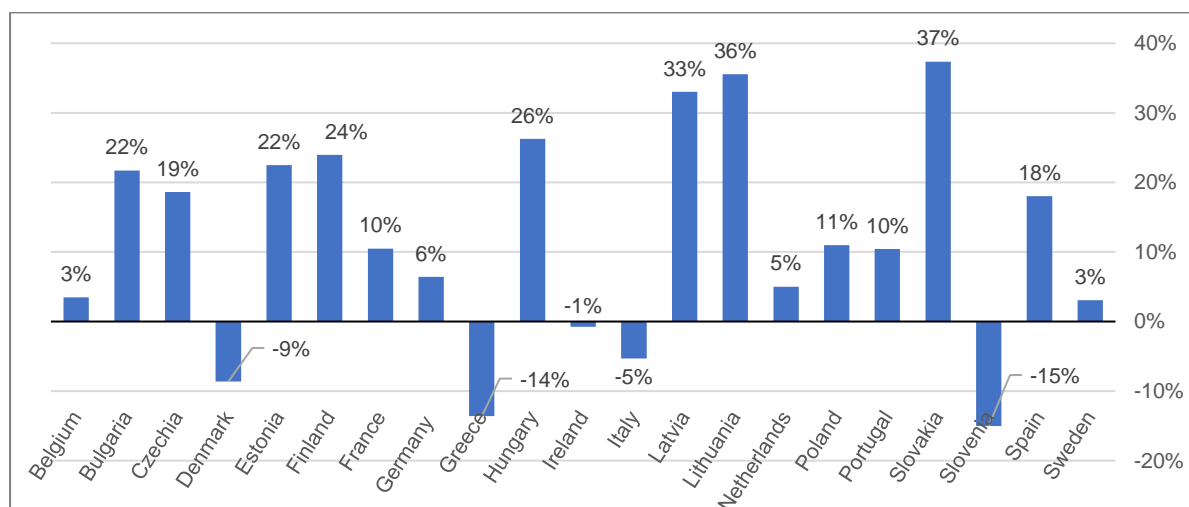


2.2.3 Analysis of supply of finance and financing conditions

2.2.3.1. Lending tendencies

The credit provided to the agriculture sector, from financial intermediaries in the 24 countries, is on an increasing trend. Looking at the period 2015-2018, 17 Member States⁸⁶ demonstrated an increasing trend of total outstanding loan volumes, only five Member States (Denmark, Greece, Italy, Slovenia and Ireland) had decreasing trends for the same time period⁸⁷. See Annex 5 for an overview of total outstanding loan volumes by Member States. The three Member States with the highest absolute levels of total outstanding loan volumes in 2018 were Germany (EUR 53.2 billion), France (EUR 52.7 billion), and Italy (EUR 42.0 billion).⁸⁸

Figure 8: Change in outstanding loan volume by Member State, 2015-2018⁸⁹



Source: 24 country reports.

86 BE, BG, CZ, EE, FI, FR, DE, HU, LV, LT, NL, PL, PT, RO, SK, ES, SE. Note that for Austria and Croatia, no data on trends was available. For information on sources, see Annex 5.

87 For Greece, the decreasing loan volume demonstrates that the sector is still deleveraging, recuperating from the effects of the financial crisis that lasted until 2017. In addition, the decreasing portfolio reflects the increase of repayments and the overall improvement in the financial stability of the sector. Thus, the provision of financing may not have necessarily decreased. The fact that many farmers are able to repay their previous loans indicates that there has been an overall recovery in the agriculture sector. Also outstanding loan amounts to non-financial corporations (excluding agriculture) decreased over the period 2014-2019. For Denmark, the decrease in the portfolios can be partly explained by the fact that many banks still have a high share of non-performing loans in agriculture, which stops them from increasing their exposure. However, the decrease in outstanding loans can also be attributed to an increase in repayments of old debts by farmers. For Italy, the decreasing trend of lending to the agriculture sector is less marked than the decrease of lending to the overall economy.

88 Note that the total outstanding loan volumes for France and Germany reflect only loans to the agriculture sector, whereas the figure depicted for Italy is for the primary sector, i.e. also including the forestry and fishery sectors.

89 For 2 Member States, Austria and Croatia, no time serie data is available. For 5 Member States, a different time span has been analysed based on availability of data. For Latvia, the Netherlands and Poland the relevant time span is 2015-2017. Romania: 2015-2019. Slovenia: 2016-2019.



The increasing lending trend reflects the overall tendency in the European economy, where the banks' balance sheets have improved over the last years, after the financial crisis that started in 2008/09. It also reflects a rather stable development of the agri-food chain during these crisis years, which re-installed the financial trust in the sector. EU support has also played a crucial role for this to happen. The increasing lending to the agriculture sector over the last years, as for the overall economy, has also been triggered by the recent general low interest rate environment, an overall broad capital base and profitability in the banking sector, increasing competition between banks (although this is not necessarily the case for agriculture financing), and a stabilised macroeconomic environment. This has led financial institutions to be, in general, more willing to assume higher risks, resulting in an increase in the overall provision of finance.

The increase of lending to the agriculture sector has been higher than the increase of lending to the overall economy for several countries, including Belgium, Lithuania, Estonia, Germany, Spain and Romania⁹⁰. Hence besides the overall positive financing climate, other factors have positively influenced the supply of finance to the agriculture sector. Bankers interviewed have pointed out that the overall increasing output value of agriculture production (although large differences by sub-sectors exist), or changed production settings/rules (for example related to the abolishment of milk quotas in 2015), together with the low interest rate environment, has catalysed investments in the agriculture sector.

The increasing uptake of agriculture investment loans, often related to the increasing availability of investment support from the EAFRD or financial instruments, has overall explained the positive credit development in several countries⁹¹. At the same time, in Spain, Portugal and Lithuania, the agriculture sector has also gained attractiveness with in particular commercial banks over the last years (section 2.2.1).

Bankers in several Member States have pointed out that they have a positive view of the agriculture sector due to the, in general, overall **high level of solidity** (adjusted equity/total capital) and **low level of default risk**, whereby the sector can be considered a good portfolio investment from the point of view of the banks. For the 24 Member States analysed, bankers often claimed that farmers with viable project proposals and available balance sheets, and with a proven repayment ability, do not face constraints in accessing finance. Many times, bankers also stressed the access to collateral, the experience from managing a farm, and the importance of previous banking relations/credit history as vital prerequisites for providing lending. Thus, according to bankers, problems related to the supply of finance to the agriculture sector does not stem from a general disinterest or distrust by EU 24 financial intermediaries in the agriculture sector as such, rather it is related to the characteristics of individual farms, as further discussed for section 2.3.2. Furthermore, the importance of CAP support was underlined by numerous bank interviewees, as the support acts as a partial stabiliser for farmers' income, making farmers more reliable clients than what would otherwise have been the case.⁹²

90 Only in BG was the increase for the agriculture sector reported to be lower than the increase for the overall economy. In SE and PL the growth was reported to be on par. For IT and EL, the decrease of outstanding loans to the agriculture sector was lower than the decrease for other sectors. For the other Member States, no comparison was available.

91 IE, ES, DE, CZ, RO, PL, AT, HU, BG, LT, SK, PT, FI

92 It was also noted for several Member States that the segments of the sector with lower levels of CAP support face more difficulties in obtaining loans. For example discussed for FI, HU, CZ, BG, RO, PT, PL, LT, EE, LV, SK, BE



In several Member States, the agriculture sector is characterised by relatively low default risk. For 11 Member States⁹³, the share of Non-Performing Loans (NPLs)⁹⁴ for the agriculture sector was found to be lower than that of other economic sectors, whereas only for three Member States (Bulgaria, Greece, Denmark) was the share of NPLs for the agriculture sector higher⁹⁵. The share of NPLs to overall loans for the agriculture sector ranged from 1% (France, 2018) to 49.6% (Greece, June 2019). Another *fi-compass* report⁹⁶ also found that the default rate of agricultural clients is the same or lower than for other SMEs for the large majority of the financial intermediaries. This could be interpreted in two ways: (i) that the sector should be attractive to banks due to the low share of farmers failing in meeting their repayment requirements, or (ii) that the risk taken by banks for the agriculture sector is lower than that for the rest of the economy. Member States with high levels of NPLs for the agriculture sector is due to the long-lasting effects from the economic crisis. Also, a combination of the currently overall low interest rate environment which has triggered investments by farmers and led banks to be too accommodating issuing too many risky loans for farmers, at the same time as farmers' in many cases experience low and fluctuating profit margins putting strains on their repayment capacity. High NPL levels in general lead banks to be more risk-averse to the agriculture sector, in particular towards the segments of the sector understood to be riskier such as young farmers and new entrants, and may make it difficult for banks to further increase their exposure to the sector⁹⁷.

2.2.3.2. Loan conditions – interest rate and collateral requests

Often the agriculture sector faces higher interest rates than other economic sectors. For all 24 Member States analysed, interest rates for loans offered to the agriculture sector, as for loans to other economic sectors, have been decreasing for the period analysed (2014-2019). However, for 10 Member States (Finland, Estonia, Portugal, Lithuania, Ireland, Latvia, Denmark, Romania, Greece, the Czech Republic) the interest rate for agriculture loans was in general higher than for loans provided to other sectors of the economy. In four Member States (Sweden, France, the Netherlands, Germany) the interest rate charged is similar to that of other sectors, whereas in no country was it observed that the agriculture sector enjoyed lower interest rates than other sectors.

93 CZ, HR, FR, HU, FI, SK, BE, LT, IT, SI, RO

94 A loan in which the borrower is in default due to the fact that they have not made the scheduled payments for a specified period.

95 For the remaining Member States, no results were presented.

96 *fi-compass*, 2018, Flexible financial products for the agricultural sector in the EU, https://www.fi-compass.eu/sites/default/files/publications/Flexible%20financial%20products%20for%20the%20EU%20agricultural%20sector_0.pdf.

97 Observed for BG, EL, DK, as well as for SI and HR even if the agriculture sector NPL level is now at a lower level, the previous high levels still cause banks to be risk-averse. Also the recent increase of NPL level in CZ has caused banks to be more cautious.



Box: Interest rates in the agriculture sector

According to information provided by interviewed bankers for the 24 Member States, the interest rate charged for market based **short-term, working capital loans** in 2018 ranged between a low of 1.5% (France, Italy) to up to 11-12% in Croatia and Lithuania, noting however that the variation within a Member State can be significant. Most Member States for which information was obtained were found in the scope between 2-5%⁹⁸. The *fi-compass* survey found that the average interest rate applied for short-term loans in 2017 was 4.76%⁹⁹. For **credit lines and bank overdrafts**, the interest obtained was in general higher than for short-term loans, ranging between a starting point of 2-2.5% (Spain, Czech Republic) up to 15-20% (Romania). The most common frequency for Member States were found in the range around 5-10%¹⁰⁰. The *fi-compass* survey found that the interest rate for credit lines and bank overdrafts on average was 6.22%¹⁰¹. The interest rate for **long-term loans** in 2018 ranged between 1% (Denmark, The Netherlands) and 15-25% (Romania). Farmers in most Member States for which interest rate information was obtained faced an interest rate in the range between 2.5-6%¹⁰². The *fi-compass* survey found the average interest rate to be 3.4%¹⁰³.

Table 3: Interest rates for agriculture bank products

	Short-term loans	Credit lines/bank overdrafts	Long-term loans
<i>fi-compass</i> survey	4.76%	6.22%	3.4%
qualitative findings	2-5%	5-10%	2.5-6%

Source: *fi-compass* survey and country studies.

The loan conditions vary depending on the client and the product requested, with small-sized farms and small loan volumes being disfavoured. Often, bank employees interviewed stated that the loan amounts, loan terms, repayment schedules and interest rates depend on the purpose of the loan and the business analysis. In the *fi-compass* survey, more than 37% of the farmers demanding an investment loan (over 18 months) told that they were not able to negotiate the interest rate proposed. For credit lines, 50% were not able to negotiate the interest rate terms.

Among agriculture producers¹⁰⁴, in general, the larger the loan volume, the lower the interest rate faced by the borrower (a pattern also observed for other economic sectors). Another general pattern observed, although with variation between and within Member States, is that the longer the maturity of the loan, the lower the interest rate. Small-sized farms, young farmers and new entrants, being considered as segments with more risky attributes, are in several Member States (Portugal, Lithuania, Latvia, Estonia, Romania, the Czech Republic, Poland, Slovakia, Croatia) faced with somewhat higher interest rates than their older peers, or peers with larger farms.

The higher interest rates faced by the agriculture sector is explained by high transaction costs for assessing loan applications of small loan volumes together with high market concentration allowing a few actors to determine the loan conditions. Banks in Poland, Slovakia, Lithuania,

98 AT, HU, LV, SK, PT, EE. Information on interest rate for working capital loans obtained for: EE, IT, PT, LT, SK, LV, HU, AT, FR, HR.

99 Median loan amount equivalent to EUR 35 363.

100 DK, DE, NL, BE, BG. Information on interest rate for credit lines and bank overdrafts obtained for: ES, BG, BE, NL, DE, AT, DK, RO, CZ.

101 Median loan amount equivalent to EUR 33 993.

102 EE, IT, ES, BG, PT, LT, IE, NL, SK, LV, HU, AT, CZ. Information on interest rate for long-term loans was obtained for: CZ, HR, EL, RO, DK, FR, AT, HU, LV, SK, NL, IE, BE, LT, PT, BG, ES, IT, EE.

103 Median loan amount equivalent to EUR 117 775.

104 According to interviewees from banks and farm association representatives in 24 Member States.

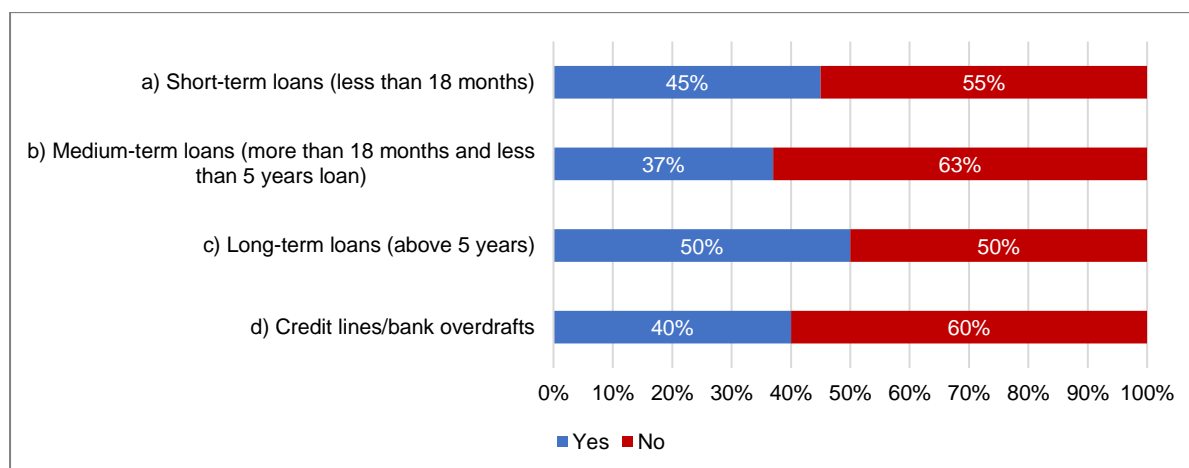


Romania, and Croatia reported that the high transaction costs for assessing loan applications of small loan volumes, in particular when they are spread out in dispersed rural areas, lead them to charge higher interest rate for these loans. Satisfying the needs of small loans impacts banks' operational costs (especially cost of sales), as every client is individually visited and interviewed during the client analysis. Each farmer also must be monitored regularly, which also requires sufficient staff. Hence, the conditions for a small loan for an agriculture client are then often comparable to short-term consumption loans. According to representatives of agriculture associations in the Member States listed above, the unfavourable conditions associated with small loans signal the limited interest from banks in working with small-sized farms.

In addition, in most of the Member States, as discussed above, there is limited competition on the agriculture finance market. This may in principle allow the banks that hold dominant positions to be more selective with clients, and to set stricter lending criteria including requesting higher interest rates even if this is not motivated by the risk performance of the sector.

Half of the farmers asking for long-term loans are requested to provide a guarantee. Banks ask for a guarantee as a security for providing a loan. As a general trend, the riskier the client or the investment project is considered, and the longer the maturity of the loan product, the higher the guarantee requested. According to the *fi-compass* survey, half of the farmers in the EU 24 applying for a long-term loan were requested to provide a guarantee, for short-term loans the share was 45%, and for credit lines 40% (Figure 9).

Figure 9: Share of farmers for which a guarantee was requested in 2017, by loan product



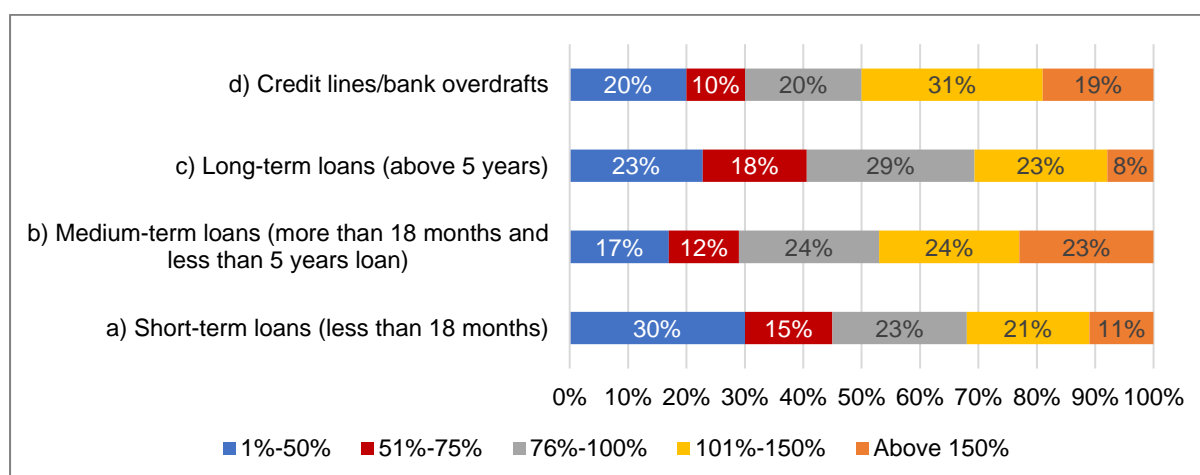
Source: *fi-compass* survey.

The guarantee requested by the financial institutions is often higher for the agriculture sector than for other economic sectors. The value of the guarantee, as a percentage of the requested loan amount, was above 100% of the loan value for half of the farmers requesting a credit line (Figure 10). A third (31%) of the farmers requesting a long-term loan had to provide a guarantee over 100% of the value of the loan. Almost a quarter of the farms receiving medium-term loans (18 months to five years) had to provide a guarantee equalling 150% or more of the requested amount, the same level for long-term loans was 8%¹⁰⁵. In many Member States the request of collateral is considered an important hurdle for farmers in obtaining finance (see section 2.3.2), and some country analysis (including Spain, Italy, Estonia, Bulgaria) showed that the collateral requested by operators in the agriculture sector are higher than those requested from other sectors.

¹⁰⁵ *fi-compass* survey.



Figure 10: Value of the guarantee as a percentage of the loan amount in 2017, by loan product



Source: *fi-compass* survey.

Banks generally accept mortgage over land and buildings as collateral for farm loans, but livestock is not accepted. The large majority of farmers provide a personal guarantee (collateral), interpreted as farm assets and family collateral. The provision of personal guarantee is most frequent for long-term loans (94%)¹⁰⁶, a finding that was highly shared by the numerous stakeholders interviewed in the Member States. Guarantees from corporate guarantee providers are used in particular for short-term loans, and relate to for example young farmers and new entrants who have no credit history or experience, and who therefore needs to have their investment guaranteed by a third party. For short-term loans 15% of the guarantees are provided by corporate guarantee providers, whereas for long-term loans this share is only 4%. The *fi-compass* survey also found that many farmers lack negotiating power, with more than half of those being requested to provide collateral not being able to negotiate the type and amount of the collateral.¹⁰⁷ This was further confirmed by the 24 country analyses.

¹⁰⁶ *fi-compass* survey.

¹⁰⁷ *fi-compass* survey.



2.3 Financing gap in the agriculture sector

This section presents an assessment of the financing gap for the EU 24 agriculture sector, broken down by Member States, farm-size and financial product. This is followed by an analysis of the drivers of the gap, elaborating on the most frequent constraints encountered on the demand and supply side of financing, as found in the 24 country reports.

Key elements of the financing gap in the agriculture sector

- The financing gap for the agriculture sector in the EU 24 is estimated to be between EUR 19.8 and EUR 46.6 billion.
- Almost two thirds of the gap is attributed to the constrained access to long-term, investment loans.
- Farmers present more difficulties in accessing finance than SMEs from other economic sectors.
- Member States with particularly high rejection rates for farmers also have the highest rejection rates for SMEs from other economic sectors.
- Among agricultural producers, small-sized farms, young farmers, new entrants, and innovative investments have the most difficulties in accessing finance.
- Member States with many small-sized farms have a higher share of farmers being discouraged from applying for finance due to the fear of being rejected, in these Member States there is often a lack of mutual trust and understanding between bankers and farmers.
- The general characteristics of the agriculture sector with low and fluctuating profit margins and cash flow, combined with the risks intrinsic to agriculture production may lead banks to be more hesitant in providing financing to the sector.
- For economies where there are general problems related to the access to financing for SMEs, the agriculture sector suffers significantly more than the overall economy.

2.3.1 The EU 24 financing gap for the agriculture sector

The financing gap for the agriculture sector in the EU 24 is estimated to be between EUR 19.8 and EUR 46.6 billion. 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 and statistics from Eurostat (see Annex 3 and 4 for more information). The methodology used for calculating the gap is described in Annex 2.

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

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

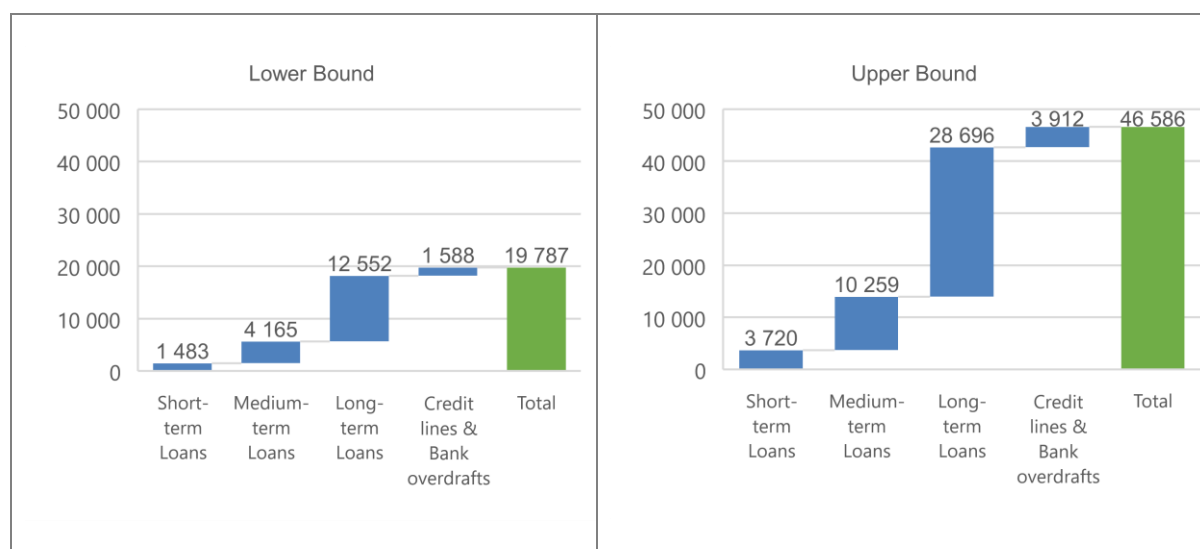


For the purpose of this study, 'turnover growth' is used as a proxy of farm viability. In particular, two different criteria for viability are used, which lead to the calculation of a range for the financing gap between an upper and a lower bound:

- The lower bound gap is calculated under the hypothesis that only enterprises which reported a stable (non-negative) turnover growth and no cost increase in the previous year can be considered 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.

Almost two thirds of the gap is attributed to the constrained access to long-term loans¹⁰⁸. The longer the maturity of a loan, the higher the risk associated with it. It is therefore logical that access to long-term loans is the biggest worry to EU 24 farmers. The estimated value of the long-term loans that viable farmers would like access to, but that is currently not available to them, is between EUR 12.6 to 28.7 billion. The second most difficult loan product for farmers to access are medium-term loans, with the gap ranging between EUR 4.2 to 10.3 billion. The value of the gap for access to short-term loans, credit lines and bank overdrafts is the lowest, to some extent reflecting the fact that the requested value of these products is usually lower than for the products with longer maturity.

Figure 11: Financing gap by product in the agriculture sector in 2017, EUR million



Source: Calculations based on the *fi-compass* survey.

The segment of the agriculture sector with the most difficulties in accessing finance are the small-sized farms (below 20 ha)¹⁰⁹, accounting for between EUR 14.3-35.2 billion, or almost 75%, of the total gap. As 87% of farms in the EU 24 are below 20 ha, this finding is not surprising. Even so, small-sized farm holdings in general ask for loans of smaller volumes, whereby the overall estimated value of the financing gap for small-sized farms is still significant. The larger farms have the least problems in accessing finance, with a financing gap estimated between EUR 2-4 billion. Thus about 10% of the total gap can be attributed to farms over 100 ha (Table 4). Table 4 also shows that small-sized farms have, compared to the larger farms, more difficulties in accessing long-term loans.

¹⁰⁸ The *fi-compass* survey defined short-term loans: <18 months, medium-term loans: 18 months – 5 years, long-term loans: >5 years maturity.

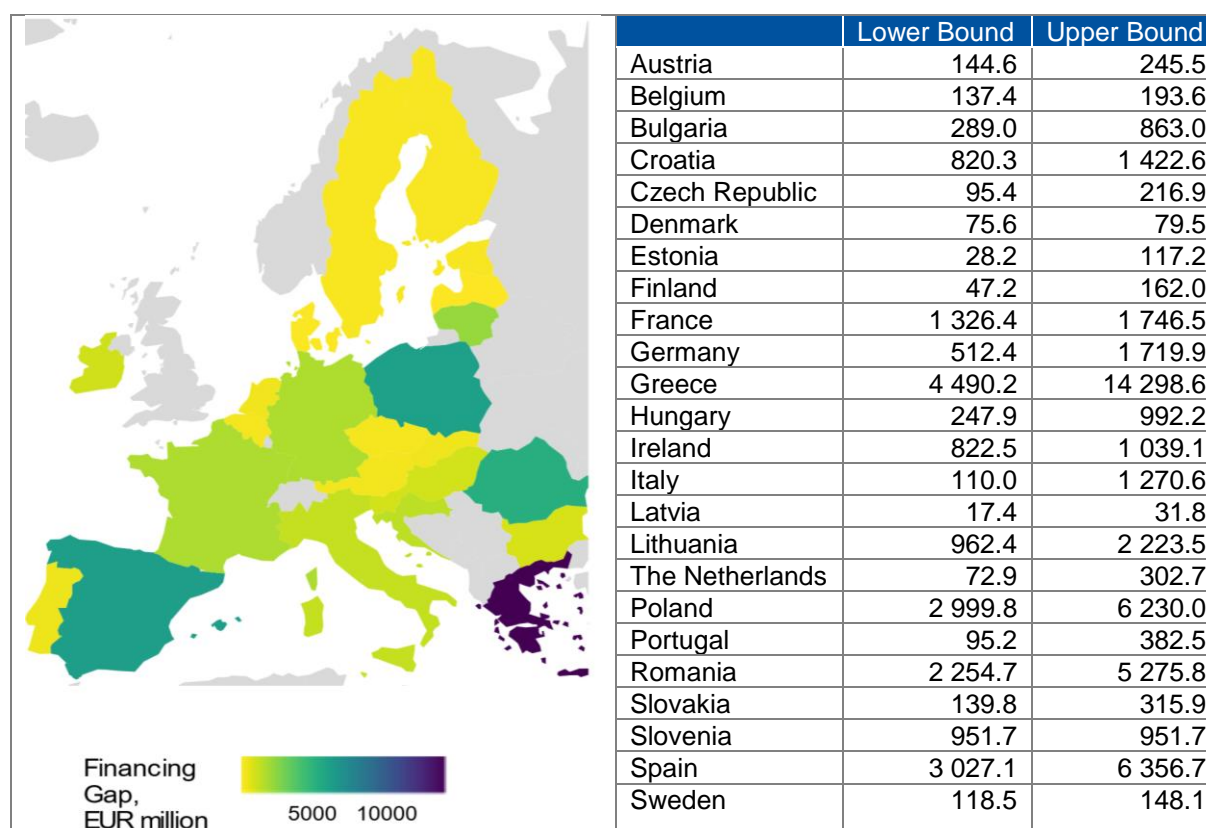
¹⁰⁹ The *fi-compass* survey divided farms in three size categories: small (<20 hectares), medium-sized (20-100 hectares), large (>100 hectares).


Table 4: Financing gap by farm size in the agriculture sector in 2017, by product, EUR million

		Total	Short-term Loans	Medium-term Loans	Long-term Loans	Credit lines Bank overdrafts
Upper Bound	Small-sized farms	35 166	2 734	7 965	21 768	2 698
	Medium-sized farms	7 336	600	1 452	4 749	535
	Large-sized farms	4 084	385	842	2 178	679
	Total	46 586	3 720	10 259	28 696	3 912
Lower Bound	Small-sized farms	14 311	1 075	3 169	9 056	1 012
	Medium-sized farms	3 472	256	632	2 340	243
	Large-sized farms	2 004	152	363	1 156	333
	Total	19 787	1 483	4 165	12 552	1 588

Source: Calculations based on the fi-compass survey.

Greece, Spain and Poland register the highest financing gaps in absolute volumes. The upper bound of the gap for Greece was estimated to EUR 14.3 billion, followed by Spain (EUR 6.4 billion), Poland (EUR 6.2 billion), and Romania (EUR 5.3 billion).

Table 5: Financing gap by Member State in 2017, upper and lower bound, EUR million


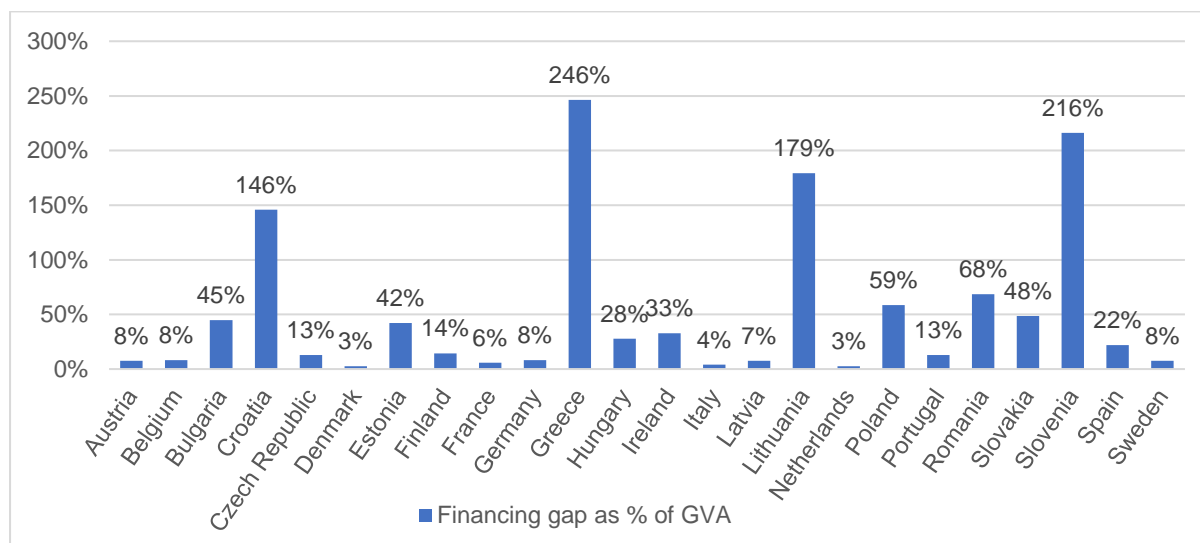
Source: Calculations based on the fi-compass survey.

But Slovenia, Lithuania and Croatia may have a higher share of the agriculture sector that experience problems in accessing finance. When comparing the estimated financing gap to the Gross Value Added (GVA) generated by the agriculture sector in the respective Member State, the relative difficulties for the farming sector in accessing finance is more evident. Greece still stands out, demonstrating the highest gap in relation to GVA, but is in this comparison followed by Slovenia, Lithuania, and Croatia, all experiencing higher values of financing gap than the value of the GVA



generated. According to this comparison, Denmark and the Netherlands have the least problems with farmers experiencing problems in accessing finance.

Figure 12: Financing gap (upper bound) as % of GVA

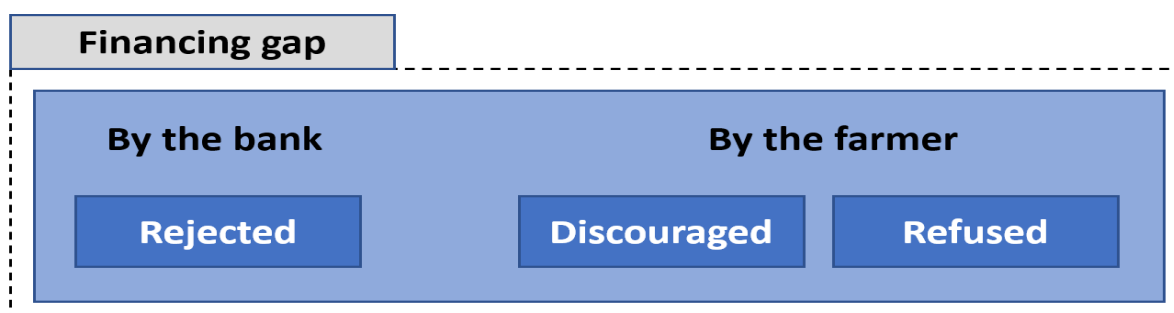


Source: Eurostat, calculations based on the fi-compass survey.

2.3.2 The drivers of the financing gap

As outlined above, the financing gap consists of (i) lending applied for by farmers but not obtained, due to a loan rejection by the potential lender, or (ii) a lending offer refused by the potential borrower due to loan conditions considered unfavourable, as well as (iii) lending not applied for due to expected rejection, i.e. farmers being discouraged from approaching a bank for a loan request. The relative importance of these three factors in explaining the gap will be examined in this section, together with the reason for why they occur, i.e. why are farmers rejected on their loan applications, why do they refuse loan offers, and why are they discouraged.

Figure 13: Schematic overview on the components of the financing gap



Source: Ecorys, 2020.



2.3.2.1. The part of the financing gap explained by unsuccessful loan applications – rejections and refusals

Farmers present more difficulties in accessing finance than SMEs from other economic sectors.

From the loan applications presented, at EU 24 level, 14.1% of farmers were rejected by the lender, and 2.4% of the loan offers were refused by the potential borrower. In addition, 10% of the farmers that decided not to apply for a loan, did not do so due to the fear of being rejected¹¹⁰. For SMEs in other economic sectors, the rejection level is 5%, the share of loan offers refused is 1%, and the share being discouraged for applying for a bank loan is 5%.¹¹¹ Thus, for all parameters analysed, the agriculture sector shows more difficulties in accessing finance than other economic sectors.

Member States with particularly high rejection rates for farmers also have the highest rejection rates for SMEs from other economic sectors, hence general problems with bankability for SMEs is also reflected for the agriculture sector.

In Lithuania, a total of more than 65% of farmers' loan applications in 2017 were unsuccessful, of these, 61% were due to rejections by banks. Greece registered more than 50% unsuccessful applications, of which 44% were due to rejections by the lender. Slovakia ranks third with more than 40% of the loan applications being unsuccessful, 29% were rejected by banks. Romania, with 28% unsuccessful applications, and Estonia, with 23%, also stand out for their low success rates.

According to the SAFE survey¹¹², Lithuania had the highest rate of unsuccessful applications also for SMEs from other sectors (24% of applications, of which 17% by the lender), followed by Greece and Estonia (21%), Romania (18%) and Slovakia (16%).

In other words, the five countries with the highest rates of unsuccessful applications are the same, regardless of whether one is looking at the overall economy or only the agriculture sector. However, it is worth noting that the share of unsuccessful loan applications is significantly higher for the agriculture sector than for SMEs for all five countries. Only for Estonia is the difference between the agriculture sector and other economic sectors small. This signals that for economies where there are general problems related to the level of successful loan applications, the agriculture sector suffers significantly more than the overall economy.

110 *fi-compass* survey.

111 *fi-compass* survey and SAFE. Disclaimer for the reader: bear in mind that two different sources, based on methodologies that may differ were used for this comparison.

112 European Commission, 2017, Survey on the access to finance of enterprises (SAFE), November, p. 40.



Figure 14: Share of unsuccessful applications for bank finance in 2017, by country (total short-term, medium-term, long-term loans and credit lines)

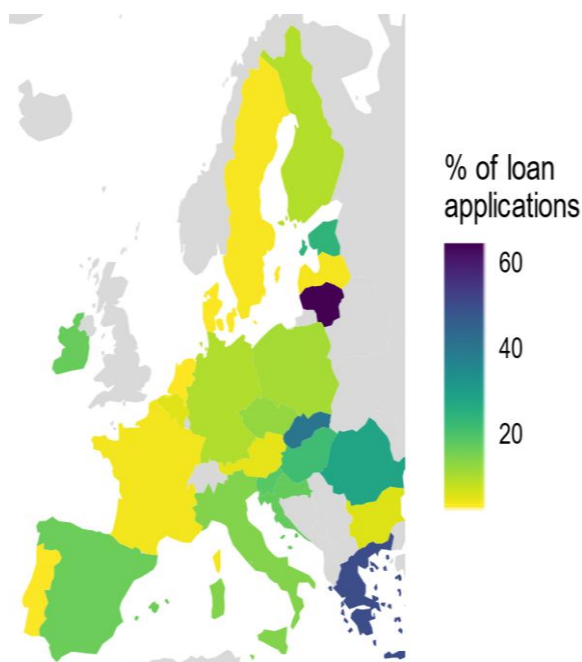
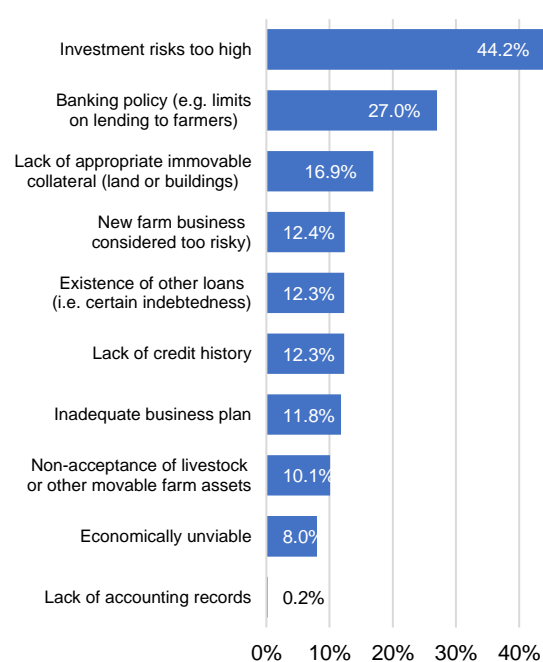


Figure 15: Reasons for loan rejections in 2017 (% of rejections)



Note: Unsuccessful applications are obtained by summing rejected and refused application rates.
Source: fi-compass survey.

The longer the maturity of the loan, the higher the rejection rate, reflecting the higher risk associated with longer repayment periods. 18.4% of those requesting a long-term loan (above 5 years) were either rejected by the lender (15.6%) or refused by the farmer (2.8%). For medium-term investment loans (more than 18 months and less than five years), as well as short-term loans (less than 18 months), 17.3% of the applicants for the respective products were unsuccessful. Credit lines, bank overdrafts and credit card overdrafts saw the lowest levels of unsuccessful requests, 13.1% of those applying for these products were unsuccessful.¹¹³

Rejections, as well as refusal of loan offers by farmers due to unsatisfactory loan conditions, is more common among small-sized farms. Small-sized farms have the highest share of applications rejected by the lender for all four bank products (17% compared to 3% for large-sized farms). Small-sized farms also refuse the loan offer made to them to a greater extent than large-sized farms, 2.8% compared to 0.4%. This is a result of the degree of negotiability of the loan conditions that the farm can impose, large-sized farms are likely to have greater potential to negotiate the loan conditions.

As for Member States, Slovakia registers a refusal rate above 10% (average for all loan products), the highest noted among all EU 24 countries, followed by Greece (6.9%), and Croatia (5.4%). Hungary, Ireland, Italy and Lithuania all noted refusal levels above 4%. To further confirm the unsatisfactory loan

113 fi-compass survey.



conditions offered in some countries, in Greece, Croatia and Bulgaria over 30% of the agricultural producers surveyed noted that they would apply for loans if better loan conditions were offered.¹¹⁴

2.3.2.2. Reasons for unsuccessful loan applications

Numerous reasons have been identified in the 24 country reports and in the *fi-compass* survey as to why agriculture producers are rejected on their loan applications. The reasons can be grouped into the following categories, which are briefly developed below¹¹⁵:

- Investment risk is considered too high and/or banks lack the expertise to assess the actual risk;
- Lack of access to collateral;
- Low profit margins implying low cash flow and repayment ability;
- Too high level of indebtedness and low solvency rate;
- High concentration of supply on the agriculture finance market and banking policy;
- Lack of, or poor, credit history;
- Unsatisfactory management of the farm or lack of management experience/business history;
- Low level of financial literacy, knowledge and confidence of some agriculture producers, and inadequate business plans;
- Lack of accountancy and business records for small-sized farms;
- Banks difficulties in assessing loan applications from the agriculture sector;
- Lack of well-established bank relationships.

A perception of risk associated with the agriculture sector is the main factor in the rejection of loan applications. The *fi-compass* survey found that 44% of those that had been rejected answered that the bank considered the investment to be of too high risk, and another 12.4% had been rejected because the farm business was new, and therefore considered too risky. The qualitative analysis found that in 13 Member States¹¹⁶, high investment risk was an important reason for rejecting loan applications from farmers. However, this result should be interpreted with care, as in practice, many of the other reasons provided as to why farmers are rejected are closely related to the risk element perception.

The banks' sectorial expertise determines their ability to assess the risk associated with an agriculture activity. Risks in agriculture are linked to sudden (negative) changes of market prices, trade embargos, animal disease outbreaks, and weather impacts such as from droughts, floods, etc. A key problem of agriculture is that producers often do not control their selling prices¹¹⁷. In addition, some sub-sectors might face strong profit volatility¹¹⁸. Financial institutions cope with this context with increased vigilance and caution, when adjusting lending terms and conditions, for instance, by requiring farms facing such output price volatility to demonstrate balance sheets with lower loan to value ratio and/or higher cash reserves. It may also lead banks to request higher collateral levels, and/or to impose higher interest rate on loans from the agriculture sector. Banks that lack agriculture expertise and work

114 *fi-compass* survey.

115 Based on findings from 24 country reports and *fi-compass* survey results. For the *fi-compass* survey results, see Figure 14. In the 24 country studies that were undertaken, the above mentioned, as well as other reasons for rejections as provided by stakeholders, were analysed.

116 BE, BG, DK, EE, FR, HR, IT, LT, NL, PT, SK, LV, HU.

117 Some farms enter in supply contracts with processors before the start of a production cycle. This gives a degree of certainty on prices in the short-term and for the expected harvest. However, these contracts are periodically renewed, and prices can be adjusted, usually with the farmer having the lowest negotiating power in the value chain.

118 Eurostat 2018, Agriculture, Forestry and Fishery statistical book; https://ec.europa.eu/eurostat/statistics-explained/index.php/Agriculture,_forestry_and_fishery_statistics; European Commission, EU Agricultural Markets Briefs No 12, September 2017; Risk Management schemes in EU agriculture, http://ec.europa.eu/agriculture/markets-and-prices/market-briefs/index_en.htm.



with general scoring models also tend to associate the sector with more risks (see section 2.2.1 and further down in this section).

In Lithuania, Belgium, Hungary, Latvia, and Bulgaria, it was noted that sub-sectors with particularly low or volatile profit margins have more problems in accessing finance. At the same time, crop farms in the same countries (and in Slovakia), which own land, were noted to be less risky because these farms can mortgage land to secure loans and they can rely on higher payments from the CAP, acting as an income stabiliser. Similarly, pig or poultry farms are in some Member States, as noted for example for Belgium and Denmark, considered as less risky for financial institutions because they, to a greater extent than other sub-sectors, hold long term production contracts, whereby they have a more stable and predictable income. As a result, their access to finance is easier than for those not holding long-term contracts.

Small-sized farms, young farmers, new entrants, and innovative investments find it harder to access financing. Small-sized farms are found to be riskier clients in several Member States (including Latvia, Estonia, Lithuania, Slovakia, Spain and Portugal). Small-sized farms are rejected to a much greater extent on the basis that the investment for which financing is sought is considered too risky (47.8% for small-sized farms compared to 7.4% of large-sized farms)¹¹⁹. The key reason by financial institutions for rejecting a loan application from a young farmer is also that it is too risky.¹²⁰ Start-ups and innovative investments might be considered risky whenever banks do not have benchmark data to assess the investment project. For example, investments in automation and precision agriculture, or in new production niches such as urban or indoor farming may, in some countries (as noted for the Netherlands, France, Portugal, Estonia and Lithuania) and for some banks (depending on the banks overall knowledge level of the agriculture sector), present a high investment risk whereby banks are hesitant to provide financing. It was particularly pointed out that investments in new, sustainable production methods (for example involving less pesticides) face problems in accessing finance, as this is new, untested ground for many banks.

According to the 24 country analyses, lack of access to collateral is one of the main reasons why farmers are rejected when requesting bank loans.^{121,122} Lack of collateral hinders access to long-term investment loans, in particular for young farmers and small-sized farms. Banks generally accept mortgage over land and buildings as collateral for farm loans, but livestock is not accepted. In countries where much property has already been mortgaged, or where the existing farm equipment or farm buildings have a low value, this creates particular problems for farmers to secure their loans. Lack of collateral is a particular problem for small-sized farms, with lower asset values. Furthermore, the high share of land being leased for agricultural production in many Member States, and that can therefore not be used as collateral, is considered a bottleneck that creates a vicious circle in terms of access to finance, in particular for young farmers. New entrants, who cannot count on support from family members or relatives with prior experience in the sector (contrary to young farmers who inherit the business from their family), face particular problems¹²³. This is further aggravated by the fact that the required initial investments in agriculture are often higher than for other productive sectors.

119 *fi-compass survey*.

120 The *fi-compass survey* found that 60% of the rejections of young farmers are due to them being considered too risky.

121 Lack of collateral was identified as one of the main causes of rejection in 22 of the countries analysed: AT, BE, BG, DE, DK, EL, ES, FI, FR, HR, HU, IE, IT, LV, LT, NL, PL, PT, RO, SI, SK, SE.

122 27% of the *fi-compass survey* respondents stated this as reason for rejection.

123 PL, NL, SE.



The low economic profit margins of the agriculture sector limit its access to finance. In 11 Member States (Austria, Belgium, the Czech Republic, Germany, Estonia, Finland, Croatia, Ireland, Latvia, Poland and Slovakia), one of the main reasons for rejecting loan applications is that the project proposed, or the farm itself, is considered economically unviable, or the farmer lacks creditworthiness. In another six Member States (Greece, Italy, Portugal, Romania, Slovenia, and Sweden), the low repayment ability linked to the low cash flow was considered an important reason explaining rejections. This is particularly the case for smaller farms.

Too high level of indebtedness and low solvency rate was found to be a particularly important reason for farmers being turned down in seven Member States (Austria, Denmark, Germany, Lithuania, Portugal, Finland, and the Netherlands)^{124,125}. In Finland and the Netherlands it was pointed out that farms that have recently gone through a succession process, following a farm take-over by a young farmer tend to have high debts and low equity, hence low solvency, whereby banks consider it risky to finance their investments and are more likely to reject their loan applications.

The high agriculture finance market concentration, and banks with established maximum debt limits for a specific activity, explain restricted lending to agriculture producers. In 11 of the Member States analysed (the Czech Republic, Denmark, Estonia, Spain, Finland, France, Croatia, Hungary, the Netherlands, Poland, and Greece), the existence of bank policy to limit the lending to the agriculture sector, as well as other rules related to lending policy, was considered to be of particular importance when explaining rejections of farmers' applications¹²⁶. In 14 Member States (see section 2.2.1) the concentration of the agriculture finance market is significant, allowing banks to be more selective with their clientele. In addition, for Member States with particularly high levels of NPL (see section 2.2.3) this has often resulted in banks being limited in their ability to source liquidity to agriculture businesses.

Lack of credit history limits access to finance for young farmers and new entrants throughout the EU 24.^{127,128} In general, credit history is an important part of the loan application process and it is considered an asset when a client can demonstrate their repayment capacity based on the previous loans they have received. Young farmers and new entrants are particularly negatively affected, as they have been unable to demonstrate their repayment willingness and capacity, as they are often new to the business. In Austria, Denmark and Estonia it was noted that also poor credit history of farmers was an important reason for rejecting farmers.

Management capacity of the farmer is an important factor assessed by banks. In 11 Member States (Austria, Germany, Denmark, Greece, Finland, Latvia, Lithuania, Portugal, Romania, Sweden, Spain), lack of experience of management of a farm, or unsatisfactory management, was flagged as one of the more relevant reasons for rejecting loan applications from the agriculture sector. Also, if banks assume that the farmer has insufficient technical skills this may lead to a rejection of his/her loan application.

124 12% of the *fi-compass* survey participants noted the existence of other loans to be the reason to be rejected a new loan.

125 Bank interviewees indicated that, although many farmers are able to serve more than one loan at a time, there are other parameters which influence the loan decision. If a farmer already has outstanding liabilities with a financial institution, this bank has a priority claim over collateral and guarantees which often comprises the whole farm including buildings of all purposes. Taking an additional loan from another lender under those circumstances therefore becomes difficult.

126 27% of farmers consider that the banking policy was the main reason to why they had been rejected a loan, *fi-compass* survey.

127 Found to be an important reason in 19 Member States: AT, BE, BG, CZ, DE, DK, ES, FI, HR, HU, IE, IT, LV, LT, NL, PL, PT, SI, SK.

128 The *fi-compass* survey found that 12% of the EU 24 farmers considered their lack of credit history records the main reason as to why they had been rejected financing by financial institutions.



The lack of knowledge on basic financial concepts amongst farmers is a reason for rejecting loan applications. In Bulgaria, Greece, Spain, Croatia, Ireland, Italy, Lithuania, and Romania, farmers' low level of financial literacy, compared to other sectors of the economy, was mentioned as a reason for rejections to occur. Farmers with low levels of financial literacy are often not aware of the type of financial products provided, or which products best suit them, and do not have a clear understanding of the terms and the requirements imposed by banks.

In addition, the lack of adequate financial knowledge negatively affects the quality of applications. This leads to applications being rejected or to farmers refraining from approaching banks for their lending needs. In Austria, Bulgaria, Denmark, Spain, Hungary, the Netherlands, Romania, and Slovenia the presentation of inadequate business plans was pointed out as a reason for rejection. Even in countries where lack of financial literacy is not a major issue, there are still segments of the farming community who lack the capacity to convincingly present their business plans to the banks. In many countries, farmers outsource the work of preparing business plans and other loan application documentation to external consultants, in order to increase the chances of succeeding in obtaining finance. This often represents a significant cost, limiting in particular managers of small-sized farms possibility to contract these services, thereby also limiting their access to finance.

In fact it was found that in the two Member States where the access to finance is the highest – France and Denmark (see section 2.1.2.1) – the high availability of technical support in preparing loan applications (facilitated both through agricultural cooperatives, accounting networks, as well as independent local firms), together with the strong relationship between banks and farmers, were important factors explaining the high success rates in loan applications.

Small-sized farms that lack business data and accountancy records have problems in accessing finance due to asymmetry of information between lender and borrower, as noted for Bulgaria, Croatia, Hungary, Italy, Lithuania and Slovenia.¹²⁹ It is common that farms do not keep household accounts separate from business accounts, and that, below a threshold level, farmers are not required to keep a bookkeeping separate from the household economy. It is therefore common that small-sized farms have problems in presenting business data. **In addition, small-sized farms do not always work with invoices, often they are even exempted from the legal invoice requirement**¹³⁰. This leads banks to have difficulties in assessing creditworthiness because they have no track records of the agricultural business activity. The absence of financial statements amplifies the asymmetry of information, resulting in banks considering this group too risky to finance.

In addition, the increasing complexity of ownership structures for the agriculture sector lead banks to have difficulties in assessing loan applications from the sector. In Germany, Hungary, Portugal, Sweden, France and Denmark, interviewees both from the agriculture and banking sectors pointed out that banks have difficulties in assessing loan applications from the agriculture sector due to their complexity, which explains some of the rejections occurring. This is related to the legal form of farms, and their increasing complexity, as noted for Sweden and France

Thus, two very different situations lead banks to have difficulties in assessing loan applications from the agriculture sector. On the one hand, the part of the sector run on a traditional basis has difficulties in presenting track records of their businesses and therefore banks cannot assess their creditworthiness in the same way as done for other economic sectors, which in turn requires banks to have different methods for assessing these farms bankability. And, on the other hand, the part of the

¹²⁹ Lack of accountancy records was not considered a significant issue by fi-compass survey participants. Only 0.2% of the participants indicated this as the reason for rejection.

¹³⁰ More predominant in Southern and Eastern parts of the EU



sector developing complex ownership structures with which the banks are often not acquainted, therefore requiring banks to have specific expertise to be able to assess the bankability of these farms.

The dual complexity of the sector may explain why, in several Member States, including Bulgaria, Greece, Romania, Slovenia, Lithuania, Italy, Estonia, Portugal, Ireland, and Croatia, the limited knowledge of, and/or limited interest among banks of the agriculture sector was pointed out as a reason behind the financing gap.¹³¹

Loan approvals sometimes depend on personal relations. The *fi-compass* survey showed that the vast majority of farmers (between 61% and 72% depending on the product) only applied for loans to one bank, hence farmers often do not actively shop around for financing. This can be explained by the fact that many farmers favour relations with a single bank. It may also be explained by the fact that in some countries, the presence of banks in rural areas is limited, whereby the local competition between banks is limited (see section 2.2.1). As a result, it is difficult for farmers to obtain better conditions, but the loyalty showed by farmers may also be an important factor in accessing finance. In Denmark, Hungary, Portugal and Sweden stakeholders underlined that personal relations between a farmer and the bank officials in the local office will substantially facilitate the access to loans. Bankers take into account the personal skills and level of motivation of farmers, and a common reason for rejection is in these cases, as stated by bank interviewees, that sometimes trust in the client is lacking, even if all assessments are otherwise positive. Others state that an important criterion for approving financing for an investment is for the farmer to convince the bankers that it is a good investment. This entails the farmer being confident in the project and often already being known to the banker. According to interviews, young farmers, in particular, do not have the same confidence when visiting the bank.

2.3.2.3. The part of the financing gap explained by farmers that do not approach the banks for fear of being rejected – discouraged farmers

Small-sized farms are more likely to hold back with applying for finance due to the fear of being rejected¹³². The five countries identified with the highest rate of discouragement – Greece¹³³, Bulgaria, Slovenia, Lithuania and Croatia – all have more than 85% of farms below 20 ha. On the other hand, in countries such as Sweden, Denmark, the Netherlands, Austria, Germany, and Finland, few farmers reported to have held back from approaching a bank due to the fear of being rejected. The same is true for Italy, but this is likely to be due to the general low participation in the financial system by many small-sized farms, rather than to the absence of small-sized farms.

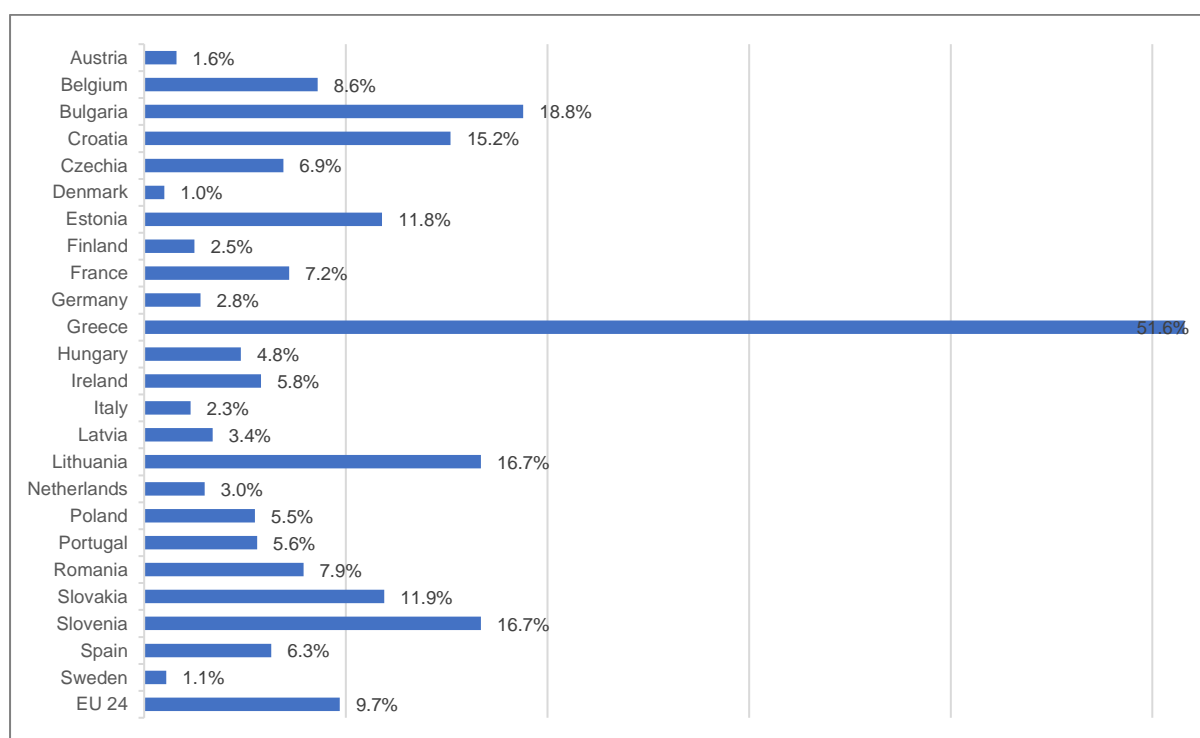
131 As discussed for section 2.2.1, in several Member States the bank sector's marketing strategy (besides the main agriculture bank/s) does not focus on farmers. This can be due to that the advantage of the agriculture banks lead other banks to consider the entry barriers as too high or due to that the agriculture sector (in particular small-sized farms) is considered as unattractive and not a relevant investment sector.

132 *fi-compass* survey: 10.1% of small farms were discouraged from applying for a bank loan, compared to 3.9% of the large-sized farms.

133 More than 50% of the Greek survey participants responded that they did not approach the bank for fear of being rejected. The situation of distrust stemming from the economic crisis the country has gone through means that there is a widespread situation of distrust in Greece between banks and farmers, whereby the share of discouraged farmers in Greece should be interpreted with caution.



Figure 16: Share of farmers discouraged from applying for finance in 2017, by Member State



Source: *fi-compass* survey.

The main reason why farmers are discouraged from applying for finance include:

- Lack of mutual trust and understanding between bankers and farmers, and lack of transparency in bank loan policy,
- Negative previous experiences with banks,
- Unattractive loan conditions as well as complicated and long application procedures, and
- Lack of financial literacy including capacity to develop quality business plans.

In countries with high rates of discouraged farmers, there is often a lack of mutual trust and understanding between bankers and farmers, as identified in the country analysis of Greece, Bulgaria, Slovenia, and Croatia. Lack of trust between bankers and farmers relate to the former being afraid of the risk of default of the borrower (sometimes linked to lack of knowledge of the agriculture sector operations), while the latter believes the bank does not understand them and their business. Sometimes the general distrust is linked to negative previous experiences, for example in Slovenia and Croatia where several episodes of farmers with Non-Performing Loans (NPL) have ended up with banks seizing their land and their farms. Farmers that are unsure of their repayment capacity are then afraid of their property being seized, whereby they refrain from applying for a loan.

High rejection levels, unfavourable loan conditions, and farmers' limited financial knowledge discourage farmers from applying for loans. In Lithuania and Greece, the share of farmers that is rejected on their loan applications is significantly higher than for other Member States. This signals to farmers that it is not worth the effort of approaching banks, thereby causing high rates of discouraged farmers in these Member States. In addition, in Greece, Croatia and Lithuania, the share of farmers that refused a loan offer from a financial institute was higher than for most Member States. Thus, the unfavourable loan conditions, as well as burdensome and long loan applications, also cause farmers to

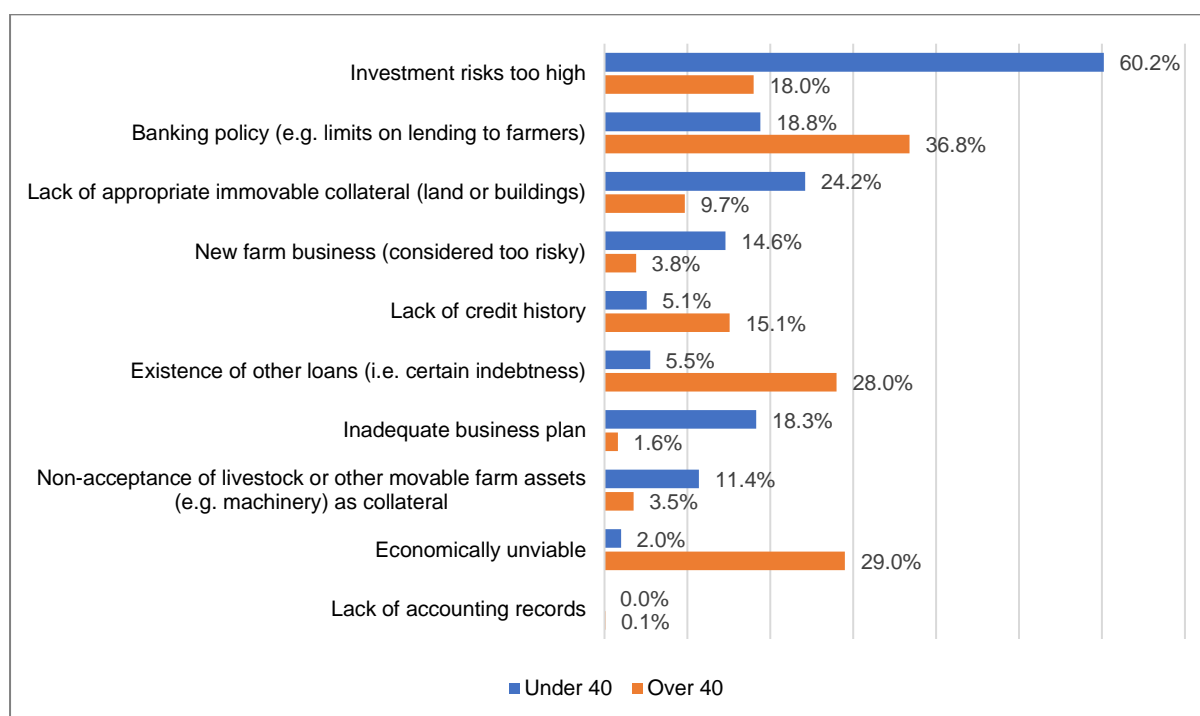


refrain from approaching banks¹³⁴. As a consequence, farmers in need of financing may therefore turn to other sources (such as friends and family, as discussed for section 2.1.2), or simply refrain from borrowing. Furthermore, limited financial knowledge among agriculture producers is a major reason why farmers are discouraged from applying for finance, in particular in Member States with many small-sized farms, as found for example for Lithuania, Croatia, and Slovenia. Many farmers lack knowledge on how to prepare business plans and other necessary documents, or they lack information on what products would be available to them to be apply for.

2.3.2.4. Young farmers and new entrants face particular difficulties in accessing finance

Young farmers (under the age of 40 years) account for about one third of the total financing gap, amounting to between EUR 6.9-12.7 billion. Young farmers and new entrants are considered particularly risky. Young farmers are three times as likely to be rejected than their older peers¹³⁵. In addition, young farmers are more likely to be discouraged from applying for loans, and are more likely to ask family and friends for financing compared to their older peers. According to the *fi-compass* survey, and further supported by the qualitative analysis undertaken in the 24 Member States, young farmers are considered too risky (60%), they lack collateral (35%), and prepare inadequate business plans (18%), causing banks to reject their loan applications. All percentages are significantly higher than for the farmers over 40 years (Figure 17).

Figure 17: Key reasons given by the bank for refusing the application in 2017, by age group (multiple answers allowed)



Source: *fi-compass* survey.

134 In for example Croatia, Greece and Slovenia, the complicated and long application procedures was pointed out as an important reason for discouragement. For example, farmers applying for short-term loans are likely to receive the financing needed with a significant time lag from the date of application, making the loan no longer useful for their business needs. Feedback from interviewees in the respective countries.

135 *fi-compass* survey: 27% of the loan applications from young farmers ended in rejection by the lender, compared to 9% for farmers over 40 years.



According to bank interviewees, young farmers in general have higher debt ratio and less solvability compared with their older peers. This is due to the initial investments they often need to undertake in order to take over the farm, as well as investments in improvements of the farm structure and/or equipment, or investments in expanding the production. For several Member States, for example Portugal, Finland, the Czech Republic, Denmark, Estonia, Spain and Lithuania, it was found that banks are reluctant to provide credit to support farmers in the initial phases of their business, except for cases where the borrower can prove to have already undertaken sound investment operations in the sector or that are able to provide sufficient equity. Generally, young farmers apply for close to 100% financing (loan to value ratio). Therefore, they need large guarantees. According to interviews with banks, often the family provides assets for guarantees or the young farmer's parents are required to co-sign loan contracts.

In all Member States it was pointed out that those entering the sector without previous farming and management experience (i.e. not having inherited the farm from their parents, or not being able to proof their involvement in the family farm activities), and without credit history, faced even greater problems in accessing finance. In addition, new entrants have even bigger difficulties with providing collateral compared to farmers that inherit a farm, which make banks even more reluctant in lending.



3 CONCLUSION AND RECOMMENDATIONS FOR THE AGRICULTURE SECTOR

A financing gap for the agriculture sector has been estimated to be in the order of EUR 19.8 to EUR 46.6 billion for the EU 24. The gap represents unobtained financing sought by economically viable enterprises. Small-sized farms, young farmers, new entrants, and innovative investments find it harder to access financing. Almost two thirds of the gap is due to difficulties in accessing long-term loans.

Compared to SMEs in other economic sectors, agriculture enterprises apply less for bank finance, and they face more difficulties in accessing finance when they do apply. For economies where there are general problems related to the level of successful loan applications, the agriculture sector suffers significantly more than the overall economy. In addition to the farmers being denied credit by financial institutions, about 10% of the farmers that are in need of financing refrain from approaching banks due to fear of being rejected, compared to 5% of SMEs from other economic sectors. The lack of bank finance provided for the agriculture sector is in some Member States partly compensated by private finance, i.e. loans from friends and family. In some cases, where this is a particularly important phenomenon, almost half of the farmers in need of finance seek private loans.

The general characteristics of the sector with low and fluctuating profit margins and cash flow, combined with the risks intrinsic to agriculture production – related to animal diseases, climate and weather-related fluctuations, as well as market and political crises – **lead banks to be more hesitant in providing financing to the sector.** Due to the general economic situation of the sector, farmers are sometimes considered to lack creditworthiness and to have low repayment capacity. Low level of financial literacy, knowledge and confidence of agriculture producers, as well as lack of accountancy and business records also limit farmers' access to finance.

However, it can be noted that the credit provided to the agriculture sector from financial intermediaries in the 24 countries analysed is increasing, and this increase has outpaced the lending to the overall economy for several countries. Bankers in several Member States have pointed out that they have a positive view of the agriculture sector due to the, in general, overall high level of solidity (adjusted equity/total capital) and low level of default risk, whereby the sector can be considered a good portfolio investment from the point of view of the banks. For the 24 Member States analysed, bankers often claimed that farmers with viable project proposals and available balance sheets, and with a proven repayment ability, do not face constraints in accessing finance.

Even so, the supply side shows some limitations. For example, for 14 Member States, the lending to the agriculture sector is concentrated to a very limited number of intermediaries, in some cases even strongly dominated by a single intermediary, leaving these with strong market power allowing them to dictate the loan conditions. In fact, often the agriculture sector faces higher interest rates than other economic sectors, and half of the farmers asking for long-term loans are asked to provide a guarantee, a guarantee which is often higher for the agriculture sector than for other economic sectors. Thus, lack of collateral and refusal of the loan conditions offered also explain why farmers' have difficulties in accessing finance. Small-sized farms and young farmers are particularly disfavoured. In addition, it was found that lack of agriculture specific expertise in banks may limit the supply of finance to the sector.

Support from the CAP – both direct payments, investment support, and start-up support – **contribute to improving the situation by facilitating farmers' access to lending** as the support increases their cash flow and loan repayment capacity. In addition, 11 Member States currently have at least one EAFRD funded financial instrument operational, or about to be operational, stimulating the investments undertaken by the agriculture sector and other financial instruments are currently under development.



Even so, the collaboration between the private and the public sector to facilitate farmers' access to finance could be further strengthened in many Member States, to make it possible for economically viable farms to undertake investments that are currently on hold.

- For the vast majority of the 24 Member States analysed, it has been recommended to the national authorities to set-aside further resources from the RDP in the upcoming programming period (2021-2027) to support credit guarantee instruments. This is expected to facilitate access to finance for farmers who cannot access loans because they are considered too risky, and/or because they cannot provide sufficient bankable collateral. The products recommended to be guaranteed are primarily investment loans with long-term maturities, but for several Member States also the provision of guarantees for working capital loans and credit lines is considered to be beneficial.
- In some Member States, depending on the specific market conditions, the use of loan funds with a risk-sharing structure has been recommended to increase access to credit through the provision of risk protection and liquidity to the banks as well as a higher interest rate reduction for the final recipients.
- In several Member States, managing authorities have been recommended to undertake further efforts to strengthen farmers' financial literacy, which would contribute to increasing their bankability. Also, the provision of training to financial institutions on the particularities of the agriculture sector has been recommended, aiming at facilitating their credit assessment of the sector.
- For Member States with a high share of small-sized and micro holdings or where a high share of farmers relying on finance from informal sources (i.e. family or friends), financial instruments for micro-credit have also been suggested.
- Finally, all managing authorities have been invited to carefully evaluate the possibilities offered by the new legal framework (e.g. easier combination of financial instruments and grant support and use of interest rate subsidies, the possibility to finance the purchase of land for young farmers) to design dedicated support packages for the most affected target groups (notably young farmers and small-sized enterprises). In addition, the provision of stand-alone working capital finance allowed by the new EAFRD rules for 2021-2027 programming period can be a turning point for many farms facing price fluctuations and volatility.

The new requirements related to the EU Green Deal will require farmers to undertake additional investments in the near future. The stronger collaboration between the private and the public sector in order to increase the financing accessible to the agriculture sector is particularly pertinent in light of the implementation of the EU Green Deal initiative, notably the Farm to Fork and Biodiversity strategies. These strategies aim at stimulating the increasing sustainability of the EU agriculture sector through a number of regulatory measures and will require farmers to undertake substantial investments in the near future. At the same time, the analysis showed that obtaining financing for investments related to climate change adaptation poses particular difficulties for farmers, as it is sometimes difficult to prove that these investments will render higher profit margins whereby banks are hesitant to lend for this purpose. Thus, in order for the agriculture sector to be able to step-up to the expectations put on them by society, additional support in accessing finance provided by financial institutions is pivotal.

In addition, the ongoing COVID-19 health crisis is expected to put even further strains on the investment capacity of the sector. Hence, although the impacts of the COVID-19 crisis on farmers' access to finance was not covered by the data that laid the ground for the conclusions of this



study¹³⁶ – this will have to be analysed in future studies – it can still be assumed that the findings of the study, notably the size of the gap and the reasons for the existence of a gap, will be further exacerbated for some sub-sectors by the ongoing crisis. As a result, the recommendations included in the 24 country reports can be understood to be even more pertinent against the background of the ongoing crisis. Indeed, some Member States have already implemented new financial instruments targeted to the agriculture sector to cope with the COVID-19 crisis, an example that could potentially be relevant also for other Member States to follow.

136 The results presented in the report do not reflect the impact of the ongoing COVID-19 health crisis and/or the effect of new support schemes set-up by Member States 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. However, the COVID-19 crisis is generally expected to increase the difficulties of the agriculture and agri-food sector in accessing finance, although this would need to be subject to further analyses by interested stakeholders, administrations and/or researchers.



4 PART II: AGRIFOOD SECTOR

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

This section summarises the results of the analysis of the demand for finance by the agri-food sector in the 24 Member States based on the national analyses. It describes the drivers of demand for finance, seeks to elaborate the main reasons for agri-food enterprises to request financing and identifies the sub-sectors of the food and beverage industries displaying the largest need for finance. The analysis of the demand for finance is based on the findings from the *agri-food* survey of 2 148 enterprises in the EU 24, as well as interviews with key stakeholders in the agri-food sector from across Europe.

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

- The agri-food export boom has sparked investments across all sub-sectors.
- The main drivers for investments are aimed at improving efficiencies, capacity expansion, compliance, and product differentiation.
- Agri-food enterprises have a great demand for working capital to cover high costs of production, payment liabilities of retailers and intermediaries, and labour costs.
- The beverage manufacturing sub-sector has the largest investment volume with 20% of the agri-food sector, followed by the bakery sub-sector (14.7%), meat processing sub-sector (14.6%), and dairy sub-sector (11.2%).
- Whilst larger enterprises have high equity ratios, there is a sizeable demand for finance across the agri-food sector.
- According to the Agri-food survey, 46% of the respondents reported that they applied for bank finance products in the preceding year.
- Medium-term loans are the most popular maturity for capital investments (47% of the Agri-food survey respondents), followed by short-term loans (37%).

4.1.1 Drivers of demand for finance

The agri-food sector plays a complex role for the EU economy. The macroeconomic importance of the agri-food sector goes far beyond generating revenues of EUR 1.45 trillion that contribute to 9% of the EU's GDP, it also positions the EU as the world's largest agri-food exporter¹³⁷. The agri-food sector also provides a strong social footprint with over 15 million employed in the food and beverage manufacturing industry. This represents 6.9% of the EU's workforce, which is mainly located in the rural economy.

The EU agri-food sector has experienced positive growth in recent years, translating into an attractive industry for investments. With a share of 15% of the EU's manufacturing industry, the agri-food sector takes a leading role¹³⁸. The positive performance of the agri-food sector is best displayed by its growing exports. Just in 2019, the EU has generated a record value of EUR 151.2 billion in agri-

137 European Investment Bank, 2019, 'Feeding Future Generations', https://www.eib.org/attachments/thematic/feeding_future_generation_en.pdf.

138 European Commission, 'Internal Market, Industry, Entrepreneurship and SMEs', https://ec.europa.eu/growth/sectors/food_en.



food exports, an increase of 10% compared to the previous year¹³⁹. 17% of the EU total exports come from the agri-food sector, generating a positive trade balance of EUR 30 billion. Whilst more than 75% of the 330,000 agri-food enterprises fall under the small-scale category (less than 50 employees)¹⁴⁰, the sector generated an annual growth rate of 0.7% since 2008¹⁴¹. The positive development of the agri-food sector has also attracted over 6% of new entrants every year and results in growing investments in the EU food and beverage manufacturing industry.

Despite this growth, agri-food enterprises face difficulties, such as high cost of production and access to qualified labour. Before the COVID-19 pandemic even unfolded, the respondents of the Agri-food survey in Austria, Finland, Hungary, Latvia, Portugal, and Slovakia already replied that access to skilled labour forces is their major constraint. This shortage in qualified labour impacts both, food and beverage manufacturing (Figure 18). And especially, small-scale enterprises are affected by the labour-challenge. The respondents of the Agri-food survey in Bulgaria, Belgium, Czech Republic, Germany, Ireland, Poland, Romania, Sweden, and Slovenia are mostly concerned about high costs of production. The variability of prices for raw materials and the increasing costs for energy and labour are the main reasons why the enterprises in these Member states reported this difficulty. The third largest constraint stated by the agri-food enterprises in the survey is the low selling price for the production. Especially in Greece (59%) and Croatia (30%), the respondents of the Agri-food survey replied that the concentration of the retail market has put pressure on the selling prices. On a positive note, only 10% of the respondents of the Agri-food survey across the EU 24 reported that access to finance, be it for investments or working capital, is the highest challenge.

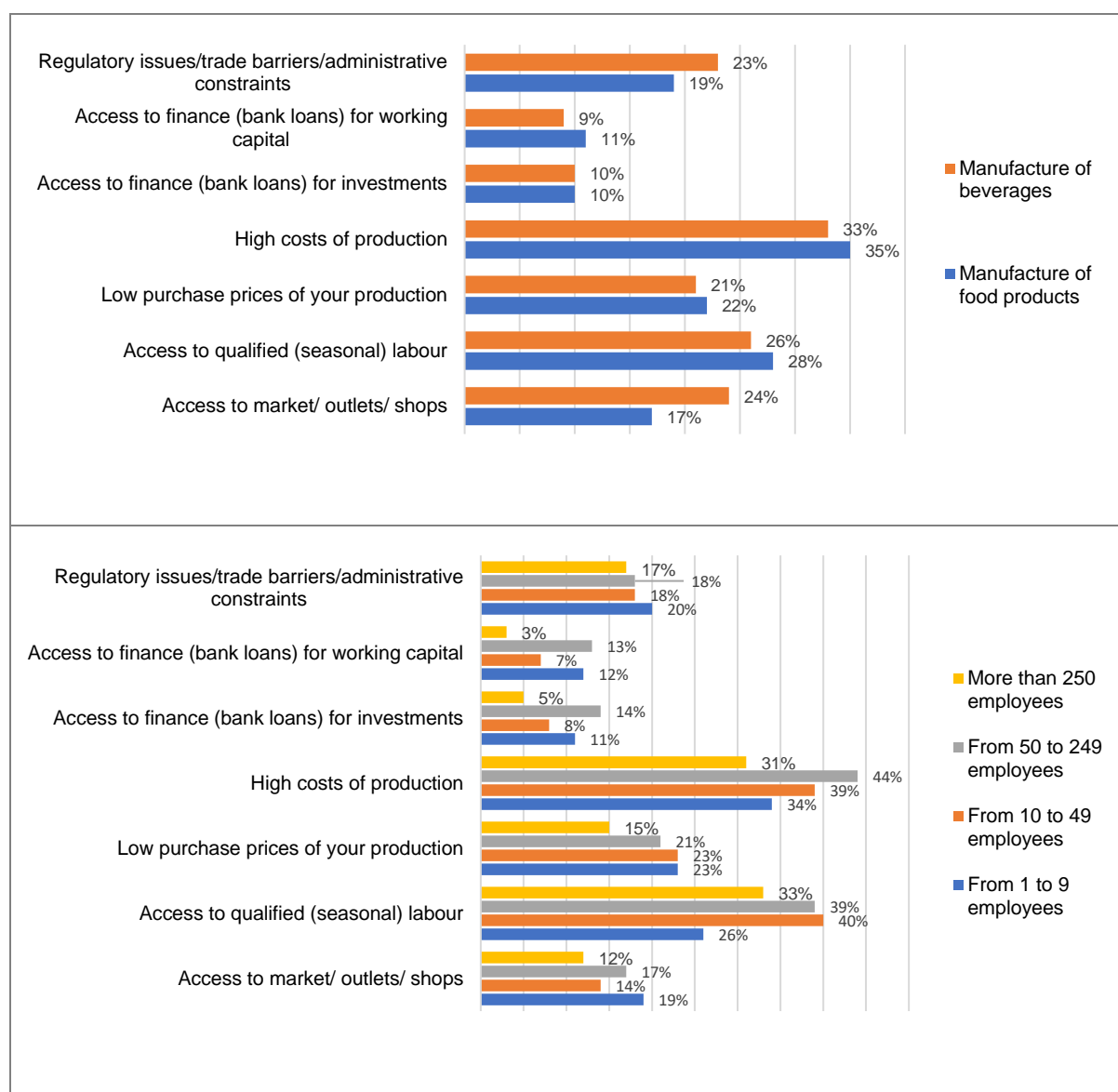
139 European Commission: Trade report for 2019, https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/trade/documents/monitoring-agri-food-trade_dec2019_en.pdf.

140 Structural Business Statistics, 2019, <https://ec.europa.eu/eurostat/web/structural-business-statistics/data/database>.

141 European Investment Bank, 2019, 'Feeding Future Generations', https://www.eib.org/attachments/thematic/feeding_future_generation_en.pdf.



Figure 18: Difficulties experienced by agri-food enterprises in 2018

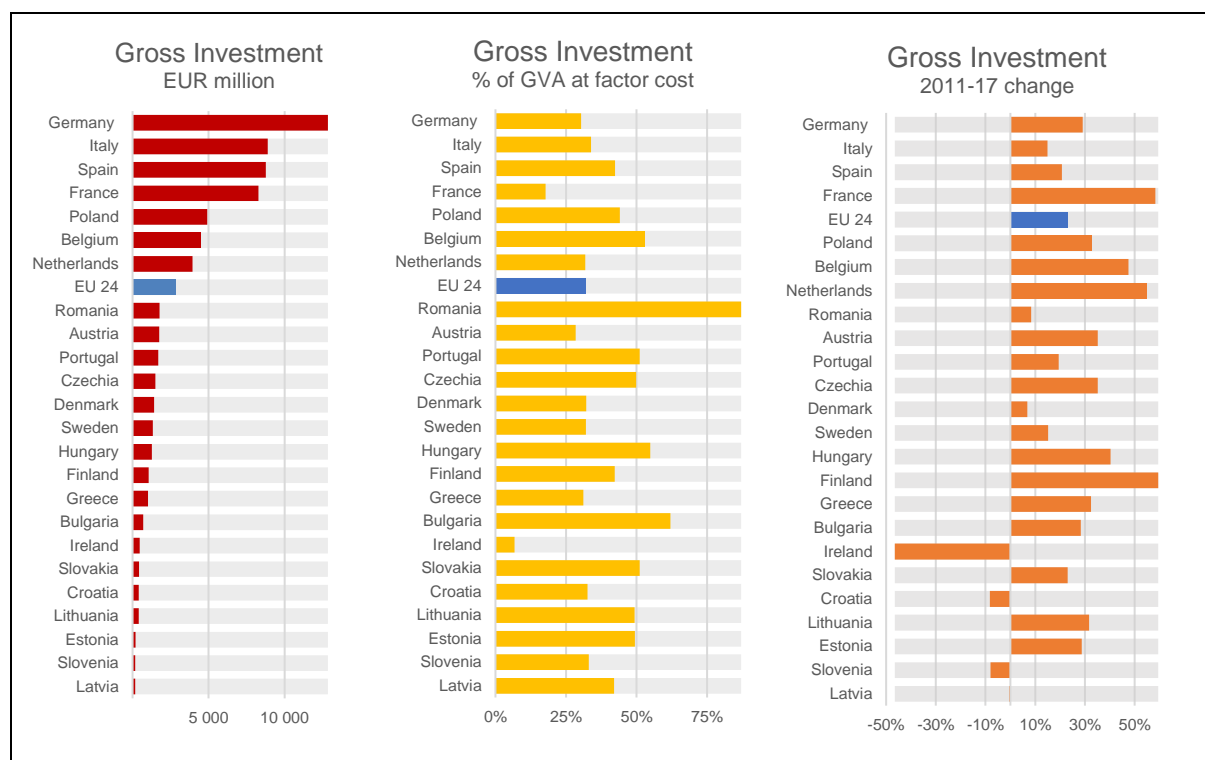


Source: Agri-food survey.

Agri-food sector constraints lead to growing investments. Since 2011, investments in the agri-food sector increased by 27% to a total of EUR 66.9 billion in fixed assets in 2018. In nominal terms, the large Member States like Germany (EUR 12.8 billion), Italy (EUR 8.9 billion), Spain (EUR 8.8 billion), France (EUR 8.3 billion), and Poland (EUR 4.9 billion) have accounted for the highest investment volumes (Figure 19). With the exception of Czech Republic, Lithuania, and Spain, all Member States have recorded a positive average annual growth rate of agri-food investments in the period 2011-2017. Finland showed the highest positive investment growth (59%), followed by Greece (58%). In year 2017, the EU 24 gross investments in the agri-food sector accounted for 12% of the total agri-food GVA. In 2017, Romania (87%) registered the highest share of investments as percentage of GVA within the EU 24, followed by Bulgaria (62%), and Hungary (55%).



Figure 19: Total gross investments in agri-food in 2018, as share of GVA in the sector in 2018, and growth 2011-2017, by Member State



Source: Eurostat, 2020.

Five drivers of the demand for finance stand out in the agri-food sector. With the overarching goal to strengthen competitiveness and increase the share in more prosperous international markets, the following drivers for investments have been identified: Improving efficiency, capacity expansion, compliance, and product differentiation. In addition, and especially for SME's in the agri-food sector, the need for working capital has been identified as a key driver of demand for finance.

EFFICIENCY	CAPACITY EXPANSION	COMPLIANCE	PRODUCT DIFFERENTIATION	WORKING CAPITAL
<ul style="list-style-type: none"> Automation Digitalisation Upgrades 	<ul style="list-style-type: none"> Competitiveness Export markets Fixed cost regression 	<ul style="list-style-type: none"> Regulation Retail standards 	<ul style="list-style-type: none"> Branding Promotion New products development 	<ul style="list-style-type: none"> Inventory Payment of liabilities

EFFICIENCY

As a response to higher input costs, unfavourable prices, and shortages of skilled labour force, agri-food enterprises invest in upgrading their facilities. Based on the Agri-food survey, 66% of the respondents across the EU 24 expressed being challenged by higher production costs. Especially, respondents in Croatia, Czech Republic, Estonia, Poland stressed increasing energy and water prices as a major constraint for their agri-food enterprises. This translates into investment in renewable



energies, as for example in Czech Republic. In addition, nearly two thirds of the respondents in the EU 24 complained that the selling prices remain unchanged or even decreased. Consequently, investments aimed at modernisation have been the main driver in Austria and Belgium to address production efficiency improvements, whilst in Lithuania, the main purpose for improving efficiency is to close the productivity gap with the rest of the EU. Improving labour productivity and maximizing their output based on the resources applied are the fundamental reasons behind the enterprises investing in machinery and equipment. As most member states are constrained by obtaining skilled labour forces (among others Belgium, Croatia, the Netherlands, etc), the beverage sub-sector has especially focused its investments in automation.

Digitalisation is becoming mainstream in several Member States. Both, off-farm food processing and beverage manufacturing sub-sectors are transitioning towards the application of digitalisation to increase production efficiencies. Within the category of investments on intangible assets, software and concessions play a more significant role within the beverage producing branch. In Germany, the concept “Industry 4.0” has been launched to improve production efficiencies in agri-food enterprises. Similarly, “Agri-food 4.0” has been initiated in Czech Republic, in order to enhance competitiveness. In France, the uptake in e-marketing and e-commerce is growing strong. The Irish marketing board Bord Bia confirms the ongoing digital transformation. Denmark is seeking to upgrade their food safety standards through high-tech digital solutions.

CAPACITY EXPANSION



Agri-food enterprises across the EU 24 invest in capacity expansion to remain competitive and serve a growing demand for food. The trend towards larger production units and the use of modern technology is linked with the strong competition across the EU 24 agri-food sector. 71% of the agri-food enterprises across the EU 24 responded in the Agri-food survey that expansion of their capacity is the primary reason for carrying out investments. Investing in new buildings or rehabilitating existing production sites are a priority for the agri-food enterprises. Growing export markets are the main driver behind capacity expansion. The ongoing concentration on the retail sector have put pressure on the market prices, thus leading to new solutions with regards to value chain integration. As a consequence, agri-food enterprises try to improve their economies of scale through expansion of their production capacity. Agri-food enterprises see expanding their capacity as a way to improve their bargaining power. However, SMEs are challenged to maintain their position under those circumstances. In both, food processing and beverage manufacturing sub-sectors, restructuring and rationalisation are additional drivers of investment, which reflect the highly competitive market environment.

COMPLIANCE



Responding to regulatory requirements and complying with buyer-driven standards also impact investments in several Member States. With stringent environmental and food safety standards, agri-food enterprises are often confronted with investments that respond to regulatory requirements. For example, interviewees in Belgium, Denmark, and France indicated that compliance with food safety and environmental standards leads to significant investments. Also, within several of the new Member States, agri-food enterprises carry out investments to better compete on the EU single market. As an example, in Estonia, agri-food enterprises carry out investments with the aim to seek alternatives to plastic or recycle waste in order to exploit new consumers' trends. In addition, the competition between wholesalers and the retail chains, in conjunction with the demand from the active non-governmental organisations' (NGO) sector has led to a continuous increase in production standards, especially pertaining to quality, safety, hygiene, and environmental standards. Investments in production standards often come in response to consumer demands, such as in Lithuania, Austria or France.



Agri-food enterprises invest in training of their staff to guarantee higher production standards.

In Finland, agri-food enterprises invest in training of their staff including seasonal workers, in order to secure and maintain highest food hygiene standards. Similarly, in Portugal, Romania, and in Spain, investments in training of staff has high priority. In Czech Republic, agri-food enterprises invest in training to monitor food quality.

Addressing climate change also influences agri-food enterprises' investments. This has been highlighted in interviews in several Member States, such as in Austria, Germany, Denmark, and France. The 'Climate Act' in the Netherlands calls for stringent actions to reduce carbon emissions in agri-food enterprises. Similarly, in Slovenia, agri-food enterprises carry out investment to comply with climate change-related standards.

PRODUCT DIFFERENTIATION



Changes in society influence consumer trends and drive investments in product differentiation.

Some segments of the EU consumer market have rising incomes, especially in some parts of the EU 13. Rising incomes in the EU will likely lead to higher demand in quality foods. Consumers are prepared to pay higher prices for organic foods. Similar trends are noticeable in the health, wellness or ethnic foods. In addition, increasingly fast-paced lifestyles have led to a growing interest in convenience foods. Agri-food enterprises are responding to these trends and carry out investments in product innovations. Not only for the domestic market, but also for international markets, agri-food enterprises in Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, Germany, Ireland, Poland, Romania, Slovakia, Slovenia, and Spain are investing in product differentiation, in order to adapt to different product requirements, packaging standards, and marketing (branding) strategies. The agri-food enterprises of Italy and Greece invest in quality schemes as a way of product differentiation, such as Protected Designation of Origin (PDO).

Innovations are often investment-drivers among start-ups. In particular, start-ups are trying to take advantage of these new food trends and target the innovative, high-priced market segment. Start-ups and product innovations require investments in technology, but also in branding and marketing strategies, to position them on the competitive agri-food market.

WORKING CAPITAL



The need for working capital is also one of the main drivers of the demand for finance. Across the EU 24, 30% of the respondents in the Agri-food survey replied that working capital is the main reason for seeking finance. In Greece (65%) and Hungary (69%), the demand for working capital has higher importance. As SMEs in the agri-food sector have low equity ratios, this form of short-term financing helps agri-food businesses better manage their daily operations that is, providing capital to buy raw material (inventory) from suppliers and repaying the liabilities once the processed foods are sold.

Agri-food investment trends

The drivers discussed above are reflected in the share of investment volumes (Table 6). In both food and beverage sub-sectors, more than half of the investment volume are used for tangible assets, followed by 33% of total investments to modernise the agri-food enterprises with state-of-the-art machinery and technical equipment. Improving labour productivity and strengthening the capacity are the fundamental reasons behind the enterprises investing in machinery and equipment. With regards to physical assets, investing in new buildings (8%) or rehabilitating existing production sites (2%) drive also the demand for finance, although to a lesser extent. Within the category of investments on intangible assets, software and concessions play a more significant role within the beverage producing sub-sector.

**Table 6:** Types of investments within the food processing and beverage sub-sectors in 2017¹⁴², EUR million

Types of investments	Food Processing		Beverages	
	Investment volume (million EUR)	Share (in %)	Investment volume (million EUR)	Share (in %)
Construction of new buildings	4 377.2	8	960.2	7
Maintenance of old buildings	873.9	2	128.3	1
Purchase of property (land)	563.5	1	143.2	1
Machinery and technical equipment	18 203.7	33	4 441.6	33
Tangible assets	30 486.5	56	7 675.3	58
Total	54 504.8	100	13 348.6	100

Source: Structural Business Statistics, 2019.

The dairy sub-sector registers the highest investments. While the agri-food sector differentiates between 30 sub-sectors, meat-, dairy-, bakery-manufacturing, and beverages are the largest contributors with regards to turnover, number of enterprises and employees, but showing a differentiated attitude towards investments:

- The **meat processing industry** generates roughly 20% of the EU agri-food sectors' turnover¹⁴³. It has been impacted by stagnating consumption since 2010 and high production costs. Still, based on the trend towards high value meat products (e.g. organic), the meat sector is still recording growth. The opening of the Eastern European market in 2004 has had an impact on investments, especially large-scale enterprises (above 250 employees) were able to contribute to the industry's turnover, by investing in technology and automation, with the aim to improve standards and increase productivity. Small-sized enterprises often invest to maintain their existing production. In 2017, the meat manufacturing industry invested EUR 9.9 billion, which is 14.6% of the total agri-food investments in that year (Table 6).
- The **dairy industry** has the largest enterprises and largest production concentration. Its 12 000 dairy processing facilities commonly invest in machinery and technical equipment, just as are aims to improve productivity by means of automation. Addressing standards and product differentiation are also common investment drivers to remain competitive. This results in an investment volume of EUR 7.6 billion, 11.2% of the total agri-food investments in 2017.
- The **bakery industry** stands out with the highest share of small-sized enterprises, and also, attracting the most start-ups. Often, these small-sized enterprises demand finance for working capital in order to satisfy their demands for smaller appliances or improve production facilities. Larger investments would usually include modernisation efforts of the production facility. Logistics are often outsourced and lead to subsequent demand for finance. Product differentiation towards high value, healthy and regional produces is the common trend in many member states. In 2017, the bakery sub-sector invested EUR 10 billion, which is 14.7% of the total agri-food investments in EU.

142 At the time of writing, 2017 was the latest year with investment data available across all sub-categories and Member States.

143 FoodDrinkEurope, 2017.



- The **beverage industry** has been growing rapidly during the last decade. Generating roughly 14% of the agri-food sectors' turnover, the beverage sub-sector is characterized by larger enterprises and often carries out investments in automation of bottling and filling facilities but also investments in building infrastructure, to improve productivity. In 2017, the beverage industry invested EUR 13.4 billion, which is 20% of the total agri-food investments in that year.

The EAFRD is one of the most important financial vehicles to promote investments for the agri-food sector and may also catalyse demand for finance. Agri-food enterprises benefit from measure M4.2 'Support for investments of processing and marketing of agriculture products' of the national or regional RDPs 2014-2020¹⁴⁴. In Hungary, substantial processing and marketing support was provided by the RDP 2014-2020 to micro and small-scale agri-food enterprises and contributes to their positive investment behaviour. Similar in Poland, where investments in small and medium-sized enterprises along the food chain belongs to one of the six priorities. In Romania, there is a positive correlation during the time the processing and marketing measure is offered and the demand for finance. In Slovenia, improving competitiveness and adding value to agri-food production is the key objective that the RDP processing and marketing measure targets, whilst catalysing access to finance has been the positive spill-over effect. In the case of Bulgaria, banks provide investment loans mostly to agri-food enterprises that have contracts for financial support under the RDP 2014-2020.

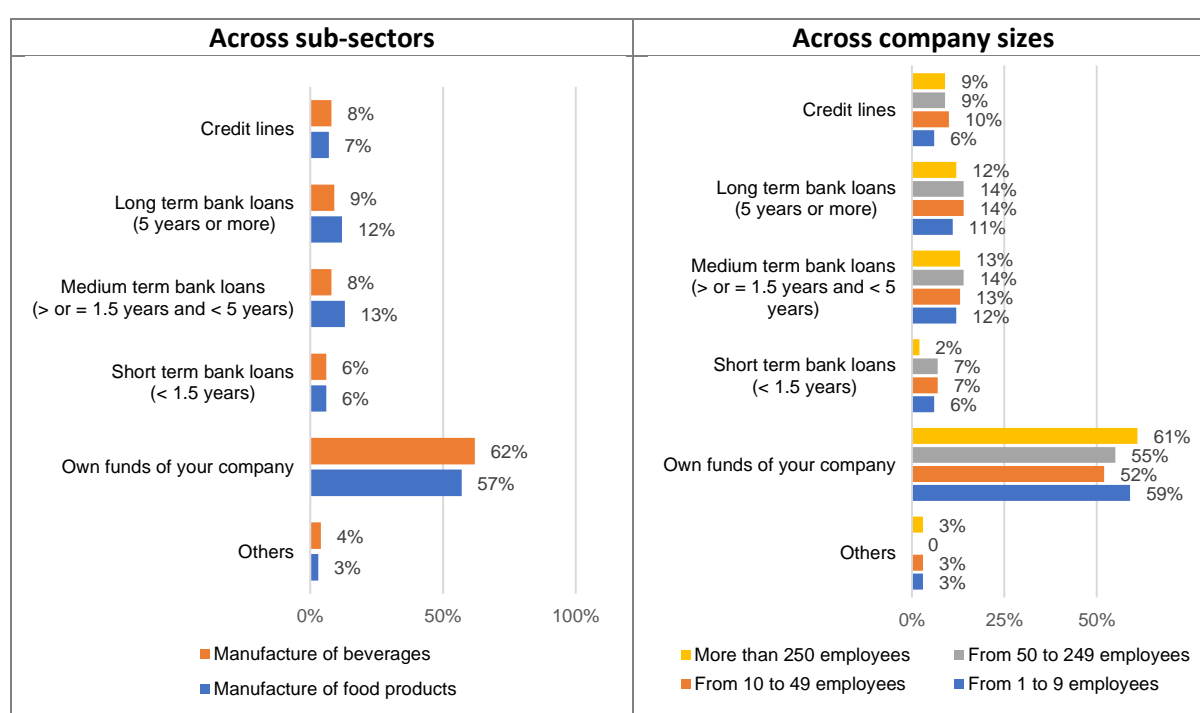
¹⁴⁴ M4.2 has not been programmed in the RDPs 2014-2020 of Denmark and Ireland.



4.1.2 Analysis of demand for finance

Larger agri-food enterprises have high equity ratios, influencing their decision to apply for finance. For those agri-food enterprises that did not apply for finance, more than 62% of the beverage manufacturing and 57% of the food producing enterprises responded in the Agri-food survey they had sufficient own sources (Figure 20). This share varies naturally and depends on the size of the agri-food enterprise. EIB studies confirm that large-scale agri-food enterprises (more than 250 employees) are not constrained by access to finance¹⁴⁵. However, also more than half of the respondents of the other enterprise sizes responded that they used own resources to carry out investments. Considering that the small-scale dominated agri-food sector seldom disposes over sufficient equity, the SME's are more inclined to apply for finance. This also applies to start-ups and new entrants, who are especially challenged in the early years of their business.

Figure 20: Most important sources of finance of the agri-food enterprise in the last three years (2016-2018)



Source: Agri-food survey.

There is sizeable demand for finance in the EU 24. According to the Agri-food survey, 46% of the respondents across the EU 24 reported that they had applied for bank finance between 2016 and 2018. There is clearly a correlation between those Member States that invest most in the agri-food sector and the demand for finance. The countries with the highest share of agri-food enterprises asking for a bank loan were Spain (64%), followed by France (63%), and Belgium (58%) (Figure 21). On the other end, there is a low demand for finance in Romania (16%), Lithuania (19%), and Slovakia (21%). The reason for the low uptake in finance is further described in section 4.3.

145 European Investment Bank, 'Access-to-finance conditions for Key Enabling Technologies (KET) companies', 2016; 'Financing innovation in clean and sustainable mobility', 2018.



Figure 21: Share of agri-food enterprises' demand for finance by Member State between 2016 and 2018

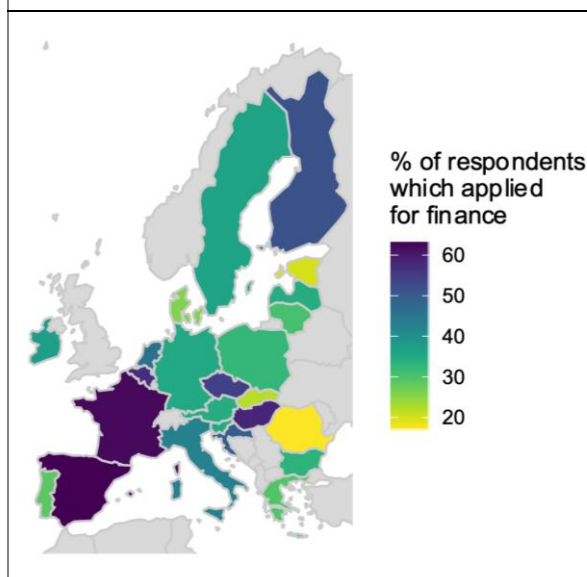
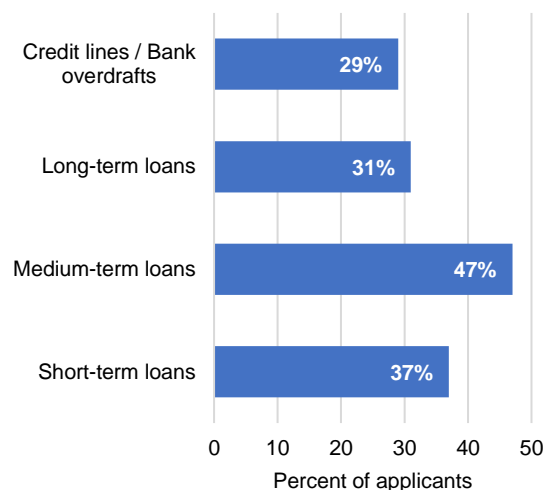


Figure 22: Share of agri-food enterprises applying for finance by maturity between 2016 and 2018



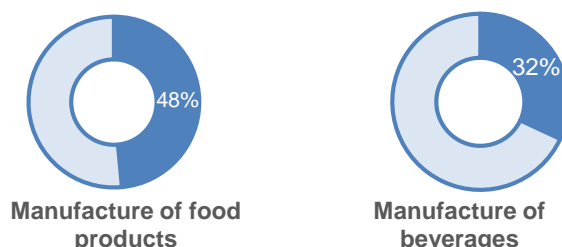
Source: Agri-food survey.

Note: multiple loan applications possible.

Agri-food enterprises seek various forms of loans, but the demand for finance with medium-term maturity stands out (Figure 22). Based on the Agri-food survey, medium-term investment loans are requested in 47% of the loan applications by the agri-food enterprises. In half of the EU 24, medium-term loans are most popular. Some Member States, where SMEs dominate the agri-food sector, such as Croatia, Hungary, Poland, Portugal and Romania, a mix of short-term investment loans and credit lines / bank overdrafts for working capital are the most common form of demand for finance. On the other end, Austria, Germany and in Czech Republic, loans for long-term investment planning show the highest uptake.

Food manufacturing enterprises register a higher demand for finance compared to the beverage sub-sector. According to the Agri-food survey results, 48% of food manufacturing enterprises sought finance between 2016 and 2018, compared to 32% of beverage manufacturing enterprises (Figure 23).

Figure 23: Share of food and beverage manufacturing enterprises applying for finance between 2016 and 2018



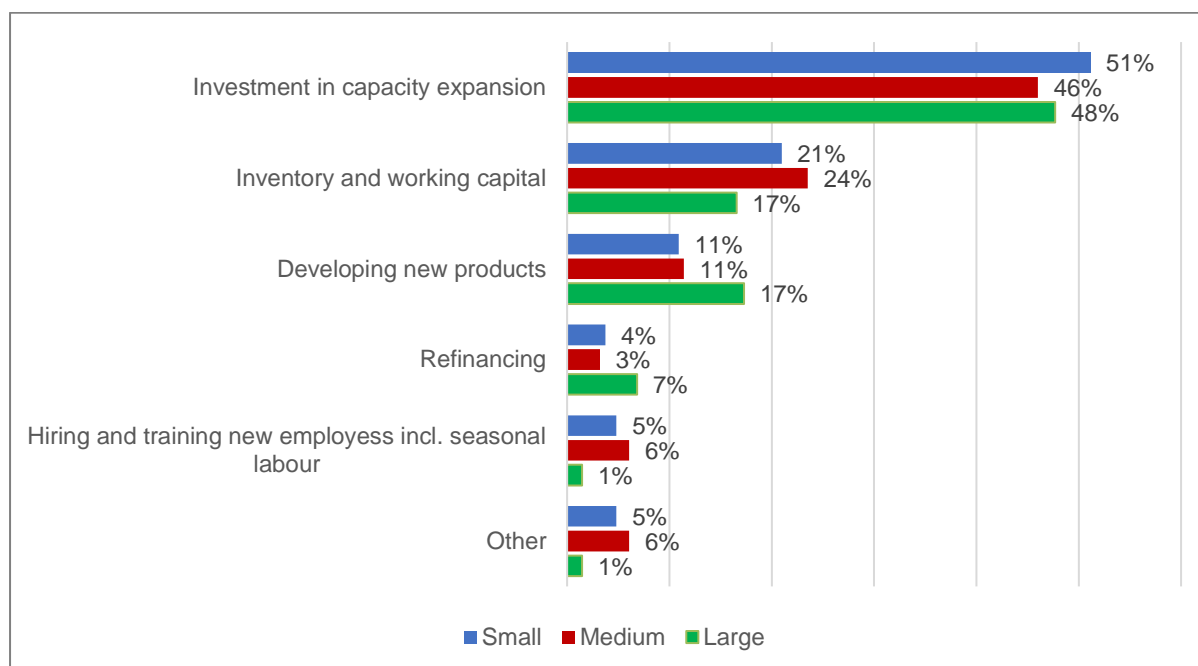
Source: Agri-food survey.

Note: The rates are calculated using as a base the number of firms operating in the manufacture of food products and beverages, respectively.



Investments in capacity expansion is the dominant driver for seeking finance. According to the Agri-food survey, the primary purpose for seeking finance is to expand production capacity and meet their inventory and working capital needs (Figure 24). 51% of the small-scale enterprises which used their finance applications for investments in capacity expansion. Similar for medium and large-sized enterprises that responded in the survey that capacity expansion is their primary purpose in seeking finance. In order to quickly adapt to inventory needs, the demand for finance also often directs towards the need for short-term loans for working capital. Finance is also commonly requested by agri-food enterprises (large-sized in particular) to develop new products.

Figure 24: Purpose of loans by size of agri-food enterprise in 2018



Source: Agri-food survey.

Note: Total might stand above 100%, multiple answers/purpose possible.



4.2 Analysis on the supply side of to the agri-food sector

This section provides an overview of the financial environment in which the agri-food sector in the EU 24 operates. It characterises the main financial providers that operate specifically on the agri-food finance market, as well as the main characteristics of the loan products and other financial solutions offered to the sector. 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. The section draws its information from interviews with financial institutions, as well as from national statistics.

Key elements on the supply of finance to the agri-food sector

- Nine Member States reveal an extremely concentrated banking sector, which implies limited competition.
- Whilst agri-food is a respected sector of the manufacturing industry, the financial intermediaries in most member states lack specialisation.
- It is common that banks providing services to agriculture also cover the agri-food sector.
- Guarantee instruments are commonly offered across the EU 24 in the agri-food sector.
- EAFRD-supported financial instruments in the agri-food sector are on the rise.
- The growth in outstanding loan volume reflects the positive attitude towards investments in the agri-food sector and overall increase of the supply conditions in the last ten years.
- Short and medium-term investment loans are the most common maturities selected by the agri-food enterprises across the EU 24.
- SMEs often fall out of scope of financing support due to their low equity ratios and consequently, their inability to provide sufficient collateral.

4.2.1 Description of finance environment and funding availability

4.2.1.1. Finance providers

Agri-food enterprises benefit from a similar landscape of financial intermediaries as the agriculture sector. The network of commercial and cooperative banks, as well as leasing institutions that also provide services to the agriculture sector (see section 2.2.1) are commonly complemented by public finance providers. Practically in all Member States, the agri-food sector benefits from financial institutions that complement lending services with guarantee instruments. These guarantee institutions work closely with the banking sector in their respective region, in order to provide for loan-risk protection.

Several Member States reveal a concentrated banking sector. Austria, Belgium, Croatia, Estonia, Greece, Ireland, Latvia, Lithuania, and Portugal have many diverse banks, but only few of these institutions in each country hold a market share beyond 70% within the agri-food sector. As an example, 98% of the agri-food market in Ireland is serviced by four banks. In Estonia, the two largest commercial banks have a market share of 62%. In some other new member states, such as Croatia, and similarly to Estonia, the agri-food sector is serviced by a network of foreign banks. Others, like the Czech Republic, Denmark, France, Germany, Hungary, Italy, Slovakia, Spain, and Sweden have a much more competitive banking environment, allowing also a more diverse range of finance products to be offered that cater the individual needs of the beneficiaries.



4.2.1.2. Finance products

The banking sector in the Member States lack specialization in the agri-food sector. Whilst being recognized as a prosperous business within the manufacturing industry, banks in practically all Member States do not provide tailored finance products to the agri-food enterprises. Only Germany has a specific preferential loan programme for agri-food enterprises. In some Member States there are additional specific finance products, like the example of Belgium, whose financial intermediaries offer micro credits, subordinated loans, or loans targeting start-ups. Still, across the EU, banks offer generic products such as short, medium, and long-term loans for capital investments, as well as credit lines and bank overdrafts supporting the working capital needs. In addition, commercial banks commonly offer financial leasing to finance the acquisition of equipment or machinery. In many Member States, including among others Estonia, France, Belgium, Finland, and Sweden, crowdfunding is an alternative source of finance slowly sparking interest, whereas capital is raised online through the collective effort of family, friends, and individual investors. But this source of capital remains marginal, especially for the agri-food sector.

Guarantee instruments are offered across the EU, but risk-coverage varies. The most common form of guarantee is offered as a credit-risk protection instrument or for export credits. Consequently, securing financing for the agri-food enterprises. The guarantees typically cover up to 70-80% of the loan volume, in line with the applicable State Aid rules.

The interest in EAFRD financial instruments is growing. As already reported in the first part of this report, 11 Member States have currently at least one EAFRD funded instrument operational or about to be operational (June 2020), while additional ones are currently under development. Almost all the instruments target both farms and agri-food enterprises and can now provide support not only for investment projects, but also for (stand) alone working capital finance (see section 2.2.2).

4.2.2 Analysis of the supply of finance

The increasing outstanding loan volume in the EU 24 clearly correlates with the growing investments in the agri-food sector. Most Member States demonstrate an increasing trend in outstanding loan volumes, as financial intermediaries recognise the agri-food sector as an attractive segment of the manufacturing industry to invest in. The three Member States with the highest outstanding loan volume in the agri-food sector in 2018 were France (EUR 48 billion), Italy (EUR 31.4 billion), and Germany (EUR 16.7 billion). These Member States also belong to the most investment-active countries in the agri-food sector (Figure 19). Since 2016, Austria (+24%) and Czech Republic (+18%) show strong growth rates of outstanding loan volumes in the agri-food sector. Whilst Sweden is investment-active in the agri-food sector, the outstanding loan volume is low, as most enterprises show high equity ratios, leading to using their own funds for investments.

The uptake in loans in the agri-food sector is also correlated to the economic situation. Whilst the outstanding loan volume in Portugal and Slovenia has been stable during the last three-five years, Croatia, Greece, and Latvia show declining trend. Especially in Croatia, the low economic performance, high interest rates, and the aftermath of the Agrokor-experience¹⁴⁶ have led to a declining investment trend, translating into a drop in the outstanding loan volume by -15.6%. The insecurities of the Brexit have also put a brake on the investment frenzy in the Irish agri-food sector, which is reflected by its slightly declining outstanding loan volume.

¹⁴⁶ The Agrokor group owned more than 50 companies in the agri-food sector, managed over 30 000 ha, and employed over 40 000 in Croatia. Its bankruptcy had been detrimental, as it contributed to 40% of the Croatian agriculture production value.



Recent drops in interest rates have attracted loan applications. Especially in Portugal, the interest rates dropped more significantly in the agri-food sector (-20%) compared with the manufacturing industry (-18%) or for the overall economy (-9%). But this drop in the interest rates was lowest for micro enterprises and new entrants, a phenomenon witnessed in all member states, as these beneficiaries are still seen as a riskier segment. Changes of interest rates have also been experienced depending on the maturity of loans, yet independent of the loan volume. With the example of France, long-term loans witnessed a stronger decrease of interest rates by over 45% during the last 5 years. On the other hand, interest rates of short-term loans for working capital have been stable in recent years.

Medium or long-term investment loans dominate. Generally, the outstanding loan volume for food manufacturing is significantly higher than the beverage sub-sector. For example, in the case of Czech Republic or Estonia, lending to the food industry is growing more rapidly than in the beverage sub-sector. The majority of the loan volume to the agri-food sector stems from medium and long-term loans for investment capital. In France, 60% of the loans are used for investments in physical assets, while 40% pertain to working capital. In Germany, 67% of the agri-food loans are long-term investment loans, 23% used for working capital and just 10% for medium-term loans. In Hungary, there is an even divide between long-term capital investment loans, working capital loans and short-term loans.

Constraints exist on the supply side of finance and liquidity of banks is not the reason. And while the banking sector is well developed across the EU 24, the primary reasons for rejecting of loan applications from agri-food enterprises are insufficient collateral or inadequate credit guarantees. Beyond these more general constraints, Slovakian banks are more cautious in their loan application assessment due to the high debt to equity ratios in agri-food enterprises. Banks generally tend to be reluctant to take high risks in providing loans. Commercial banks are therefore more oriented towards large-scale agri-food enterprises. For example, large-scale agri-food enterprises in Romania benefit from relationships with the banks going back many years, which is a trust-building factor.

Especially SMEs often fall out of the scope of bank lending activities due to lack of collateral. Generally, small-sized enterprises have limited equity and are subject to more stringent assessment procedures, and the agri-food sector is no exception. Financing innovative start-ups and micro-sized enterprises at an early development stage is considered too risky for the financial intermediaries. Given the short business history of young firms, they receive unfavourable conditions, such as higher interest rates, like in the case of Estonia. These conditions often lead to discouragement by the loan applicant. Most Member States report that their banks reveal a higher risk-aversion towards smaller agri-food enterprises. SME's tend to provide over low equity ratios and are challenged to provide collateral (for example, in Finland, Greece or Slovakia), which often lead to be the main obstacle for receiving loans. Similar situation has been reported in most member states with regards to start-ups.



4.3 Financing gap in the agri-food sector

This section presents an estimate of the total volume of unmet financing needs of financially viable agri-food enterprises in the EU 24, defined as the financing gap, broken down by Member States, firm-size and financial product. This is followed by an analysis of the drivers of the gap, elaborating on the most frequent constraints encountered on the demand and supply side of financing, as found in the 24 country reports.

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

- The financing gap for the agri-food sector in the EU 24 is estimated at EUR 12.5 billion.
- 57% of the gap is attributed to the constrained access to long-term investment loans.
- 78% of the financing gap affects small-scale agri-food enterprises.
- Despite sufficient liquidity of financial intermediaries, SMEs are often constrained to access finance due to the lack of collateral.
- New entrants and start-ups, together with innovations are challenged to obtain finance in the agri-food sector.
- SMEs are often discouraged from applying for a loan due to the fear of being rejected.
- Unfavourable loan conditions are the most common reason to discourage agri-food enterprises from applying for a loan.

4.3.1 An analysis of the financing gap in the EU 24

The financing gap for the agri-food sector in the EU 24 is estimated at EUR 12.5 billion¹⁴⁷. The estimate is calculated by multiplying the total number of agri-food enterprises in the financing market by the proportion of financially viable enterprises reporting unmet demand for finance, multiplied, in turn, by the average obtained loan volume to the enterprises.

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 the EU 24 (see Annex A.4 for more information). The methodology used for calculating the gap is the same as the methodology used for the agriculture sector (see Annex A.2).

The financing gap arises from unmet financing demand from economically viable firms¹⁴⁸. 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.

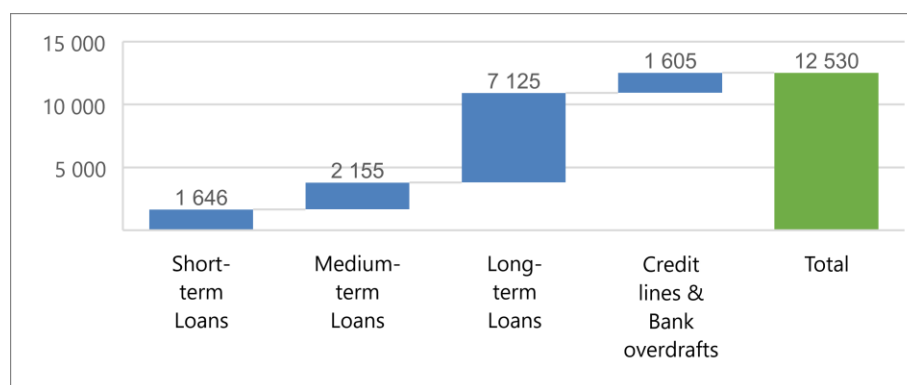
¹⁴⁷ In a related European Investment Bank publication a financing gap for the agri-food sector was estimated at EUR 11-13 billion: 'Feeding Future Generations, 2019, https://www.eib.org/attachments/thematic/feeding_future_generation_en.pdf.

¹⁴⁸ 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.



Access to long-term loans is the biggest challenge to the agri-food enterprises within the EU 24. EUR 7.1 billion or 57% of the financing gap are attributed to long-term loans (Figure 25). The second most difficult loan product for agri-food enterprises to access are medium-term loans, with the gap at EUR 2.2 billion. Access to short-term loans, credit lines and bank overdrafts is the least concern to agri-food enterprises in the EU 24.

Figure 25: Financing gap by product in the agri-food sector in 2018, EUR million



Source: Calculations based on the Agri-food survey.

Small-sized agri-food enterprises are most affected by the financing gap. EUR 9.8 billion or 78% of the financing gap affects small-scale enterprises (Table 7), which correlates with the share of this size category (75%) in the total agri-food enterprise population in the EU 24. Whilst small-sized agri-food enterprises request loans with smaller volumes, the financing gap for small-sized farms is still significant. The larger farms have the least problems in accessing finance, with a financing gap estimated at EUR 737 million, which is just 6% of the total gap.

Table 7: Financing gap by firm size and product in 2018, EUR million

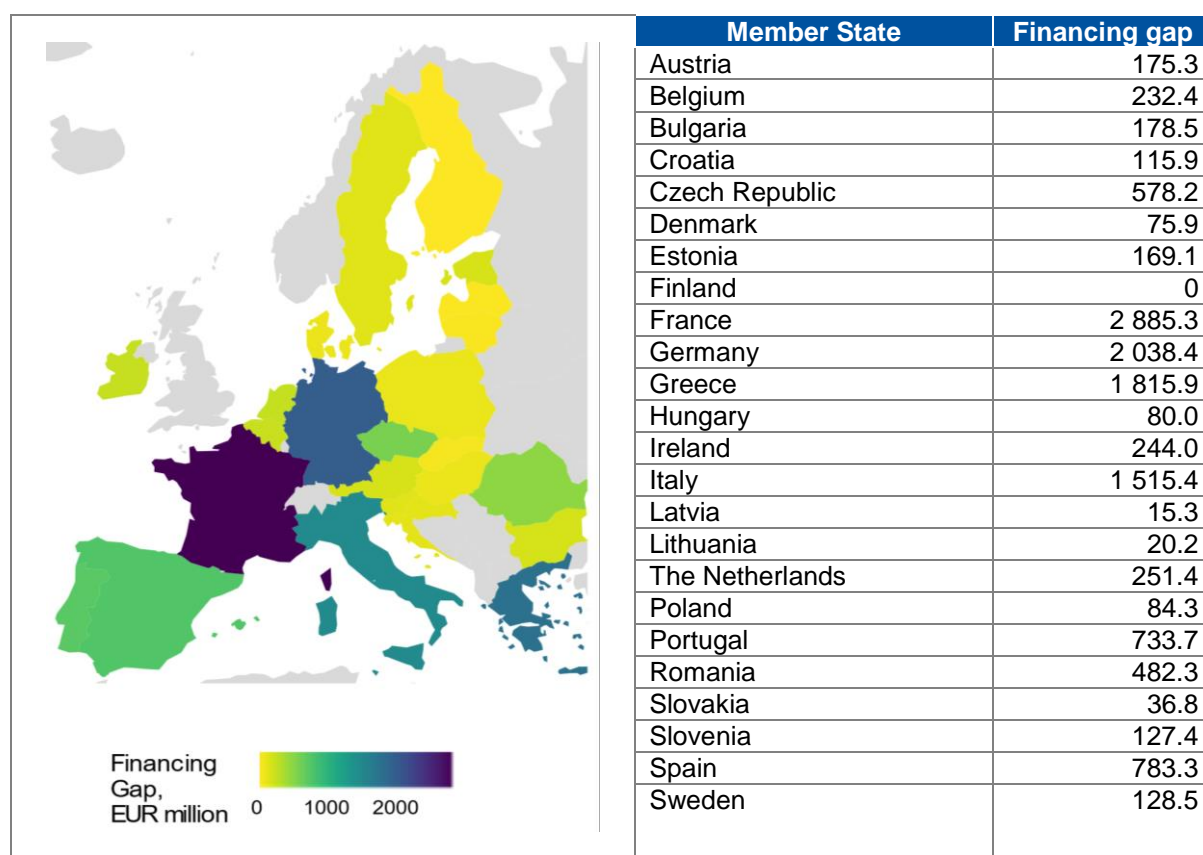
	Short-term loans	Medium-term loans	Long-term loans	Credit lines/bank overdrafts	Total
Small-sized Firms	1 181	1 711	5 652	1 273	9 817
Medium-sized Firms	379	321	1,046	229	1,976
Large-sized Firms	85	123	426	103	737
Total	1 646	2 155	7 125	1 605	12 530

Source: Calculations based on the Agri-food survey.

France, Germany, Greece, and Italy reveal the highest financing gaps in absolute terms (Table 8). Especially France (EUR 2.9 billion), Germany (EUR 2 billion), and Italy (EUR 1.5 billion) belong to the top investors in the EU agri-food sector (see Figure 19). France also leads the group with the highest share of respondents in the Agri-food survey that have a demand for finance. Greece, on the other hand, belongs to the bottom half of the EU 24 with regards to investment volume in the agri-food sector, but matches the EU 24 average with regards to share of agri-food enterprises that have a demand for finance.



Table 8: Financing gap by Member State in 2018, EUR million

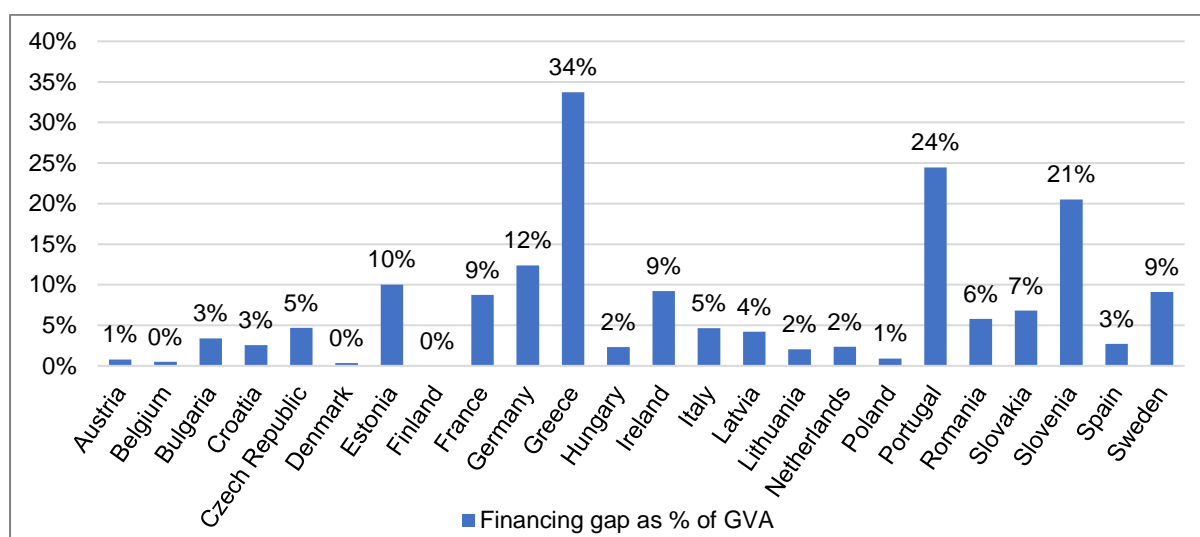


Source: Calculations based on the Agri-food survey.

The economic impact of the financing gap is most accentuated in Greece, Portugal, and Slovenia. In relation to the GVA generated in the agri-food sector, the financing gap of Greece (34%) seemingly demonstrates the highest impact (Figure 26). Also, Portugal (24%) and Slovenia (21%) are experiencing a higher impact of their gap on their agri-food GVA. This also relativizes the high absolute financing gap volumes of France and Germany and Italy, as comparing the gap with their GVA shows much lower impact. This situation is even more pronounced for Austria, Belgium, Denmark, and Poland, who also reveal significant financing gaps, but only marginal impact when comparing with the GVA.



Figure 26: Financing gap as a share of GVA (in %)



Source: Agri-food survey and Eurostat, 2019.

4.3.2 The drivers of the financing gap

As outlined at the beginning of this section, the financing gap consists of the assumed value of applications rejected by financial institutions, offers of credit refused by agri-food enterprises, alongside cases when enterprises are discouraged from applying for credit due to expectations of rejection or refusal (see Figure 15).

Many small-sized agri-food enterprises cannot access finance despite sufficient liquidity of the finance providers. Based on the Agri-food survey, the highest rate of long-term loan rejections has been found in Romania, followed by Bulgaria and Portugal (Figure 27). The prevalence of a high share of small-sized agri-food enterprises in those economies, supports the conclusion that commercial banks are more reluctant to lend to smaller enterprises, and therefore set strict collateral and cash flow requirements. The business of a small-sized agri-food enterprise is seen with higher risk by the financial intermediaries, which is also the main reason (41%) for loan rejection (Figure 28). Especially for long-term loans, which are the most affected by the financing gap, the respondents of the Agri-food survey replied that in 35% of the loan rejected cases, the high business risk was the main reason. On top of that, 54% of the agri-food enterprises replied that the high business risk was the main reason for short-term loans being rejected.



Figure 27: Rejection (by bank or by borrower) of long-term loans per Member State in 2018 (in %)

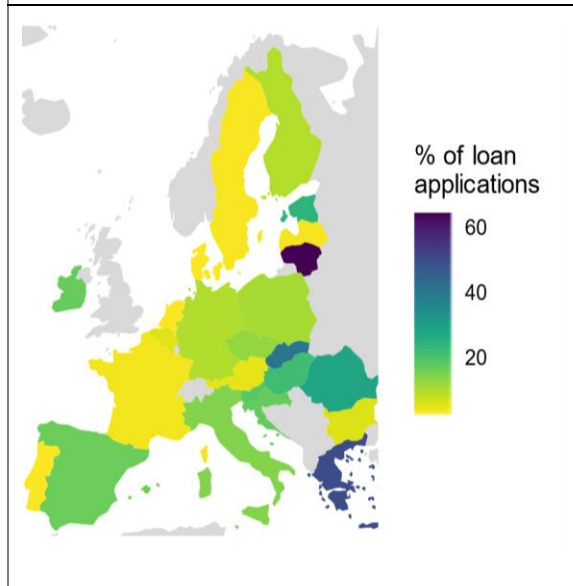
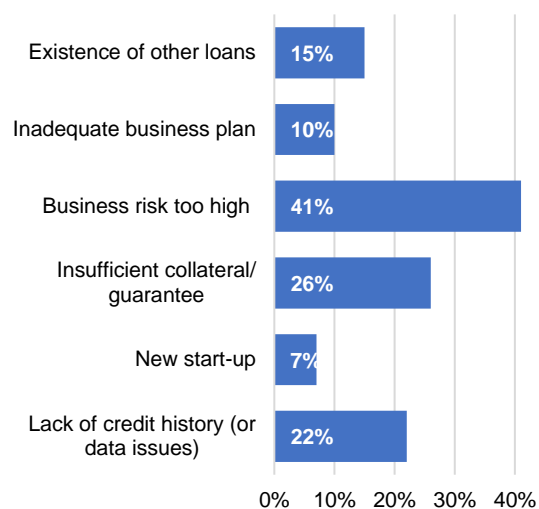


Figure 28: Key reasons for rejection of loan application in 2018 (in %)



Source: Agri-food survey.

The lack of collateral constrains the loan approval especially for small-sized agri-food enterprises. According to the Agri-food survey, insufficient collateral or guarantees is not only the second highest reason of loan rejection (26%), but also a large obstacle for small-sized agri-food enterprises (Figure 28). Whilst this is the case in practically all Member States, Finland, Greece, Portugal, Slovakia, and Spain stated this as their primary rejection reason. Across the EU 24, in 34% of the rejections of credit lines and bank overdrafts, collateral was mentioned by the affected. Similar, 32% of the respondents in the EU 24 replied that collateral was the rejection reason when applying for investment loans with medium-term maturity. Considering the stringent requirements regarding collateral requested by the financial intermediaries, agri-food enterprises frequently may also refuse to accept the bank offer. In addition, SMEs generally have lower financial literacy, which may lead (10% of the respondents) to insufficient designed and unrealistic business plans, as well as low cash flow. 22% of the respondents in the EU 24 replied that the lack of credit history was the reason for loan rejection, independent of the finance product.

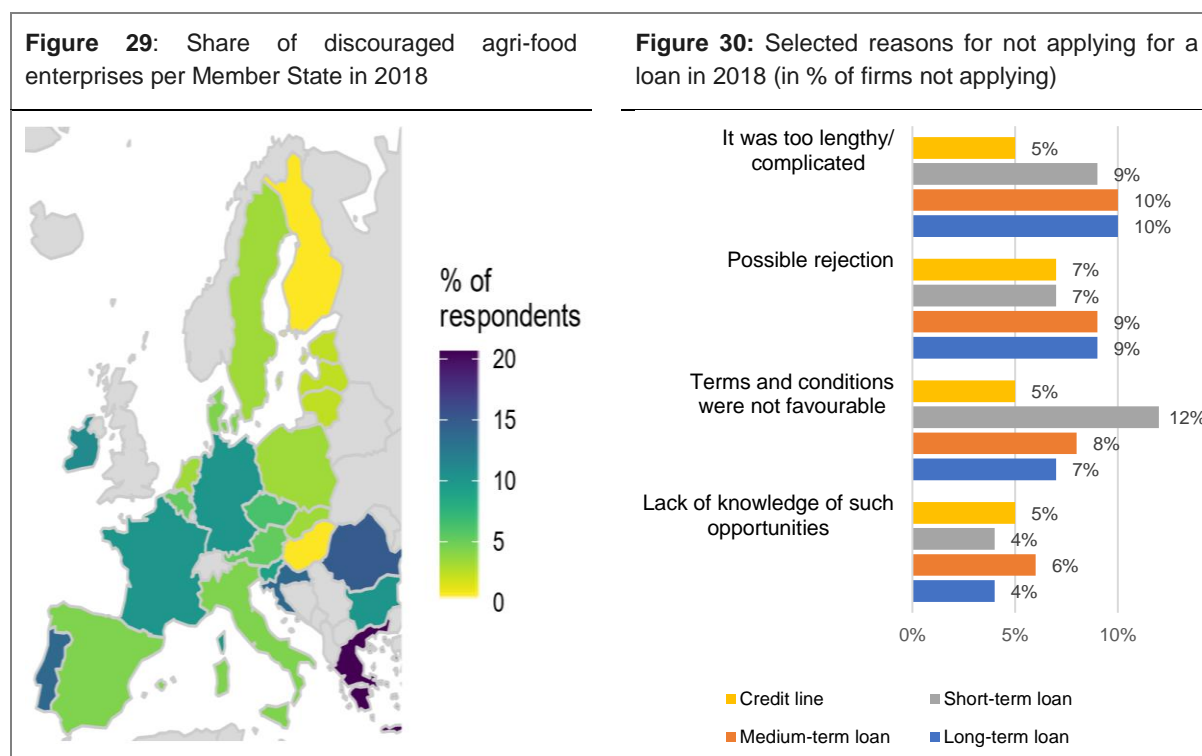
New entrants and innovations in the agri-food sector find it difficult to attract finance support. Similar to small-sized agri-food enterprises, new entrants in the sector commonly have low equity ratios, calling for a higher demand for finance to launch their business. The respondents of the Agri-food survey replied that in 14% of the cases when applying for credit lines and bank overdrafts for their working capital needs, being a new entrant in the sector had been the reason for rejection. In addition, 11% of the rejected new entrants were affected when applying for medium-term investment loans and 8% for long-term investments loans. Similar to new entrants, financial intermediaries often see innovations with much scepticism, as they lack benchmark data to assess the credibility of the investment project. This is detrimental, as innovation in the agri-food sector lags behind other sectors of the economy¹⁴⁹.

Discouraged agri-food enterprises also contribute significantly to the financing gap. Greece (21%), Romania (15%), Portugal and Croatia (both 14%) have the highest share of agri-food enterprises that are discouraged to apply for a loan (Figure 29). These Member States also have a

149 European Investment Bank, 2019, 'Feeding Future Generations', https://www.eib.org/attachments/thematic/feeding_future_generation_en.pdf.



significant high share of small-scale agri-food enterprises, pointing towards the most constrained segment within the EU 24. On the other hand, Finland and Hungary as well as the Baltic countries, only a very small share of agri-food enterprises have replied in the Agri-food survey that they have been discouraged from requesting finance from banks.



Source: Agri-food survey.

Unfavourable loan conditions are deterring agri-food enterprises from applying for a loan.

Especially for short-term loans, 12% of the agri-food enterprises responded in the Agri-food survey that the terms and conditions were not favourable (Figure 30). Greece (34%), Bulgaria (21%), Slovenia and Slovakia (both 15%) stand out with share of discouraged enterprises based on the requirements on collateral or the banks inability to provide tailored finance solutions, such as loan amount, maturity, interest rate or grace periods. Similarly, 10% of agri-food enterprises across the EU 24 responded that the loan application process is too cumbersome and therefore do not go through the effort in applying. As an example, in Ireland agri-food enterprises complained that a final decision on the loan application takes too long.

The fear of being rejected discourages mainly small-scale agri-food enterprises from applying for medium and long-term investment loans.

9-10% of the respondents of the Agri-food survey stated that the fear of being rejected discouraged them to apply for an investment loan (Figure 30). In several Member States, the fear of being rejected stand out, such as Greece, where 25% of the agri-food enterprises were discouraged from applying for medium-term loans and 20% for long-term loans. In Romania, where there is a dominance of small-scale agri-food enterprises, 17% responded that they were discouraged from applying for a loan, independent of the maturity of the finance product. Similar responses were recorded in Portugal (15% for long-term loans), Czech Republic (18% for short-term loans), Croatia (15% for medium or long-term loans), and even France (12% for long-term loans).

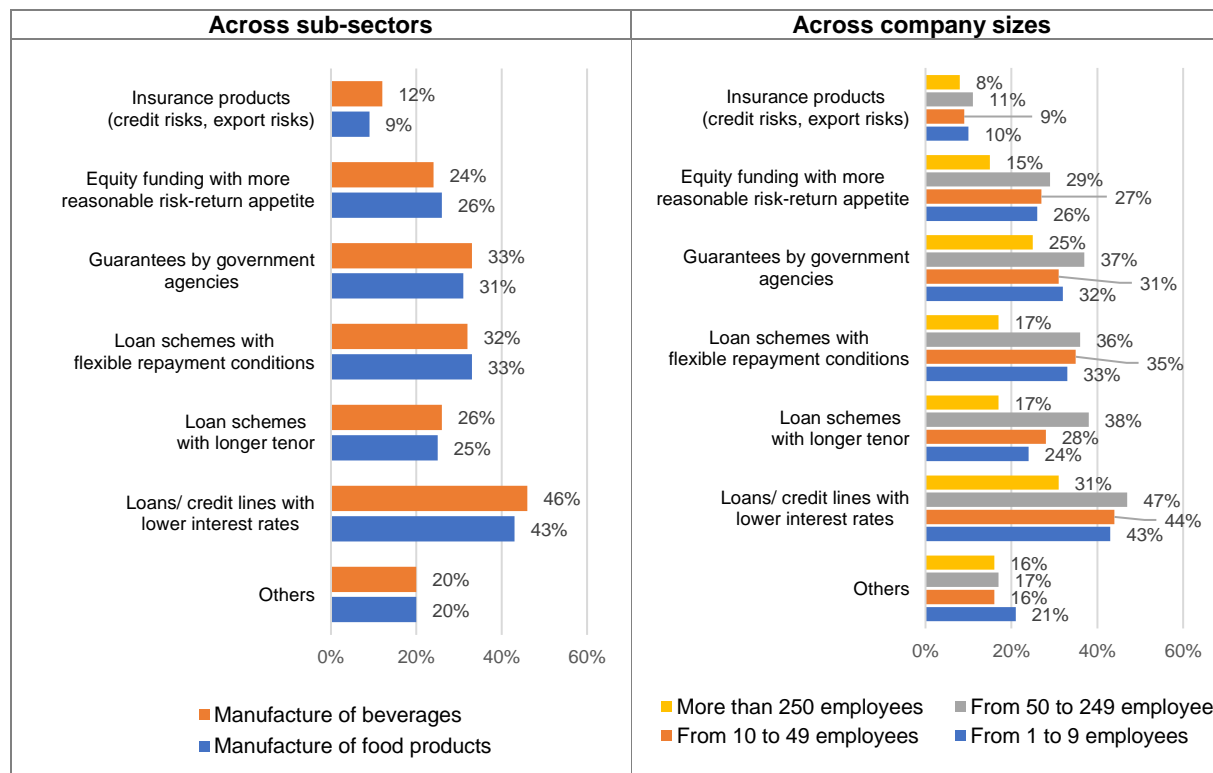
Nearly half of the agri-food enterprises in the EU 24 would see lower interest rates as the main solution to improve access to finance

(Figure 31). Affordable loans and credit lines / bank overdrafts have been stated the main solution in Croatia (75% of respondents), Greece (71%), Hungary (70%), Ireland (67%), and Romania (61%). Popular solutions also include flexible repayment conditions, as stated especially in Greece, Austria, Ireland, and Denmark. Putting in place public-supported guarantee



instruments was mainly suggested in Ireland, Greece, Croatia, Denmark, and Poland. Support for equity funding has been suggested in Austria (54%), Spain (45%), Greece (44%), Bulgaria (41%), and Germany (41%).

Figure 31: Solutions to reduce the difficulties in accessing finance in 2018



Source: Agri-food survey.



5 CONCLUSION AND RECOMMENDATIONS FOR THE AGRIFOOD SECTOR

The expected global increase in demand for food by 70% until 2050¹⁵⁰ represents both, an opportunity and a challenge for the EU agri-food sector. Growing market prospects are an evident boon for agri-food enterprises and the EU's pole position in exporting food and beverage products has transpired to attract investments. Yet imperfect finance market conditions also reveal how vulnerable the agri-food sector is, and consequently the enterprises do not fully achieve their investment needs.

A financing gap has been estimated at EUR 12.5 billion for the agri-food sector in the EU 24. While there are several reasons for the financing gap, insufficient capital affects small-sized agri-food enterprises most. More than three quarters of the financing gap relates to small-scale agri-food enterprises (less than 50 employees). In terms of financial products, 57% are attributed to long-term loans for capital investments.

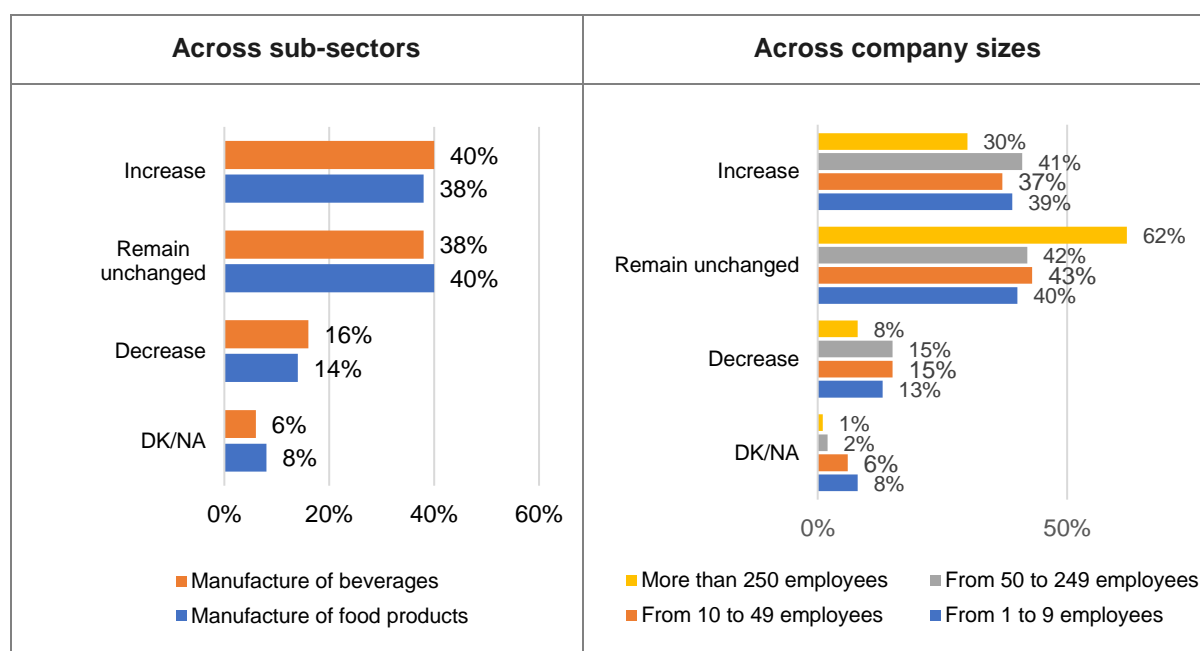
A number of demand- and supply-driven factors contribute to the financing gap in the agri-food sector. On the demand side, small-scale agri-food enterprises and new entrants in the sector more often have poor financial literacy, weak business planning and management capacities, as well as insufficient collateral due to their low equity ratios. This can limit their engagement opportunities with the credit market. The lack of collateral has often been identified as the main reason for loan applications being turned down. On the supply side, stringent terms and conditions or lengthy decisions by financial intermediaries have also discouraged agri-food enterprises from applying. SMEs have difficulties accessing finance mainly due to their lack of equity capital. Consequently, SMEs are perceived as high-risk, low return investment opportunities by commercial banks.

The demand for finance will increase in coming years, and COVID-19 is exacerbating these challenges. 78% of the enterprises across the sector responded in the Agri-food survey that they expect the demand for finance to remain the same or even increase (Figure 32). Market developments and compliance with stringent standards are the main drivers behind these responses. The implementation of the Green Deal could further add onto the requests for finance. Whilst the EU has made remarkable progress in food quality and safety, the consequences of the COVID-19 pandemic still awaits to be seen, be it to impact food prices, or the inability of the population to afford food due to income shocks.

150 Food and Agriculture Organisation of the UN: The State of the World's Land and Water Resources for Food and Agriculture, http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf.



Figure 32: Agri-food enterprises' expectations of future needs for finance



Source: Agri-food survey.

Several Member States have recognised the need to further stimulate investments through financial instruments. Especially EAFRD-supported financial instruments have a proven track record in some Member States, facilitating the access to finance by subsidizing interest rates or bolstering the current guarantee offering for agri-food enterprises. While the cause for the financing gap in the agri-food sector has various causes, the following suggestions stand out, to improve the enterprises access to finance and thus, further support investments in the Member States:

- For the vast majority of the 24 Member States analysed, it has been recommended to the national authorities to use EAFRD resources to strengthen the guarantee instruments already in place or to create new ones more targeted towards the needs of the agri-food sector. The products recommended to be guaranteed are primarily investment loans with long-term maturities, but for several Member States also the provision of guarantees for working capital loans and credit lines is considered to be beneficial.
- In some Member States, depending on the specific market conditions, the use of loan funds with a risk-sharing structure has been recommended to increase access to credit through the provision of risk protection and liquidity to the banks as well as a higher interest rate reduction for the final recipients.
- An effort to increase the financial literacy of micro and small-sized enterprises has also been suggested in several Member States.
- For some Member States showing a higher attitude towards innovation and higher level of financial awareness among enterprises, also the development of equity or quasi-equity targeted to the sector has been suggested
- Finally, as for the agriculture sector, all managing authorities have been invited to carefully evaluate the possibilities offered by the new legal framework (e.g. easier combination of financial instruments and grant support and use of interest rate subsidies) to design dedicated support packages for the most affected target groups.



ANNEX

A.1 References

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A.2 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**:

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 Viable firms is measured by the share of total firms that have a non-negative turnover growth¹⁵¹ 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

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

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

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

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

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



Step 2: Number of farms rejected or discouraged

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 66th percentile, between the 33th and 66th percentile, or below the 33th 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.

$$N. \text{ of Farms rejected}_{ij}^{Viable} = \text{Eurostat Farm population}_i * \text{Rejection Rate}_j^{Viable}$$

$$N. \text{ of Farms discouraged}_{ij}^{Viable} = \text{Eurostat Farm population}_i * \text{Discouraged Rate}_j^{Viable}$$

$$N. \text{ of Farms in unmet demand}_{ij}^{Viable} = N. \text{ of Farms rejected}_{ij} + N. \text{ of Farms discouraged}_{ij}$$

for $i = \text{Small, Medium, Large}$

and $j = \text{Short Term, Medium term, Long Term Loans, Credit lines}$.

Step 3: Standard Loan Application Size

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 party 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.

$$\text{Financial Gap}_{ij} = \text{Application Size}_{ij} \times N. \text{ of Farms in unmet demand}_{ij}^{Viable}$$

for $i = \text{Small, Medium, Large}$

and $j = \text{Short Term, Medium term, Long Term Loans, Credit lines}$.

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:

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.



A.3 TGI: fi-compass survey

The analysis for the agricultural sector in the report relies on the fi-compass survey on financial needs of EU agricultural enterprises, conducted from April to June 2018 across 24 EU Member States (EU 24): Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Slovenia, Lithuania, 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 9 reports the number of respondents by Member State.

Table 9: *fi-compass* survey sample size per Member State

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

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.4 TGII: 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.

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

The survey was conducted targeting the completion of a minimum of 45 questionnaire for each Member State. The minimum sample size obtained varied per country mirroring the differences in the size of the sector. Table 10 reports the sample size per country

Table 10: Agri-food survey sample size per Member State

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

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.5 Overview total outstanding loan volume by Member State

Table 11: Outstanding loan volume in the agriculture sector, by Member State, EUR million

Country	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Austria											6.3	
Belgium			7 961	8 173	8 216	8 382	8 446	8 572	8 723	8 892	8 870	
Bulgaria							4 436	4 462	4 598	4 759	5 431	
Croatia											536	
Czech Republic							1 902	1 962	2 094	2 259	2 327	2 414
Denmark								9 501	9 216	8 793	8 682	8 522
Estonia	238	214	224	240	300	339	370	371	419	442	455	
Finland			1 119	1 170	1 385	1 206	1 236	1 432	1 475	1 654	1 775	
France					42	43	46	48	49	50	53	54
Germany			40	43	45	46	48	50	51	50	53	
Greece							1 520	1 410	1 341	1 233	1 218	1 201
Hungary								1 547	1 805	1 973	1 953	
Ireland						3 793	3 259	3 168	3 028	3 137	3 144	
Italy							44 420	44 347	43 444	42 920	41 997	
Latvia								412	495	548		
Lithuania					173	184	216	221	284	317	300	302
The Netherlands								37	39	39		
Poland			4 963	5 057	6 050	6 469	7 121	7 514	7 548	8 360		
Portugal			2 060	2 068	1 923	1 959	2 080	2 187	2 287	2 326	2 415	2 556
Romania								3				4
Slovakia								543	650	712	746	
Slovenia									77	72	65	61
Spain		23 123	23 128	21 782	20 217	18 448	17 693	18 106	18 972	20 330	21 364	
Sweden	16 945	19 565	23 129	26 469	29 218	30 603	30 674	31 337	32 793	33 527	32 300	

**Table 12:** Outstanding loan volume in the agriculture sector, sources

Country	Comments	Source
Austria	No data at national level. Only for Upper Austria and disaggregated per type of product	
Belgium	Outstanding loan volume in agriculture, forestry and fishing	National Bank of Belgium, 2019
Bulgaria	Supply of loans in agriculture	Author's calculations based on data from the Bulgarian National Bank (2014-2018).
Croatia	Outstanding loan to the agriculture	Croatian national bank
Czech Republic	Amount of outstanding loans for agriculture	
Denmark	Calculation: Amount of outstanding loans for agriculture, forestry, fishing (excluding mortgages)	<i>Author's calculations based on National Bank of Denmark data, 2019.</i>
Estonia	Amount of outstanding loans for agriculture, forestry, fishing	
Finland	Outstanding loan portfolio to agriculture, forestry and fishing	National Bank of Finland, 2019
France	Amount of outstanding loans for agriculture	Central Bank (Banque de France, 2019.
Germany	Amount of outstanding loans for agriculture	Deutsche Bundesbank, 2019.
Greece	Amount of outstanding loans for agriculture	Credit to domestic non financial corporations by domestic MFIs excluding the Bank of Greece, breakdown by branch of activity, Central Bank of Greece 2020.
Hungary	Amount of outstanding loans for agriculture	<i>Ministry of Agriculture Hungary.</i>
Ireland	Amount of outstanding loans for agriculture	Central Bank of Ireland
Italy	Amount of outstanding loans for agriculture, forestry and fishing	
Latvia	Estimate. Total outstanding loans: agriculture, forestry and fisheries	Own calculations based on FCMC.
Lithuania	Total outstanding loans: agriculture, forestry and fisheries	
The Netherlands	Estimation based on Rabobank data	
Poland	Amount of outstanding loans for agriculture	
Portugal	Supply of loans to agriculture sector	Banco do Portugal, 2019.
Romania	Total outstanding loans for the agriculture, forestry and fishing	National Bank of Romania
Slovakia	Outstanding loans in agriculture	<i>National Bank of Slovakia, 2019.</i>
Slovenia	Amount of outstanding loans in the Slovenian agriculture sector	Slovenian Central Bank data, 2019
Spain	Private credit to the primary sector (agriculture, fishery and forestry)	Bank of Spain database 2019.
Sweden	Total outstanding loans: agriculture, forestry and fisheries (including private financing and credit provided by suppliers).	Lantbruksbarometern 2013-2019.

