



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



June 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.
ANC	Areas with Natural Constraints
AWU	Annual Working Unit
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
EU	European Union
EU 24 Countries	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
<i>fi-compass</i> survey <sup>1</sup>	Survey on financial needs and access to finance of 7 600 EU agricultural enterprises carried out by <i>fi-compass</i> in the period April-June 2018 and based on respondents' financial data from 2017.
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GVA	Gross Value Added
Ha	Hectare
LTV	Loan to value
R&D	<i>Research and Development</i>

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



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RDP	Rural Development Programme
SMEs	Small and medium-sized enterprises
SNI	Swedish Standard Industrial Classification
SO	Standard Output
UAA	Utilised Agricultural Area



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## EXECUTIVE SUMMARY

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

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

### Financing gap for the agriculture sector in Sweden

**The Swedish farmers' demand for finance and the credit supplied to the agriculture sector, has grown significantly since 2008.** The total outstanding loan volume to the primary agriculture and forestry sector at the end of 2018, including both private financing from friends and family and credit lines from suppliers, was estimated to be EUR 32.3 billion. Between 2008 and 2018, the total outstanding loan volume increased by approximately 78%, which was in line with the development of the overall economy.

**Investments in capital formation by young farmers drive the developments.** More than 50% of the investments undertaken by the agriculture sector are invested in capital formation, which suggests a positive outlook for the sector. Large-sized farms mostly invest to expand their business activity and improve their efficiency. In contrast, small-sized farms tend to invest to complement their current activity with additional activities that diversify their income stream. Farmers below 40 years drive investments in buildings and stables and in machinery. High land prices, particularly in the southern regions, also impact the demand for finance.

**CAP support facilitates farmers' access to finance.** CAP subsidies strengthen farmers' cash flow, creating headroom to enable access to financing via banks, as cash flow is an important component of the bank's credit assessments. Additionally, CAP support provides farmers with a possibility to make investments in their business that they would not have made otherwise. The amount of support determines the amount that can be borrowed from financial institutions, by acting as guaranteed repayment. Further, the existence of investment support generates more investments and encourages farmers to make larger investments than what would have been the case otherwise. Also, the start-up support to young farmers facilitates their entrance to the sector. In some Swedish regions, with more young farmers, the budget for start-up support has run out, which is a concern for many young farmers who meet the conditions for seeking funds but who belongs to a region where there is no more budget.

**Overall, access to finance is not a major concern for Swedish farmers.** The loan rejection rates are low, and the share of farmers being discouraged from applying for loans is rather low. When farmers' applications for loans are rejected by banks this is mostly because of the farmers' limited repayment capacity, which is linked to the profitability of the sector as a whole. This leads to agricultural producers being more thoroughly scrutinised by banks on their management capacities, compared to the management of businesses in other economic sectors.

**Starting-up a new farm is very difficult unless there is property within the family.** Therefore, new entrants to the sector are likely to suffer more from banks' reluctance to provide loans to entrepreneurs who lack credit history. However, rather than stressing the importance of credit history, the banks interviewed stressed the importance of a track record in the management of a farm, including management of financial issues, practical issues, handling of employees, etc. Hence, the combination of a relatively low level of profitability and high land prices can make it difficult to develop a viable business case for new entrants creating an additional difficulty in accessing finance.





**The Swedish agricultural finance market offers a varied and extensive supply of finance. Multiple actors play an active role.** The largest actors include commercial banks, savings banks, a mortgage institute, and an insurance company. A public agency facilitates access to loans without the borrower having to provide a guarantee. Additionally, a small-scale venture capital/partnership, referred to as *Tillväxtbolaget för Sveriges Lantbrukare*, is also available on the market. It was created by the Swedish Farmer's Federation, and two of the agricultural cooperatives, SCAN and Lantmännen. Furthermore, credit lines are provided by input suppliers (for fertilisers, seeds, etc.) and, given the strong vertical integration of the agriculture sector in Sweden with strong cooperative tradition, this reduces the need for working capital finance from banks. The offer of financial products in Sweden is extensive, with many different loans available with varying terms and for different purposes, such as investment, working capital, and liquidity. Additionally, the 'EU-credit facility' offered, where banks use granted CAP applications as collateral and pay out part of the total sum before the actual subsidy arrives, is a bank product offering a liquidity solution to farmers during the time of the year that is characterised by high costs and low revenues. According to interviews, there is no agricultural sub-sector that the banks hesitate to finance. Regardless of the farming activity undertaken, the focus of the bank when assessing a credit application is on the management of the farm and on the repayment ability.

**A financing gap in the range of EUR 119 million to EUR 148 million has been identified for the Swedish agriculture sector.** In contrast to the situation for many other EU Member States, the gap in Sweden is the largest for the medium and large-sized farms<sup>2</sup>. The gap mostly concerns access to long-term financing, which is in line with the situation in most other countries.

**The principle reasons why some viable enterprises do not have access to finance are:**

- The thorough scrutiny of the management of farm businesses by the financial institutions; compared to SMEs from other economic sectors; in general, the management of a farm may not be considered by the bank to be satisfactory as there is no transparency on the decision-making process (contrary to other SMEs where different management levels have distinguishable functions), and hence the risk of financing an investment is regarded as too big.
- The repayment capacity or cash flow is considered to be too low (in combination with risk-averse banks), and
- Lack of collateral (although this is of minor importance).

As for young farmers, in addition to the reasons outlined above, which may impact young farmers and new entrants to an even greater extent than the rest of the farming community, they may also lack the confidence when approaching banks for funding which likely leads to unmet demand.

**Additionally, there is a potential constraint to the supply of finance.** The analysis concludes that there is sometimes a lack of understanding of agriculture businesses by the local bank offices, in particular in regions with fewer farmers. Bankers may be unable to make correct credit assessments because of their unfamiliarity with the type of company which is most common in the farming sector (i.e. sole proprietor owners) or because of a lack of knowledge of farming businesses. This may also limit some viable farming enterprises from accessing credit.

## RECOMMENDATIONS

- If a financial instrument is to be considered and analysed, a small pilot could be set-up for the agriculture sector to address issues related to asymmetrical information identified in the market analysis and in relation to long-term finance and/or new entrants/start-ups and young farmers. Such pilot could be a stand-alone initiative or a section of a more global financial instrument covering also the agri-food investments/sector. The new possibilities offered by the CAP/EAFRD over the 2021-2027 programming period could be taken into account and potentially EU-funding could be involved.
- There is an opportunity for increasing the budget from the CAP/EAFRD allocated to young farmers and its better regional distribution in the 2021-2027 programming period, in line with the strategy for

<sup>2</sup> In the *fi-compass* survey, on which the estimations are based, farms are divided in three size categories: small (below 20 hectares), medium-sized (between 20 and 100 hectares), large (above 100 hectares).



generational renewal, as current budget has been quickly absorbed by some regions and some applications remain uncovered.

- Technical support aiming at increasing both farmers' technical management skills and their financial understanding, including preparation of business plans, could be beneficial.
- Technical support/capacity building in terms of education/courses that include banks, advisers and farmers are recommended. Bank personnel at local bank branches could benefit from an increased understanding of the functioning of the agriculture sector, and of the legal structure of sole proprietary.

Additionally, **farmers may be encouraged to take the following steps to increase the likelihood that banks grant credit applications:**

- In order to benefit from the highly competitive bank market in Sweden, farmers could try to approach several different banks with their business plan.
- Submit a professional business plan that will facilitate the bank's assessment process and would show the farmer's management capability.
- Try to establish good working relationships with the personnel at the local bank branch and keep them informed on the farm's business development, on extraordinary situations and, to some extent, on the development of the sector in general.

## Financing gap for the agri-food sector in Sweden

**Gross investment undertaken by the agri-food sector is increasing at a modest pace with investments in machinery and inventory as the main driver, and with the largest companies driving the investments.**

The yearly investments undertaken are in the range of EUR 500 million and EUR 600 million. The principle purpose of the investments is to reduce costs (in particular salaries) and to make the production more efficient. Very few investments are made for innovative purposes, and few investments are undertaken in order to expand production internationally, as the sector is primarily focused on the domestic market. The 10 largest companies in the sector account for 50% of total revenue, and this segment also carries out the majority of investments.

The yearly growth rate of the sector was 2.4% between 2011 and 2016, below the EU average, and the sector is characterised by low profit margins. Even so, there has been a recent boom in the sector, with a large share of start-ups. But the high number of new enterprises has not had a significant influence on the overall demand for finance from the sector. In general, the small-sized companies prefer to grow organically through their own funding in order to minimise risks. In addition, **there are many barriers for the SMEs to access external funding:**

- There are many new entrants who lack credit history and a relationship with banks.
- Many of them lack know-how and knowledge in finance and management.
- Access to collateral is limited.
- The low profitability of the sector causes banks to be cautious.

**There are many banks as well as many different types of providers who supply funding.** Competition between banks themselves, as well as between banks and financial institutions, is very high. While FinTech<sup>3</sup> is developing on the market, it only holds a marginal share of fund supply. When searching for finance in the sector, the most common approach is to turn to banks. The agri-food companies approach banks mostly for long-term financing.

**Overall, the demand for and supply of finance to the agri-food sector is rather low.** The large-sized agricultural cooperatives (two of them being among the top-10 food producers in Sweden) finance their investments through member fees and internal resources and do not turn to the banks to any great extent. The large share of foreign-owned companies among the top-50 companies are expected to resolve their financing

3 Financial services firms and banks that utilise new technology to provide innovative lending products, often based on Open Banking, such as crowd funding and peer-to-peer lending.



needs through the international financing market, rather than through Swedish banks. And the small-sized companies, when demanding finance (which many times is not the case), experience several problems in accessing it, which is why the overall supply of finance to the agri-food sector is low.

**The largest constraints in the supply of finance are due to the risk aversion of banks**, linked to the low profitability of the agri-food sector, as well as the rules and regulations which have turned the agri-food sector into a high-risk sector compared to other industries, because of the general lack of collateral. In turn, this has led to a high cost of loans, making them unaffordable for many small processors.

**Against this background, the financing gap for the Swedish agri-food sector is estimated to be EUR 129 million.** In accordance with the analysis, the gap is the largest for small-sized enterprises and for long-term loans, but a gap is identified for all financial products regardless of maturity. The short conclusion is that the start-up segment in the agri-food sector has difficulties in accessing external funding, thereby driving the gap.

**The gap is expected to increase in the near future.** The increasing number of new entrepreneurs in the sector means that it is possible that the demand for financing will increase. Additionally, in order to remain in business, many enterprises will have to invest in innovation and exports, which will likely increase demand even further. Unless the underlying reasons behind the gap are addressed, it can be assumed that these factors will lead to an increased gap.

**A number of governmental and regional initiatives provide support in terms of knowledge in finance and business development to start-ups.** As there are many small entrepreneurs in the sector, with a focus of the business often disconnected from finance and organisational management, substantial support measures are needed to encourage the development of these companies. Enterprises are also in need of collateral in order to get access to finance. While there are many educational efforts in place today, they are very often regional initiatives and they are often scattered. New entrepreneurs do not always know who to turn to in order to get help and the help provided differs from one region to another. With the national long-term food strategy that was adopted in 2017, efforts are becoming more centralised and the situation in the industry is getting more attention from the government and other bodies in Sweden. However, there is still several issues to address.

## RECOMMENDATIONS

- Introduce risk-sharing instruments and guarantees in order to increase the level of investment towards innovation, and to also make credit accessible for small-sized companies without access to guarantees. This could include targeted instruments to start-ups in order to reduce costs linked to credit. The new possibilities offered by the CAP/EAFRD in the 2021-2027 programming period could be taken into account and potentially EU-funding could be involved.
- Increase support efforts in terms of competence in finance and management to the agri-food sector.
- In order to help enterprises in the sector to grow, the two first recommendations could be combined, so that the management and the board of directors are forced to set out a strategy for the company and follow up on the accounting and key covenants.
- Digitalisation has proven to open new niches for start-ups to absorb and develop in areas such as new distribution channels; new ways of developing products, with help from ambassadors; and to add value to the product in terms of story-telling, whereby support in the development of digitalisation in the enterprises, in terms of knowledge, network and support funding, is highly relevant.



# 1. INTRODUCTION

## Objective

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

## Approach

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

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

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

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

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

## Report structure

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



## 2. PART I: AGRICULTURE SECTOR

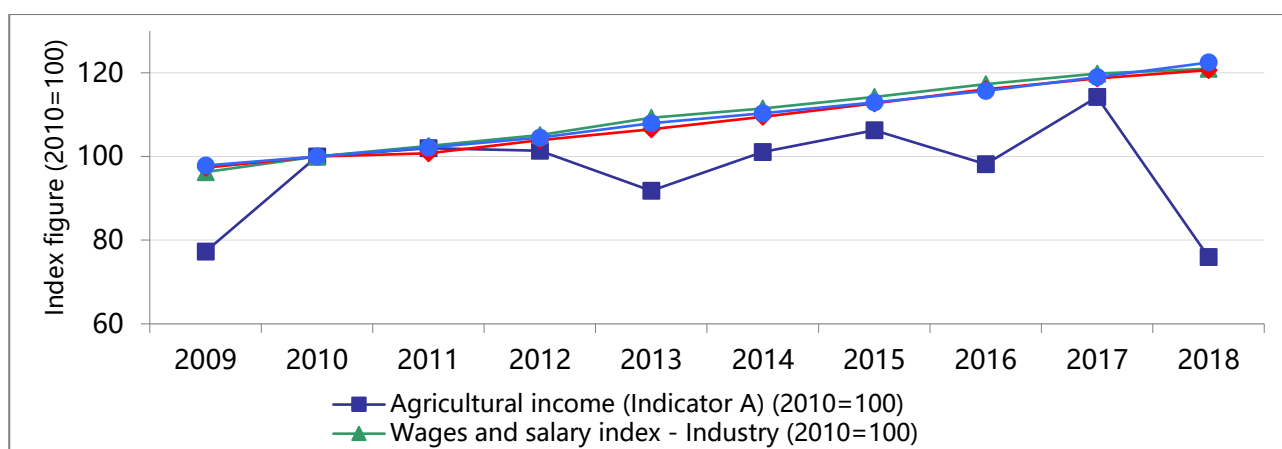
### 2.1 Market analysis

#### Key elements on the Swedish agriculture sector

- The agriculture sector represents a small part of the Swedish economy, accounting for only about 0.3% of GDP and 1.6% of total employment. Only 7% of the total land area is farmland, of which nearly half is classified as areas with natural constraints (ANC).
- Compared to the agriculture sector in the rest of the EU, the average farm size in Sweden is large (48 hectares (ha) vs 16.6 ha at EU 28 level). Even so, most of the farms (54%) are still below 20 ha. About 30% of the farms are family-run.
- Among those employed in agriculture, 75% are part-time workers.
- The number of farms combining farming with forestry activities is high, and the combination with other economic activities is increasing.
- Dairy production is the dominant sector in terms of the value of production (20.3% of total), followed by the production of forage crops (18.3%) and cereals (13.7%).
- Generation renewal is an issue for the sector, as only 10% of the farm holders are under 40 years old and one third are over 64 years old.

**Agriculture production is a small part of the Swedish economy.** Agricultural output for the year 2018 was EUR 5.6 billion. Its contribution to gross domestic product (GDP) for the same year was 0.26%.<sup>4,5</sup> As can be seen from Figure 1, 2018 was a particularly poor year, with a strong downturn in the income of the agriculture sector, breaking a previously long-lasting, stable trend. The agricultural output fluctuated around EUR 6.0 billion between 2013 and 2017, and the sector's share of GDP for the same period fluctuated between 0.29% and 0.31%. Hence, 2018 was a significant year. That year, the agriculture sector in Sweden was hit very hard by drought. The downturn in income was due to decreased volumes of output, as well as increasing costs of production (Figure 2) following the drought. Despite output prices increasing sharply, with the consumer price index for food products even surpassing the consumer price index for all goods in 2018 (Figure 3), farmers' economic margins were squeezed in 2018.

**Figure 1:** Evolution of agricultural income compared to wages and salaries in other sectors of the economy, 2009-2018



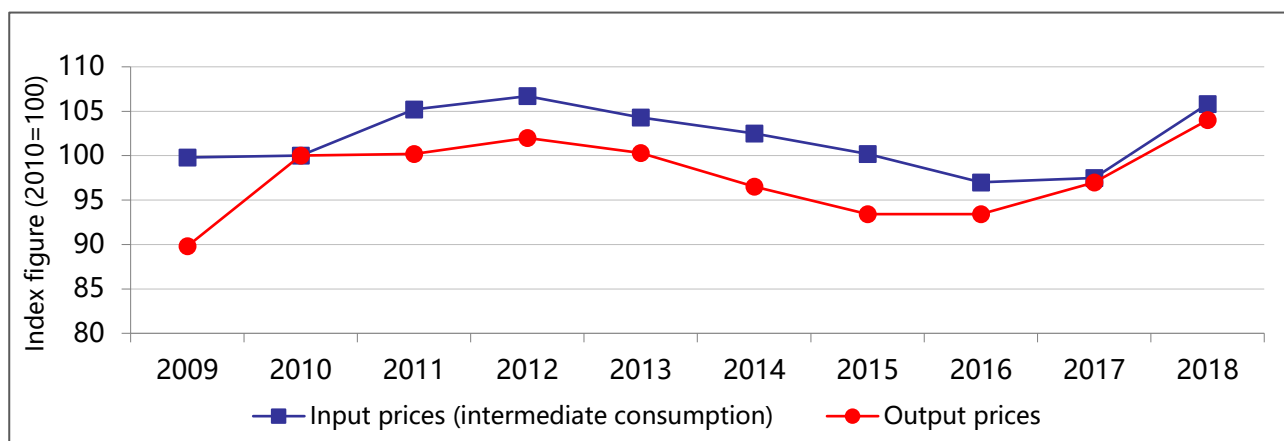
Source: European Commission, DG AGRI, Statistical Factsheet for Sweden, June 2019.

4 Eurostat, 2019, Agriculture, forestry and fisheries at a glance.

5 Swedish Board of Agriculture, 2019, Jordbruksstatistik sammanställning 2019 med data om livsmedel-tabeller.

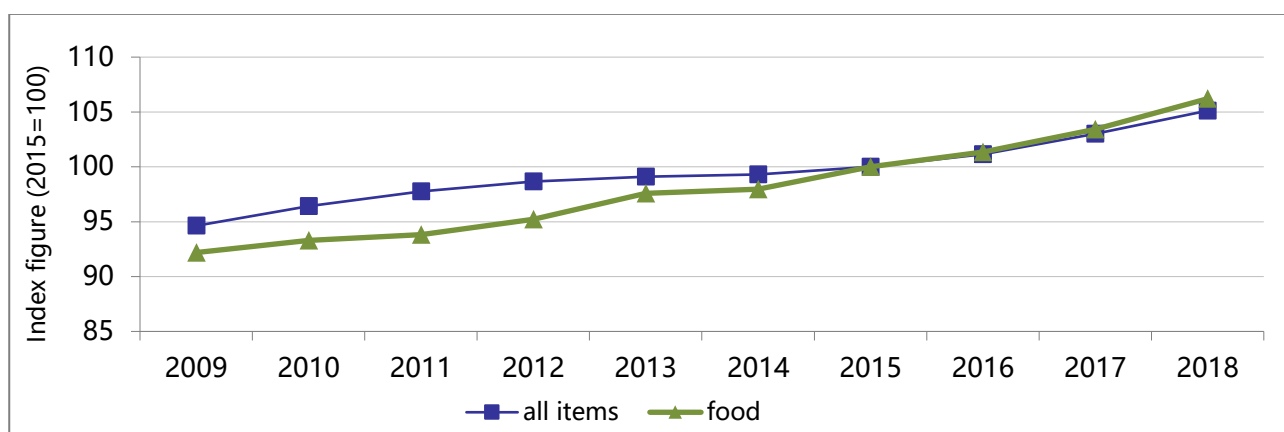


**Figure 2:** Evolution of agricultural input and output prices, 2009-2018



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

**Figure 3:** Evolution of harmonized indices of consumer prices, 2009-2018



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

**Employment in the agriculture sector has been decreasing.** Measured in Annual Working Unit (AWU), employment has fallen continuously and was estimated at 56.000 in 2018. Of the total number of AWU's, 60% are estimated to be unpaid.<sup>6</sup> Agricultural activity in Sweden is often combined with forestry. Forests cover 68% of the total land area and forestry is one of the country's most important industries.<sup>7</sup> The Gross Value Added (GVA) for the forestry sector was almost EUR 4 billion in 2018, compared to EUR 2 billion for the agriculture sector.<sup>8</sup> Farming and forestry production are often combined, with the two economic activities carried out by the same enterprise. Looking at the total land area owned by farm enterprises in Sweden, the share of hectares with productive forest land exceeds the share of agricultural land.<sup>9</sup>

**The farming conditions vary significantly throughout the country.** Sweden is the third-largest country in the EU in terms of land area.<sup>10</sup> However, only 7.4% of the total land area is farmland and this is mainly concentrated in the south of the country.<sup>11</sup> In the northern half of the country, agricultural land is classified as areas with natural constraints (ANC) and is characterised by mountain landscapes, low temperatures, wetlands, peats and bogs. The growing season is almost 100 days longer in the southern province of Skåne,

6 The Swedish Board of Agriculture, 2019, Economic Accounts for Agriculture 2007-2018 JOJO 45 SM 1902.

7 European Commission, DG AGRI, 2019, Factsheet on 2014-2020 Rural Development Programme for Sweden.

8 Eurostat, 2019.

9 Economic Accounts on Agriculture, 2019, Statistics Sweden.

10 European Commission, DG AGRI, 2019, Factsheet on 2014-2020 Rural Development Programme for Sweden.

11 Eurostat, 2019.



compared to Norrland in the north.<sup>12</sup> In the northernmost counties, livestock farms dominate and the farms are small-sized. In Svealand, in the middle of the country, there are many large arable farms. In Götaland, in the south, cattle and arable farming dominate.<sup>13</sup>

**A strong farm structure consolidation process is ongoing, with the average farm size having reached 48 ha in 2017. However, the majority of farms are still below 20 ha.** In 2017, the number of farms in Sweden was 61 615 managing an Utilised Agricultural Area (UAA) of 3 021 million ha. Compared to 2010, the number of farms decreased by 13%, but the total UAA decreased by less. Large-sized farms have grown larger and have increased their level of specialisation. Farm enterprises specialise in crops and species that are best suited to their region. Farms located at the plains in Southern Sweden have become specialised in plant breeding, while farmers in the forest regions have concentrated on livestock breeding.<sup>14</sup> These developments have been made possible by significant investments in machinery.<sup>15</sup> Average farm size has increased from 45.2 to 47.9 ha between 2013 and 2016.<sup>16</sup> However, the Swedish agriculture sector is still dominated by farms below 20 ha, constituting 54% of all farms. The share of farms defined as family farms was 30.5% in 2016.<sup>17</sup> **The share of young farmers is 10%**, while 33.1% are over 64 years old, in line with the EU average.<sup>18</sup>

**Less than half of the farms obtain their income exclusively from agriculture activities.** The number of farms combining farming with other business activities has been increasing rapidly. In 1999, the share of farming enterprises engaged in other gainful activities was only 11%. However, by 2013, this figure had increased to 37% and, by 2016, to 43%. Following up on this trend in the yearly survey Lantbruksbarometern,<sup>19</sup> the interest in combination activities increased during 2017 compared to 2016, but with a slight decrease or no change at all in 2018.<sup>20</sup> In addition, the economic impact of such activities has increased significantly over the years.<sup>21</sup> Contracting<sup>22</sup> is the most common combination activity, followed by tourism. Only about 3 000 farms process and sell their own products.<sup>23</sup> The energy sector, especially solar energy production, has become more attractive as a complementary activity. This is particularly the case for large-sized firms who use their energy production for their own purposes.<sup>24</sup>

**As for the cost and revenue structure for the agriculture sector** (Error! Reference source not found.), comparing the years 2004-2006 with 2016-2018, costs for interest rates and taxes have decreased, while the cost of feed and seeds has increased (partly due to the strong impact from the 2018 drought). On the revenue side, the share of revenues stemming from public support has decreased, while the share from animal and crop output has increased.

12 Swedish Board of Agriculture, 2019, Facts about Swedish Agriculture.

13 European Commission, 2019, Factsheet on 2014-2020 Rural Development Programme for Sweden.

14 Agri-food Economics centre, 2012, Tillväxt, specialisering och diversifiering-hur jordbruksföretagen förändrats de senaste 20 åren.

15 Swedish Board of Agriculture, 2019, Facts about Swedish Agriculture.

16 Calculated from figures in EUR, Eurostat 2019.

17 Eurostat, 2019, Agriculture, forestry and fisheries at a glance.

18 Eurostat, 2019.

19 A survey carried out annually among 1 000 Swedish farmers by the Swedish Farmers Federation together with Swedbank and Sparbankerna The survey has been carried out annually since 1987 with the purpose of capturing farmers' perception of their economic situation. The survey is carried out during the first half of January, and contains questions both regarding the previous year, and about the coming year, in order to capture the main trends of the agriculture sector.

20 LRF Konsult, Sparbankerna, Swedbank, Lantbruksbarometern 2018 and 2019.

21 Swedish Board of Agriculture, 2017, Statistics Sweden, Other gainful activities at Agricultural Holdings.

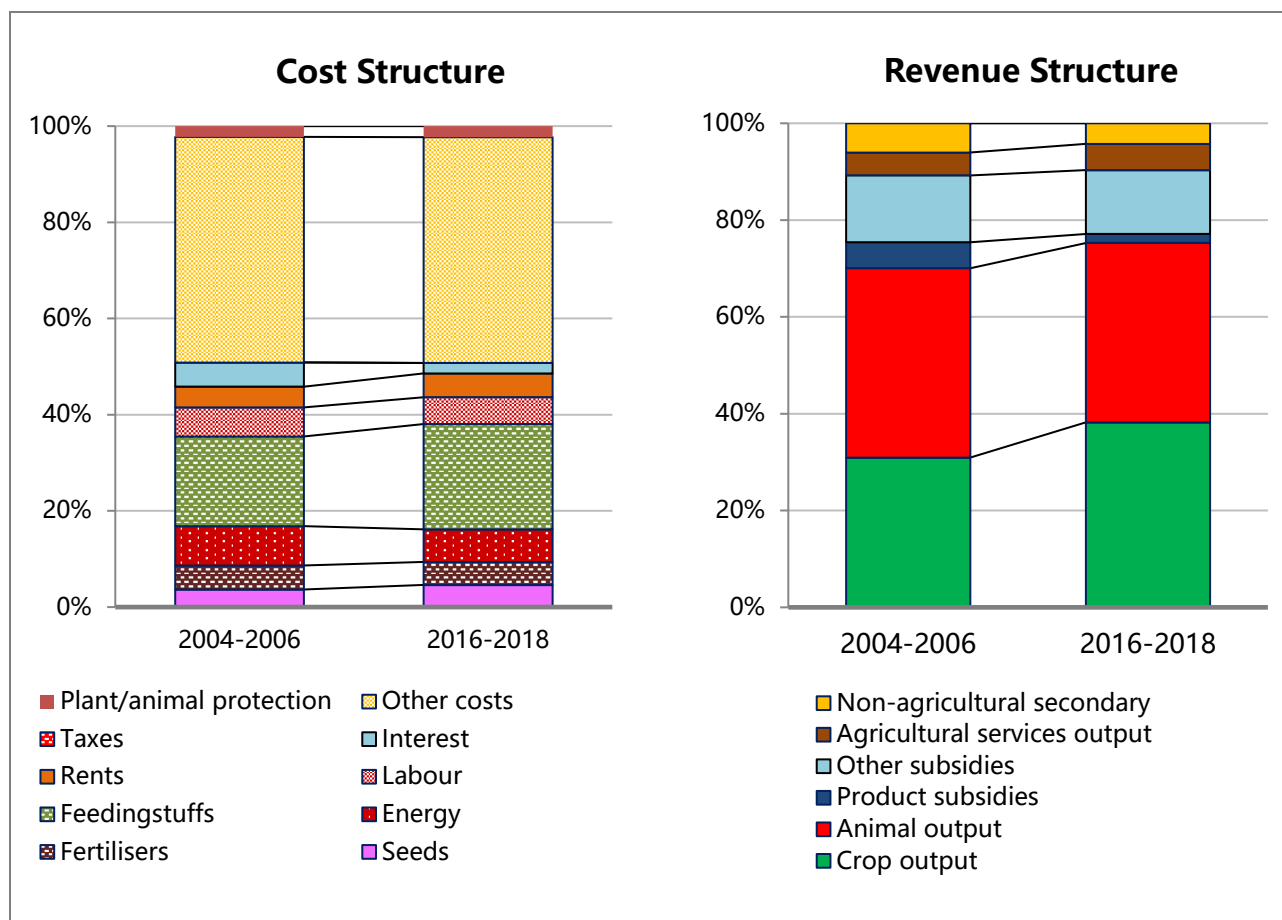
22 Contracting include work both inside and outside the agricultural industry. It is the use of the enterprise equipment such as machinery, buildings etc.

23 Swedish Board of Agriculture.

24 LRF Konsult, Sparbankerna, Swedbank, Lantbruksbarometern, 2018.



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



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

**Large-sized agricultural cooperatives hold a prominent role.** One of the explanations for this is the sparse population of the country. The transaction costs of collecting perishable products from farms, processing them, and then distributing them to a scattered population, was a catalyst for the development of cooperatives. The economic associations include the following principles in their statutes: mainly collective ownership, open membership, equal voting rights, and duty of reception. Two of the main cooperatives include Arla Foods<sup>25</sup> (dairy) and Lantmännen<sup>26</sup> (cereals).

**Swedish agricultural production is diverse, with dairy and forage plants being the dominant type.** The value of production is evenly distributed between the animal and crop sectors, representing 50.9% and 49.1%, respectively. The dominant animal production sector is dairy, with 20.3% of the total production value, followed by grazing livestock (mostly cattle) (11.5%)<sup>27</sup>, intensive pig production<sup>28</sup> (8.6%) and poultry (4.0%).<sup>29</sup> Among arable crops, forage crop<sup>30</sup> (18.2% of total production value) and cereals (13.7%) are the main types of production.<sup>31</sup> Among cereals, wheat is the main crop. The proportion of leys<sup>32</sup> makes up most of the arable

25 Arla Foods amba had 19 190 employees in 2018 and is owned by 10 319 members in seven countries. The turnover was approximately EUR 10.4 billion.

26 10 000 employees, owned by 25 000 members in Sweden, turnover approximately EUR 4.39 billion for year 2018, operations in 20 countries. They are a leading player in agriculture, machines, bioenergy and food.

27 More than 60% of all beef comes from farms that also produce milk.

28 More than 90% of fattening pigs are found in herds with at least 500 animals.

29 EU statistical fact sheet, 2018, Sweden.

30 Forage crops are crops, annual or biennial, which are grown to be utilized by grazing or harvesting as a whole crop.

31 EU statistical fact sheet, 2018, Sweden.

32 Non-productive grass land.





land in Norrland.<sup>33</sup> Vegetables and horticultural products, with 8.0% of the total production value in 2017, are the third-largest category of crop in Sweden.

#### Statistical factsheet Sweden, 2019

More data on agriculture indicators from Sweden can be found in the [Statistical factsheet Sweden 2019](#) of the Directorate-General for Agriculture and Rural Development, Farm Economics Unit.



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

This section describes the drivers of demand for finance in the agriculture sector and analyses and quantifies the met and unmet demand. It seeks to elaborate the main reasons for farm enterprises to request financing and identify the agricultural sub-sectors displaying the largest need for finance. The section also provides an analysis of the type of producers that face the greatest constraints to accessing credit. The examination of the demand for agricultural finance is based on the findings from the *fi-compass* survey of 300 Swedish farms, as well as interviews with key stakeholders in the agriculture sector combined with information obtained from the Farm Accountancy Data Network (FADN).

### Key elements on finance demand from the Swedish agriculture sector

- The investment trend is positive, with 55% of GVA in the agriculture sector used for capital investments (compared to 31% for EU 24).
- The unmet demand for finance of the Swedish agriculture sector in 2017 is estimated at EUR 148 million
- An individual Swedish farmer receives substantially higher average bank loan amounts compared to the average amount received by a farmer in EU 24.
- The main share of investments within the sector were directed towards machinery (33% of investments) and buildings and stables (25%) in 2018.
- Investments are largely driven by farmers up to the age of 50 years.
- In general, access to finance is not considered to be a problem by Swedish farmers. The rejection rate for bank loan applications by farmers is low, representing about 3% of total applications.
- The main reasons for rejection are (i) the unsatisfactory management of the farm; (ii) the low repayment ability/cash flow; (iii) the lack of confidence and knowledge of the farmer of financial products; (iv) banks' difficulties in assessing farm viability (e.g. due to its legal form), and (v) to a limited extent, a lack of collateral.
- Access to land is considered a problem by 10% of the farmers. High land prices affect demand for finance and also slow down the transition of farms between generations.
- CAP support enables farmers to undertake more and larger investments in their businesses than what would have been otherwise possible.

### 2.2.1 Drivers of total demand for finance

**There was a moderate increase in the Gross Value Added (GVA) and factor income between 2013 and 2017, whereas 2018 was a peculiar year.** Between 2013 and 2017, the crop output increased marginally, whereas the animal output trend decreased (Figure 5). Nevertheless, both the factor income and the GVA have had a positive development between 2013 and 2017, with a drop in 2018.

In 2017<sup>34</sup>, the production value at current basic prices increased by 10% compared to the previous year. The increase in the value of crop output was 11% and the corresponding increase in animal output was 9%. Dairy production, which is of vital importance to the Swedish agricultural economy, experienced an increase in production value of 22%. The main driver behind this change was the increasing sale prices for milk.<sup>35</sup> However, the effects of the positive development of production value in 2017 were dampened by increasing input prices. According to the *fi-compass* survey, the main difficulties experienced by Swedish farmers during 2017 were first and foremost connected to growing costs of production, as responded by 21%, followed by

34 As the *fi-compass* survey was carried out for year 2017, measuring demand trends for finance among farmers, this year is considered relevant as a year of comparison.

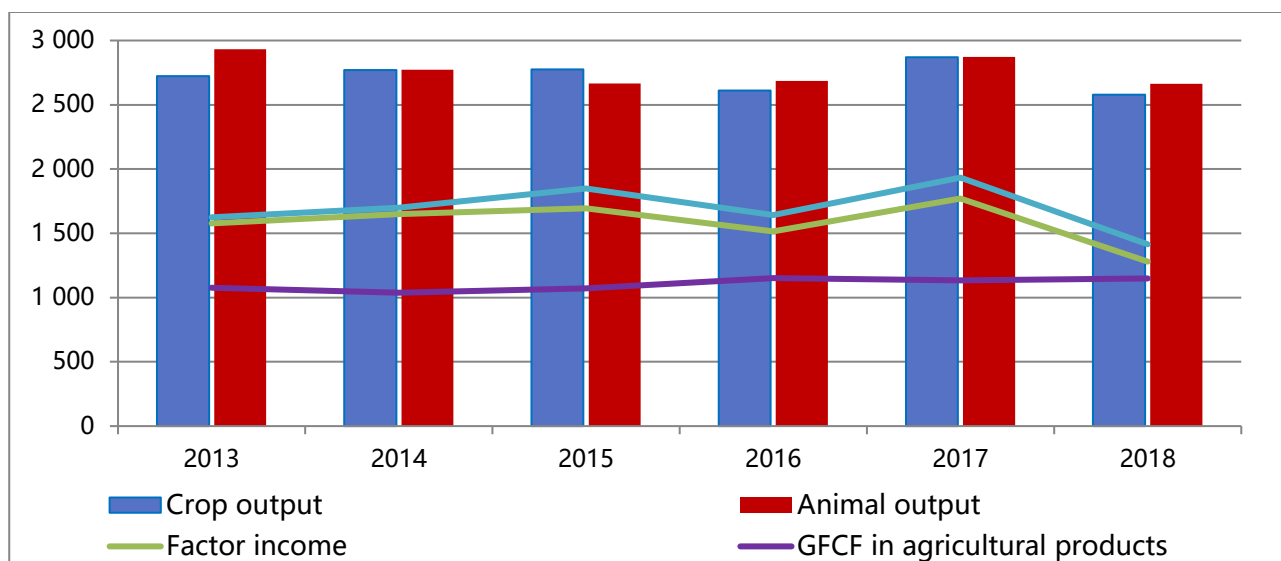
35 Economic Accounts for Agriculture, 2019.



selling prices (15%). In comparison, for the EU-average farmer, 47% answered that they were facing difficulties with costs of production and 38% with selling prices.

As previously mentioned, 2018 was greatly affected by the drought and, at the same time, by the falling exchange rate between the EUR and the SEK. The value of total production at current prices decreased by 3% compared to 2017. Value of crop output decreased by 4% and animal output decreased by 1%. Costs for foodstuffs increased by 16%. There was an increase in slaughtered cattle (4%), and slaughtered pigs (3%), compared to 2017, and prices decreased for both segments. Factor income dropped by 23%, compared to 2017, and entrepreneurial income decreased by 45%.

**Figure 5:** Gross Fixed Capital Formation in the Swedish agriculture sector, 2013-2018, EUR million



Source: *Economic Accounts for Agriculture, Statistics Sweden, 2019.*

**Overall, there is a healthy and positive investment climate in the Swedish agriculture sector, with a large share of the GVA being devoted to investments in tangible assets.** The Gross Fixed Capital Formation<sup>36</sup> (GFCF) development has been rather stable over the past years and amounted to EUR 1.05 billion in 2017, the year covered by the *fi-compass* survey. In relation to the GVA - EUR 1.91 billion in 2017 - the investment climate appears very positive, with 55% of GVA used for capital investments, compared to 31% for the EU 28 average. Both banks and farmer organisations confirmed that when the sector is doing well, farmers tend to want to invest, even though these do not pay dividends until a number of years later (when the market conditions may have changed).<sup>37</sup>

**The total outstanding loan volume trend for the agriculture and forestry sector is positive, reflecting a positive investment trend.** The total outstanding loan volume to the agriculture and forestry sector stood at EUR 32.3 billion at the end of 2018. Approximately 50% of the total outstanding loan volume can be attributed to agricultural activity.<sup>38</sup> However, as discussed in section 2.1, many of the farms have both agricultural and forestry activity and it is, therefore, difficult to make a distinction between the two sectors. Since 2008, and up

36 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.

37 Interviews with banks and farmers unions, 2019.

38 Interviews with banks, 2019.

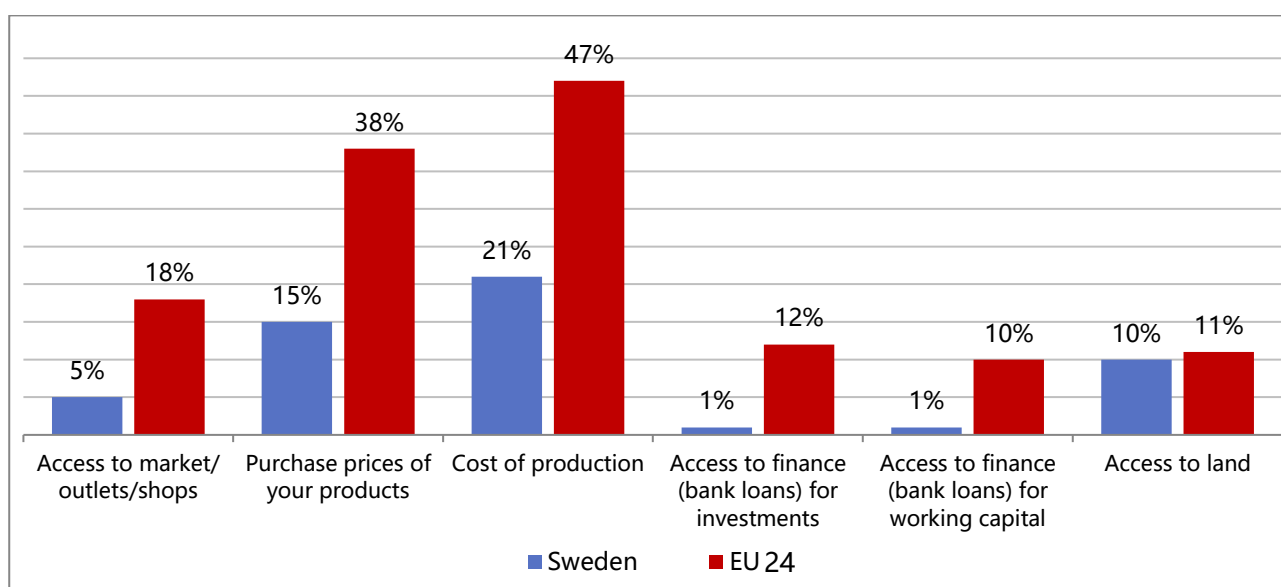


to and including 2018, total outstanding loan volume has increased by approximately 78%.<sup>39</sup> Hence, the positive growth of finance provided to the agriculture sector shows a stable and positive investment trend (See section 2.3 for more details).

**There are relatively low debt levels in the agriculture sector.** The Loan to Value (LTV)<sup>40</sup> ratio is, in general terms, very low for farms in Sweden at around 37% on average.<sup>41</sup> Large-sized farms often have a much higher LTV and loan amounts applied for are also higher. In general, as the number of farms has decreased and as farm units have grown larger, the LTV in the sector has been increasing.<sup>42</sup>

**In general, Swedish farmers experience fewer problems than other farmers in the EU 24,** particularly with regard to access to finance (Figure 6). Only 1% of farmers in Sweden considered access to finance for investments and working capital to be problematic, compared to the EU 24 averages of 12% and 10%. Even when compared to other Scandinavian countries this result is very low (6% and 4% for Denmark, and 10% and 8% for Finland). The only issue where Swedish farmers were on par with the EU 24 is with regard to the access to land, with 10% of Swedish farmers considering it a problem, compared to 11% for the EU 24.

**Figure 6:** Difficulties experienced by farmers in 2017



Source: *fi-compass survey*.

**Investments in the Swedish agriculture sector, and the associated finance demand, are mainly driven by the following factors:**

- (i) Investments to increase efficiency and reduce costs, driven by large-sized farms (mostly in machinery, but also in buildings and facilities).
- (ii) Investments for purposes of income diversification, driven by small-sized farms (mostly in machinery, which, in addition to serving their own farm, allows farmers to provide contract services to other agricultural producers or to local communities).
- (iii) Young farmers' investments in buildings and machinery.

39 Calculated from figures in Lantbruksbarometern 2018, their figures based on the banks reporting of total outstanding loans to the agriculture and forestry sector, including estimations of private financing through friends and family, and composed by Swedbank, Sparbankerna and LRF consult.

40 The loan-to-value (LTV) ratio is a financial term used by lenders to express the ratio of a loan to the value of an asset purchased.

41 Interviews with banks, 2019.

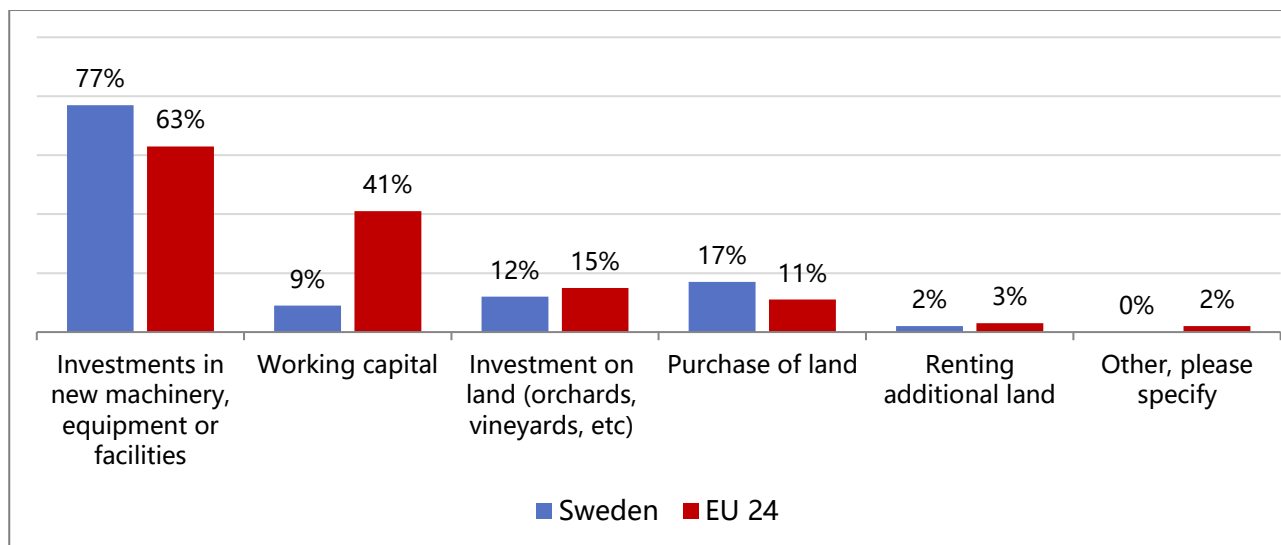
42 Interviews with banks, 2019.



- (iv) Reaching EU standards for certain farms and animal welfare.
- (v) The purchase of land.

**The demand for finance for investments in tangible assets is significantly more important than the demand for working capital.** Bank loans are mainly used for investments in new machinery, equipment and facilities (77% of the loans obtained were used for this purpose, according to the *fi-compass* survey), rather than for working capital (9%). About 17% of Swedish farmers use bank loans to purchase land, which in turn becomes a driver of finance demand. In addition, 12% of the loans were used for investments on land to improve its quality (Figure 7).

**Figure 7:** Purpose of bank loans in the agriculture sector, 2017



Source: *fi-compass* survey.

**There were increasing investments in machinery in 2017, as farmers looked to increase their efficiency and diversify their income sources.** According to *Lantbruksbarometern*<sup>43</sup>, a survey carried out annually among 1 000 Swedish farmers by the Swedish Farmers Federation together with Swedbank and Sparbankerna<sup>44</sup>, 38% of the farmers invested in machinery in 2017 and the trend has been increasing since 2013. In 2018, farmers were advised to postpone their investments as a measure to cope with the extreme conditions that prevailed during that time.<sup>45</sup> The share of farmers that invested in machinery, therefore, decreased to 33% in 2018, according to *Lantbruksbarometern*.<sup>46</sup> Among indirect agricultural assets, machines and other equipment occupy most of the investment space, equivalent to EUR 472.5 million in 2017<sup>47</sup>, and thus constitute the largest driver of finance demand. The investments in machinery increased for all sub-sectors in 2017. In total, two-thirds of the pork producers (67%) reported investing in machinery, compared to 49% for dairy producers, 41% for beef producers, and 33% for crop producers. Compared to the previous year, machinery investments in 2018 decreased by 20% for pork producers, by 4% for dairy producers, by 11% for beef producers and by 2% for crop producers.<sup>48</sup>

43 Swedbank, 2019, <https://online.swedbank.se/ConditionsEarchive/download?bankid=1111&id=WEBDOC-CID-2602939>.

44 The survey has been carried out annually since 1987 with the purpose of capturing the farmers' perception of their economic situation. The survey is carried out during the first half of January, and contains questions both regarding the previous year, and about the coming year, in order to capture the main trends of the agriculture sector.

45 Interviews with farmers unions, 2019.

46 *Lantbruksbarometern*, 2019.

47 Eurostat, 2019.

48 Calculated from figures in *Lantbruksbarometern*, 2019.

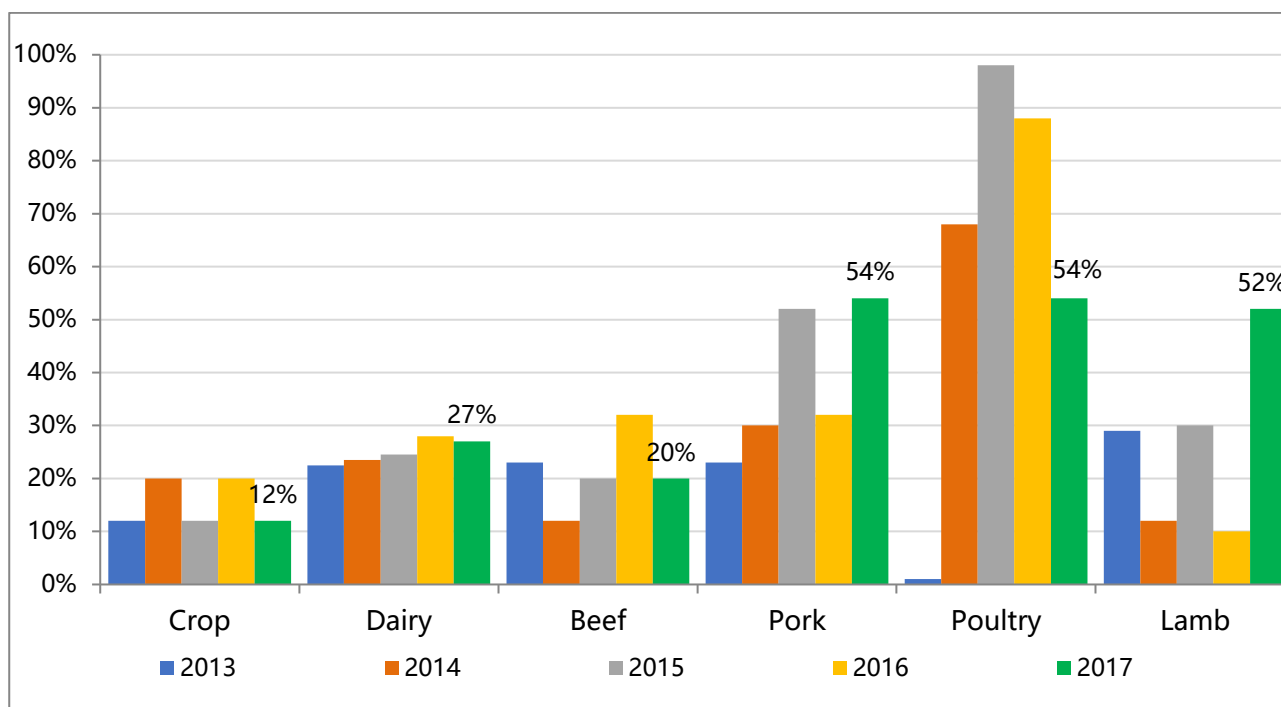


One way small-sized Swedish farms diversify their income is by offering contractual services to other farms and communities. This can require the purchase of additional equipment and machinery.<sup>49</sup>

**Investments in buildings are undertaken in order to modernise the facilities, increase the efficiency of production and improve animal welfare.** Besides machinery, investments in buildings are another major driver of finance demand. The share of farmers having invested in buildings for the year 2017 was 21%. This represents a 2% decrease compared to the previous year. However, overall, this investment trend has been increasing since 2013 and in 2018 total investments in buildings reached 25%.

Looking at building investments by sub-sector, pork, poultry and lamb clearly dominate in the recent years (with 52-54%; Figure 8), with dairy gradually growing and eventually reaching its maximum level (of 27%). In 2018, however, investments in buildings by pork producers decreased by 11%. Importantly, only 12% of crop producers invested in buildings in 2017, which is even lower than the 11% level in 2018.

**Figure 8:** Building investments per production branch, including animal stables, 2013-2017



Source: Lantbruksbarometern, 2018.

**Dairy and pork producers are investing in stables, and the investment trend is highly positive.** For investments in stables, pork and dairy producers are driving the trend, with 19% and 18% of the producers, respectively, reporting that they had invested in stables in 2017. Further, 23% and 16%, respectively, reported that they planned additional investments in 2018. This is the highest number reported since the survey started, which shows strong optimism in both sub-sectors.<sup>50</sup> In 2018, the actual level of investments in stables was 32% for pork producers and 23% for dairy producers. As investments in buildings and stables are planned in advance, they are not immediately affected by unexpected circumstances.<sup>51</sup> Many farmers view investments in buildings and production as being too costly and burdensome, and so they continue to use their farms without making the necessary investments. Additionally, other investments, such as those required to comply with animal welfare requirements, lag behind.<sup>52</sup> The above factors indicate that when young farmers take over

49 Interviews with farmers union, 2019.

50 Lantbruksbarometern, 2018.

51 Interviews with farmers union, 2019.

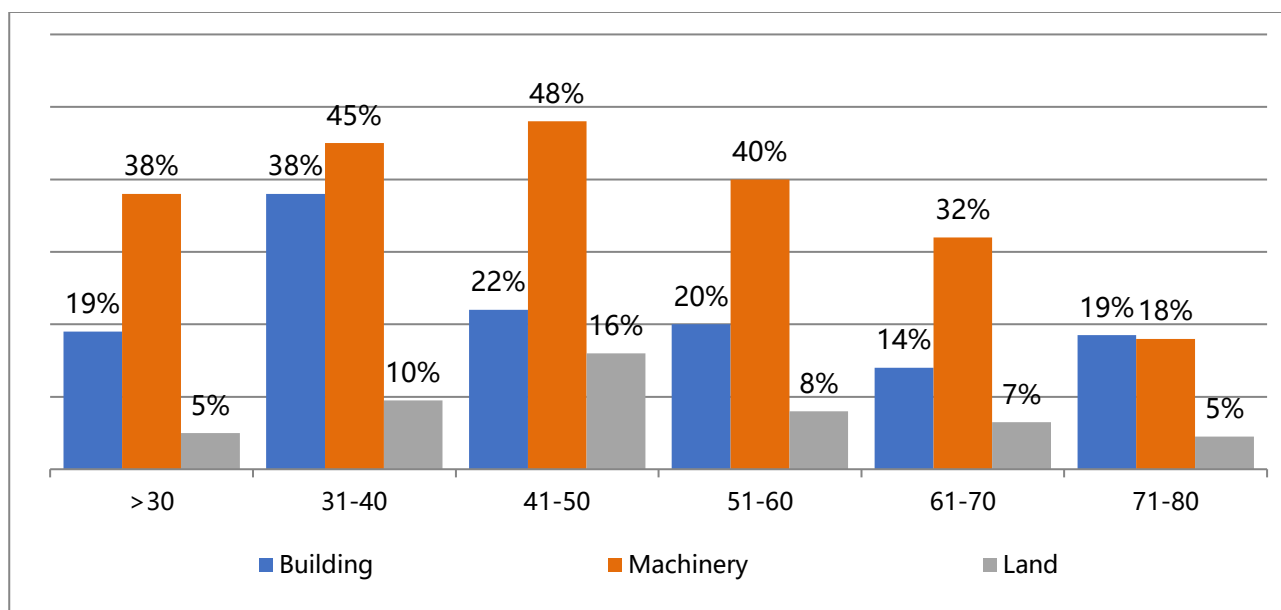
52 Interviews with farmers union, 2019.



a greater share of the sector, investments in buildings have the potential to become the main driver of finance demand.

With regard to investments by age groups, **investments in machinery are driven by farmers in the 41-50 years old age group**, followed by those in the 31-40 year old group (**Error! Reference source not found.**). **Farmers aged 31-40 years old are driving investments in buildings**, whereas investments in land are more evenly distributed among the age groups, with a prevalence in the 41-50 year old age group. This trend can likely be explained by the difficulties of younger farmers in accessing land. Almost 70% of farmers in Sweden are more than 50 years old.<sup>53</sup>

**Figure 9:** Investments undertaken in relation to age (years), % of total farmers for the age category



Source: Lantbruksbarometern, 2018.

**Prices for arable land have an impact on the demand for finance.** In general, land prices have increased significantly in recent decades, even faster than inflation, which has affected the demand for finance for the purchase of land.<sup>54</sup> Still, prices vary significantly across the country.<sup>55</sup> Land with fertile soils and high productivity are located in the south and yield very high prices, followed by counties in the middle of the country. Northern land, which is relatively unproductive, is the cheapest. The market value of the agricultural properties also depends on the number of other operating farms in the area. Regions with clusters of farmers generate a higher price on arable land and properties.<sup>56</sup> For the year 2017, land prices increased by an average of 10% throughout the country (Figure 10).

53 Federation of Swedish Farmers, 2015, Kapital till jordbruket – varifrån och till vem.

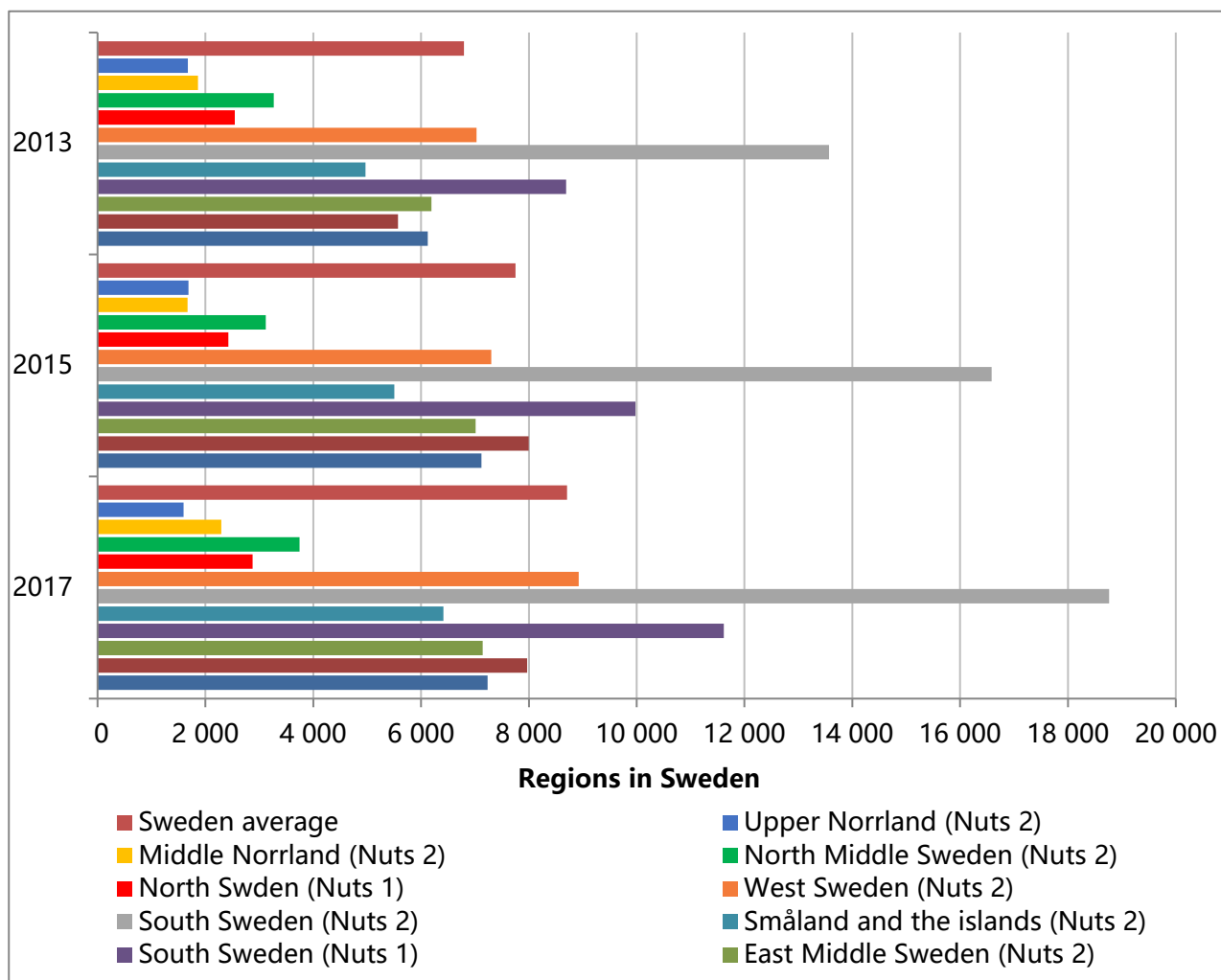
54 LRF Ungdomen och Länsförsäkringar Skåne, 2019, 'Vem har råd att ta över garden?' En undersökning kring generationsskifte i det svenska lantbruket.

55 As a great part of agricultural land is classified as 'Areas with Natural Constrains' as previously described in Section 2.1.

56 Interviews with farmers union, 2019.



**Figure 10:** Prices for arable land in Sweden, 2013-2017, EUR per hectare



Source: Eurostat, 2020.

**Young farmers and new entrants require substantial start-up capital in order to access land.**<sup>57</sup> The demand for finance is, therefore, higher for this group. However, it also makes them more financially vulnerable, reducing their economic margins and repayment capacity.

**Support from the Common Agricultural Policy (CAP) facilitates farmer’s access to bank loans by acting as a guarantee to the banks.** It provides farmers with the opportunity to make investments in their business that they would otherwise have not been able to make.<sup>58</sup> Sweden’s direct payment allocation for 2014-2020 amounts to EUR 4.9 billion, which is approximately EUR 700 million per year. The amount of support determines the amount that can be borrowed from financial institutions by acting as a guarantee. Furthermore, it provides liquidity at a time of year characterised by high costs (for seed, fertilisers, pesticides, foodstuffs, salaries to personnel etc.) and low revenue. When it comes to guarantees for working capital, support to farmers from the CAP can be pledged (for the ‘EU-credit facility’<sup>59</sup> product, see section 2.3.1.2) and banks in Sweden can lend up to 80% of the total of the granted and pledged support amount, subject to individual credit analysis.

57 Interviews with farmers union and banks, 2019.

58 Interviews with farmers union, 2019.

59 The EU-credit facility is a specific bank loan for farmer. While most farmers seek and obtain various grants from the CAP, the application process for the subsidies is sometimes long. The EU-credit facility is a special loan that may correspond to a maximum of 80% of the total CAP subsidies, subject to individual credit assessments. When the grant is paid in full or in part, the loan is repaid accordingly.





**Most of the investment support from the Rural Development Programme (RDP) was used for investments in new or modernised stables and farmers below 44 years old have benefitted from almost 40% of the support.** The total budget for the RDP, including national co-financing, is EUR 4.4 billion for the 2014-2020 programming period. The total planned budget for farm investment support, sub-measure 4.1 of the RDP, is EUR 274.1 million for the 2014-2020 programming period, which is 6.7% of the total RDP budget. The support is aimed at increasing the competitiveness of the agriculture, horticulture and reindeer herding sectors, and the number of targeted enterprises for the support amounts to 3 500. In accordance with the monitoring report from the Swedish Board of Agriculture, by 2018, 42% of the total budget had been paid out and 33% of the goal, in relation to the number of enterprises, had been reached.<sup>60 61</sup> Divided into sub-sectors, 39% of the support had been granted to beef production, 34% to milk production, 8% to crops and 6% to poultry and pork production, so far. In total, the number of investments supported so far amounts to 2 004 and occurred mostly in new or modernised stables.<sup>62 63</sup> The most common investments relate to new, renovated and extended livestock stables for all cattle (milk and meat production), as well as, for example, fixed furnishings/equipment for buildings, investments in greenhouses, gardens, reindeer husbandry, feed handling, cultivation tunnels, beehives and drainage facilities. In 2018, 39% of the beneficiaries of the investment support paid out were below 44 years old and 80% of the firms were registered as sole proprietors.<sup>64</sup>

**The existence of investment support generates more investments and encourages farmers to make larger investments.** As a general rule, the farmer can receive up to 40% in compensation (i.e. grant) for investments that meet the criteria for support.<sup>65</sup> The investment support generates more investments and encourages farmers to make larger investments.<sup>66</sup> It also steers the investments undertaken in a certain, desired direction. Farmers are well informed about the support for which they can apply for, however many find the application process complicated. The direct payments, which are applied for on a yearly basis, are easier to administer for the farmers due to their experience with the program. However, for investment support, which is applied for on a single occasion, large-sized farms tend to rely on the expertise of a consultant for their applications.<sup>67</sup>

**Support to young farmers gives them a smoother start to their new business operations, but in some regions the budget for such support has run out.** Under sub-measure 6.1, the Swedish RDP addresses the need to contribute to the generational renewal in the agriculture sector. The total budget for start-up assistance for the 2014-2020 programming period amounts to EUR 16.1 million, constituting 0.37% of the total RDP budget. The measure is aimed at entrepreneurs below 40 years old that have not been previously engaged in the agriculture sector. Applicants must be able to show a business-plan covering 3 years and have sufficient professional skills and professional qualifications. The goal is to grant support to 550 enterprises for the full 2014-2020 programming period. Up until 2 April 2018, the number of applications received was 787, out of which 246 had been granted. Rejected applications amounted to 280. Approximately 50% of the total funding planned for had been paid out.<sup>68</sup> Support to young farmers gives them leeway in the new business before they need to generate profits. Since a specific budget is allocated to each region, some regions with

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

61 Swedish Board of Agriculture, 2019, Utvärderingsrapport.

62 Ibid.

63 Between 2015 and 2017, 3 773 applications were made, and the total requested amount was SEK 4.5 billion. 2 004 applications were approved, and the budget approved was SEK 1.5 billion. According to the Paying Agency, only a few of the applications that were not approved was due to the lack of budget, the principal explanation for not approving applications were that they did not comply with the requirements.

64 A small portion of the expenditure for this measure is earmarked for renewable energy (2.84% of the total measure budget) and 3.2% of the budget is set aside for reduction of carbon dioxide and ammoniac emissions.

65 Conventional field machinery is not eligible for investment support, nor is leasing, irrigation or investments in engines running mainly on fossil energy.

66 Interviews with farmers union and banks, 2019.

67 Interviews with farmers union, 2019.

68 Swedish Board of Agriculture, April 2018, Startstöd till unga företagare, en uppföljning av stöd inom landsbygdsprogrammet 2014-2020.



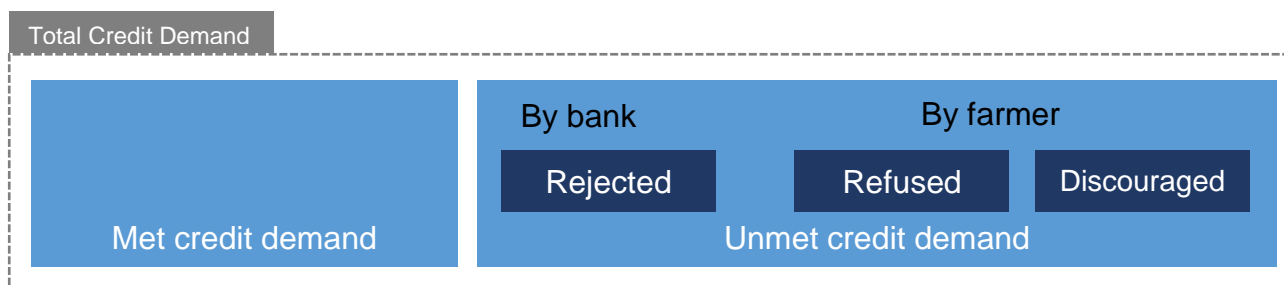
many young farmers have already run out of budget. This is a concern to many farmers who meet the conditions for seeking funds but who belong to a region where the budget has run out.<sup>69</sup>

**Young beef and dairy producers benefit most from the EAFRD start-up support.** Young farmers from all over the country submit applications for the support, but there are fewer applications from those in the northern parts of the country. So far, the most common beneficiary of support is engaged in beef production (27%), followed by dairy production (24%), and thirdly crops (19%).<sup>70</sup> Among those who have been granted support from this measure, 36% have taken over an already existing family business, and 41% have started a new business. Young farmers can also apply for and be granted other forms of RDP support, such as the investment support reported on above.

## 2.2.2 Analysis of the demand for finance

The potential total demand for finance combines both met and unmet demand. The met demand consists of the value of all applications for finance which were accepted by the financial institutions in the relevant year. The unmet demand consists of the assumed value of applications rejected by a financial institution, offers of credit refused by farmers, alongside cases where farmers are discouraged from applying for credit due to an expectation of rejection or refusal (Figure 11).

**Figure 11:** Schematic overview of the demand side of agriculture sector



Source: Ecorys, 2019.

**Based on the results of the *fi-compass* survey, the unmet demand for the agriculture sector in Sweden is estimated at EUR 148 million.**

**In Sweden, considerably fewer farmers apply for bank loans, compared to the EU 24, but they receive fewer rejections.** According to the *fi-compass* survey, only 13.2% of the Swedish farmers applied for finance in 2017, compared to almost 30% for the EU 24. This is very low, even when compared to other neighbouring Scandinavian countries; for example, in Finland and Denmark, 42.7% and 45%, respectively, of farmers applied for financing in the same year. Also, it should be noted that approximately 92% of the Swedish farmers considered that they had sufficient internal/own funds to undertake the investments considered necessary (compared to approximately 75% for the EU 24), and a higher share of Swedish farmers (approximately 11% compared to 9.5% for the EU 24) stated that they already had taken out a loan before 2017 which had been sufficient. Therefore, it is unsurprising to see that the share of Swedish farmers applying for finance was lower than for the EU 24 as a whole.

**Private financing from friends and family plays a limited role in Sweden.** Swedish farmers finance their activities almost entirely via the banking sector and do not need to rely on private funding. Only 1% of the respondents said they asked friends or family for financing in 2017. According to Lantbruksbarometern, approximately 2.4% of the total outstanding credit to the agriculture and forestry sector are loans provided by friends and family. Additionally, the undervaluation of agricultural property compared to the market value, in

69 Interviews with farmers union, 2019.

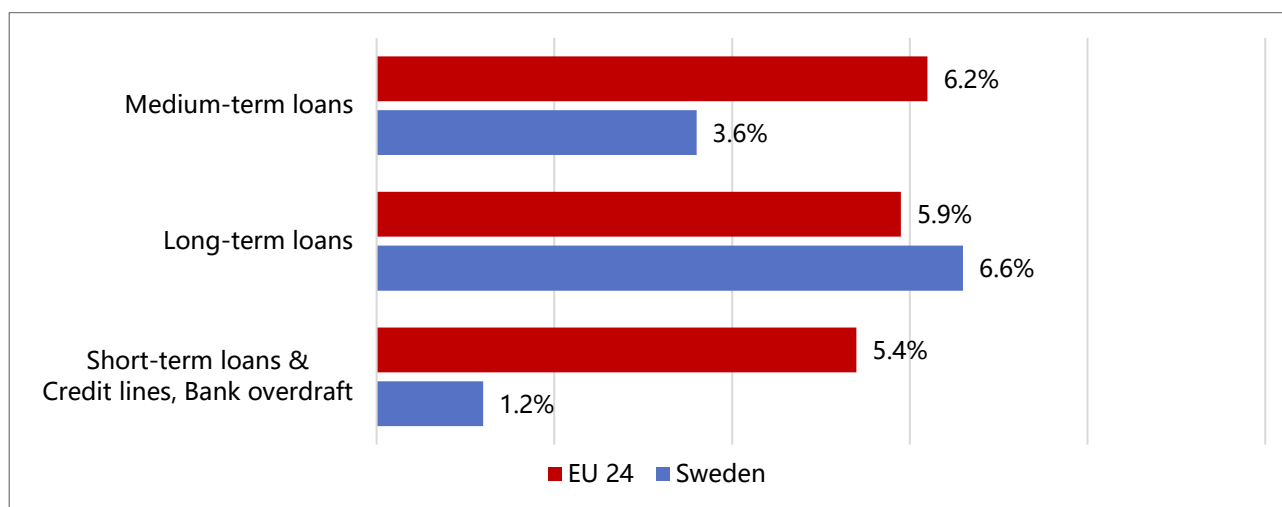
70 Swedish Board of Agriculture, 2019, Utvärderingsrapport.



order to make a generational transition possible in regions with high land prices, could be regarded as a type of private funding, even though it does not appear in any official statistics.<sup>71</sup>

**Swedish farmers applied for long-term loans to a relatively higher extent than the EU 24**, with 6.6% compared to 5.9% for the EU 24, according to the *fi-compass* survey. On the other hand, applications for medium-term loans and short-term loans from Swedish farmers were far lower than the EU 24 average (Figure 12). According to interviewees, farmers do apply for working capital credits from time to time but especially in the start-up phase related to a generational transition. Another source of funding when it comes to capital for investments is forestry. As discussed, many farms in Sweden rely on both agricultural and forestry activities. It is not uncommon for agricultural investments to be financed through the profits generated by forestry activity, or by selling off part of the forest land.

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



Source: *fi-compass* survey.

**The strong vertical integration<sup>72</sup> of the sector, due to the importance of agricultural cooperatives, means that demand is lower for working capital loans from banks.** In Sweden, there is a tradition of farmers funding themselves via credit lines from suppliers of fertilisers, feeding stuff, seeds etc. The strong role of agricultural cooperatives reduces the need for working capital finance from banks since the cooperatives provide advance payments to the suppliers. According to *Lantbruksbarometern*, outstanding credits to suppliers in 2017 were estimated to represent approximately 0.9% of the total outstanding credits to the agriculture and forestry sector.

Farmers use this channel because they believe that the costs for short-term finance via bank loans are higher than for supplier credit lines (even if the interest rate from the supplier is higher, there may be other costs involved with the banks). It was also suggested that, in order to obtain supplier credit lines, much less administration is required from the farmer (e.g. a business plan).<sup>73</sup> Another reason is that the relationship between the supplier and the farmer is often much closer than that of the bank and the farmer.<sup>74</sup> Furthermore, the use of credit lines from suppliers acts as a substitute for bank loans due to poor economic decisions previously taken, making it more difficult to access bank loans today. For some farmers, there may even be

71 Interviews with farmers union, 2019.

72 For example, beef producers' agreements with slaughterhouses mean they can place cattle at a farm if the farmer cannot invest in a full-scale herd. The cattle are fed and sheltered by the farmer up until slaughter, or, if it is a heifer, the slaughterhouse will take the first offspring and the cow at a later stage.

73 Interviews with farmers union, 2019.

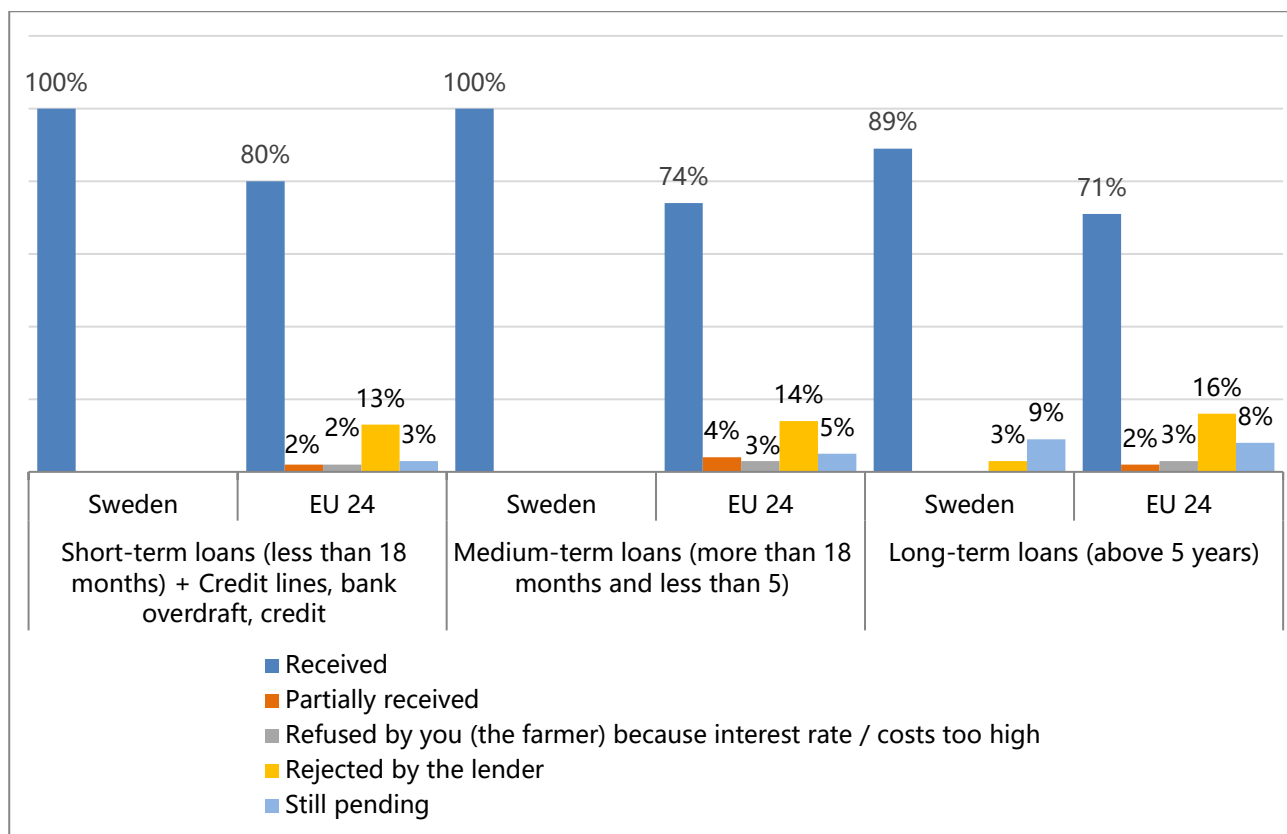
74 Interviews with farmers union, 2019.



no other alternative.<sup>75</sup> By using a granted but not yet paid-out subsidy as a guarantee for lending (see section 2.3.1.2 for a description) banks try to convince farmers to borrow money instead of relying on the credit lines with their suppliers.<sup>76</sup>

**The rejection levels of loan applications are very low. Among all rejections, the dairy sector has the highest share.** The success rate on applications for funding from Swedish farmers is 100% for short-term loans and medium-term investment loans according to the *fi-compass* survey. Only for long-term loans do a small portion of rejections from lenders occur (3%), while 89% of the applications are successful (9% of applications were still pending when the survey was conducted). For the EU 24 on average, between 13% and 16% of applications were rejected by the lender, depending on the maturity of the loan (Figure 13).

**Figure 13:** Result from applications for finance in the agriculture sector in 2017



Source: *fi-compass* survey.

According to Lantbruksbarometern, 4% of the Swedish farmers were rejected for a loan application (regardless of maturity) in 2017, compared to 2% in 2016. The *fi-compass* survey discovered a 3% rate for 2017. These rather similar ranges hide an important aspect of the agricultural financing in the country – the differences between sub-sectors is substantial. About 9% of the dairy producers and 6% of the beef producers had their applications rejected, whereas none of the pork producers reported having their credit application rejected (a sharp decrease from 6% from 2016).

According to the *fi-compass* survey, no loan offers are refused by farmers in Sweden due to the high-interest rate levels offered by the banks or because the cost of the loan is considered too high. This is a difference with EU 24, where some 2-3% of the loan offers are refused by farmers due to the above two reasons.

75 Interviews with farmers union, 2019. During the 1990s, farmers applied for financing from banks to expand the farm business, but costs for additional livestock was not included in the calculations. Many of these farms ended up frequently using credit lines from suppliers to compensate for the lack of access to bank financing, and it is difficult to break the pattern. It was argued that this is a structural phenomenon specific to Sweden.

76 Interviews with banks and farmers union, 2019.



**According to interviews, the reasons banks reject loan applications are** (although not necessarily in the order of importance):

- The management of the farm is not considered satisfactory;
- Difficulties from banks in assessing farm viability (legal form and knowledge);
- Lack of confidence and knowledge of financial products of the farmer;
- Farmers' repayment ability/cash flow is too low;
- Lack of collateral.

In addition, the relationship between the farmer and the bank, and the lack of confidence in their business, particularly among those run by young farmers, as well as the legal form of sole proprietor rather than limited company liability, constitute obstacles for some farmers in receiving credit from banks.

Several stakeholders stressed the **importance of professional farm management in ensuring access to finance from banks**. From time to time, and before making a loan, banks carry out physical due diligence at the farm, which may demonstrate management's capability.<sup>77</sup> The responsibility of a farm rests heavily on one or a few individuals, whereas normally for SMEs in other economic sectors, responsibilities are divided between a board of directors and management. Also, as a general rule, the loan amounts given to agricultural entrepreneurs are higher than for other SMEs. The combination of these two factors makes professional management vital for the survival of the farm and its financial stability.<sup>78</sup>

**Lack of credit history was not considered to be a major obstacle to accessing credit as long as the farmer has a track record of successful farm management.** In Sweden, the lack of credit history is not a frequent reason as to why banks reject finance applications from farm enterprises.<sup>79</sup> In the process of the generational transition, and as a means of resolving the property-price issue, the younger generation, in many cases, runs the farm while the elder generation remains in ownership. Hence, when the young farmer takes over the farm from their parents, they already have a track record of running the enterprise. In the case of new entrants, it is very difficult to have the opportunity to own a farm unless there is property within the family. Therefore, this category of potential farmers is likely to suffer more from banks' reluctance to provide loans to entrepreneurs who lack credit history, but this was not an obstacle pointed out by stakeholders. The banks stressed the importance of a track record in the management of the whole farm, including financial issues, practical issues, handling of employees, etc., rather than just a track record in credit history. As already mentioned in section 2.2.1, the combination of a relatively low level of profitability and high land prices can make it difficult to develop a viable business case, creating an additional difficulty in accessing finance for new entrants.

**Young farmers and dairy producers experience more difficulties than others in repaying bank loans.** According to the farmers' associations and bank stakeholders interviewed, the main concern with regard to access to finance for Swedish farmers is the sector's profitability and the farmers' repayment ability. In Sweden, there are no legal requirements for amortisations on farm mortgages. This creates headroom for future investments in the value of mortgage deeds and ensures that the liquidity of the enterprise will continue to be sound into the future when new investments are needed to develop the farm. This is accepted by the lion's share of farmers.

Also, the banks do not expect agricultural real estate mortgages to be repaid in full as long as the owner remains the same.<sup>80</sup> In the interviews, banks and farmers argued in favour of not implementing legal

77 Interviews with farmers union, 2019.

78 Interviews with farmers union, 2019.

79 Interviews with banks and farmers union, 2019.

80 In 2016 June 1 amortisation requirements were introduced on the Swedish mortgage market. Those requirements were amplified in 2018. However, the requirements were not applied to loans with a farm property used as collateral. Amortisations on such loans are requested on banks initiatives, not on the initiative from any governmental body. A bank loan with an agricultural property (or a residential property) as collateral in practice often can have a duration as long as the individual borrower's lifetime. In comparison, in Finland or in Denmark, such loans are amortised and fully refunded in perhaps 10 years.

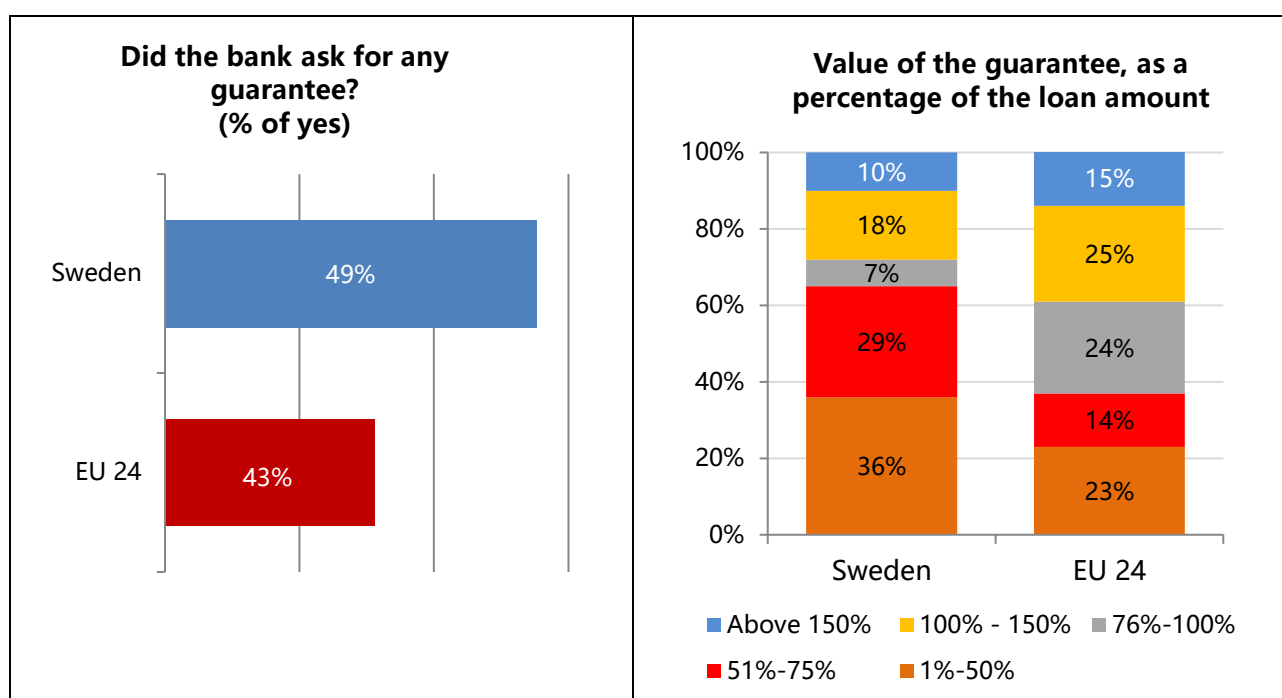


requirements for amortisations on farm mortgages.<sup>81</sup> Still, the banks themselves need to adjust to the common rules for capital adequacy and risk management within the EU. In addition, banks in Sweden are rather risk-averse and strongly encourage farmers to include amortisations in their business plan.<sup>82</sup> In times of crisis, such as the drought in 2018, banks may have the possibility to provide amortisation relief to the farmer.<sup>83</sup> The ‘voluntary’ amortisation plans might be considered as an opportunity for short-term funding on extreme occasions. Among Swedish respondents to the *fi-compass* survey, 59% answered that they had managed to negotiate the terms and conditions of the loan, such as for example a new amortisation plan, with the bank, compared to the EU 24 average of 52%.

According to *Lantbruksbarometern*, 8% of the farmers asked to postpone or decrease the level of their repayments for the year 2017, an increase of 2% compared to the previous year. The majority of those asking for postponement were farmers between 31 to 40 years old. When looking at a breakdown by sub-sectors, 12% of the dairy producers and 5% of the pork producers asked to postpone their repayments.

**Compared to the EU 24, Swedish farmers have lower collateral requirements and better overall lending conditions.** The *fi-compass* survey also investigates the use of guarantees for bank loans; (i) if guarantees are requested from the bank, (ii) the value of the guarantee demanded, and (iii) the type of guarantee used. In Sweden, 48.8% of the survey participants answered that the bank asked for a guarantee when applying for a loan, compared to 42.8% for the EU 24. The higher share for Sweden may be due to the fact that there is a higher share of long-term loans applied for than in other countries, which usually requires higher levels of collateral. When looking at the value of the guarantee requested, it is lower than the EU 24 average. 65% of the guarantees requested were for a value of below 75% of the loan value, while the corresponding value for the EU 24 was just 37%. Only 28% of Swedish farmers were asked to provide guarantees higher than 100% of the loan amount, compared to 40% for the EU 24 (**Error! Reference source not found.**).

Figure 14: Information related to guarantees requested by farmers, 2017



Source: *fi-compass* survey.

81 Interviews with banks and farmers union, 2019.

82 Interviews with banks and farmers union, 2019.

83 Interviews with banks, 2019.



**Banks' financing offer to the agriculture sector is better adapted to landowners as they can use the land as collateral.**<sup>84</sup> Nevertheless, a lack of collateral was not considered a major problem by stakeholders and neither banks nor farmers' associations considered it a real obstacle in access to finance. Furthermore, it was stated that lease holding farmers are often better at generating profitability in their farm enterprises than landowners, making them more attractive clients to banks. Additionally, the agriculture sector is better off in terms of access to collateral than many of the manufacturing sectors, including the agri-food sector, because of the access to agricultural real estate property that is commonly used as collateral. See section 3.2.2 for a further discussion.

**Farmers' lack of confidence in their business and the legal form of many farms negatively impacts their access to finance.** According to banks, 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 farmers being confident in the project and maybe already being known to the banker. According to interviews, young farmers, like new entrants/start-ups, do not have the same confidence as older farmers when visiting the bank.

With respect to the legal form of the farm enterprises, a much higher share are registered as sole proprietors (84%) rather than limited liability companies (aktiebolag), compared to SMEs from other sectors. When running a business in this legal form, there is a risk for information asymmetry as bank personnel do not have the same amount of experience when making an assessment of the conditions for such enterprises. Therefore, the risk of applicants being turned down for that reason exists. It is even more difficult for bankers to make credit assessments regarding a sole proprietorship. For stock companies, a lot of information is official and easily accessible, which simplifies the credit assessment process and thereby increases their accessibility to finance.<sup>85</sup>

**Provided the business is viable, however, access to finance does not seem to be a major concern.** Overall, the interviews conducted support the findings from the *fi-compass* survey – most banks are confident that farmers get access to the financing they need, provided their business is viable. However, some farm organisations in Sweden argue that there are other barriers to access to finance that need to be addressed in order to stimulate farm investments. Examples of such barriers include legal demands that contradict each other. There are governmental requirements on technical equipment that does not work in the harsh environment that the stables offer. Another example is problems with the time required to obtain environmental permits in an investment situation. The permit is given after pre-agreed loan permits have expired and/or conditions in the market have changed. In addition, the banks do not always understand the operations of agricultural businesses and their requirements.<sup>86</sup>

**Few farmers are discouraged from applying for finance due to a fear of being rejected by the banks.** According to the *fi-compass* survey, Swedish farmers do not hold back from applying for financing due to a fear of rejection by the banks. This was also confirmed by all stakeholders during our interviews. On average, and for all loan maturities in Sweden, 1.1% of farmers participating in the survey answered that they do not submit loan application due to a fear of being rejected by the bank, while in the EU 24 up to 10% withheld their loan application for this reason.

**Banks' lack of understanding of agricultural businesses may discourage farmers from proceeding with formal loan applications.** When farmers are to apply for a loan with a bank, they are encouraged to cooperate with the local bank branch office.<sup>87</sup> While local branches usually have unique expertise in local business conditions, their expertise in specific economic sectors may be limited. Therefore, they may need to turn to the specific department at the headquarters of the bank for more in-depth expertise.<sup>88</sup> However, it is up to the local branch to decide when to engage the internal department. Hence, it is the local branch that will discourage or encourage the farmer to submit a formal loan application. According to several farmers' associations, the local branches do not always understand the farming business and, therefore, discourage farmers from applying or

84 Interviews with banks, 2019.

85 Interviews with banks, 2019.

86 Interviews with farmers union, 2019.

87 Interviews with banks, 2019.

88 Interviews with banks, 2019.



reject any loan applications.<sup>89</sup> As the number of farms decrease, there is a risk that the understanding of agricultural businesses among bankers will decline further.<sup>90</sup>

**Technical support to both farmers and bankers is recommended, in order to increase the understanding on both sides.** Some farmers also lack an understanding of banks perspective, and some show a lack of competence in discussing financial and economic matters. According to interviews, this is particularly the case for young farmers, who are unaware of how to administer themselves and to what extent the bank can assist them.<sup>91</sup> The Federation of Swedish Farmers has undertaken an initiative to train farmers on management, including financial aspects, which are perceived as positive by stakeholders. As the farms grow bigger, and economic and financial matters get more advanced, additional training is needed. Particular focus on young farmers may be warranted, given their more limited experience in dealing with banks. Bank employees and financial advisers could take part in trainings in order to increase the understanding of the agricultural business model and its prerequisites.

89 Interviews with farmers' associations, 2019.

90 Interviews with farmers union, 2019.

91 Interviews with banks, 2019.





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

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

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

### Key elements on the supply of finance to the Swedish agriculture sector

- A wide range of financial institutions provide finance to the agriculture sector in Sweden and there is a large number of financial products adapted to farm enterprises.
- Interest rates on bank loans are very low due to the low key interest rate (Reporäntan) for the Swedish market and because of the competition between banks.
- Banks have a well-developed credit assessment process aiming at building a mutual trust relationship with the customer.
- There is no agricultural sub-sector that banks hesitate to finance. Regardless of the farming activity, the focus of the banks when assessing credit applications is on the management of the farm, repayment ability and LTV.
- The credit growth in the agriculture sector is on par with that of the economy as a whole.
- The total outstanding loan volume to the agriculture and forestry sector (including private financing and credit provided by suppliers) stood at EUR 32.3 billion by the end of 2018.
- Despite the overall well-functioning of the Swedish agriculture finance market, some constraints have been identified: (i) Finance institutions have difficulties assessing the repayment ability and management capacity of individual farms; (ii) some banks possibly have insufficient knowledge at local level, especially in regions with less farming activity; and, (iii) Swedish banks show high levels of risk aversion.

### 2.3.1 Description of finance environment and funding availability

#### 2.3.1.1 Finance providers

**Finance to the agriculture sector in Sweden is provided through a diversified network of finance providers.** The commercial banks have an important market share for finance to the agricultural producers, but the network of savings banks is even more important. Also, a mortgage association and an insurance company have important market shares of agriculture and forestry financing. Table 1 provides an overview of the outstanding credits to the agriculture and forestry sectors held by the various finance providers. This also includes credit lines by suppliers and private financing from friends and family. The total outstanding credit to the agriculture and forestry sector for the year 2017 was EUR 33.5 billion (equivalent to SEK 323 billion), see section 2.3.2 for a further discussion.



**Table 1:** Total outstanding loan volume to the agriculture and forestry sector by provider, 2008-2017, EUR million

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Market share 2017
Landshypotek	3 741	4 421	5 426	6 153	6 764	7 014	6 787	6 894	7 024	7 051	21%
Swedbank/ savings banks	6 304	6 971	8 064	9 058	9 883	10 378	10 489	10 784	11 146	11 235	34%
Danske Bank	825	898	1 022	1 222	1 312	1 347	1 346	1 362	1 603	1 762	5%
Nordea	1 226	1 360	1 582	1 896	2 034	2 047	2 040	2 040	2 070	2 024	6%
Länsförsäkringar Bank	749	1 230	1 662	2 075	2 443	2 616	2 682	2 565	2 667	2 782	8%
SEB	629	670	735	905	1 146	1 334	1 415	1 514	1 779	1 935	6%
Other banks/credit institutions	1 792	2 275	2 771	3 246	3 706	3 971	4 155	4 436	4 804	5 097	15%
Credit lines by suppliers	510	516	524	498	459	416	352	374	348	311	1%
Private financing from friends/ family	702	736	807	852	885	890	846	823	813	799	2%
Others	465	487	535	565	586	590	561	545	539	529	2%
<b>Total</b>	<b>16 945</b>	<b>19 565</b>	<b>23 129</b>	<b>26 469</b>	<b>29 218</b>	<b>30 603</b>	<b>30 674</b>	<b>31 337</b>	<b>32 793</b>	<b>33 527</b>	100%

Source: Lantbruksbarometern, 2018. Private funding and credits from suppliers are estimates. All other data is provided by the bank/financial institutions. \*Average annual exchange rate SEK/EUR used, see Annex A. 6.



Sweden was heavily influenced by the establishment of savings banks in Europe in the early 19th century and there are still numerous independent savings banks active on regional or local markets.

**Savings banks<sup>92</sup> control almost one-third of the financing market for the agriculture and forestry sector and are the preferred choice of financial institutions among farmers<sup>93</sup>** (including the market share of Swedbank, which is an independent commercial bank, but where the savings banks are one of the owners).<sup>94</sup>

**Table 2:** The ten largest savings banks in Sweden as of 31 December 2018

Name of the bank	N° of branches	Balance sheet total <sup>95</sup> (EUR billion) 2018
Sparbanken Nord	11	2.2
Sörmlands Sparbank	8	1.5
Sparbanken i Karlshamn	6	1.1
Orusts Sparbank	4	1.1
Westra Wermlands Sparbank	7	1.1
Sparbanken Syd	8	1.0
Falkenbergs Sparbank	4	1.0
Roslagens Sparbank	5	0.96
Sparbanken Västra Mälardalen	4	0.93
Sparbanken i Enköping	3	0.92
<b>Total</b>	<b>60</b>	<b>11.8</b>

Source: The National Federation of Independent Savings Banks and Sparbanken Syd. Author's calculations of Balance sheet total from SEK to EUR.

**A mortgage association controls about 21% of the market.** Created in the 19<sup>th</sup> century, Landshypotek Bank stems out of a cooperative tradition, where landowners jointly formed mortgage associations, offering loans to farmers with the farm property used as collateral, without any profit claims. Landshypotek Bank is among the 10 largest banks in Sweden today. It plays an important role in the agriculture sector with its network of 19 branch offices. Landshypotek is still member-owned and became a bank in April 2014. According to Lantbruksbarometern, it controlled about 21% of the financing market in the agriculture and forestry sector in 2017.

After the deregulation process and the financial crisis affecting Sweden in the early 1990s, **four commercial banks came to be almost equally strong and shaped the banking landscape.** 'The big four', as they are usually referred to, are: Handelsbanken; Nordea; SEB; and Swedbank. These four banks all started and developed in Sweden.

Nordea, however, moved its headquarters to Finland in October 2018 and then became by far the largest foreign bank in Sweden. They are important actors in most segments of the financial market, including the agriculture sector. The history of each bank is unique and hence their strategy and market share in different market segments diverge significantly. According to Lantbruksbarometern, both Nordea and SEB control approximately 6% each of the market. Swedbank is partly owned by the savings banks, whereby its market

92 Savings Banks are an element of the Swedish cooperation. They constitute a separate form of association, regulated in a separate law, the Savings Bank Act. The business is under supervision of a number of principals who appoint the bank's board.

93 Interviews with farmers union, 2019.

94 Lantbruksbarometern, 2018.

95 Average annual exchange rate was SEK/EUR 10.2567 for 2018.



share is reported together with the savings banks. The share of Handelsbanken is lower and is reported among the 'others' bank category in Table 1 above.

**Another player that provides finance to the agriculture sector in Sweden originates from a cluster of insurance companies.** Länsförsäkringar Bank consists of 23 independent companies, selling insurances mainly to the agriculture sector. Together they own an administrative centre, Länsförsäkringar AB, which calculates tariffs and develops insurance terms for all the independent companies. The bank, Länsförsäkringar Bank, was founded in 1996 and is owned by Länsförsäkringar AB. The bank was intended as a complement to the insurance offer, allowing customers to keep their most important economic transactions in the same company. According to Lantbruksbarometern, they control approximately 8% of the market.

**The role of foreign banks is increasing.** In December 2018, the number of foreign banks established in Sweden amounted to 36 (Table 3). Danske Bank is the second largest foreign bank in Sweden after Nordea and number five on the Swedish market. Danske Bank provides services and products for all types of customers. It also plays a role in the agriculture sector, especially after a number of mergers and acquisitions that culminated in 1997 with the merger of 17 regional Swedish banks. Danske Bank became the first foreign bank to have an extensive branch network in Sweden. The number of branch offices and their distribution is essential in order to reach the agriculture sector, as discussed in the demand for finance section of this report. Most other foreign banks focus on the corporate banking and securities market. According to Lantbruksbarometern, Danske bank controls about 5% of the agriculture market.

**Table 3:** Development of the bank market in Sweden, 2008-2018

Type of bank	2008 (December)	2018 (December)
<b>Swedish commercial banks</b>	21	39
<i>of which are big banks</i>	4	3
<i>of which former savings bank</i>	13	13
<i>of which other Swedish commercial banks</i>	4	23
<b>Foreign banks</b>	33	36
<i>of which subsidiaries</i>	4	1
<i>of which branches</i>	29	35
<b>Savings banks</b>	53	47
<b>Cooperative banks</b>	2	2
<b>Total</b>	<b>118</b>	<b>124</b>

Source: The Swedish Financial Supervisory Authority.

**A government credit institution offers financing without guarantee requirements but with higher interest rates.** Almi Företagspartner was founded in the mid-1990s as a governmental complement to existing private banks and financial institutions, with a focus on innovative entrepreneurs (available to many economic sectors, including agriculture). Their approach is to fund investments without requiring guarantees. In order to compensate for the higher risk, and to maintain their role as a complement to, rather than a competitor with, banks and financial institutions, the interest rate they offer is higher than normal market rates.

Almi Företagspartner is owned by the Swedish Government and is the parent company to 16 regional subsidiaries as well as the Almi Invest subgroup. According to interviews, the importance of Almi to the agriculture sector, from a financial perspective, differs from one region to another depending on the knowledge that the personnel working at the regional offices hold regarding farming activities and sole proprietor businesses.

As interest rates on loans provided by Almi are, in general, higher than interest rates offered by private financial actors, Almi is less attractive as a provider of financial solutions.



**The agricultural cooperatives, together with the farmers' union, have formed a credit institution, called *Tillväxtbolaget*.** It includes HKScan (meat producers), Lantmännen (cereals producers) and the Swedish Federation for Farmers (farmers union), who are seeking to increase the competitiveness of the Swedish agri-food industry. *Tillväxtbolaget* has existed in its current form since 2018 and provides loans, including mortgage loans, for investments in viable projects. In order to find suitable economic solutions, *Tillväxtbolaget* often arranges triparty discussions including:

- the farmer;
- representative(s) from the farmers' main bank;
- a representative from *Tillväxtbolaget*.

According to interviews, *Tillväxtbolaget* is currently involved in 8-10 projects. They have only existed in this form for a year, so they have not yet been able to take on a larger volume of loans.

**Suppliers' role in facilitating leasing.** Many banks provide leasing solutions and have their own subsidiaries specialising in that area. Some banks have a contract in place with an external leasing provider and can therefore include leasing in their product range. From a farmer's perspective, the matter of leasing can then be discussed with their ordinary bank contact. Leasing is a crucial product for banks competing on the Nordic market.

Cooperatives also work with leasing solutions in different forms. The Federation of Swedish Farmers' cooperative has agreements in place that allows them to offer beneficial leasing conditions to their members. Another cooperative in Sweden, Lantmännen, has their own division called Lantmännen Finans, which provides finance solutions for the leasing of machinery. In addition, there are financial institutions focused on leasing and finance solutions for the purchase of machinery and vehicles on the Swedish market.

However, when farmers invest in machinery through leasing, very often the supplier of that particular machinery provides finance on the most favourable terms to the customer. Many suppliers have a contract with an external leasing provider. In order to place their product on the market, they strive to make their finance solution as attractive to farmers as possible. Suppliers do that through taking on the responsibility to pay a part of the total leasing costs to the external leasing partner.

The co-operation between the leasing partner and supplier of machinery is of course mutual beneficial, especially in a financial climate with a very low market rate.<sup>96</sup> Suppliers of machinery are multinational companies that have the ability to provide favourable finance conditions for the benefit of their customers.

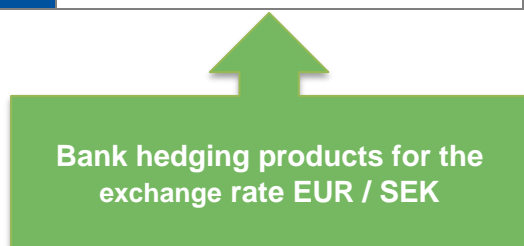


### 2.3.1.2 Financial products

Agricultural producers have access to a wide variety of financial products. Table 4 provides an overview.

**Table 4:** Bank products for the agriculture sector in Sweden

Type of funding	Product	Collateral and guarantees
Investment funding	Mortgage Loans	Mortgages
	Loans long-term or medium-term	Corporate mortgage <sup>97</sup>
Leasing	N/A	N/A
Working capital	Credit card credit lines	N/A
	Account credit lines	Suretyship agreement No collateral needed
	Short-term loans	Mortgages Corporate mortgage Suretyship agreement No collateral needed
	CAP support guaranteed loans	Support granted to farmers from the CAP can be pledged up to 80%



Source: Summary based on interviews and banks' websites, 2019.

97 A company or a (natural or legal) person that intends to run a business can pledge a company mortgage, Swedish företagshypotek by registering a specific amount in the corporate mortgage register. The pledge is not tied to a particular property at a particular point in time, but it can change over time. The idea behind this is the entrepreneur's personal property can be used as collateral for credit without him or her having to give up having the assets at his or her disposal.



## Financial products for the agriculture sector in Sweden

### *Mortgage loans*

Long-term loans often rely on residential properties as collateral, in which case they are referred to as mortgage loans. Banks offer mortgage loans with a LTV ratio of up to 70% and, on occasions, 80%. Many banks are highly competent in evaluating farms correctly, which creates headroom for loans.

### *Credit card, credit line or account credit line*

Credit lines on credit cards or account credit lines are frequently used in Sweden regardless of the business sector. A maximum credit amount is agreed upon and interest is paid on current debt. In addition, there is a fixed annual fee depending on the maximum loan amount. For the agriculture sector, this form of short-term finance is less demanded than for other economic sectors due to the existence of credit institutions (section 2.2.2).

### *Leasing or purchase of machines*

Purchase of machines can be financed in several ways. A 'regular loan' can be used and these loans usually have a maturity of 4-6 years. The second option is leasing, where the bank purchases the machine and leases it to the farmer. After the rental period, the machine still has a residual value and it can then be purchased at the residual value or a new leasing agreement can be negotiated.

### *CAP support guaranteed loans – resolving working capital needs*

A farmer specific bank loan is the EU-credit facility. While most farmers seek and obtain various grants from the CAP, the application process for the subsidies is sometimes long. The EU-credit facility is a special loan that may correspond to a maximum of 80% of the total CAP subsidies, subject to individual credit assessments. When the grant is paid in full or in part, the loan is repaid accordingly.

### *Hedging products*

The EU determines the exchange rate used for RDP support from the CAP at the end of September/early October. Most RDP funds are applied for in the period between April and August. Commercial banks offer hedging products to minimise the risk of a fluctuating exchange rate affecting working capital.

### 2.3.1.3 Description of the financing market

**The Swedish banking market is a competitive market characterised by low interest rates and strong competition.** A move by one bank immediately affects its rivals. The net interest margin (looking across the entire banking sector) is among the lowest in Europe.<sup>98</sup> The four largest banks are dominating the credit market, but smaller banks keep on gaining market share.<sup>99</sup> To keep and attract customers, banks' have:

- a (local) presence;
- a well-developed credit assessment process while building a mutual trust relationship with the customer;
- negotiable interest rates, to some extent.

As discussed in the survey of the competition situation in the Swedish Banking Market, 'small banks such as saving banks for example often service non-urban areas that would otherwise have more difficulties in accessing finance [...]. Thus, having small banks, or at least banks with a local focus (even though they are less cost-effective), is important for the economy'.

**Loans to the agriculture sector have lower interest rates than for the EU 24.** According to the *fi-compass* survey, the average interest rate charged to Swedish farmers for medium and long-term loans was 1.52% and 1.86%, respectively, compared to 5.11% and 3.40% for the EU 24. Although these levels cannot be confirmed

<sup>98</sup> Copenhagen Economics, June 2018, Competition in the Swedish Banking Sector.

<sup>99</sup> Ibid.



through official data,<sup>100</sup> interviewees confirm that there are several reasons why the interest rates charged to Swedish farmers are so low. Firstly, Swedish farmers very often successfully negotiate the interest rate they are charged on their loans. The banks, especially the five largest ones, offer approximately the same services and conditions, such as prices, to their clients, which creates a strong competitive element. While farmers can turn to several banks to secure credit at a good price, this method is only used to a limited extent. Other implications, such as the complexity of the business and the relationship-based co-operation with the banks, work against such ‘shopping’ of conditions.

Banks can also approach farmers, in their effort to obtain customers in new geographical areas. The farmer can choose to accept the price offered by the new bank or to use it as leverage in negotiations with their existing bank contacts.

Secondly, lenders to the Swedish agriculture sector consider the risk in the sector to be relatively low while access to collateral (compared to for example the manufacturing industry) is high<sup>101</sup>. Lastly, the key interest rate for the SEK<sup>102</sup> has been negative for several years in a row, compared to 0% for the European Central Bank refinancing rate.<sup>103</sup> The key interest rate of a currency determines the price that banks lend funds to each other on the interbank lending market and with the central bank. When funding for banks (i.e. the interest) is cheap, interest rates on loans to end customers are low.

As a reference, the announced interest rate for the CAP support guaranteed loans (short-term loan) on 28 October 2019 from one of the major banks in the agriculture sector was 3.95% plus an arrangement fee of SEK 1 500 (approximately EUR 150). However, this serves only as a general reference, as the interest rate is negotiable and depends on the prerequisites of the customer.

In the case of mortgage loans, every bank has an advertised interest rate which serves as a kind of benchmark. Such advertised interest rates do not exist in the same way for corporate funding. However, as the underlying security for farm and investment loans is often the farm property, these interest rates also serve as references for general farm and investment loans. As Swedbank is a major player in the agriculture sector, the historic interest rates on the mortgage loans offered by the bank are provided in Table 5.

**Table 5:** Overview of interest rates for mortgage loans from Swedbank between December 2016 and June 2018

Date for applicable interest rates	Term of the loan 3 months	Term of the loan 2 years	Term of the loan 5 years	Term of the loan 10 years
11 June 2018	2.05%	2.05%	2.45%	3.33%
7 July 2017	2.05%	2.05%	2.30%	3.33%
16 December 2016	2.04%	2.08%	2.42%	3.30%

Source: Swedbank, November 2019.

Interest rates on credits from agricultural cooperative suppliers are substantially higher and fluctuate around 11-12% in October 2019.

**While online banking is changing the provision of banking services, the agriculture sector continues to hold physical meetings.** An important change in the Swedish bank sector is that branch offices have become less important for bank customers’ daily services. The Swedish banking sector is one of the most digitalised in Europe. Today, normal bank services are mostly performed through computers, mobile phones

100 As interest rates are the most important negotiation factor for the clients, the banks are very reluctant to discuss the issue during interviews.

101 This is also an explanation as to the high level of competitiveness between the banks – risk-avoiding banks compete to obtain and keep low-risk customers.

102 Reporäntan.

103 It should be noted that this negative interest rate, in combination with the tight competition between the banks, has on some occasions threatened a sound lending market.

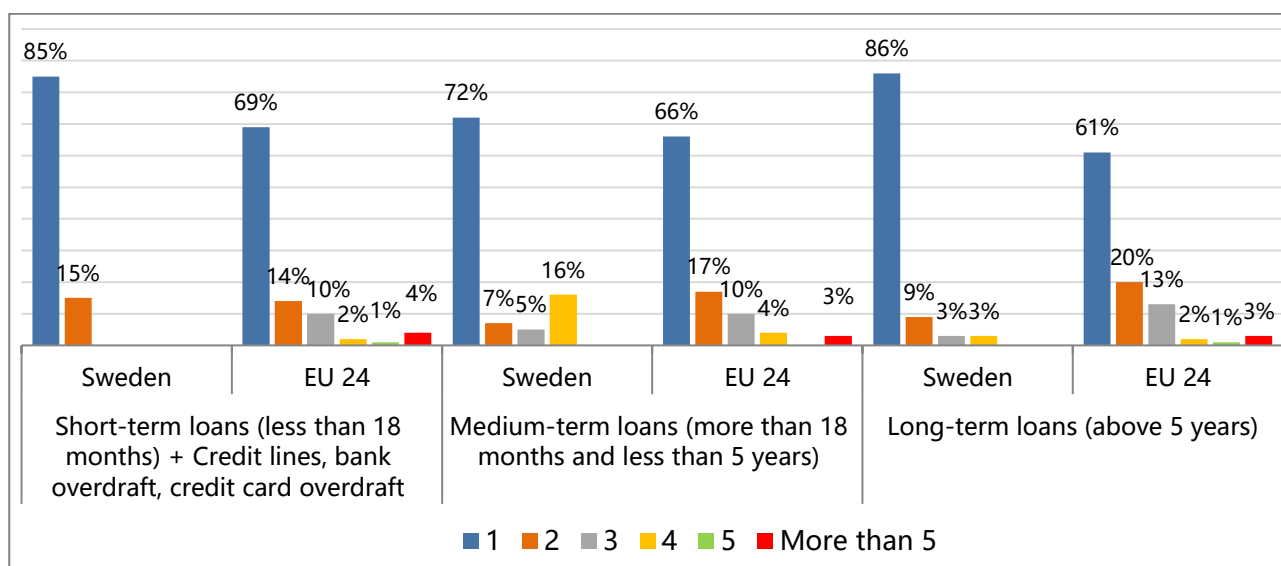




and tablets. Other ways of performing bank services include, for example, real-time payments between customers (Swish) and e-invoices. These new channels of distribution have enabled the development of new services while existing services have changed. The new technology has also paved the way for the establishment of new banks and financial services companies (FinTech), which has led to increased competition in the banking market. This development has not yet reached the financial services for the agriculture sector in full since farmers still are encouraged by their bank contacts to visit or at least make contact with the nearest local branch office, where a physical meeting preferably then takes place.<sup>104</sup>

**Bank customer mobility is high in Sweden, but not for the agriculture sector.** The costs for the bank customer related to changing a bank are very low. The high degree of digitalisation, combined with online comparison sites, makes it easier to compare conditions. Customers' mobility has grown significantly over the past ten years.<sup>105</sup> However, agricultural customers seem to be very loyal to their bank. According to the *fi-compass* survey, the share of farmers that only applied for finance from one bank was 86% for long-term loans (compared to 61% for the EU 24), 72% for medium-term loans (compared to 66% for EU 24), and 85% for short-term loans (compared to 69%). Hence, Swedish farmers seem to be significantly more loyal to their bank office than the average EU 24 farmer (**Error! Reference source not found.**). This may be because of the existence of 'soft costs' involved when switching bank, as identified by stakeholders. Financial advisers at the bank advise on major commercial decisions such as debt composition, and the value of potential acquisitions etc., through which the bank establishes a relationship as not only a provider of credit but also a trusted partner.

**Figure 15:** Number of banks approached by farmers seeking finance in 2017



Source: *fi-compass* survey.

### 2.3.2 Analysis of the supply of finance

**The overall credit volume has grown by 5% per year since 2010, thus the credit growth of the agriculture sector is on par with the overall growth of the economy.** Lending from banks to the agriculture sector has increased for several years. The total outstanding loan volume to the agriculture and forestry sector (including private financing and credit provided by suppliers) stood at EUR 33.5 billion by the end of 2017 and EUR 32.3 billion by the end of 2018. While the volume in SEK remains the same, the decline in EUR is due to a significant decrease in the exchange rate. Between 2008 and 2018 (included), total outstanding loan volume increased by approximately 78%. Hence, the positive growth trend of finance provided to the agriculture sector shows a stable and positive investment trend, in line with the rest of the Swedish economy<sup>106</sup> (Table 6).

104 Interviews with farmers union and banks, 2019.

105 Copenhagen Economics, June 2018, Competition in the Swedish Banking Sector.

106 Lantbruksbarometern, 2018.

**Table 6:** Total outstanding loans to the agricultural and forestry sector in Sweden, 2013-2018

End of year	Amount in SEK billion	Average annual exchange rate EUR / SEK	Amount in EUR billion
2013	265	8.6494	30.1
2014	279	9.0968	30.1
2015	293	9.3562	31.3
2016	311	9.4704	32.8
2017	323	9.6326	33.5
2018	331	10.2567	32.3

Source: Lantbruksbarometern, 2019.

The outstanding credit growth can partly be explained by the competition between banks, and the relatively low interest rates. In addition, the competition between banks also affects the access to finance for customers, with farmers among them.

At the same time, **Swedish banks are also considerably more risk-averse, compared to the banking sector in other EU countries** (see further discussion under section 3.3). Risk aversion may affect farmers' access to finance, bearing in mind the relatively low economic margins of the sector.

**The agriculture sector is considered as a good customer base by the banks, and the provision of financing is not linked to sub-sectors but to the individual farm.** Overall, the solidity (adjusted equity/total capital) of the agriculture sector is high, at approximately 70%.<sup>107</sup> Usually, farmers have a good mix of credit with different maturities.<sup>108</sup> The default risk is in general considered to be very low in the sector, whereby agricultural customers are considered good customers.<sup>109</sup> In the agriculture sector, there are very few bankruptcies. Therefore, the sector can be considered a good portfolio investment from the point of view of the bank.<sup>110</sup> According to interviews, there is no agricultural sub-sector that the banks hesitate to finance. Regardless of the farming activity undertaken, the focus of the bank when assessing a credit application is on the management of the farm, repayment ability and LTV.

**Young farmers may have more difficulties in accessing finance, but it depends on the individual's relationship with the bank.** Compared to older farmers, young farmers do not have the same confidence when visiting a bank. They are unaware of the extent to which banks can provide them with assistance and of how they are supposed to conduct themselves when dealing with bank personnel.<sup>111</sup>

**The lack of understanding of the agriculture business by the local bank offices may constitute a barrier to the provision of finance, in particular in regions with fewer farmers.** As discussed in section 2.2.2, when farmers want to apply for financing, they generally go through the local branch office of the bank, but the expertise at the local branches is not always guaranteed, and farmers may be turned away due to a lack of knowledge from the banker. In interviews, both banks and farmers organisations suggested that in some regions where there are few farmers, the level of competence may be lower and this may worsen as the number of farms decrease further.<sup>112</sup> As suggested in section 2.2.2, training of bank personnel on the functioning of the agriculture sector and on the assessment of sole proprietorships may provide benefits to both sectors.

107 Ibid.

108 Interviews with banks, 2019.

109 Interviews with banks, 2019.

110 Interviews with banks, 2019.

111 Interviews with farmers union, 2019.

112 Interviews with banks and farmer organisations, 2019.



## 2.4 Financing gap in the agriculture sector

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

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

- The financing gap is estimated to be between EUR 119 million and 148 million.
- The largest part of the gap is identified for long-term financing.
- The medium and large-sized farms have the highest non-covered needs, contrary to the situation for many other EU Member States.
- The key constraints for the economically viable farms that do not have access to finance, and that thus drive the gap are (i) the weak repayment capacity deriving from low economic returns on farming activities, in combination with risk aversion of banks; (ii) the thorough scrutiny of farming activities due to the legal form of many companies, causing banks to conclude, in some cases, that there is insufficient professionalism in the management of the farm; and (iii) to a limited extent, the lack of collateral held by farms.
- In addition, some bankers are unable to make correct credit assessments because of their unfamiliarity with the sole proprietorships, and with the agriculture sector as a whole, which may pose a constraint in access to finance for the farmers.
- New entrants face serious difficulties with high prices for farmland combined with the low profitability of the sector, whereby their access to finance (due to limited repayment capacity) may be affected.
- CAP support facilitates access to finance. The amount of aid determines the amount that can be borrowed by acting as guaranteed repayment. Also, it provides liquidity at the time of year characterised by high costs and low revenue.

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

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

All the calculations are based on the results of the *fi-compass* survey for Swedish farms and statistics from Eurostat (see Annex A. 4 for more information). The methodology used for calculating the gap is described in Annex A. 3.

**The financing gap arises from unmet financing demand from economically viable farms<sup>113</sup>.** The unmet demand for finance includes:

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

For the purpose of this report, '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:

<sup>113</sup> The financing gap presented in this section is different from the total unmet demand presented in Section 2.2.2. In the quantification of the total unmet demand, all the enterprises in the population applying for finance are considered independent from their economic viability.



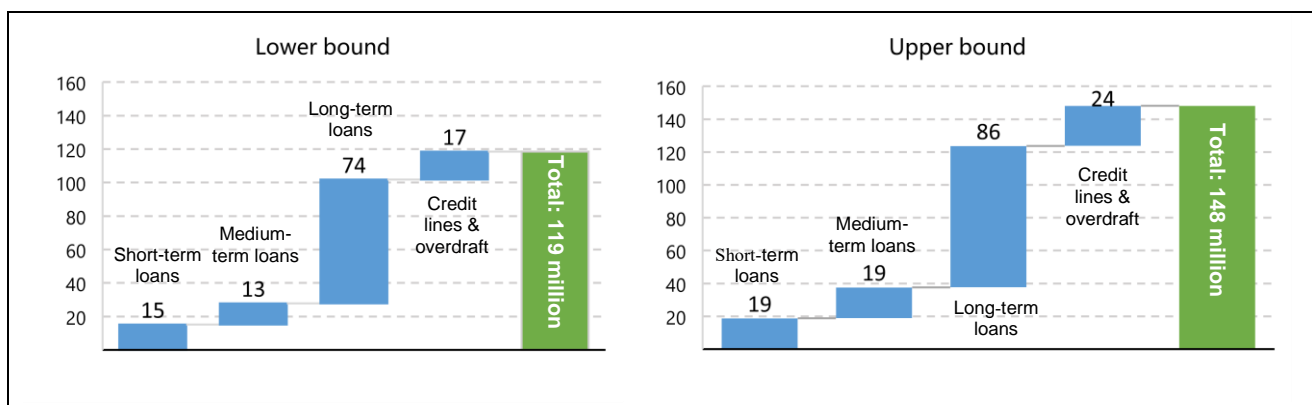
- The lower bound gap is calculated under the hypothesis that only enterprises which reported a stable (non-negative) turnover growth and no cost increase in the previous year can be considering as viable;
- The upper bound gap is calculated under the hypothesis that all enterprises which reported a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

**The financing gap for the Swedish agriculture sector is estimated to be between EUR 119 million and EUR 148 million** (Figure 16). The financing gap is the highest for the medium and large-sized farms. This is in contrast to the situation for many other EU 24 countries, where the gap is typically larger for small-sized farms (Table 7). This can be explained by the fact that, in Sweden, many of the small-sized farms (below 20 ha) belong to part-time farmers who have important income from other economic activities, whereby:

- they may not prioritise investing in their farm activity; or
- they may use own resources for investing in their agricultural activity; or
- access to finance is less constrained as their repayment capacity is improved due to their income from other economic activities than farming.

In addition, young farmers, in general, have larger farms than their older peers and, as was discussed for section 2.2.2, seem to face the most difficulties in accessing finance in Sweden. This, therefore, further supports those results.

**Figure 16:** Financing gap by product in the agriculture sector, 2017, EUR million



Source: fi-compass survey and project calculations.

**The type of loans for which the gap is the largest are long-term loans, which is logical given the higher risk for longer maturity products.**

**Table 7:** Financing gap by farm size in the agriculture sector, 2017, EUR million

		Total	Short-term Loan	Medium-term Loans	Long-term Loans	Credit lines/ bank overdraft
Upper bound	Small-sized farms	31.2	3.2	4.3	20.2	3.4
	Medium-sized farms	57.7	6.8	7.0	37.3	6.5
	Large-sized farms	59.3	8.6	7.6	28.5	14.6
	<b>Total</b>	<b>148.1</b>	<b>18.7</b>	<b>19.0</b>	<b>86.0</b>	<b>24.5</b>
Lower bound	Small-sized farms	25.2	2.6	2.9	17.4	2.3
	Medium-sized farms	46.8	5.6	4.7	32.1	4.4
	Large-sized farms	46.5	7.0	5.1	24.5	10.0
	<b>Total</b>	<b>118.5</b>	<b>15.2</b>	<b>12.6</b>	<b>73.9</b>	<b>16.8</b>

Source: *fi-compass* survey and project calculations.

**Several aspects both on the demand and the supply side drive the financing gap.** The gap identified for Sweden seems relatively low, compared to the assumed overall size of the market. Even so, there are reasons to believe that some viable farming enterprises are being excluded from the financing market. The drivers behind this have been discussed thoroughly in the previous two sections (section 2.2 and section 2.3), however they can be summarised as follows:

- The lower profitability of the agricultural activities, whereby the sector is assumed to have a low repayment capacity, in combination with the banks being risk-averse, might sometimes make banks reluctant to lend despite a positive overall risk profile for the sector (low share of defaults).
- Some farmers tend to lack professionalism in the management of their farms, as well as financial knowledge. They can therefore be discouraged from applying for finance.
- Some bankers are unable to make correct credit assessments because of their unfamiliarity with the type of company (sole proprietorships) and the prerequisites for the farming activity.
- Lack of collateral is a factor of relatively minor importance.

According to banks, and representatives of farmers' unions, the most important factor holding farmers back from accessing finance is their low repayment capacity.

**Young farmers and new entrants face particular difficulties in accessing finance.** The number of observations in the *fi-compass* survey was not sufficient to estimate a potential financing gap specifically for the young farmers in Sweden. Even so, the high costs associated with starting a farming business, together with the limited profitability of the sector, can be assumed to have a negative impact on the chances of new entrants and young farmers of accessing finance or entering the sector. Furthermore, interviews suggest that young farmers do not have the same confidence when approaching the bank, which leads banks to be more hesitant in lending to them. This lack of confidence stems from young farmers more limited experience with banks and from their lack of confidence in their own business, influenced in recent years by negative media coverage of the farming sector. The young farmers' limited experience from the business itself also make banks more hesitant in providing finance. Interviews suggested that if the young farmer in question had previously been employed at a farm or leased farming land before taking on the responsibility of owning and managing an enterprise of their own, then their chances of accessing finance increases.

**The financing gap can be expected to stay the same for the coming years.** Young farmers are driving the investments in Sweden, as discussed in section 2.2.1, and show strong tendencies to develop and grow their enterprises further and to even complement their existing business with other business activities (providing contracting services for example) in order to increase profitability. Also, they tend to invest more in on-farm



energy supply. This trend suggests that as the younger generation takes over farms, the demand for finance will increase.

On the other hand, competition between banks is high and it is increasing as new technology is implemented and as bank services can be performed online. Customers can compare conditions between different banks more easily. Also, new technology and new regulations have paved the way for new banks and financial service companies to be established. The possibilities that these changes to the bank sector may have for farmers has not yet been fully explored. However, young people are increasingly using technology to their advantage and tend to try out new solutions which appear on the market. Hence, even though the demand for finance may increase, the competition and technological developments in the banking market may fill the gap more efficiently, and so the gap can be assumed to remain more or less unchanged.

**A combination of competence and venture capital and/or partnership, similar to the capital venture companies that SMEs in other sectors use, would most likely contribute to developing the agriculture sector and encouraging banks to accept greater risk.** There is one such small-scale initiative by the corporate 'Tillväxtbolaget för Sveriges Lantbrukare' in the market today.

**Special focus could be given to the intergenerational transition of farms since the older generation faces problems living on their pension and since young farmers require high levels of start-up capital to compensate the older generation and their siblings for the high value of the farming property.** Another reason to focus further on new entrants is that the banks consider them a high-risk customer, as they lack management experience and require high amounts of start-up capital. In other words, new entrants are assessed to be high risk among risk-averse banks. New entrants could also be subject to further focus as, despite requiring high levels of start-up capital, they face difficulties with banks during risk assessments, including the evaluation of their management ability.

**Farmers can take the following steps to increase the likelihood that banks grant credit applications:**

- In order to benefit from the highly competitive bank market in Sweden, farmers could approach several different banks with their business plan.
- A highly professional business plan facilitates the banking procurement process, as described above, and provides evidence of management ability.
- Keep personnel at the local bank branch updated and informed on business development, extraordinary situations and, to some extent, on the development of the sector in general.

**Potential additional intervention on the financial market with EAFRD resources has not been analysed via an ex-ante assessment for financial instruments.** However, the conclusions from the general ex-ante evaluation of the Swedish RDP from the year 2014 were that the market was not sufficient to motivate setting up a financial instrument for the agriculture sector. Interviews with the Swedish Ministry of Innovation and Enterprise underlined that the implementation of financial instruments was never seen as an option in the Swedish Rural Development Programme, partly because such instruments would add a new complexity to the programme and hence the administration may cost too much (although no real estimates have been made) in relation to the policy benefits such instruments would provide in the Swedish context and as considered by the Swedish administration. During the early years of the milk crisis, the possibility of using financial instruments was further investigated. The conclusion at the time was that financial instruments could not be used efficiently under the circumstances because:

- it was difficult to access the kind of instruments considered relevant under the preceding circumstances;
- the handling and administration were considered very expensive; and
- the banks argued that they had the ability to meet the needs of their customers.

The above decisions, although fully understandable, signal a potential for further capacity building within the administration on what financial instruments are and what they offer. In this report, the problems found on the market functioning relate predominantly to asymmetrical information, which is a market gap normally addressed through guarantee instruments. Although the market gap for the agriculture sector is relatively limited, there are benefits which may result from the setting-up of a guarantee fund for the agri-food sector (see section 3.3). Thus, if a guarantee fund was to be set-up for the agri-food sector, potentially a small pilot



section for the agriculture sector could be included (whereby administrative costs for setting up the scheme would be limited).

**The provision of technical support to various stakeholders is encouraged:**

- Technical support and capacity building in terms of education/courses that include banks, advisers and farmers are recommended.
- The farming sector, and particularly young farmers, need increased training in financial aspects, including business planning and interactions with banks for loan applications. To some extent, training in farm management could also be envisaged as being needed.
- Bank personnel at local bank branches could benefit from an increased understanding of the functioning of the agriculture sector (including rules and regulations) and of the legal structure of sole proprietary farms when assessing farm viability.
- Technical support/capacity with the purpose of creating an understanding between managing authorities and farmers, resulting in better communication between the two stakeholders, would also be highly relevant.



## 2.5 Conclusions

**Young farmers are driving the positive investment trend for the Swedish agriculture sector.** The agriculture sector in Sweden has a positive investment trend and accounts for a high share of the investments made in capital formation. This points towards a positive outlook for the sector. Young farmers drive the investments, being the group with the highest levels of investments in buildings and stables, and the second biggest group investing in machinery (after the 41-50 years age group) in 2017. High land prices, in particular in the southern regions, also drive demand for finance.

**Overall, access to finance is not a major concern for Swedish farmers.** The rejection rates are low and the share of farmers being discouraged from applying for loans is likely to also be low. Farmers' loan applications are rejected by banks mostly due to their perceived limited repayment capacity, which is linked to the general profitability of the sector. According to interviews with banks, there is no agriculture sub-sector that the banks hesitate to finance. Regardless of the farming activity undertaken, the focus of the bank when assessing a credit application is on the management of the farm, repayment ability and LTV. **CAP support facilitates farmers' access to finance in various ways.** CAP subsidies strengthen farmers' cash flow and therefore create headroom which enables access to financing via the banks, as cash flow is a main component in the credit assessment. Additionally, CAP support provides farmers with a possibility of making investments in their business that they would not have otherwise had made. The amount of support determines the amount that can be borrowed from financial institutions, by acting as a guaranteed repayment. The existence of investment support generates more investments and encourages farmers to make larger investments. Also, start-up support fills an important function in facilitating the entrance of young farmers to the sector. However, for the current programming period, some regions where there is a higher presence of young farmers have run out of budget, causing concern among some young farmers.

**A financing gap of between EUR 119 million and 148 million has been identified for the Swedish agriculture sector.** The gap is largest for the medium and large-sized farms, and mostly concerns access to long-term financing.

**The principle reasons why viable enterprises can be assumed not to have access to finance are that:**

- (i) the management of the farm is not considered to be satisfactory by the bank and hence the risk of financing an investment is regarded to be too high;
- (ii) because the repayment capacity or cash flow is considered to be too low, in combination with risk aversion of banks; and
- (iii) because of a lack of collateral (although a minor explanation).

As for young farmers, in addition to the reasons outlined above, which may impact young farmers and new entrants to a greater extent than the rest of the farming community, they may also lack confidence when approaching banks for funding which likely leads to unmet demand. In some cases, the inability of bankers to make correct credit assessments because of their unfamiliarity with the type of company (sole proprietorships) that is typical of the farming sector and because of the prerequisites for the farming activity, limits access to finance. New entrants to the sector who do not have access to property through their family face severe difficulties in starting up an enterprise. This is mostly linked to the difficulties in accessing land, but also to the difficulties in accessing finance. The banks stressed the importance of a track record in the management of a farm, including financial issues, practical issues, handling of employees, etc., rather than just a track record in credit history, in order to obtain a loan linked to farming activities.

**Recommendations to increase access to finance for Swedish agriculture producers:**

- If a financial instrument is to be considered and analysed, a small pilot could be set-up for the agriculture sector to address the issues related to asymmetrical information, as identified in the market analysis, long-term finance, and new entrants/start-ups and young farmers. The pilot could be a stand-alone initiative or a section of a more global financial instrument also covering the agri-food investments/sector. The new possibilities offered by the CAP/EAFRD in the 2021-2027 programming period could be taken into account and EU funding could potentially be involved.





- There is an opportunity to increase the budget from the CAP/EAFRD allocated funds to young farmers and to improve the regional distribution in the 2021-2027 programming period. This is in line with the strategy for generational renewal, as the current budget for some regions has been quickly absorbed and some applications remain uncovered.
- Technical support aiming at increasing both farmers' technical management skills and their financial understanding, including preparation of business plans, could be beneficial.
- Technical support/capacity building in terms of education/courses that include banks, advisers and farmers are recommended. Bank personnel at local bank branches could benefit from an increased understanding of the functioning of the agriculture sector and of the legal structure of sole proprietorships.

Additionally, **farmers could be encouraged to take the following steps to increase the likelihood that banks grant credit applications:**

- In order to benefit from the highly competitive bank market in Sweden, farmers could try to approach several different banks with their business plan.
- Submit a professional business plan that will facilitate the bank's assessment process and show the farmer's management capability.
- Try to establish good working relationships with the personnel at the local bank branch and keep them informed on the farm's business development, on extraordinary situations and, to some extent, on the development of the sector in general.



## 3 PART II: AGRI-FOOD SECTOR

### 3.1 Market analysis

#### Key elements on the Swedish agri-food sector

- The food industry is one of the largest industry sectors in Sweden, but in relation to the population, and compared to other countries in the EU, it is small.
- The total turnover of the Swedish food industry for the year 2017 was approximately EUR 20 billion. The yearly growth rate of the sector between 2011 and 2016 was 2.4%, which was below the EU 28 average.
- The number of employees working directly with food processing in the agri-food sector is approximately 48 000. During the last 10 years, the number of employees has decreased, especially in large-sized companies, but the total number of enterprises has increased due to the significant number of start-ups.
- The main sub-sectors are (i) slaughter and charcuterie, (ii) dairy processing, and (iii) bakery and confectionery.
- A high proportion of the Swedish primary production (70%) is processed by companies in Sweden. Two of the top-10 food processors are the agricultural cooperatives Arla Foods and Lantmännen.
- Many of the large-sized agri-food producers in Sweden are foreign-owned.
- Market concentration is very low due to mergers and acquisitions in the agri-food sector.
- There is a large trade deficit for the agri-food sector. The share of sales abroad, as a percentage of total sales, is only 30%, which is low compared to other Swedish industries that have a corresponding percentage of around 70%.

**While the agri-food industry is one of the largest industry sectors in Sweden**, in relation to the population, and compared to other countries in the EU, it is rather small, representing just 7% of the total value added to GDP.<sup>114</sup> Value-added to GDP in 2017 for the industry was approximately EUR 4.4 billion<sup>115</sup>. The yearly growth rate of the sector was 2.4% and between 2011 and 2016, the yearly growth rate was below the EU 28 average.<sup>116</sup> The total turnover of the Swedish agri-food industry for the year 2017 was approximately EUR 20 billion.<sup>117,118</sup> Large-sized companies account for a vast share of total revenue, with the 10 largest companies in the sector accounting for 50% of total revenue.<sup>119</sup> There are 4 426 agri-food enterprises in Sweden in total.<sup>120</sup> The number of employees working directly with food processing in the agri-food sector is approximately 48 000.<sup>121</sup> During the last 10 years, the number of employees has decreased, especially in large-sized companies.

**Production is driven by the sub-sectors of meat processing and dairy processing.** The main sub-sectors in terms of net sales are (i) slaughter and charcuterie (35% of total share of value of the food industry in 2016), (ii) dairy processing (25%), and (iii) bakery and confectionery (18%).<sup>122</sup>

114 Including food, beverages, tobacco. Lantmännen, Macklean, The Federation of Swedish Farmers, 2019, Insikter Tillväxt #11.

115 Author's calculations using Annual Average Exchange Rate for 2017. SEK 42 billion according to the Swedish Food Federation.

116 Lantmännen, Macklean, The Federation of Swedish Farmers, 2019, Insikter Tillväxt #11.

117 Author's calculations using Annual Average Exchange Rate for 2017 which was 9.6326.

118 195 billion SEK according to Swedish Competition Authority, 2018, Konkurrensen i Sverige.

119 Federation of Swedish Farmers, Lantmännen, Macklean, 2019, Insikter #11 Tillväxt.

120 Statistics Sweden, 2019.

121 The Swedish Food Federation, October 2019.

122 Swedish Board of Agriculture, 2017, Swedish food production.



**Production costs are high and increasing, especially due to the increasing labour costs in Sweden.**

The price increase on agri-food products rises at a slower pace than production costs. After Sweden's accession to the EU, its agri-food products began competing with imported goods. This resulted in slower price increases on agri-food products, which rose at an even slower pace than production costs. 70% of the food produced in Sweden is processed by companies in Sweden.<sup>123</sup>

**Small-sized enterprises dominate the sector in numbers but there are a few large market players, including the agricultural cooperatives, and the market concentration is high and increasing.**

Production from middle-size companies makes a rather small contribution to the total agri-food production. The number of new enterprises and start-ups in the sector increased significantly between 2010 and 2017, with the number of companies increasing by 16%. Most of them are sole proprietorship or companies with few employees. Many of the large-sized agri-food producers in Sweden are foreign-owned. Two of the largest food processors are agricultural cooperatives. Large-sized companies employ one-third of all employees in the industry, while small-sized enterprises, with up to 49 employees, employ 45%.<sup>124</sup>

**Table 8:** Structure of the Food and Drinks industry in Sweden<sup>125</sup>, 2014-2018

No of employees:	2014	2015	2016	2017	2018
0 employee	1 786	2 013	2 109	2 267	2 300
From 1-9 employees	1 340	1 307	1 341	1 369	1 448
From 10-199 employees	657	662	667	663	643
From 200-500+ employees	39	38	35	32	35
<b>Total number of employees in drink and food industry</b>	<b>3 822</b>	<b>4 020</b>	<b>4 152</b>	<b>4 331</b>	<b>4 426</b>

Source: Statistics Sweden, 2019.

**The trade deficit for the Swedish agri-food sector is increasing.** Swedish agri-food companies have a strong focus on the domestic market and Sweden is a net importer of agricultural commodities and food. The share of sales abroad as a percentage of total sales is approximately 30%. This is very low compared to other Swedish industries, which have an export-oriented economy and where the share of exports is around 70%.<sup>126</sup> The main export countries are the Nordic countries, followed by Germany and the UK. The trade deficit has increased almost every year since the EU accession in 1995. Even though the growth rate in the export of agri-food products has shown an increasing trend over many years, it started from a very low level and thus imports have grown significantly faster in level terms. The largest trade deficit for Sweden among agri-food product groups is found in the trade of fruits and vegetables. In the case of cereal products, Sweden has a trade surplus.<sup>127</sup>

123 Swedish Competition Authority, 2018, Konkurrensen i livsmedelskedjan Rapport.

124 Swedish Agency for Economic and Regional Growth, 2019, 'Basfakta om företag', <https://tillvaxtverket.se/statistik/foretagande/basfakta-om-foretag.html>.

125 Statistics Sweden, 2019, [http://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START\\_\\_NV\\_\\_NV0101/FDBR07N/](http://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START__NV__NV0101/FDBR07N/).

126 Ibid.

127 Swedish Board of Agriculture, 2017, Sveriges utrikeshandel med jordbruksvaror och livsmedel 2014-2016, Rapport 2017:20.

**Table 9:** Total imports and exports of agricultural commodities and food, 2013-2018, EUR billion.

	2013	2014	2015	2016	2017	2018
Total imports	12.756	12.966	13.928	14.962	15.012	15.397
Total exports	7.331	7.517	8.020	8.735	8.690	8.944

Source: The Swedish Board of Agriculture, *Sveriges utrikeshandel med jordbruksvaror och livsmedel 2015-2017, Rapport 2018:28, 2018, average annual exchange rate according to Riksbanken.*<sup>128</sup>

128 See Annex A. 6 for average annual exchange rate according to Riksbanken.



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

This section describes the drivers of demand for finance in the agri-food sector and analyses and quantifies the met and unmet demand. It seeks to identify the main reasons for agri-food enterprises to request financing and the agri-food sub-sectors showing the largest need for finance. The section also provides an analysis of the type of enterprises which face more constraints in accessing credit. The examination of the demand for agri-food finance is based on the findings from the Agri-food survey results of 48 Swedish firms, as well as interviews with key stakeholders in the agri-food sector, combined with national statistics.

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

- Gross investments in physical assets amount to approximately EUR 500 million to EUR 600 million per year, with a moderately growing trend. Large-sized companies drive these investments.
- The main drivers of demand are investments in capacity expansion, and investments in inventory and working capital, according to the Agri-food survey. Interviews confirm that most investments are linked to cost reductions and efficiency improvements, with few investments linked to innovations.
- The export market is of limited interest and importance to the Swedish agri-food sector, thus there are few investments to expand activities abroad. Even so, one of the goals with the national food strategy is to increase the exports of the sector substantially, which could increase demand for finance as small-sized firms develop their business activities.
- Many start-ups in the sector aim for the premium price category and related to the trending demands among consumers. However, this also puts them in a precarious financial situation, being entirely dependent on one or a few products.
- The demand for processing and marketing support from the CAP exceeds the expected number of applicants, and support is mostly provided to the dairy and meat sectors.
- 36% of enterprises asked for finance in the year 2018, and these mostly demanded medium and long-term financing. Interviews confirmed that demand for finance from banks mostly relates to long-term financing.
- The unmet demand for finance from the agri-food sector in Sweden is estimated at EUR 128.5 million.
- Applications for bank loans and credit lines/bank overdrafts were rejected by banks 10% and 12% of the time, respectively. This was significantly greater than for the EU 24 which had 8% rejected.
- Important reasons for why banks reject loan applications from the agri-food sector include a lack of credit history, a lack of collateral, and low profit margins, which make the repayment of loans uncertain. In addition, the sector is claimed to have low financial and managerial skills, making banks hesitant to provide finance.
- Agri-food businesses would welcome the provision of guarantees by government agencies.

### 3.2.1 Drivers of total demand for finance

**Gross investments in the Swedish agri-food sector are increasing at a modest pace.** The agri-food industry is undertaking investments in physical assets in the order of EUR 500 million to 600 million annually. The trend increased modestly between 2014 and 2018 (Table 10). The food industry accounts for most of the investments undertaken in the sector (the other actors being the drink and tobacco industries) and for the largest share of investments devoted to machines and inventories.<sup>129</sup>

129 Interviews with banks, 2019.



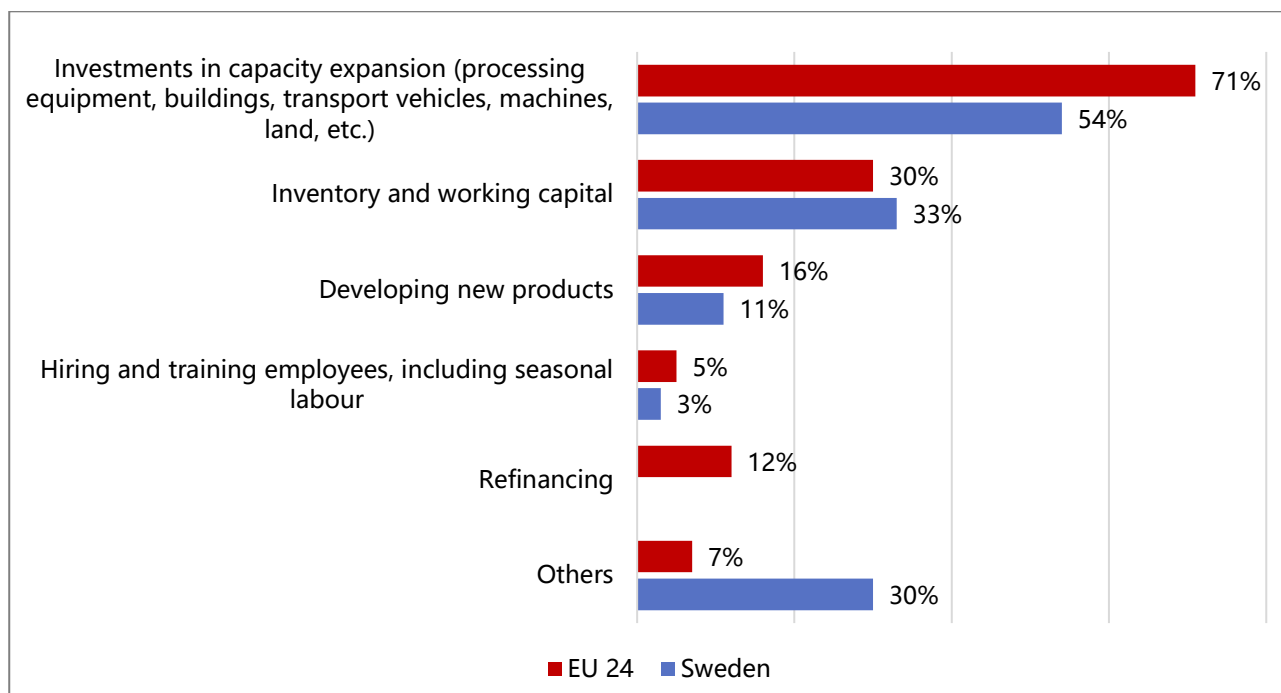
**Table 10:** Total investments by the agri-food industry in Sweden, 2014-2018, EUR million

	2014	2015	2016	2017	2018
<b>Buildings</b> <sup>130</sup>	116.97	146.43	104.22	132.67	113.58
<i>of which food</i>	94.54	132.21	93.34	116.06	94.96
<b>Machines and inventories</b>	445.43	375.86	476.64	479.10	482.81
<i>of which food</i>	354.52	366.60	408.11	406.22	410.76
<b>Total investments</b>	<b>562.40</b>	<b>522.29</b>	<b>580.86</b>	<b>611.77</b>	<b>596.39</b>

Source: Calculations based on Statistics Sweden information, with Annual Average Exchange Rate according to the Swedish Central Bank.<sup>131</sup>

**There is a lower finance demand for capacity expansion compared to the EU 24, but higher demand for inventory and working capital financing.** The main driver of demand for finance according to the Agri-food survey is investments in capacity expansion, such as processing equipment, buildings, and vehicles. Even though this was the most frequent reason for demanding finance, the share was lower, at 54%, than for the EU 24, at 71%. The second largest driver for finance demand in Sweden was for investments in inventory and working capital (33%), which was marginally more than for the EU 24 (30%) (Figure 17). The high number of replies pointing towards ‘others’ may suggest that with so many relatively new start-ups on the market, many entrepreneurs do not have a long-term strategy that clearly defines the steps to create a growing enterprise, including the different funding needs in each step. This picture was confirmed during interviews.

**Figure 17:** Purpose of bank loans in the agri-food sector in 2018



Source: Agri-food survey.

**The large market players carry out the majority of the investments undertaken by the sector.** Looking at investment trends it is more relevant to divide companies according to size rather than by product segment. The agri-food industry in Sweden includes large market players which inherently drive the demand for finance.

130 Investments in buildings include new plants/buildings, redevelopment of plants/buildings, and extensions and annexes to plants/buildings.

131 See Annex A. 6 for average annual exchange rate according to Riksbanken.



Large-sized companies account for a vast share of total revenue, with the 10 largest companies in the sector accounting for 50% of total revenue.<sup>132</sup> This market segment also carries out the majority of investments. Many small entrepreneurs rely instead on organic growth<sup>133</sup> to expand their enterprise.<sup>134</sup> This was also indirectly confirmed by the Agri-food survey (**Error! Reference source not found.****Error! Reference source not found.**), where 90% of Swedish farmers said that internal funds were the most important source of finance for their enterprise.

**The principal purpose of investments made by large enterprises is to reduce costs.** Interviews with stakeholders have revealed that:

- Demand for finance is driven by investments in machinery and inventories to improve efficiency in production lines and reduce salary costs.
- Demand is not driven by investments in innovation to any large extent.

**Among the top 10 food producers in Sweden, in terms of turnover, are two agricultural cooperatives and a few strong family businesses.** The largest corporate, AAK, produces vegetable oil and food fats. Their largest presence is in North America and Europe and they have a head office in Sweden. Arla Foods (dairy) and Lantmännen (cereals) are agricultural cooperatives and are the food processors with the highest turnover in Sweden, even when compared to companies such as Coca Cola and Carlsberg. While Lantmännen fell to number 25 by turnover in 2018, it remains one of the largest food producers in Sweden. Among the top 10 producers, there is also HKScan. This was a cooperative of slaughterhouse associations until 2007 when it was then turned into a shareholding company (and merged with a Finnish company).<sup>135</sup> Arvid Nordquist Handels and Gunnar Dafgård AB are strong, family-owned companies (Table 11).

132 Federation of Swedish Farmers, Lantmännen, Macklean, 2019, Insikter #11 Tillväxt.

133 A business approach where investments are made to a large extent with internal funds and on a constant basis (rather than being planned for specific years).

134 Interviews with agri-food enterprises, 2019.

135 Swedish Competition Authority, 2018, Konkurrencen i livsmedelskedjan, Rapport 2018:4.

**Table 11:** Turnover for the 20 largest agri-food producing<sup>136</sup> companies in Sweden for year 2018

Company, subsidiaries included	Turnover in SEK	Turnover in EUR
AAK AB (publ)	27 592 000	2 685 274
Arla Foods AB	16 408 000	1 596 839
Scandi Standard AB (publ)	8 797 000	856 131
HKScan Sweden AB	7 683 097	780 034
AAK Sweden AB	7 409 298	721 079
Cloetta AB	6 218 000	605 140
Orkla Foods Sverige AB	5 574 974	542 561
KLS Ugglarps AB	5 358 201	520 492
Skånemejerier AB	4 090 737	398 114
Svenska Foder AB	4 036 803	392 865
Nestlé Sverige AB	3 611 270	351 452
Pågengruppen AB	3 318 884	322 996
Arvid Nordquist Handels AB	2 998 921	291 857
Atria Sverige AB	2 816 532	247 107
Gunnar Dafgård AB	2 808 785	273 353
Malmö Mejeri AB	2 657 499	258 630
Kronfågel AB	2 649 619	257 863
Pågen AB	2 532 705	257 135
Santa Maria AB	2 514 512	244 714
HFG Sverige AB	2 392 036	232 795

Source: Largest Companies database, 2019.<sup>137</sup>

**The agricultural cooperatives mainly finance their investments through their own resources, rather than bank financing.** The cooperative association form, as well as strong family owners, is an advantage in a sector with low margins and high initial investments. This is because it can provide a breeding ground for more long-term strategies than, for example, venture capital ownership. According to interviews, cooperative companies act very much like large-sized companies in their financial decisions, tending to engage in long-term planning rather than focusing on the quarterly economy, as many small actors do. According to interviews, the large-sized agricultural cooperatives mainly finance their investments through their own resources (mainly member fees) and do not ask for bank financing.

**The low growth rate of the sector in Sweden, due to low margins, relative to stronger agri-food producing countries, may explain the relatively low levels of investment.** Compared to strong agri-food producing countries, such as the Netherlands, Ireland and Denmark, the growth rate for agri-food companies

<sup>136</sup> Corporates producing tobacco and drinks are not included in the below compilation.

<sup>137</sup> Largest Companies database, 2019, <http://www.largestcompanies.se/topplistor/sverige/de-storsta-foretagen-efter-omsattning/bransch/livsmedelsframstallning?includeChildCompanies=True>.





in Sweden is modest. The sector is characterised by high production costs and low margins. Several stakeholders believe that due to the competitive situation of the Swedish market, especially the distribution channels, profit margins are low. Large-sized companies often have a well-established position in the grocery trade. As the grocery trade is dominated by low and middle price products, high volumes need to be sold to reach profitability. Large-sized companies have such capacity and hence focus on the grocery trade. This enables stable growth trends, but without major growth peaks due to the limited room for niche markets/products.

**Large-sized companies in the agri-food sector in Sweden do not invest any significant amounts in innovation but focus on developing new products within the same product line**, according to interviews.

Hence, large-sized enterprises can generally be said to focus more on products with an already proven demand among consumers, whereas the small-sized enterprises (generally start-ups) focus on niche markets for new trendy products. Statistics on Research and Development (R&D) (Table 12) reveal that the overall investments by the agri-food sector are very low compared to other industries (e.g. about half of that of the 'average industry', such as furniture) and this trend has been stable over time. Further, domestic reports confirm that innovation by Swedish agri-food companies is low<sup>138</sup> compared to other industries in the country.

**Table 12:** Work year equivalents in own R&D<sup>139</sup>, 2011-2017

Product groups	2011	2013	2015	2017
Food products, tobacco and drinks	418	326	361	399
Agriculture, Fishing, Mineral mining	263	176	181	185
Construction	117	177	497	253
Furniture, other manufacturing	711	759	697	563

Source: Statistics Sweden, 11 November 2019.

**Relative to other countries, Swedish agri-food companies do not invest much abroad and exports are not a priority.** This is despite an increasing foreign presence on the Swedish agri-food market. Out of the 50 largest food-producing companies in Sweden, 65% have foreign ownership. While these companies often market and sell Swedish products in other countries, the same strategy, but in the opposite direction, is not exploited by Swedish owned agri-food companies.<sup>140</sup>

Furthermore, high labour and input costs make it increasingly difficult for the sector to compete globally and most entrepreneurs in the agri-food sector instead focus on selling to the domestic market. Establishing a new product and/or product line in a new market is costly in terms of marketing activities, adapting to rules and regulations of a country and obtaining a means of distribution for the product. With low margins in the food industry, many entrepreneurs do not think it is worth the effort.<sup>141</sup> This view was confirmed by interviews and through domestic surveys.<sup>142</sup>

**Price is still the dominant value for the end consumer, and this determines the food industry business models, but the sector is becoming increasingly dependent on new trends among the consumers.**

Example of such trends are:

- Environmental awareness and health – demand for ecological products and locally produced food increases. Environmental and health values are reported and communicated to the consumer through

138 The Swedish Food Federation, 2018, Exportrapporten.

139 The work of a full-time employee for one year. A person that has been a full-time employee but only devoted half his/her time to R&D has done 0.5 full-time positions in R&D.

140 Where Swedish agri-food companies would buy strong brands on foreign markets and sell them domestically.

141 Government Offices of Sweden, Ministry of Enterprise and Innovation, A national food strategy for Sweden – more jobs and sustainable growth throughout the country, Short version of Government bill 2016/17:104.

142 As an example of such domestic surveys – Federation of Swedish Farmers, Lantmännen, Macklean, 2019, Insikter #11 Tillväxt.



certification programmes and have, during the last years, allowed for higher prices for firms that target the premium segment.

- Digitalisation – the level of online shopping for food products is high and is increasing strongly.
- Household income spent on food products has decreased significantly and is being replaced by visits to restaurants and cafés. Between 2003 and 2013, the total revenue of the restaurant sector increased by 50%.<sup>143</sup>

**Small-sized enterprises have been able to create strong growth in connection with changes in trends and shifting consumer behaviours.** Large-sized enterprises in the sector have more difficulties in following these trends in the consumer market, with many of them mainly focusing on efficiency and margins. There is built-in inertia in large-sized corporate organisations that prevents them from quickly developing and producing new products that do not fit into established production lines.<sup>144</sup> This has allowed small-sized enterprises to enter the market with innovative products, which have higher margins and a high market share within a specific niche. The local presence is of great importance and is used in marketing activities. For a significant share of the enterprises, there are many customers and ambassadors locally and they have great use of the local network.<sup>145</sup>

**One-fifth of the agri-food sector are start-ups that have been established in the last decade.** Table 8, under section 3.1 shows the clear trend of an increasing number of small-sized enterprises, both in the agri-food and drink segment. Between 2010 and 2015, 732 new companies were registered in the food sector, compared to the approximately 4 000 in 2015. This is more than for any other industry and implies that almost one-fifth of the companies active in the sector have been operating for less than a decade. Out of these, 41% were founded in city regions, but new start-ups were founded in 190 of the total 290 municipalities in Sweden, hence there is an important geographical spread.<sup>146</sup> The increasing interest in food, in general, combined with low entry barriers, explains the increasing number of small entrepreneurs in the sector.<sup>147</sup>

**However, the high share of start-ups in the agri-food sector has most likely had a relatively low influence on demand for finance.** While the interest in the sector is large, the volume of invested capital is very low. This is due to the fact that SMEs:

- Prefer to grow organically, through own funding, in order to minimise risks.
- Encounter problems with accessing external funding.
- Lack financial knowledge and know-how in management and therefore clear strategies for growth.
- Many of them are satisfied with the local market and do not have the ambition to significantly expand their business.

**Start-ups are founded by entrepreneurs with a passion for the product, rather than entrepreneurs with a growth strategy, and therefore the external financing demanded by the sector is likely to be low.** Founders of start-ups represent diversity in age and background.<sup>148</sup> Co-founders mostly come from close acquaintances and friends, as well as close family and relatives. This provides an indication of the level of ambition and professionalism of the new enterprises. Many entrepreneurs might not have a long-term strategy that clearly defines the steps to create a growing company and the different needs for funding each step. The start-ups may lack the capacity or the time to create such a strategy. Additionally, the fierce competition in the sector means that it is difficult to develop an agri-food producing enterprise. With relatively low margins (even if it is a niche market, the margin compared to other economic sectors is still low) and high costs, entrepreneurs avoid taking on external financing in order to minimise risk. Hence the demand for finance is kept on a low level in the sector.

143 Royal Swedish Academy of Engineering Science, 2012, Livsmedel en branchrapport, IVA-projektet Resurseffektiva affärsmodeller-stärkt konkurrenskraft.

144 Lantmännen, Macklean, The Federation of Swedish Farmers, 2019, Insikter Tillväxt #11.

145 Swedish Food Federation, 2017, Start-up rapporten, matentreprenörerna som formar framtidens livsmedelsindustri.

146 Swedish Food Federation, 2017, Start-up rapporten matentreprenörerna som formar framtidens livsmedelsindustri.

147 Swedish Competition Authority, 2018, Konkurrensen i livsmedelskedjan Rapport 2018:4.

148 Swedish Food Federation, 2017, Start-up rapporten matentreprenörerna som formar framtidens livsmedelsindustri.



Interviews revealed that small agri-food entrepreneurs are often driven by passion and idealism but do not always have a realistic picture of the commercialisation process.<sup>149</sup> For some of them, a change in their professional life, through starting a company of their own, is of greater value than expansion and growth.<sup>150,151</sup>

**Retail market concentration is a barrier to access market channels for one-fifth of the Swedish agri-food sector**, according to both the Agri-food survey and the domestic survey. Swedish agri-food producers experience problems with access to markets, outlets and shops. As Sweden's population is spread over a large geographical area, an efficient and relatively large-sized logistic apparatus is required. Most agri-food producing companies, regardless of size, are therefore focusing on grocery stores as distribution channels for their products.<sup>152</sup>

**Despite this barrier, increasing digitalisation of the agri-food sector is opening up new possibilities for small-sized firms and improving access to market channels.** The relatively high level of digitalisation among the Swedish public allows the use of new distribution channels that are particularly suited to smaller companies<sup>153</sup> and where products from primary production and agri-food are sold directly from the producer to the consumer. The volume of products distributed via this channel is limited but the direct link between end customer and producer also serves as a test market for the latter and hence plays a role in product development.<sup>154</sup>

**Policy as a driver of finance demanded by the agri-food sector.** The largest policy initiative put in place during the 2016-2018 period has been the agreement of a national food strategy, which was adopted in June 2017 by the Swedish Parliament. However, regional food strategies have existed before this.<sup>155</sup> The Swedish food industry has struggled with growth levels below expectations for a long time and, although regional efforts may have had an impact on their local business, the initiative from the parliament is very welcome both by farmers and agri-food producers.

The national strategy covers the entire value chain, from primary producers to the consumer. The overall objective of the food strategy is a competitive food supply chain that increases overall food production while complying with the relevant national environmental objectives, aiming to generate growth and employment and contribute to sustainable development throughout the country. The long-term food strategy covers three strategic areas: rules and regulations, consumers and markets, and knowledge and innovation.

As part of the strategy, on 20 December 2019 the Government Offices presented an action plan which included investments of SEK 122 million annually until the year 2025. This corresponds to approximately EUR 11.5 million annually. Additional investments of SEK 114 million will be made in 2020, corresponding to approximately EUR 10.8 million.<sup>156</sup> The Swedish Board of Agriculture has the task of evaluating and following up the food strategy. Funding to achieve the goals of the strategy will come from various sources, but one of the sources will be the RDP program. The government will also earmark funding to governmental bodies to be used in the food strategy.<sup>157</sup> An example of a finance solution within the strategy that will benefit agri-food producers includes the financing of activities by the Swedish Board of Agriculture that are aimed at obtaining Swedish facilities for food production for export to third countries.<sup>158</sup> As the strategy was recently launched, it

149 Interviews with agri-food representatives and banks, 2019.

150 Interviews with agri-food representatives and banks, 2019.

151 Among such reports 'startup rapporten' by The Swedish Food Federation, 2017, can be mentioned.

152 Lantmännen, Macklean, The Federation of Swedish Farmers, 2019, *Insikter Tillväxt #11*.

153 An example of such new channel is 'reko-ringar'. Consumers and producers in one region get in touch with each other through special Face-book groups.

154 Interviews, 2019.

155 The Royal Swedish Academy of Agriculture and Forestry, February 2015, *Regionala Livsmedelsstrategier En kartläggning av regionala livsmedelsstrategier*.

156 Calculations using Annual Average Exchange Rate for 2019, EUR 1 = SEK 10.5892.

157 Swedish Government, January 2017, *Regeringens proposition 2016/17:104 En livsmedelsstrategi för Sverige – fler jobb och hållbar tillväxt i hela landet*.

158 Swedish Board of Agriculture, January 2020, <http://www.jordbruksverket.se/uppdrag/livsmedelsstrategiforsverige/jordbruksverketsuppdraginomlivsmedelsstrategin.4.cc85ec315c8c3e077ac90b2.html>.



is too early to evaluate its effects<sup>159,160</sup> Hence, so far, no real positive investment trends can be seen as a result of the strategy.

**Robotisation and automation is also an investment driver of the agri-food sector.** This includes a national support scheme, implemented by the Swedish Agency for Economic and Regional Growth, for the transformation of several Swedish industry sectors towards robotisation and automation, with the intention of strengthening SMEs through increasing their knowledge and their use of, and investments in, automation solutions. The programme will continue up until 2021 with support of SEK 100 million and will total approximately EUR 9.4 million (calculated with annual average exchange rate 2019).<sup>161</sup> Stakeholders in the agri-food sector have underlined the importance of this program.

**Support for processing and development of agriculture products is popular among small-sized agri-food companies and the goal set for the full RDP programming period has already been exceeded.** Sub-measure 4.2 in the RDP programme consists of support for investments in infrastructure related to processing and/or development of agricultural products. This support has been included in the RDP programme in Sweden during several programming periods and is therefore assumed to be well-known by entrepreneurs in the agri-food sector. As discussed, the demand by consumers for local and small-sized agri-food alternatives has increased at the consumer level which, in turn, has positively affected the willingness of enterprises to invest in the sector. This trend can also be seen from the number of producers applying for support from RDP. The target number of projects to support through this measure for the entire programming period (2014-2020) is 155<sup>162</sup> and, as of writing, this target has already been exceeded. A total of 394 applications have been presented, with a total budget request equivalent to SEK 268 million. Of these applications, 201 have been approved with a total budget of SEK 82 million.<sup>163,164</sup> According to the Swedish Paying Agency, only a few applications have not been approved due to lack of budget.

The support has been granted for the processing of dairy meat and meat products. Processing and sales of self-produced agricultural products are most common and sales often take place in the shop on the farm. Many start up their own small-sized farm dairies, where the common purpose is to produce milk products locally that can be sold on the farm or in stores in local areas. Others invest in breeding facilities on their own farm to be able to process meat from their own production. They also usually sell products in their own farm shop.

### 3.2.2 Analysis of the demand for finance

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

**Based on the Agri-food survey, the unmet demand for the agri-food sector in Sweden is estimated at EUR 128.5 million.**

**Swedish agri-food companies tend to rely more on internal financial resources compared to other EU 24 companies and enterprises from other economic sectors within Sweden.** The results of the Agri-food survey shows that the Swedish agri-food sector consists of small-sized enterprises with an organic balance

159 However, the conclusions regarding development of the Swedish agri-food sector in 2018 however were that sales volumes increased slightly, profitability declined as a result of the drought, and the employment in the industry fell with 1.5%.

160 The Swedish Board of Agriculture, March 2019, Utvärdering och uppföljning av livsmedelsstrategin- årsrapport 2019.

161 Swedish Agency for Economic and Regional Growth, October 2019.

162 Swedish Board of Agriculture, 2019, Landsbygdsprogrammet 2014-2020, resultat och förväntade effekter, Utvärderingsrapport 2019:13.

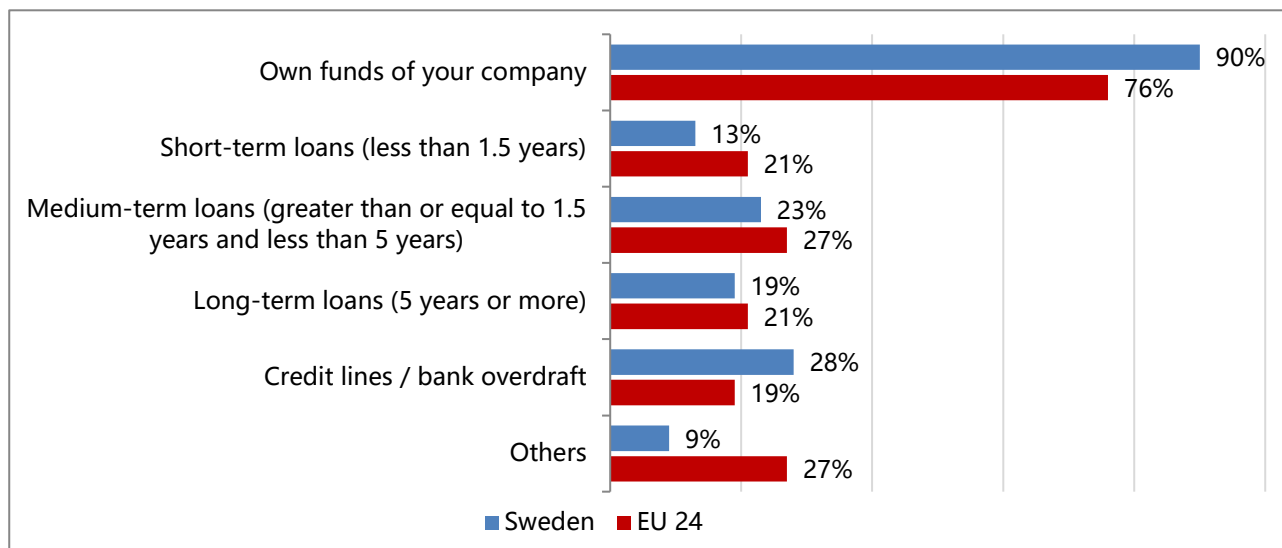
163 The total amount requested is calculated based on all received applications before any administrative check regarding eligibility or selection criteria to have taken place. Applications that have not been approved could have been non-eligible, and/or with insufficient or missing information not allowing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

164 Swedish Paying Agency, 2019, Swedish board of Agriculture.



sheet (as opposed to growing through mergers and acquisitions of other food-producing companies). 90% of the survey respondents claimed that the most important source of finance over the past 3 years was their own funds, compared to 76% for the EU 24 (Figure 18: Most important financing instruments to agri-food enterprises in 2018). This can also be explained by the relatively important role agricultural cooperatives play in the agri-food sector, where member fees (own resources) are used to finance investments undertaken.<sup>165</sup>

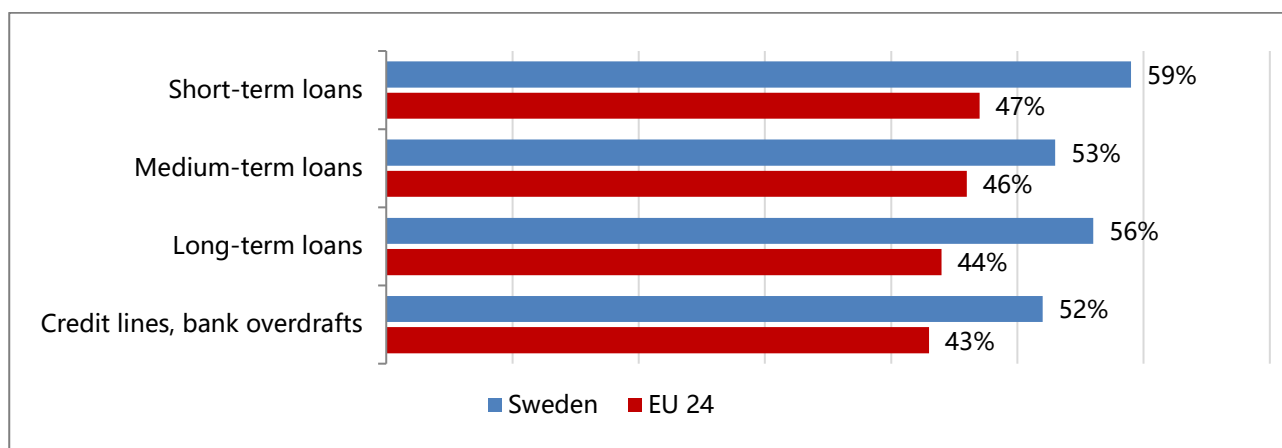
**Figure 18:** Most important financing instruments to agri-food enterprises in 2018



Source: Agri-food survey.

Additionally, more than 50% of the respondents in Sweden who did not apply for financing in 2018 stated that the reason for not applying was due to sufficient internal funds, ranging between 52 and 59% depending on the maturity of the loan product. The equivalent for the EU 24 was a range of between 43 and 47% (Figure 19). The SAFE<sup>166</sup> survey provides the equivalent number for the economy as a whole. According to the SAFE survey, 32% of the Swedish enterprises reported having sufficient internal funds. Hence, the agri-food sector in Sweden seems to use internal funding to a greater extent than the economy as a whole.

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



Source: Agri-food survey.

165 Interviews with agri-food associations, 2019.

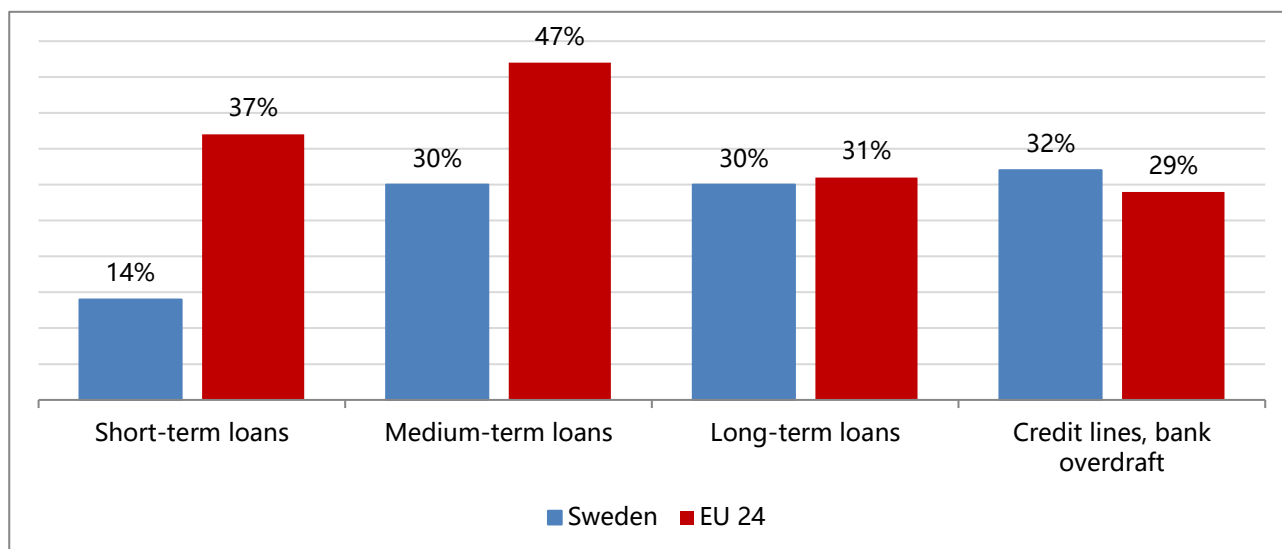
166 European Commission, DG GROW, 2018, Survey on the Access to finance of Enterprises (SAFE).



**The demand for bank credit is lower than for the EU 24, but in line with other economic sectors in Sweden.** Only 36% of the Swedish enterprises in the Agri-food survey applied for funding last year, while the corresponding figure for the EU 24 was 46%. For Sweden, the share of agri-food companies that applied for bank financing is similar to that of the economy as a whole (34%, according to the SAFE survey).

**Short-term loans are in least demand.** According to the Agri-food survey, in the year 2018, the share of farmers that applied for credit lines/bank overdrafts was 32%, for medium-term loans was 30%, for long-term financing was 30%, and for short-term loans was 14% (Figure 20). This is, however, somewhat in contrast to information provided by interviewees, who claim that the agri-food sector turns to the banks for financing almost entirely for long-term loans, while short-term financing is of limited relevance. Additionally, short-term financing requests are usually not well-received by banks, who consider it as demonstrating a lack of long-term planning skills<sup>167</sup>. Short-term financing is instead, to a great extent, financed through supplier credits.

**Figure 20:** Agri-food enterprises applying for finance by financial product in 2018



Source: Agri-food survey.

Bank loans and credit facilities are the most common forms of external finance for Swedish companies.<sup>168</sup> The larger the company the more likely it is to apply for funding.<sup>169</sup> **It is reasonable to assume that large-sized companies are more successful in obtaining external finance because:**

- The large-sized companies have in general existed for many years and built up a relationship with their bank/banks.
- Large corporates in the sector have a high solidity<sup>170</sup> and hence are financially strong.
- Foreign owned large-sized companies have access to funding through the parent company.

**Findings from the SAFE survey reveal that Swedish companies have a harder time in accessing finance than their European counterparts, revealing a risk-averse banking sector.** According to the SAFE survey, the rejection rate for bank loan applications among Swedish enterprises was 12% in 2018, whereas the EU 28 average was 5%. Hence, this implies that Swedish enterprises in general have a harder time accessing finance than the average European enterprise, and that this is not only the case for short-term loans in the agri-food sector. Bank interviews confirmed this, with the banking sector in Sweden recognising that they are risk averse.

167 Interviews with agri-food enterprises' representatives, 2019.

168 Interviews with banks, 2019.

169 Swedish Agency for Economic and Regional Growth, 2017, Rapport 0246 Nummer 4 i serien om företagens villkor och verklighet, Finansiering i svenska företag, temarapport.

170 Solidity is calculated through dividing company assets by equity.

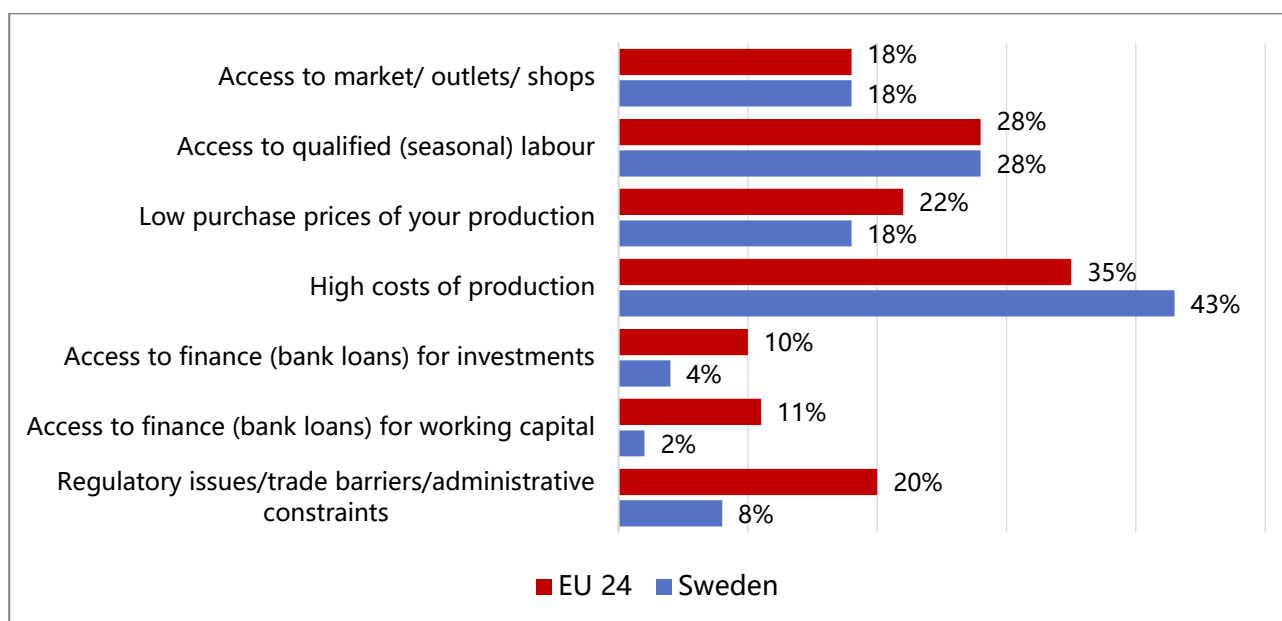


Access to credit lines was also slightly more difficult, with 6% of Swedish enterprises rejected, compared to 5% for the EU on average.

**Access to finance is not considered a big problem by the average agri-food company, but the SMEs with high-growth ambitions or those looking to innovate may find it more complicated.** In general terms, access to finance is not considered to be a great barrier for the development of an enterprise in Sweden, irrespective of the economic sector.<sup>171</sup> This is also the case for the agri-food industry. In the Agri-food survey (Figure 21), only 4% of respondents in Sweden replied that their company experienced problematic access to bank loans for investments in 2018, and only 2% responded that access to working capital funding was a difficulty. For the EU 24, the corresponding figures were 10% and 11%, respectively. There is a low share of enterprises applying for finance in Sweden. Among those who do approach a bank with an application, many are rejected (Figure 22). The low share of enterprises who consider access to finance as critical, seems to contradict the relatively high rejection rates for loan applications, discussed in later sections of this report (Figure 22). This could be explained with the lower share of agri-food enterprises applying for finance in Sweden compared with the EU average and the tendency of small-sized enterprises to rely mostly on their own funds for investments (Figure 23).

However, innovative enterprises in Sweden with high growth ambitions, including start-ups, do find access to finance to be a more significant barrier to their development.<sup>172</sup> According to the Swedish Agency for Economic and Regional Growth<sup>173</sup>, the proportion of companies in the manufacturing industry who view access to loans as being a barrier to growth increased from 11% in 2008 to 18% in 2017. Small-sized companies in the manufacturing industries are among those the most affected.

**Figure 21:** Difficulties experienced by agri-food enterprises in 2018



Source: Agri-food survey.

**Rejection rates are highest for short-term loans and credit lines/bank overdrafts.** According to the Agri-food survey, rejection rates for bank loans were 10% for year 2018, while the rejection rate for credit lines and bank overdrafts was 25% (Figure 22). Although the survey sample was limited, the results showed that the rejections were higher for short-term loan applications than for medium and long-term, and this was further confirmed by interviewees.

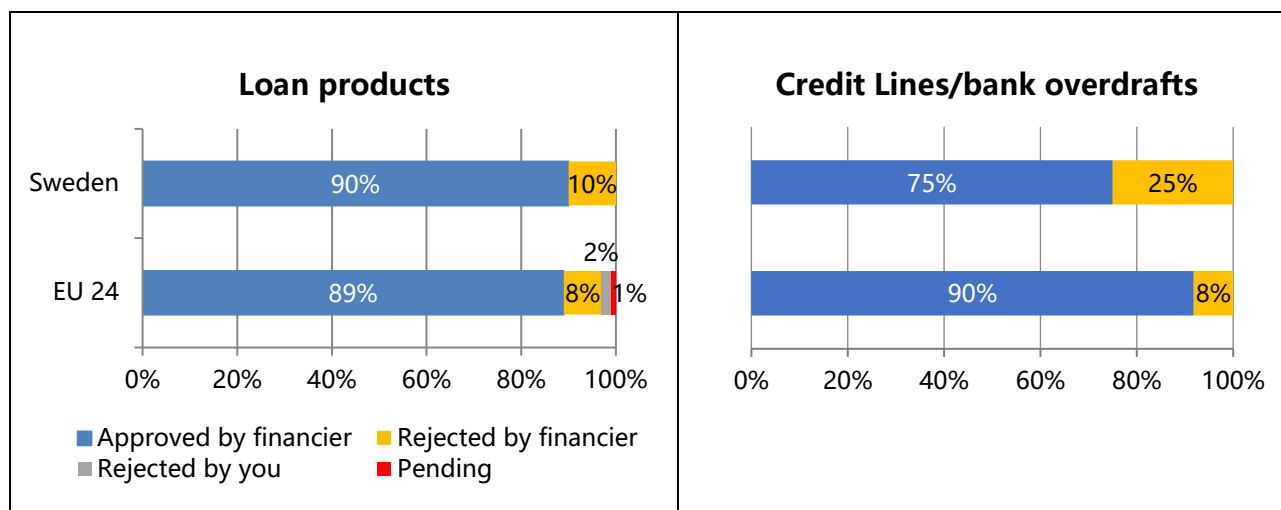
171 Swedish Agency for Economic and Regional Growth, 2017, Finansiering i Svenska företag, Rapport 0246 Nummer 4 I serien om företagens villkor och verklighet,.

172 Swedish Agency for Economic and Regional Growth, 2017, Finansiering i Svenska företag, Rapport 0246 Nummer 4 I serien om företagens villkor och verklighet.

173 Confederation of Swedish Enterprise, November 2019, Bankregleringen och företagens kreditmöjlighete.



**Figure 22:** Results from loan applications in agri-food sector in 2018



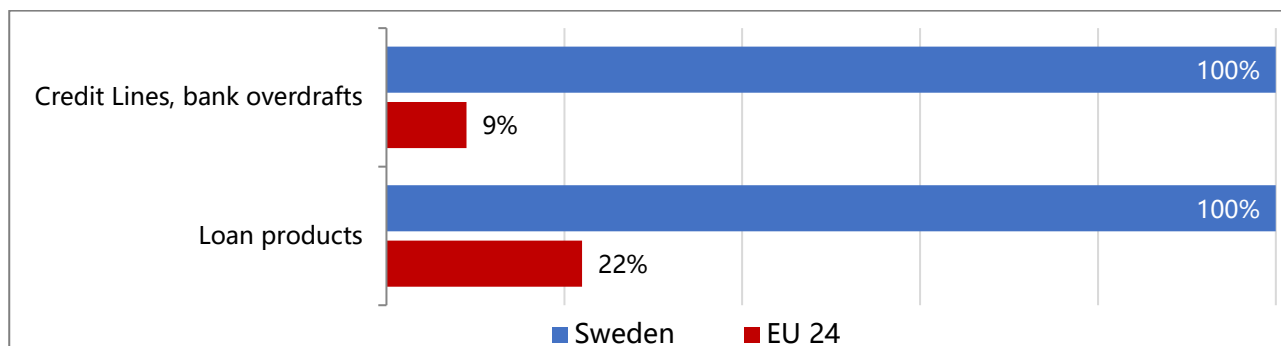
Source: Agri-food survey.

**Reasons why agri-food companies’ loan applications are rejected:**

- Lack of credit history;
- Low margins of the sector combined with high risk aversion of the banks;
- Lack of collateral;
- Lack of a professional business plan.

**A lack of credit history is the main reason credit applications are rejected, and this particularly impacts start-ups.** According to the Agri-food survey, the only reason for rejections by financiers of short-term loan applications in Sweden is due to lack of credit history. 22% of bank loan applicants and 9% of the applicants for credit lines were rejected for this reason. This picture was further confirmed by interviews<sup>174</sup> and suggests that the basis for getting access to finance via banks is, as was discussed in the corresponding section regarding farmers demand for finance, the relationship between the bank and the entrepreneur. The long-time relationship with the bank is of utmost importance in Sweden. Some banks even claimed that they do not accept new corporate customers (which one can assume only applies to small-sized companies). It also suggests that start-ups likely have a harder time accessing finance compared to already established businesses.

**Figure 23:** Lack of history as a reason for the rejections of agri-food enterprises’ loan applications in 2018



Source: Agri-food survey.

174 Interviews with banks and agri-food associations, 2019.





**Other important reasons why agri-food companies are not able to access finance is due to the low profitability of the sector.** According to Business Sweden's analysis,<sup>175</sup> the greatest challenges for the sector are competition, prices, and logistics. These factors all have a strong influence on the profitability of the sector. The economic resilience towards unforeseen events among small-sized agri-food producers is extremely low according to all interviewed stakeholders.<sup>176</sup> As many of them offer one or just a few products, the limited range of products makes the companies vulnerable.<sup>177</sup> As the sector includes many different types of businesses and production plants, it is difficult to find a standardised insurance cover that fits.<sup>178</sup> Stakeholders confirmed during interviews that it is difficult to start a new, viable company in the agri-food sector. In combination with a risk-averse banking sector, this makes it difficult for SMEs in the agri-food sector to obtain financing.

**Lack of collateral and the perceived high costs and margins for loans may also result in a lower uptake of loans by the small-sized agri-food companies.** Since 2007, overall bank lending using real estate as security has increased sharply in Sweden. Bank market regulations made banks reserve more equity when lending. The amount of reserved equity capital depends on the risk weight that the borrower is deemed to have.<sup>179</sup> This has primarily benefited the real estate companies and to some extent the agriculture sector, which are the sectors that have the most real estate assets. For other sectors, it is more difficult to present collateral in the form of real estate.<sup>180</sup> Hence, the changes to the bank market regulations hit companies in the manufacturing and trade industries harder than the rest of the economy. While these industries usually have a large need for capital, they lack larger property holdings. The largest companies can issue their own bonds, but this is usually not an option for small and medium-sized corporates. Small-sized companies in these industries are, therefore, among those who are most affected by changes in the banking market and who find it the most difficult to get access to external funding from banks.

The collateral<sup>181</sup> used by small-sized agri-food enterprises include:

- Mortgages on agricultural properties (when possible, as only a limited share of the sector also has agricultural production);
- Mortgages on residential properties;
- Personal guarantees; and
- Company mortgages (to a limited extent and depending on what assets the company has).

However, usually, the smaller the company the harder it is to provide collateral. The new rules have made it possible for banks to lower the risk-weight for companies with collateral such as mortgages behind their loans. However, the risk-weighting is not affected by, for example, contracts with a client that can guarantee a certain turnover or if the company has a track record of successfully fulfilling their commitments to their clients. For this reason, margins and costs have increased significantly on loans to sectors such as manufacturing, which includes food-producing companies (see section 3.2 for further discussion).

**Applicants refuse loan offers due to high interest rates, together with a lack of financial knowledge by the applicants.** According to the Agri-food survey, around 2% of the loan offers to farmers are refused by enterprises (the percentage is higher, at 5%, in the SAFE survey, which includes SMEs from all economic sectors). According to interviews, a lack of financial knowledge leads the customer to expect 'unreasonably' low costs for credits. The margins for the loans are expected to be in line with mortgage loans even when a mortgage in residential property is not part of the collateral for the loan.

**Start-ups experience problems in accessing external capital.** The five largest barriers experienced by start-up companies in the agri-food sector in Sweden, according to the report *startuprapporten*<sup>182</sup>, are:

- (i) Getting access to markets/outlets shops, which makes it difficult to create a viable enterprise;

175 Business Sweden, March 29, 2018, Slutrapport analys av exportpotentialen utifrån livsmedelssegment.

176 Interviews with banks and agri-food association, 2019.

177 Interviews with banks and agri-food association, 2019.

178 Interviews with banks and agri-food association, 2019.

179 Confederation of Swedish Enterprise, November 2019, Bankregleringen och företagens kreditmöjligheter.

180 Confederation of Swedish Enterprise, November 2019, Bankregleringen och företagens kreditmöjligheter.

181 Interviews with banks and agri-food association, 2019.

182 Ibid.



- (ii) Employing people with the necessary competencies;
- (iii) Understanding and following laws and regulations in the sector;
- (iv) Getting access to external capital; and
- (v) Starting or expanding export activities.

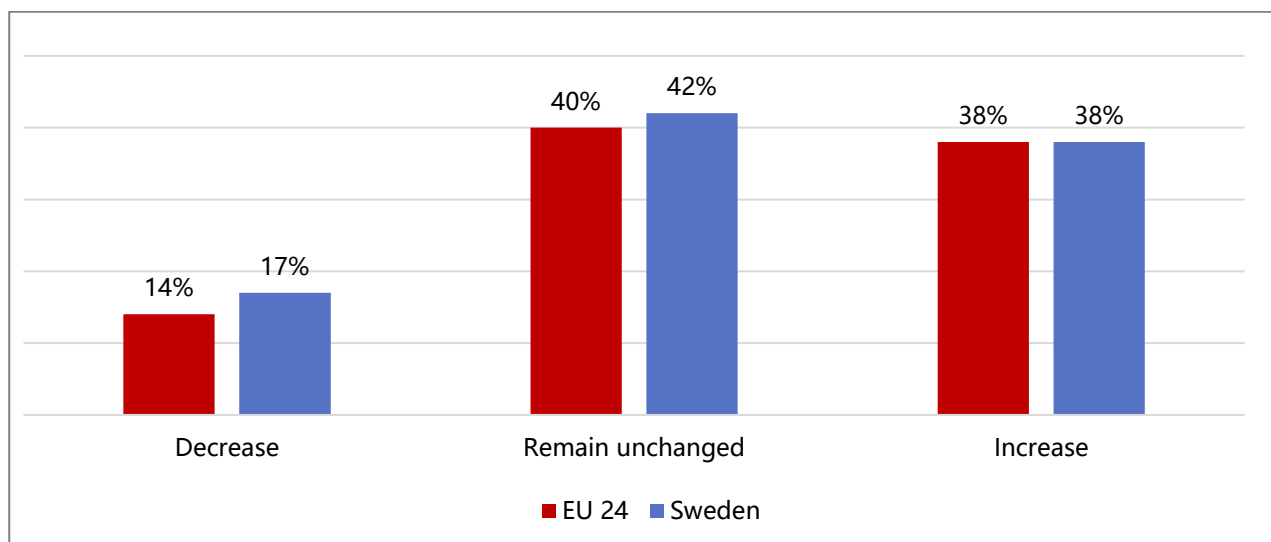
**Access to external finance for small-sized enterprises via sources other than banks, such as FinTech, is not viable.** This is because FinTech is, as of yet, not explored by many actors in any branch and the know-how on how to access this financing is low. Additionally, FinTech companies are rather small and not as solid as banks. Other external sources, such as a crowdfunding campaign, require many work hours, which is a problem for the already hard-working small entrepreneur who does not have the funding to buy expertise.

**The share of enterprises not applying for finance due to the fear of being rejected is lower for Sweden than for the EU 24, according to the Agri-food survey.** In total, 3% of the Swedish agri-food companies responded in the Agri-food survey that they did not apply for finance due to the fear of being rejected, regardless of loan maturity. This is a much lower share than the 6% average for the overall Swedish economy. In EU 24, the average ranged from 7% to 9%, depending on the loan maturity.

The fear of being rejected can be explained by the limited selection of products available to companies and their concern of not being able to repay the loan. This can potentially discourage companies from applying for finance. As explained, the economic resilience to unforeseen events among small-sized agri-food producers is extremely low, according to all interviewed stakeholders.<sup>183</sup> Low profitability and high risk exposure for unforeseen events holds many entrepreneurs back from applying for finance. The risk exposure with building a business with borrowed funding is probably considered too high for many enterprises, such that they may abstain from applying for finance.

**The constantly increasing number of new entrepreneurs in the sector means that it is possible that both demand for financing as well as unmet demand will increase.** According to the Agri-food survey, 38% of the respondents expected their financial needs to increase over the coming two to three years (Figure 24).

**Figure 24:** Agri-food companies' expectations on future financing needs in 2018



Source: Agri-food survey.

**It would be beneficial to address the lack of know-how in finance and management among small-sized agri-food enterprises.** Start-ups often lack a clear strategic plan for their expansion. They have not decided whether their expansion plans could be focused on exports, developing a new product, expand production capabilities, employing more personnel or investing in additional machinery. Often, estimations and

183 Interviews with banks and agri-food association, 2019.



calculations on income from sales tend to be over-optimistic. At the same time, the work effort needed to reach the market with the product is often underestimated. Hence, additional efforts to increase the level of know-how in finance and management would be beneficial to the sector.

According to stakeholders, organised network meetings are highly appreciated among small-sized enterprises. Some even claim that asking questions to other entrepreneurs is the best way of getting access to useful knowledge and for problem-solving.

**There are many educational efforts in place today, however, they are very often regional initiatives and the sector is rather scattered.** New entrepreneurs do not always know who to turn to in order to get help and the help provided often differs from one region to another. With the national long-term food strategy that was adopted in 2017, efforts are becoming more centralised and the situation in the industry is getting more attention from the government and other bodies. However, there is still a long way to go.

**Given that Swedish agri-food enterprises often require collateral to access finance, they would welcome the provision of guarantees by government agencies,** according to the Agri-food survey. Even so, the share of companies reacting positively to the proposition of this support is lower than the EU 24 average, with 21% for Swedish respondents compared to 32% for the EU 24. Ideally, the effort to train agri-food companies could be combined with the introduction of guarantees by the government. By combining the two efforts, the management and the board of directors are forced to set out a strategy for the company and to follow up on the accounting and key covenants.

**Increased know-how of the agri-food sector may not necessarily lead to an expansion of their production.** Even if providing additional technical support to the sector, one must bear in mind that, in many cases, even though the entrepreneur might have the financial or managerial competence, it is difficult to find the time to focus on these aspects. Production in the agri-food sector is often very work-intense. Hence, additional know-how may help overcome some barriers. However, several hurdles still exist for small-sized companies to be able to grow. Additionally, stakeholders have underlined that some companies are comfortable with providing their products only to the local/regional market and do not wish to expand. Furthermore, there is a built-in conflict in providing a handicraft product and expanding the production. There is a risk that the 'craftsmanship' of the product, which is valued by consumers, is lost when the organisation expands.



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

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

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

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

- The traditional banks dominate the supply of finance to the agri-food sector.
- Swedish banks are relatively risk-averse, and the agri-food sector is struggling with high risks due to generally low profitability and low access to collateral.
- There is a development of FinTech companies on the supply side of finance in Sweden, providing services within the areas of loans, payments and savings. Their market share is low but the industry drives transformation processes forward on the financial market.
- There is a vast number of different finance products on the market, but agri-food companies mostly turn to banks for long-term loans.
- The total outstanding long-term loan volume to the agri-food sector at the end of 2017 was estimated to be EUR 594 million. The trend has been fluctuating since 2013.
- The relatively low level of supply is due to the high dependency on own resources in the sector; a high share of foreign companies, which rely to a great extent on financing from international markets; and to many small-sized companies being excluded from the financing market.
- The constraints to the supply of finance to the Swedish agri-food sector include (i) the banks are risk averse and prefer to finance other sectors with higher collateral; (ii) the agri-food sector has low collateral and low margins. Hence, it is considered risky and thus is subject to higher interest rates; and (iii) banking based on long-term relations penalise start-ups.

#### 3.3.1 Description of finance environment and funding availability

##### 3.3.1.1 Finance providers

**The traditional banks are the largest providers of finance to the agri-food sector.** The agri-food sector is treated as any other economic sector, and so the market share of lending to the sector is not available. However, as the agri-food sector is dominated by SMEs, the same general tendencies for finance providers to SMEs are assumed to be the same for the agri-food sector. The major lenders within the traditional banking sector, in particular to SMEs, are:

- Swedish major commercial banks;
- Retail banks;
- Savings banks;
- Leasing companies.

The banks discussed in the section on Finance Providers for primary production (section 2.3.1.1) are also relevant for the financing of agri-food companies (i.e. Swedbank, SEB, Handelsbanken and Nordea). Together,



these three banks have the largest absolute share of total lending in Sweden, (including both private and corporate lending) at 57%.<sup>184</sup> These represent the more traditional bank positions.

**But the sector also makes use of retail banks.** As agri-food companies are regarded and treated as any other corporate business, and divided on the basis of size rather than economic sector, they have, to a greater extent than the agriculture production sector, the alternative to turn to retail banks instead. These banks have few offices but provide services online. Examples of such banks or credit market companies are Marginalen Bank, Svea Företagsbanken, Collector Bank, and Klarna. For agri-food enterprises with large balance sheets, rather than large assets, online contact with the bank is potentially problematic since it is more difficult to digitally assess a business concept or the value of a customer contract, which are the two major factors for agri-food enterprises.

**Savings banks** represent 4.9% of total lending (including private and corporate lending) on the Swedish market.<sup>185</sup> Savings banks are regional banks that differ in size. Their lending is directed to mortgages, but they also represent an alternative to the major banks.

**Leasing companies** in Sweden account for a very low share of total lending in the country (0.5%). Leasing is not very common in the sector since the equipment and machinery are not very standardised and/or marketable.<sup>186</sup> Leasing is a more common solution for cars, medical equipment and agriculture machinery. Leasing is also applicable to software products, licences, installation and education, which are offered all together in a package. Enterprises who are focused on technical development usually choose the leasing alternative, since the equipment can be updated under the leasing agreement. Leasing agreements are subject to normal credit assessment procedures and an acceptable repayment ability is necessary in order to obtain a leasing agreement.

**Almi**, as previously discussed in the section regarding finance providers to farmers, is a state-owned venture capital organisation. Almi offers loans to companies with growth potential and assists in their business development. This applies to businesses in the start-up phase as well as established companies. The Almi Invest subsidiary provides venture capital for early-stage, emerging companies with large growth potential and a scalable business concept.

**Vinnova**, Sweden's innovation agency, can also provide financing to the agri-food sector provided that innovative processes are included in the business. They provide financing in the early stages of innovation processes where the risks are great and where projects would generally not be feasible without government aid. They provide the opportunity for enterprises and organisations to experiment and test new ideas before they become profitable.

### 3.3.1.2 Financial products

**Financial products offered by the banks are very much the same as the products described for agricultural primary producers.** According to interviews, the agri-food sector mainly turns to banks for long-term loans. The products available to the agri-food sector are:

- long-term investment corporate loans;
- check credits or account credits;
- card credits connected to company cards;
- leasing of equipment and/or cars;
- instalment loans; and
- car financing.

The interest rates charged on each of these products are not available. However, it is important to note that, like in agriculture, Swedish agri-food firms often successfully negotiate the interest rate they are charged. When real estate properties are used as collateral, the interest rates provided for mortgage loans under

184 Finansinspektionen, Bankbarometern, April 2019.

185 Finansinspektionen, Bankbarometern, April 2019.

186 Interviews with agri-food associations, 2019.



section 2.3.1.3 (Table 5) are also the relevant reference for the agri-food sector. According to the SAFE survey, the average interest rate applied to Swedish loans is lower than for the EU as a whole, with the mean interest rate being 2.6% in Sweden compared to 3.7% for the EU.

#### *Long-term investment corporate loan*

- Collateral is a prerequisite to access such a loan. Collateral can consist of a company mortgage<sup>187</sup> or properties.
- The interest rate can be fixed or variable, in which case it can include a rate cap.
- The loan follows an amortisation plan, which is adapted to the term of the investment
- The terms, such as the interest rate, fees and amortisation plan, is based on the type of investment and the preferences of the borrowing corporate.
- A business plan is needed to get access to such a loan.
- Customers are advised to contact the local branch of major banks to arrange the credit facility.
- The loan can be made in the local currency (SEK) or in a foreign currency, depending on the preferences of the borrower.

#### *Check-credits or account-credit; Short-term lending*

To be used in the event of unexpected occurrences, low season or start-up.

- In order to access such credit, banks require the latest reports on a quarterly, semi-quarterly or other frequency basis, as well as an annual report. In addition, a budget is also required and the bank also assesses the borrower's solvency and ability to pay.
- Interest rate is variable (as opposed to fixed).
- Interest rates are not advertised by the major banks and are subject to negotiation.
- The corporate customer is encouraged, if turning to the major banks, to apply for this kind of credit facility online and the local branch will contact the customer after finishing the credit procedure. New entrants are encouraged to phone the major banks regarding this finance solution.
- This credit possibility can be made in local currency (SEK) or in a foreign currency, depending on preference of the borrower.

#### *Card credits connected to company cards*

Company cards often include a 30 or 45 days credit setup. The amount of credit depends on the bank customers' ability to pay and it is subject to a credit assessment. Annual report, budget, profit/loss statements and balance sheets are needed in the application process. The yearly interest rate is from 10%.

#### *Car financing*

Long-term finance specifically designed for cars. This works like leasing but with the car itself serving as collateral.

- Payment for leasing of cars is on a monthly basis.
- Terms, such as interest rate and fees, are negotiated and depend on the value of the car, the amount borrowed and the creditworthiness of the customer.

<sup>187</sup> A company or a (natural or legal) person that intends to run a business can pledge a company mortgage, Swedish företagshypotek by registering a specific amount in the corporate mortgage register. The pledge is not tied to a particular property at a particular point in time but it can change over time. The idea behind this is the entrepreneur's personal property can be used as collateral for credit without him or her having to give up having the assets at his or her disposal.



**In addition, examples of financial products offered by the FinTech industry are:**

- Crowdfunding, and
- Peer-to-peer funding.

Crowdfunding is a method of raising capital through the collective effort of friends, family, customers, and individual investors. This approach taps into the collective efforts of a large pool of individuals – primarily online via social media and crowdfunding platforms. There are a variety of crowdfunding types. The three primary types are donation-based, rewards-based, and equity crowdfunding.

Peer-to-peer funding is through a loan, rather than an investor owning a stake in a business. There is a match via an online platform which connects the lender and person or business. A loan is very different from equity; it is a specific amount of money, repaid over a defined term, and the lender gets the return via interest payable on the loan.

**The supply of FinTech financial solutions to the agri-food sector is still in its infancy, but there is potential for providing important solutions in the future.** The use of new FinTech services has primarily taken place in customer groups who do not have a relationship with a bank. In Western Europe, this means small-sized businesses and segments with lower income and creditworthiness, which is the case for the agri-food sector in Sweden. Some reasons why not all potential customers have access to banking services include the business and cost model of the banks, which are partly shaped by laws and regulations.<sup>188</sup> One of the suggestions from the Swedish organisation 'Företagarna' in order to improve the financial situation for start-ups in agri-food, as well as in other sectors, is to facilitate the access to other forms of financial solutions such as crowdfunding and crowd lending.<sup>189</sup> Nevertheless, in Sweden, there are more than 150<sup>190</sup> FinTech companies. On the other hand, it must be taken into account that they are very small and, to some extent, compete with each other.<sup>191</sup> Even though the FinTech market share of the loan volume is very small, such companies drive a transformation process forward in the financial market that will, in turn, affect both the supply and demand for financing in the near future.

It would seem that this industry would be able to provide the agri-food sector with financing possibilities, but the development is still in its infancy and, at present, few entrepreneurs have tried these options. At the time of writing, there are only a few good examples of successful crowdfunding campaigns in the sector. There are also examples of a number of enterprises that, despite a successful campaign, turned out not to be viable. Hence, the future will have to show how this complement to the financing market can add value to the agri-food sector.

**Business angels** are another way of attracting both funding and advice, as well as a network, related to finance. However, currently, neither business angels nor venture capital is attracted to the sector in Sweden to any larger extent.

### **3.3.1.3 Description of the financing market**

**Collateral requirements are linked to real estate assets, posing a problem to all manufacturing industries, including the agri-food sector. As a result, the margins and costs for the loans are high.** Usually, an agri-food producing company is treated the same as any company from any other sector and the case is the same for start-ups. Therefore, the banks interviewed had difficulties providing a comprehensive picture of the specificities for the agri-food sector and its financing needs. Therefore, the general description of the financing market in Sweden, as already described under section 2.3.1.3, also remains valid for the agri-food sector, and in particular for the larger enterprises.

However, as described for in section 3.2.2, a complication for the agri-food sector, as for other manufacturing industries, is the collateral requirements for loans often being linked to the ownership of real estate. This is particularly a problem for small and medium-sized companies. The most commonly used collateral by the

188 Blue Institute, June 2019, FinTech den digitala transformeringen av finansmarknaden.

189 Företagarna, 2019, Småföretagen vill växa men saknar finansiering, Företagarnas finansieringsrapport.

190 Blue Institute, June 2019, FinTech den digitala transformeringen av finansmarknaden.

191 Ibid.



sector are mortgages on the residential properties of the enterprise owner (and to the extent possible, on agricultural properties) and personal guarantees. Because of the general lack of access to collateral by the small and medium-sized manufacturing companies, including agri-food, the risk-weighting by the banks is higher and therefore the margins and costs for the loans are also higher. According to analyses made by the organisation Confederation of Swedish Enterprises, Swedish banks have increased their margins sharply in their corporate lending over the last 10 years. The transfer of loans and credits from sectors with a low level of collateral (i.e. the manufacturing sector) towards sectors with high level of collateral (i.e. the real estate sector) began in 2007, as a result of the implementation of Basel II rules, and has continued since then.<sup>192</sup>

**The emphasis on mutual trust relationships for obtaining finance creates problems for start-ups.** In addition, regardless of what category the agri-food producing company is sorted under, the direct relationship between the bank and its customers is of very high relevance when obtaining a loan in Sweden (please see further discussion under section 2.3.1.3). Therefore it is, in general, more difficult for new enterprises to access finance, when compared to already established companies, due to their lack of history.<sup>193</sup>

**The emphasis on credit history by the banks has generated a space for FinTech services.** Their primary customers are those groups who do not have a relationship with a bank. This implies that FinTech does not only compete with the banks on customers but that they also expand the market.<sup>194</sup> While it would seem that this industry would be able to provide the agri-food sector with financing possibilities, its development is still in its infancy.

### 3.3.2 Analysis of the supply of finance

**There are low levels of supply of long-term financing to the agri-food sector and the trend is fluctuating.**

No official statistics on total outstanding loan volumes are available for the agri-food sector. However, Statistics Sweden provides data for the agri-food sector on the median share of long-term loans compared to turnover for five segments of company size (1-19, 20-49, 50-199, 200-499, ≥500 employees), as well as the median turnover for the 5 segments and the number of companies for each segment. Based on this, an estimate of the total outstanding loan volume for long-term loans was obtained.<sup>195</sup> As can be seen from Table 13, the trend fluctuated substantially between 2013 and 2017. However, the most striking message is that, overall, the total loan volume for long-term loans to the agri-food sector in Sweden is relatively low.<sup>196</sup>

**Table 13:** Total corporate outstanding long-term loans to the agri-food sector, 2013-2017, EUR million

	2013	2014	2015	2016	2017
Total outstanding long-term loans	394	665	327	468	594

Source: Calculations based on Statistics Sweden data.

The total outstanding loan volume to the agri-food sector is only estimated for long-term loans. Additionally, it is calculated based on numerous assumptions and therefore needs to be interpreted with care. The total outstanding loan volume is relatively low compared to the levels of investments in physical assets undertaken yearly, which could be explained by the fact that a high number of large-sized companies (i) finance their investments through international loans, or (ii) finance their investments through own resources (in the case of agricultural cooperatives), whereas, at the same time, several of the SMEs experience problems in accessing finance.

192 Confederation of Swedish Enterprise, November 2019, Bankregleringen och företagens kreditmöjligheter.

193 Företagarna, 2015, Småföretagen vill växa men saknar finansiering, Företagarnas finansieringsrapport.

194 Ibid.

195 See Annex A. 7 for the procedure to conduct calculations in order to obtain estimates for the total outstanding long-term loan volumes.

196 Focus on long-term loans in estimations of outstanding loans.



**The explanation for the low estimate of outstanding long-term loans to the agri-food sector is threefold:**

- A high dependency on own resources in the sector.
- Foreign companies largely rely on financing from international markets.
- Many small-sized companies are excluded from the financing market.

First, as discussed for section 3.2.2, Swedish agri-food companies rely to a greater extent on internal resources compared to the EU 24 average and to other economic sectors in Sweden. This signals that the use of external financing from the sector is low overall. This is partly due to the documented tendency of the small-sized companies to grow organically, and to not depend on external finances, and of the large-sized agricultural cooperatives to use their own resources to finance their investments. Hence, the supply of finance to both of these segments of the sector can be expected to be low. Secondly, a large part of the biggest agri-food companies (65% of which are foreign-owned) are likely to finance their investments through their parent company, or through the international financial markets, and so their finance demand from the Swedish market is limited or non-existent. Thirdly, a large share of the agri-food sector has limited access to the financial market, as discussed in-depth in section 3.2.2.

**Banks being risk-averse and the fact that the agri-food sector is considered a high-risk sector contributes to the low supply of finance to the sector.** There are many banks as well as many different types of providers that supply financing to the agri-food sector. Hence, competition between banks themselves and between banks and other financial institutions is very high. However, this is not the reason for the low supply of finance to the sector. The largest constraints in the supply of finance to the agri-food sector are:

- Banks are risk-averse;
- Rules and regulations have turned a sector lacking in collateral to a high-risk sector, in comparison to other industries.

**Risk-averse banks are hesitant to finance the small-sized agri-food companies due to the high investment costs and low profitability that characterise the sector.** The appetite for risk among retail banks in Sweden is rather low,<sup>197</sup> proven by the fact that the proportion of credit losses and non-performing loans, compared to total lending on the Swedish bank market, is very low. The proportion of non-performing loans in relation to total lending for the three major Swedish banks was just under 1% at year-end 2018. This is significantly lower than average in the EU, which is over 3%.<sup>198</sup> This illustrates the level of risk-aversion that the largest banks have. At the same time, the largest lenders have increased their margins and lending to borrowers without, or with limited access to, collateral. These clients are weighted as high-risk clients.

The agri-food sector is characterised by high investment costs and low profitability. Big parts of the sector struggle with problems of profitability of a more structural nature. In addition, agri-food enterprises tend to have large balance sheets rather than large assets, and so the possibility of providing collateral is limited. Hence, it is reasonable to assume that enterprises within the agri-food sector have limited access to bank lending.

Supporting organisations, including government, cooperatives and other initiatives, have just begun their work in developing strategies, action plans and structures to assist agri-food producers.<sup>199</sup> These institutions describe agri-food entrepreneurs as being very competent at craftsmanship but lacking competence in financing matters. Therefore, it can be said that the market is currently very immature and under development.<sup>200</sup>

197 Interviews with banks, 2019.

198 Finansinspektionen, Bankbarometern, April 2019.

199 Interviews with banks and agri-food associations, 2019.

200 Interviews with banks and agri-food associations, 2019.



### 3.4. Financing gap in the agri-food sector

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

#### Key elements on the financial gap in the Swedish agri-food sector

- The total financing gap is estimated to be EUR 129 million.
- The gap is the largest for the small-sized firms.
- Long-term loans show the largest gap.
- The key constraints are a lack of credit history, collateral and professional business plans. The low margins of the sector, combined with the high risk aversion of the banks, provide additional barriers to agri-food producers in accessing finance.
- Start-ups face particular difficulties in accessing finance.
- The national food strategy, adopted by the Swedish Parliament in 2017, including the accompanying action plan, will potentially address several of the issues faced by the small-sized agri-food companies.

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

$$\text{Financing gap} = \text{Number of firms} \times \text{percentage of firms that are both financially viable and have unmet demand} \times \text{average loan volume}$$

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

**The financing gap arises from unmet financing demand from economically viable firms<sup>201</sup>.** The unmet demand for finance includes

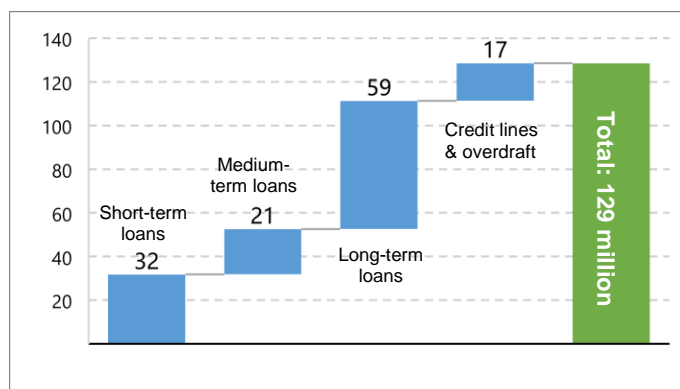
- (i) lending applied for but not obtained, or
- (ii) a lending offer refused by the potential borrower, as well as
- (iii) lending not applied for due to expected rejection.

For the purpose of this report, '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.

<sup>201</sup> The financing gap presented in this section is different from the total unmet demand presented in Section 3.2.2. In the quantification of the total unmet demand, all the enterprises in the population applying for finance are considered independent from their economic viability.



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



Source: Agri-food survey.

The financing gap for the Swedish agri-food sector is estimated to be EUR 129 million (Figure 25). The unmet financing needs are mostly concentrated in small-sized firms. The type of loans for which the gap is largest are long-term loans (Table 14).

**Table 14:** Financing gap by agri-food firm size and product, 2018, EUR million

	Total	Short-term Loan	Medium-term Loans	Long-term Loans	Credit lines/bank overdraft
Small-sized firms	102.6	24.5	16.8	47.6	13.8
Medium-sized firms	17.9	5.7	2.7	7.4	2.2
Large-sized firms	8.0	1.6	1.3	3.8	1.3
<b>Total</b>	<b>128.5</b>	<b>31.8</b>	<b>20.8</b>	<b>58.7</b>	<b>17.2</b>

Source: Agri-food survey.

The general drivers of the financing gap include a lack of credit history, collateral, a professional business plan and financial know how, as well as the low margins of the sector and the high risk aversion of the banks.

- Lack of credit history.** The long-term relationship with the bank is of utmost importance in Sweden. Some banks even claim that they do not accept new corporate customers (which one can assume only applies to small-sized companies). This suggests that start-ups have a harder time accessing finance than already established businesses, which has also been confirmed in numerous interviewees.
- Lack of collateral.** A complication for the agri-food sector, as for other manufacturing industries, is that the collateral requirements for loans are often linked to ownership of real estate. This is particularly a problem for small and medium-sized companies. The most commonly used collateral by the sector are mortgages on residential properties (and, to the extent possible, on agricultural properties) and personal guarantees. Because of the general lack of access to collateral by the small and medium-sized manufacturing companies, including agri-food companies, the risk-weighting by the banks is higher and the market is dominated by risk-averse banks. Due to the lack of collateral, the costs and margins for loans to the sector are higher and presumably unaffordable for many small-sized entrepreneurs in the sector.
- The low margins of the sector combined with the high risk aversion of the banks.** The economic resilience towards unforeseen events among small-sized agri-food producers is very low according to all interviewed stakeholders. As many of them offer one, or just a few products, the unilateral production



makes the companies vulnerable. Additionally, significant problems with access to distribution channels make it difficult to create a viable enterprise. Stakeholders confirmed during interviews that it is difficult to start a new company from the ground and to make it viable in the agri-food sector. The combination with a risk-averse banking sector means that it is difficult for SMEs in the agri-food sector to obtain financing.

- **Lack of a professional business plan.** Small-sized agri-food entrepreneurs are often driven by passion and idealism but do not always have a realistic picture of the commercialisation process. To expand a small-sized company is a very demanding task and it requires knowledge in many areas such as finance, employee rights, marketing and much more. This is knowledge that is often missing among the small-sized start-ups in the agri-food sector. Therefore, start-ups often lack a clear strategic plan for their expansion. They have not decided whether their expansion plans should be focused on exports, developing a new product, expanding production capabilities, employing more personnel or investing in machinery. Often, estimations and calculations on income from sales tend to be over-optimistic. At the same time, the work effort to be able to reach the market with the product is often underestimated. This combination leads to banks being hesitant about providing finance.
- **Lack of financial know-how.** Interviews suggest that the knowledge of finance among small-sized firms in the sector is low and that they do not have the funds needed to hire that kind of competence through advisers or employment. In addition to potentially discouraging small-sized firms from applying for finance, a lack of financial knowledge also leads the customer to expect 'unreasonably' low costs for credits when they do approach the banks. The margins for the loans are expected to be in line with mortgage loans, even when a mortgage in residential property is not part of the collateral for the loan. When the credit offer is not in line with the client's expectations, this may lead to a refusal of the loan offer.

**Overall, the small-sized agri-food enterprises, and in particular start-ups, have particular difficulties in accessing finance, whereas the large-sized enterprises have not been found not to have these problems.** Interviewees have confirmed that the constraints identified for accessing finance are particularly relevant to the SMEs in the sector. Access to finance from the traditional banking sector is found problematic because of the reasons outlined above. Access to external finance via other sources than banks, such as FinTech, is not easy since:

- FinTech is not yet explored by many agri-food companies and the know-how on how to access this financing is low.
- A crowdfunding campaign needs many working-hours, which is a problem for the already hard-working small-sized entrepreneur who does not have the funding to buy expertise.
- FinTech companies are rather small and not as solid as banks.

**Over the coming years, the evolution of the financing gap is likely to increase.** According to the Agri-food survey, 38% of respondents expected their financial needs to increase over the coming two to three years period. Furthermore, innovations will be needed in the future, both to cope with sustainability issues and in order to reach export markets for the agri-food sector in general, regardless of company size. This all points to increasing financing demand.

In addition, if the interest in agri-food production continues to increase and to attract more new enterprises, it is reasonable to believe that the financing gap will expand as long as the underlying factors for the existence of the gap are not addressed. Also, the financing gap for the medium-sized companies will potentially grow larger, because as some of the start-ups succeed and grow they will require additional finance. Additionally, according to the report *Startuprapporten*,<sup>202</sup> while there are measures in place to support research and development in starting a company, the next step, which is to obtain finance, is more difficult.

**In order to address the gap, technical support could be provided to the small-sized agri-food companies in Sweden.** This is already being done through government programmes, sectorial involvement, and support provided through organisations supporting SMEs in the economy in general. However, the gap in

202 The Swedish Food Federation, 2017, *Startuprapporten*.



knowledge identified both in terms of business planning and financial know-how, leads to the conclusion that additional efforts could help SMEs accessing finance to a greater extent than today.

As is the case for the agriculture sector, in order to help small-sized companies and start-ups overcome issues related to a lack of credit history, training sessions could be organised where both bank employees and agri-food companies participate. This will increase the know-how of both parties with regard to each other's sector. This would also lay the foundation for a more solid relationship between the banks and the agri-food sector and it would increase the agri-food sector's financial know-how.

Additionally, risk-sharing instruments and guarantees could be introduced in order to increase the level of investment in innovations and to make credit also accessible for small-sized companies without access to guarantees.

Ultimately, the recently adopted national long-term food strategy, together with the accompanying action plan, is expected to address several of the weaknesses of the sector. However, it is still far too early to evaluate its effects.



### 3.5. Conclusions

**Gross investment undertaken by the agri-food sector is increasing at a rather modest pace, with investments in machinery and inventory the main drivers and with the largest companies driving the investments.** The yearly investments undertaken are in the range of EUR 500 million to 600 million. The principle purpose of the investments is to reduce costs (in particular salary costs) and to make production more efficient. Very few investments are made for innovative purposes and few investments are undertaken in order to grow internationally, as the sector is primarily focused on the domestic market. The 10 largest companies in the sector account for 50% of total revenue. This segment also carries out the majority of investments.

**The small-sized companies prefer to grow organically through own funding in order to minimise risk.** In addition, there are many barriers for this group in accessing external funding:

- There are many new entrants in this subgroup lacking credit history or a bank-relation.
- Many of them lack know-how and knowledge in finance and management.
- Access to collateral is limited.
- The low profitability of the sector causes banks to be cautious.

There are many banks and different types of providers who supply funding needs. Competition between banks themselves and between banks and other financial institutions is very high. While FinTech is developing in the market, it only holds a very marginal share of fund supply. When searching for finance in the sector, the most common approach is to turn to banks. **The largest constrains in the supply of finance are as follows:**

- Banks are risk-averse;
- Rules and regulations have turned a sector lacking collateral into a high-risk sector, compared to other industries.

**Against this background, the financing gap for the Swedish agri-food sector is estimated at EUR 129 million.** In accordance with the analysis, the gap is the highest for the small-sized enterprises and for long-term loans. However, a gap is identified for all products, regardless of maturity levels. The main conclusion is that the start-up segment in this sector has difficulties in accessing external funding.

#### **Recommendations for the agri-food sector:**

A number of governmental and regional initiatives provide support in terms of knowledge in finance and business development to start-ups/new enterprises. As there are many small-sized entrepreneurs in the sector, with a business focus that is often disconnected from financial and organisational management, big support-efforts are needed to encourage the development of such companies.

- Introduce risk-sharing instruments and guarantees in order to increase the level of investment towards innovation, and to also make credit accessible for small-sized companies without access to guarantees. This could include targeted instruments to start-ups in order to reduce costs linked to credit. The new possibilities offered by the CAP/EAFRD in the 2021-2027 programming period could be taken into account and potentially EU-funding could be involved.
- Increase support efforts in terms of competence in finance and management to the agri-food sector.
- In order to help enterprises in the sector to grow, the two first recommendations could be combined, so that the management and the board of directors are forced to set out a strategy for the company and follow up on the accounting and key covenants.
- Digitalisation has proven to open new niches for start-ups to absorb and develop in areas such as new distribution channels; new ways of developing products, with help from ambassadors; and to add value to the product in terms of story-telling, whereby support in the development of digitalisation in the enterprises, in terms of knowledge, network and support funding, is highly relevant.



# ANNEX

## A. 1. References

1. Agrifood Economics Centre on behalf of Swedish Competition Authority, 2011, De lantbrukskooperativa företagens betydelse för konkurrensen inom livsmedelskedja, <http://www.konkurrensverket.se/globalassets/aktuellt/nyheter/de-lantbrukskooperativa-foretagens-betydelse-for-konkurrensen-inom-livsmedelskedjan.pdf> .
2. Agrifood Economics Centre, Ida Lovén, Martin Nordin, 2019, Is the Setting Up Aid Mitigating the Generational Renewal Problem in Farming?
3. Agrifood Economics Centre, Joakim Gullstrand, Christian Jörgensen, 2011, Local Price Competition: The Case of Swedish Food Retailers.
4. Agrifood Economics Centre, Sören Höjgård, 2019, Kapitalförsörjning på landsbygden och EU:s finansiella instrument, Fokus nummer 2019:3.
5. Agri-food Economics centre, 2012, Tillväxt, specialisering och diversifiering – hur jordbruksföretagen förändrats de senaste 20 åren.
6. Agrifood Economics Centre, 2019, Ger startstödet yngre jordbrukare?
7. Arla Foods, 2019, Consolidated Annual Report 2018, Transforming for the future, [https://www.arla.com/4927e1/contentassets/d968a7fbbad24880a14ada9e65e91f44/arla\\_consolidated\\_annual\\_report\\_2018.pdf](https://www.arla.com/4927e1/contentassets/d968a7fbbad24880a14ada9e65e91f44/arla_consolidated_annual_report_2018.pdf).
8. Bankers Association: website downloaded 14 July, 2019.
9. Blue Institute, 2019, FinTech den digitala transformeringen av finansmarknaden, <https://blueinst.com/wp-content/uploads/2019/06/FinTech.pdf> .
10. Blue Institute, 2019, FinTech den digitala transformeringen av finansmarknaden, <https://blueinst.com/wp-content/uploads/2019/06/FinTech.pdf>.
11. Business Sweden, 2018, Analys av exportpotentialen utifrån livsmedelssegment.
12. Business Sweden, 2019, Slutrapport analys av exportpotentialen utifrån livsmedelssegment, [file:///Users/asa/Downloads/Slutrapport\\_Analys%20av%20exportpotentialen%20utifr%C3%A5n%20livsmedelssegment%20\(1\).pdf](file:///Users/asa/Downloads/Slutrapport_Analys%20av%20exportpotentialen%20utifr%C3%A5n%20livsmedelssegment%20(1).pdf)
13. Confederation of Swedish Enterprise, 2019, Bankregleringen och företagens kreditmöjligheter, [https://www.svensktnaringsliv.se/migration\\_catalog/Rapporter\\_och\\_opinionsmaterial/Rapporter/2285161\\_snl\\_rapport\\_bankfinansiering\\_webbpdf\\_747365.html/BINARY/2285161\\_SNL\\_Rapport\\_Bankfinansiering\\_WEBB.pdf](https://www.svensktnaringsliv.se/migration_catalog/Rapporter_och_opinionsmaterial/Rapporter/2285161_snl_rapport_bankfinansiering_webbpdf_747365.html/BINARY/2285161_SNL_Rapport_Bankfinansiering_WEBB.pdf).
14. Copenhagen Economics, 2018, Competition in the Swedish Banking Sector, Swedish Bankers' Association, <https://www.swedishbankers.se/media/3854/competition-in-swedish-banking-sector.pdf>.
15. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Pandi Zdruli, Ordan Cukaliev, Andrea Hagyo, Boban Illic, Benjamin Mohr, Elena Gavrilova and Dori Pavlovska-Gjorgjieska, 2017, Implications of the ANC EU methodology to the respective SEE countries, <http://seerural.org/wp-content/uploads/2009/05/Areas-with-Natural-Constraints-in-SEE-Assessment-and-Policy-Recommendations.pdf>.
16. Ekonomifakta, 2019, <https://www.ekonomifakta.se/fakta/ekonomi/utrikeshandel/sveriges-export--och-importprodukter/>.
17. European Commission, 2019, Factsheet on 2014-2020 Rural Development Programme for Sweden [https://ec.europa.eu/agriculture/sites/agriculture/files/rural-development-2014-2020/country-files/se/factsheet\\_en.pdf](https://ec.europa.eu/agriculture/sites/agriculture/files/rural-development-2014-2020/country-files/se/factsheet_en.pdf)
18. European Commission, DG AGRI, June 2019, Statistical Factsheet for Sweden, [https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/agri-statistical-factsheet-se\\_en.pdf](https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/agri-statistical-factsheet-se_en.pdf).
19. European Commission, 2019, Sweden Country Report 2019.



20. European Commission: Sweden, CAP in your country.
21. Eurostat, 2017, CAP Context Indicators 2014-2020, 28. Gross Fixed Capital Formation in Agriculture, <https://ec.europa.eu/eurostat/documents/3217494/9455154/KS-FK-18-001-EN-N.pdf/a9ddd7db-c40c-48c9-8ed5-a8a90f4faa3f>.
22. Federation of Swedish Farmers, 2015, Kapital till jordbruket – varifrån och till vem.
23. Federation of Swedish Farmers, Lantmännen, Macklean, 2019, Insikter #11 Tillväxt, <https://www.macklean.se/siteassets/insikter/macklean-insikter-11-tillvaxt-digital-version-a4.pdf>.
24. *fi-compass*, Country data for Sweden, <https://www.fi-compass.eu/financial-instruments/sweden>.
25. *fi-compass*, 2016, Methodological handbook for implementing an ex-ante assessment of agriculture financial instruments under the EAFRD, <https://www.fi-compass.eu/publication/manuals/manual-methodological-handbook-implementing-ex-ante-assessment-agriculture>.
26. *fi-compass*, 2018, Ex-ante assessment for Financial Instruments - Sweden, Case study, [https://www.fi-compass.eu/sites/default/files/publications/case-study\\_sweden.pdf](https://www.fi-compass.eu/sites/default/files/publications/case-study_sweden.pdf).
27. *fi-compass*, 2018, Financial gap in the EU agriculture sector, Study report, <https://www.fi-compass.eu/sites/default/files/publications/Financial%20gap%20in%20the%20EU%20agricultural%20sector.pdf>.
28. *fi-compass*, 2018, Flexible financial products for the EU agriculture sector, Study report, <https://www.fi-compass.eu/news/2018/12/flexible-financial-products-agricultural-sector-eu>.
29. *fi-compass*, 2019, Survey on financial needs and access to finance, Study report, <https://www.fi-compass.eu/publication/brochures/survey-financial-needs-and-access-finance-eu-agricultural-enterprises>.
30. Finansinspektionen, April 2019, Bankbarometern, <https://www.fi.se/contentassets/1be782b6ad604b7999a2adabae93b610/bankbarometern-april-2019.pdf>.
31. Företagarna, 2019, Småföretagen vill växa men saknar finansiering, Företagarnas finansieringsrapport 2019, <https://www.foretagarna.se/contentassets/5913d3ae56ac4a7da29d61d50b7690da/finansiering-for-tillvaxt-och-jobb---foretagarnas-finansieringsrapport-2019.pdf>.
32. Government Offices of Sweden, Ministry of Enterprise and Innovation: A national food strategy for Sweden – more jobs and sustainable growth throughout the country, Short version of Government bill 2016/17:104 år, <http://www.jordbruksverket.se/download/18.12cf1a5d150d42fca521ff0d/1517920216623/Landsbygdsprogrammet%202014-2020.pdf>.
33. Helena Ahlberg, Linn Andersson, 2012, How do banks manage the credit assessment to small businesses and what is the effect of Basel III?, Jönköping International Business School, Jönköping University.
34. Länsförsäkringar Skåne, The Federation of Young Swedish Farmers, 2018, Vem har råd att ta över gården? En undersökning kring generationsskifte i det svenska lantbruket.
35. Lantmännen, 2019, Annual Accounts 2018, <https://lantmannen.com/siteassets/documents/01-om-lantmannen/press-och-nyheter/publikationer/arsredovisningar/lantmannen-arsredovisninghallbarhetsredovisning-2018.pdf>.
36. LRF Konsult, 2014, Swedbank och Sparbankerna: Lantbruksbarometern 2013.
37. LRF Konsult, 2015, Swedbank och Sparbankerna: Lantbruksbarometern 2014.
38. LRF Konsult, 2016, Swedbank och Sparbankerna: Lantbruksbarometern 2015.
39. LRF Konsult, 2017, Swedbank och Sparbankerna: Lantbruksbarometern 2016.
40. LRF Konsult, 2018, Swedbank och Sparbankerna: Lantbruksbarometern 2017.
41. LRF Konsult, 2019, Swedbank och Sparbankerna: Lantbruksbarometern 2018.
42. Macklean, November 2019, <https://www.macklean.se/aktuellt/crowdfunding/>.
43. Royal Swedish Academy of Engineering Science, 2012, Livsmedel en branchrapport, IVA-projektet Resurseffektiva affärsmodeller-stärkt konkurrenskraft, <https://www.iva.se/globalassets/info-trycksaker/resurseffektiva-affarsmodeller/rask-branschrapport-livsmedel.pdf>.
44. Statistics Sweden, 2019, Economic Accounts for Agriculture 2006-2017, [https://www2.jordbruksverket.se/download/18.2532524316cca0df48ab2548/1566885388130/JS\\_2019v2.pdf](https://www2.jordbruksverket.se/download/18.2532524316cca0df48ab2548/1566885388130/JS_2019v2.pdf).





45. Statistics Sweden, 2019: <https://www.scb.se/hitta-statistik/statistik-efter-amne/utbildning-och-forskning/forskning/forskning-och-utveckling-i-sverige/pong/tabell-och-diagram/forskning-och-utveckling-inom-foretagssektorn/arsverken-i-den-egna-fou-verksamheten-efter-bransch/>.
46. Statistics Sweden, 2019, Agricultural statistics 2018, [http://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START\\_\\_NV\\_\\_NV0101/FDBR07N/](http://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START__NV__NV0101/FDBR07N/).
47. Statistics Sweden, 2019, Foreign Trade Statistics and Swedish Board of Agriculture, <https://www.scb.se/en/finding-statistics/statistics-by-subject-area/agriculture-forestry-and-fishery/general-statistics/general-agricultural-statistics/pong/tables-and-graphs/imports-and-exports-of-agricultural-products-and-foodstuffs/>.
48. Statistics Sweden, 2019, Food sales 2018HA 24 SM 1901, [https://www.scb.se/contentassets/e13b1e797c144b6fa457630a7b09d561/ha0103\\_2018a01\\_sm\\_ha24sm1901.pdf](https://www.scb.se/contentassets/e13b1e797c144b6fa457630a7b09d561/ha0103_2018a01_sm_ha24sm1901.pdf).
49. Statistics Sweden, [https://www.scb.se/contentassets/17311f1a5d8448b9bb62f8cc6d512b68/jo0104\\_2017a01\\_sm\\_jo10sm1703.pdf](https://www.scb.se/contentassets/17311f1a5d8448b9bb62f8cc6d512b68/jo0104_2017a01_sm_jo10sm1703.pdf).
50. Sveriges Riksbank, Erik Frohm: Economic Commentaries, 2018, How do global value chains impact the krona exchange rate's effect on exports?, No 9 2018.
51. SwedBank website:  
<https://online.swedbank.se/ConditionsEarchive/download?bankid=1111&id=WEBDOC-CID-2602939>
52. Swedbank, 2019: <https://hypotek.swedbank.se/rantor/historik-bolanerantor-2008-2018.html>.
53. Sweden – Rural Development Programme (National).
54. Swedish Agency for Economic and Regional Growth, 2017, 'Rapport 0246 Nummer 4 i serien om företagens villkor och verklighet, Finansiering i svenska företag, temarapport', <https://tillvaxtverket.se/download/18.5dbe7d2416201d6b58b54ee7/1520867799686/Rapport%200246.pdf>.
55. Swedish Agency for Economic and Regional Growth: <https://tillvaxtverket.se/statistik/foretagande/basfakta-om-foretag.html>.
56. Swedish Agency for Economic and Regional Growth: Rapport 0227 Nr 9 I serien om företagens villkor och verklighet, <https://tillvaxtverket.se/download/18.4b0b6bb11677dcddd156bd3d/154469711431218/0272%20Va%CC%88xtkraft%20fo%CC%88r%20de%20gro%CC%88na%20na%CC%88ringarna2.pdf>.
57. Swedish Authority for Economic and Regional Growth, 2014, The need for venture capital in Sweden during the EU programming period 2014–2020.
58. Swedish Board of Agriculture: Budget för landsbygdsprogrammet 2014–2020.
59. Swedish Board of Agriculture, Sara Johansson and Pia Nilsson, 2012, Vilka faktorer bestämmer priset på jordbruksmark.
60. Swedish Board of Agriculture, 2017, Statistics Sweden, Use of agricultural land 2017, Final statistics, Statistical Message JO 10 SM 1703.
61. Swedish Board of Agriculture, 2017, Sveriges utrikeshandel med jordbruksvaror och livsmedel 2014-2016, Rapport 2017:20, [https://www2.jordbruksverket.se/download/18.423cd68e1606d3e156bd2434/1513860995323/ra17\\_20.pdf](https://www2.jordbruksverket.se/download/18.423cd68e1606d3e156bd2434/1513860995323/ra17_20.pdf).
62. Swedish Board of Agriculture: Statistics Sweden, 2017, Other gainful activities at Agricultural Holdings 2016, JO 47 SM 1701.
63. Swedish Board of Agriculture, 2017, Statistics Sweden, Statistical Message JO 10 SM 1703, Use of agricultural land 2017, Final statistics,
64. Swedish Board of Agriculture, 2019, Economic Accounts for Agriculture 2007-2018 JOJO 45 SM 1902,
65. Swedish Board of Agriculture, Sofia Riedmüller, 2018, Startstöd till unga företagare, En uppföljning av stöd inom landsbygdsprogrammet 2014-2020 baserad på uppgifter fram till och med den 2 april 2018, <http://www.jordbruksverket.se/download/18.257cec57165d18882da36d86/1540996802439/Uppf%C3%B6ljning%20av%20startst%C3%B6d.pdf>.



66. Swedish Board of Agriculture, 2019, Landsbygdsprogrammet 2014-2020, resultat och förväntade effekter, Utvärderingsrapport 2019:13, [https://www2.jordbruksverket.se/download/18.7466e23816cb50dcb904728b/1566457119925/utv19\\_13.pdf](https://www2.jordbruksverket.se/download/18.7466e23816cb50dcb904728b/1566457119925/utv19_13.pdf).
67. Swedish Board of Agriculture, 2019, Långsiktiga effekter av torkan och hur jordbruket kan bli mer motståndskraftigt mot extremvärme, Rapport 2019:13.
68. Swedish Board of Agriculture, 2019, På tal om jordbruk och fiske – fördjupning om aktuella frågor, <http://www.jordbruksverket.se/download/18.5fe4591d16ae718ed6f35552/1558703578019/Svenska%20marknadsandelar%202019.pdf>.
69. Swedish Board of Agriculture, 2019, Utvärdering och uppföljning av livsmedelsstrategin – årsrapport 2019, [https://www2.jordbruksverket.se/download/18.37ee335016a437eec95d2df4/1556109780429/ra19\\_9v2.pdf](https://www2.jordbruksverket.se/download/18.37ee335016a437eec95d2df4/1556109780429/ra19_9v2.pdf).
70. Swedish Competition Authority, 2018, Konkurrensen i Sverige 2018, [http://www.konkurrensverket.se/globalassets/publikationer/rapporter/rapport\\_2018-4.pdf](http://www.konkurrensverket.se/globalassets/publikationer/rapporter/rapport_2018-4.pdf).
71. Swedish Food Federation, 2018, Konjunkturbrev Q4, 2017.
72. Swedish Government, 2017, Regeringens proposition 2016/17:104 En livsmedelsstrategi för Sverige – fler jobb och hållbar tillväxt i hela landet.
73. Swedish Federation for Farmers, Mattias Gotting, Mathilda Bergman and co-writer Elina Mansdotter, 2018, Livsmedelsstrategi i olika EU-länder – Jämförelse och analys av olika åtgärder.
74. Swedish Food Federation, Livsmedelsföretagen website: <https://www.livsmedelsforetagen.se/branschfakta/>.
75. Swedish Food Federation, 2017, Startuprapporten, matentreprenörerna som formar framtidens livsmedelsindustri, <https://www.livsmedelsforetagen.se/app/uploads/2017/05/startuprapporten-2017.pdf>.
76. Swedish Food Federation: Exportrapporten, 2018, <https://www.livsmedelsforetagen.se/app/uploads/2018/11/exportrapporten-vad-kan-vi-lara-oss-av-andra-lander-och-industrier-livsmedelsforetagen-2018.pdf>.
77. Swedish Food Federation, 2019, Livsmedelsföretagens konjunkturbrev Q4 2018 <https://www.livsmedelsforetagen.se/app/uploads/2019/03/livsmedelsfoxxretagens-konjunkturbrev-mars-2019.pdf>.
78. Swedish Food Federation, 2019, <https://www.livsmedelsforetagen.se/livsmedelsforetagen-kommenterar-den-nya-handlingsplanen-for-livsmedelsstrategin/>.
79. Swedish National Audit Office, 2018, En granskningsrapport från Riksrevisionen, DNR: 3.1.1-2017-1414.
80. Wageningen university and research, Huib Silvis and Martien Voskulien, 2018, Agricultural landprices in the EU in 2016.



## A. 2. Stakeholders interviewed

Type of Organisation	Name of Institution
Administrative body on regional level	Connect Sweden Region East
Agri-food network	Regional Project MatLust
Bank	Danske Bank
Bank	Handelsbanken
Bank	Landshypotek Bank
Bank	Länsförsäkringar Bank, the county of Skåne
Bank	Nordea
Bank	Landshypotek Bank
Bank	Swedbank
Consultancy	Macklean
Cooperative initiative to financial institution	Tillväxtbolaget för Sveriges Lantbrukare
Cooperative initiative to financial institution	Tillväxtbolaget
Farm Industry organisation	Federation of Swedish Farmers,
Farmers organisation	The Swedish Federation for Farmers
Farmers organisation	Swedish Association of Beef Producers
Farmers organisation	Swedish Milk Board
Farmers organisation	Swedish Pig Association
Farmers organisation	The Swedish Poultry Meat Association
Farmers organisation	Swedish Pig Association
Farmers organisation for young people	The Swedish Federation for Young Farmers
Farmers organisation/ Agri-food organisation	The Swedish Federation for Farmers
Food industry organisation	Livsmedelsföretagen
Government	Government Offices of Sweden
Government Agency	Swedish Board of Agriculture
Insurance company	Länsförsäkringar, Skåne
University	Swedish University of Agriculture Science



### A. 3. Methodology for financial gap calculation

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

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

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

**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 growth<sup>203</sup> or a non-negative turnover and that are not in a situation of cost increase (these two criteria might be used to obtain an upper and lower boundary for the calculations).

**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<sup>Viable</sup>** : This refers to the share of viable enterprises whose application was unsuccessful. It is measured by the ratio of enterprises with unsuccessful applications over the total population. It includes rejected applications by the lending institution and offers turned down by the applicant itself.

$$\text{Rejection Rate}_j^{\text{viable}} = \frac{\text{Number of Rejected Viable Firms}}{\text{Total survey population}_j}$$

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

**Discouraged Rate<sup>Viable</sup>**: It represents the share of viable enterprise that were self-discouraged because of fear of rejection. It is computed as follows:

$$\text{Discouraged Rate}_j^{\text{viable}} = \frac{\text{Number of Discouraged Viable Firms}}{\text{Total survey population}_j}$$

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

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

$$\text{Unmet demand Rate}_j^{\text{viable}} = \text{Rejection Rate}_j + \text{Discouraged Rate}_j$$

203 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<sub>ij</sub><sup>Viable</sup>***: In order to get the number of farms constrained in accessing financing, we multiply total share of viable respondents with unmet demand from the survey sample (Step 1) by the total farm population from Eurostat by farm size.

For TG I, this total population is adjusted by removing farms having a Standard Output<sup>204</sup> (SO) below EUR 8 000, EUR 4 000 or EUR 2 000, depending on the Purchasing Power Parity Index (PPI) of the country. The EUR 8 000, EUR 4 000 or EUR 2 000 SO thresholds are used for countries with their 2017 PPI respectively above the 66<sup>th</sup> percentile, between the 33<sup>th</sup> and 66<sup>th</sup> percentile, or below the 33<sup>th</sup> 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<sub>ij</sub>***: For each type of financial product and each firm/farm size category, a standard size of application is constructed. A starting point for Country experts might be the EU wide geometric mean, adjusted at country level with the purchasing power parity index. This value might be further adjusted based on the results of the analysis.

### Step 4: Financial gap across farm size and product type

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

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

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

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

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

204 The standard output (SO) of an agricultural product (crop or livestock) is the average monetary value of the agriculture output at farm-gate price in Euro.



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

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

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

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

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

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

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

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

For Sweden Table 15 and Table 16 report the elements used in the calculation of the financing gap for the agricultural and agri-food sector, respectively.

**Table 15:** Elements for the calculation of the financing gap in the agriculture sector, 2017

		Short-term Loans	Medium-term Loans	Long-term Loans	Credit lines/bank overdraft
<b>Lower bound:</b> farms with a non-negative turnover growth and no cost increase	Share of respondents rejected by creditor or farmer	0.00%	0.00%	0.00%	0.00%
	Share of respondents that have not applied because of possible rejection	1.06%	0.49%	1.06%	1.06%
	<b>Total (sum of rejected and discouraged)</b>	<b>1.06%</b>	<b>0.49%</b>	<b>1.06%</b>	<b>1.06%</b>
<b>Upper bound:</b> farms with a non-negative turnover growth	Share of respondents rejected by creditor or farmer	0.00%	0.00%	0.17%	0.00%
	Share of respondents that have not applied because of possible rejection	1.30%	0.73%	1.06%	1.55%
	<b>Total (sum of rejected and discouraged)</b>	<b>1.30%</b>	<b>0.73%</b>	<b>1.23%</b>	<b>1.55%</b>
<b>Total unmet demand:</b> all farms	Share of respondents rejected by creditor or farmer	0.00%	0.00%	0.17%	0.00%
	Share of respondents that have not applied because of possible rejection	1.30%	0.73%	1.06%	1.55%
	<b>Total (sum of rejected and discouraged)</b>	<b>1.30%</b>	<b>0.73%</b>	<b>1.23%</b>	<b>1.55%</b>
Farms with constrained access to finance, <b>lower bound</b>	Small-sized farms	118	54	118	118
	Medium-sized farms	201	93	201	201
	Large-sized farms	85	39	85	85
Farms with constrained access to finance, <b>upper bound</b>	Small-sized farms	145	82	137	173
	Medium-sized farms	247	139	234	294
	Large-sized farms	105	59	99	124
Standard loan application size (EUR)	Small-sized farms	22 036	53 454	147 421	19 894
	Medium-sized farms	27 920	50 806	160 075	22 068
	Large-sized farms	82 346	129 292	288 231	117 529

Source: *fi-compass survey*.

**Table 16:** Elements used for the calculation of the financing gap in the agri-food sector, 2018

		Short-term Loans	Medium-term Loans	Long-term Loans	Credit lines/bank overdraft
Firms with a non-negative turnover growth and no cost increase	Share of respondents rejected by creditor or firm	0.00%	0.00%	0.00%	0.00%
	Share of respondents that have not applied because of possible rejection	0.00%	0.00%	0.00%	0.00%
	<b>Total (sum of rejected and discouraged)</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>
<b>Total unmet demand: all firms</b>	Share of respondents rejected by creditor or firm	2.86%	0.00%	0.00%	2.86%
	Share of respondents that have not applied because of possible rejection	2.86%	2.86%	2.86%	0.00%
	<b>Total (sum of rejected and discouraged)</b>	<b>5.73%</b>	<b>2.86%</b>	<b>2.86%</b>	<b>2.86%</b>
Firms with constrained access to finance	Small-sized firms	-	-	-	-
	Medium-sized firms	-	-	-	-
	Large-sized firms	-	-	-	-
Standard loan application size (EUR)	Small-sized firms	102 086	139 752	396 384	115 266
	Medium-sized firms	811 035	763 710	2124 499	617 079
	Large-sized firms	799 758	1 337 594	3 754 829	1 255 000

Source: Agri-food survey.





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

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

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

Overall, the survey consists of 7 659 respondents, of which 73% own the agricultural enterprise, 8% are member owners, 8% are owner's relatives, 7% administrative managers, 3% other employees, and 1% human resource managers. Table 17 reports the number of respondents by Member State.

**Table 17:** *fi-compass* survey sample size per Member State

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

Source: *fi-compass* survey.

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

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

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



## A. 5. TG II: Agri-food survey

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

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

The survey was conducted targeting the completion of a minimum of 45 questionnaires for each Member State. The minimum sample size obtained varied per country mirroring the differences in the size of the sector. Table 18 reports the sample size per country.

**Table 18:** Agri-food survey sample size per Member State

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

Source: *Agri-food survey*.

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



## A. 6. Average annual exchange rate according to Riksbanken

**Table 19:** Average annual exchange rate<sup>205</sup>, Riksbanken, 2013-2018, EUR

	2013	2014	2015	2016	2017	2018
Average annual exchange rate	8.6494	9.0968	9.3562	9.4704	9.6326	10.2567

Source: Riksbanken.

205 Riksbank, 2019, <https://www.riksbank.se/en-gb/statistics/search-interest-exchange-rates/annual-average-exchange-rates/>.



## A. 7. Procedure to conduct calculations to estimate total outstanding long-term loan volumes

Calculations in order to obtain estimates for the total outstanding long-term loan volumes were carried out according to the following procedure:

1. Median percentage \* Median Net sales per size group of companies = Total value of long-term debt (including accounts payable) per group in SEK.
2. The above calculation is conducted for each size group of enterprises (5 segments divided by number of employees).
3. Values for all enterprise groups are added and generates a total value of long-term debt (including accounts payable).
4. Value calculated in paragraph 3 above is divided by Average Annual Exchange Rate for the relevant year to calculate the value in EUR.
5. Median = Value of key performance indicator which half of enterprises fall short of and half of enterprises exceed.

Median percentage of long-term loans compared to turnover = 'Calculated as Median long-term debt (including provisions for other liabilities and charges) divided by Median net sales.'

For average annual exchange rate according to Riksbanken see Annex A. 6.



## A. 8. Focus on long-term loans in estimations of outstanding loans

When estimating outstanding loans to the agri-food sector in Sweden focus is placed on long-term loans. Figures from Statistics Sweden over Key covenants for all enterprises in the sector (with Swedish Standard Industrial Classification (SNI) code 10, 11, 12 including drinks 11 and tobacco 12) on long-term funding include long-term loans and provisions for other liabilities and charges. Corresponding figures on short-term funding from the same source include:

- Other current liabilities;
- Accrued expenses and prepaid income;
- Current liabilities to group- and associated companies;
- Accounts payable;
- Tax liabilities;
- Advance payments from customers.

At a first glance, comparing short-term and long-term debt figures from Statistics Sweden it appears that the agri-food sector is heavy on short-term funding. This short-term funding does however mainly consist of accounts payable, and not of bank credits. Enterprises in the agri-food sector have a very high level of accounts payable since their whole production is based on great volumes of raw materials. In order to mirror a more realistic picture of the outstanding loans towards the sector only long-term loans are represented.

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