

# Lending to a farmer: a comparative analysis of frames banks use to interpret agriculture

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**Abstract:** *The financial sector is an environment where certain knowledge, values, and visions persist. These categories shape the perception of agriculture in general and influence services financial sector will provide to farmers. The paper analyses frames bankers adapt to interpret agricultural process and to interact with farmers. It compares evidence from four countries and raises two research questions. First, what differences can be observed between the different countries in terms of how banks interpret farmers? Second, how the claims about farming shape the services banks provide to farmers. Both agriculture in general and the dairy cattle sector in particular are considered.*

**Keywords:** *banks, financing, credits*

## Introduction

Researchers might hold different visions regarding the preferable development trajectory of agriculture. However, they share a notion that any changes will require political support and resources. To ensure the growth of the agricultural production, for farmers to remain profitable in “technology treadmill”, to facilitate changes in farming practices or to ensure farm succession – access to finance is crucial. Most farmers do not have free resources to improve the sustainability (Legoarde-Segot and Paranque, 2018), efficiency or to resolve sudden challenges their farm might face. Academic literature and policy documents have been widely discussing benefits farmers might have from the availability of credits; barriers and optimal models for providing financial services; and diversity of relations between farmers and actors representing the financial sector. Although the role of finances for agricultural development is strongly articulated there is also evidence that formal lenders for a host of reasons tend to avoid financing farmers (Wenner, 2010). This is due to information asymmetries between a financial institution and farmer (Maruer, 2014; Meyer, 2011), high transaction costs that financial institution has in rural settings (Wenner, 2010) and farmers high exposure to risks (Wenner, 2010).

Accounts discussing financial environment in agriculture have been mainly looking at relations between the financial sector and farmers as impersonal – emerging from a notion of “optimal financial behaviour” supporting a need to maximize the individual value of actors involved in financial transactions. In this context relations between farmers and financial institutions have been described as a sum of financial performance, risks and risk management tools. However, little attention has been paid to the fact that financial sector is an environment where certain knowledge, values, and visions persist. And although these values are objectified by data, they will affect that relations between financing institutions and farmers will differ from country to country. Also, being the main source of finances, banks

visions will strengthen particular farming models, will shape agriculture's development trajectory and will influence the overall perception of agriculture (Legoarde-Segot and Paraque, 2018).

The paper analyses frames bankers adapt to interpret agricultural process and to interact with farmers. The paper compares evidence from four countries – Latvia, Denmark, United Kingdom and France and raises two research questions. First, what differences can be observed between the four countries regarding how banks interpret farmers? Second, how the claims about farming shape the services banks provide to farmers.

To reach these goals, three fields characterizing banks' relations to agriculture are analysed. First, national regulations setting the main principles banks have to follow. Second, references bankers use to describe processes in agriculture (e.g. conditions named, overall economic trends identified, sectors that are mentioned). Third, internal procedures and rules banks have adopted in guiding their relations with farmers (e.g. "assessment of risk", "temporal horizon" banks assess, interest rate, who are doing the actual assessment of the farmers).

For this study, we have chosen to focus on banks because for the most part banks (at least across the EU member states) play the central role in agriculture financing (Jansson et al., 2013). The four compared countries represent diverse contexts (regarding historical political development, agricultural development situations and dominating trends, agricultural demographic situation) and different examples agricultural financing is in (national banking sectors' exposure to agriculture, centralisation of banking services provided to farmers).

The paper identifies two principles banks use to interpret agriculture: index based crediting and collateral based crediting. Index based credit is based on the assessment of farms current performance, evaluation of the intended project and an overall analysis of farms ability to repay the loan. Typically for this approach farms with long credit history will be considered as more creditworthy (Wenner, 2010) and thus it will be easier for these farms to access credit (Meyer, 2011). In the case of collateral based crediting lenders tend to overemphasize the use of immovable collateral (usually agricultural land) as an asset backing the credits. In practice, banks will structure their crediting policy by introducing their models linking the two principles. The article claims that created models reflect banks interpretation of agricultural risks.

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## **Crediting and Risks**

Lender's willingness to issue a loan depends on her assessment of loan's receiver – her capacity and willingness to repay the loan (Meyer 2011). The belief in farmers' ability to repay can be seriously undermined by the risks farmers face.

Apart from broader macroeconomic risks and risks related to farmers' personal wellbeing OECD (2009) identifies four groups of risks that affect agriculture. First, farmers are exposed to production risks or risks related to the uncertainty of annual yields farmer will have (Maurer 2014). Threats, such as heavy rainfalls, floods, draughts, pests, and even human errors can influence the yields farmers' harvest reducing her ability to fulfil her long-term financial commitments. Second, farmers face markets/ price risks. The price of resources (such as land) and inputs (such as fuel, agro-chemicals, machinery, etc.) fluctuate and farmers have only limited or none possibilities to influence or replace these factors. Furthermore, the price of products farmers sell are mainly influenced on a global scale and tend to fluctuate annually – and again, farmers have only limited or none possibilities to influence these processes. Furthermore, the annual global yields of particular product hold a significant impact on the prices. Thus, a price of a particular crop will drop if all farmers will follow hype or will decide to grow the crop that proved to be most profitable in a previous season. Third, there are financial risks or the risk that farmers will face negative changes in households/ enterprises cash flow – this might be caused either by a loss of side income farmers might

have, by changes in interest rates that might put additional pressure on the household or by bad management decisions. Finally, social perception of food is constantly changing, and food is increasingly becoming an instrument in global politics. For example, Russia's trade embargo with EU serves as one example of these processes while the abolition of milk quota regime is one more. Thus farmers are faced with institutional and legal risks that might restructure the context the sector they represent is embedded in.

Apart from the mentioned researchers have also been stressing the significance of human resource risk and principal credit risk. The human resource reflects growing social tensions in rural sites – difficulties to attract employees, conflicts with rural inhabitants promoting other land use models, etc. Meanwhile, the latter – the principal credit risk illustrates the shortage of information financial institution might face when dealing with agriculture. Because of this for the most cases, banks will tend to interpret agricultural practices through the perspective of financial flows. For example, the quality of produce will be assessed comparing the price received for the product to the average regional price of the same product. In such assessment very little or no attention will be paid to a product itself. Most of the mentioned risks are similar to risks that could be observed in other business branches. However, for agriculture, these risks are more pronounced. Obviously, these risks might manifest themselves differently depending on the agriculture sector that is assessed and the region that is regarded.

These risks, on the one hand, have facilitated that banks develop specific coping mechanisms (Maurer 2014) while on the other hand, have forced stakeholders to look for new systemic arrangements that could help reducing risks (Legoarde-Segot and Paraque 2018). The chosen coping mechanisms and introduced systemic arrangements are reflecting interpretations of the state the agriculture is in. To overcome individual credit risks, banks tend to use one of the two approaches – banks either can choose to work with asset-backed lending or – banks can develop mechanisms to apprise farmers repayment capacity (Maurer 2014; Wenner 2010). In case of asset-backed lending banks are looking for collateral that can be simple to appropriate in the case of default, that despite the contextual events will maintain its value, and that is highly valued by borrowers (Meyer 2011). In general commercial banks are supporting immovable assets - predominantly land. This can help banks to secure their investments. However, it has its downsides as well. Farmers might not own the land they are operating with, and they might be hesitant to back loans with land due to the high emotional value land has. Using land as the collateral also reduces the possibilities of smaller and subsistence farmer instead favouring already established large commercial farms (Fredriksson et al. 2017). Finally, even agricultural land as a relatively safe resource can face sudden value loss. The last statement becomes especially relevant when it is considered that financing of land purchases is one of the key services banks provide and that the land loan conditions can raise the overall price of land. In most EU countries agricultural land prices have been raising. However, there are notable exceptions (for example, Denmark (see European Commission 2016) that illustrate the shortcomings of double relations banks have with the land. Finally, there are also claims suggesting that financialization indirectly tend to reduce soil fertility thus making these relations unsustainable (Tasch, 2008).

On the other hand, banks can base their decision to issue a loan to a farmer basing on an appraisal of his/hers repayment capacity. This approach requires in-depth knowledge about the peculiarities of national agriculture and processes taking place in global markets and value chain (Maurer 2014). A bank needs to be able to conduct a broad financial analysis of the farms' performance and future opportunities all the while keeping in mind diversity of characteristics, challenges and threats associated with various agricultural sectors. Furthermore, this approach requires constant information flow from farms allowing a bank to appraise the financial trends farm is witnessing. Consequently, this approach often leads to overly technical decision making (Maurer 2014) and diversity of processes taking place on a farm is squeezed into simple financial indicators. Furthermore, basing on such calculations might limit funding availability to completely new solutions and new farms favouring projects that have not been tested yet. Meanwhile, the risks illustrate that farms historical success

cannot serve as a guarantee for its future success. Thus, this approach holds significant limitations as well.

A number of things can be concluded from the two approaches described here. First, none of the banks will use purely just one of the approaches. Rather, banks will tend to rely on the mix of the two balancing collateral demands with estimates of farms financial potential. The combination of the two approaches can help to understand the interpretation bank holds towards farming. Second, both of the approaches can hesitate to approve a loan to new farms and farms representing sectors perceived as economically “weak”. To overcome this additional risk management instruments can come into play. Risk management instruments can be found at farms, sectors and countries level (Meuwissen et al. 2001.). For example, these can be state subsidised reduced interest rates approved to specific sectors, demands to insure or forms of contracts illustrating long-term relations between producer and processor and many more. Analysing these additional risk management requirements can improve understanding of implicit assumptions banks hold regarding the normality of agriculture and safe farming. Third, there is also need to monitor banks’ ongoing work with farmers.

## Context

To understand the relations between banks and agriculture in the four analysed countries short insight in the context is needed. First of all, it would mean looking shortly into the historical development of financialisation of agriculture in particular country. Second, the state agriculture is in could help understanding these relations. Third, a look at the state the financial markets are in is needed. And finally, it is worth looking at the overall credit burden agriculture has in each country.

**Table 1.** Level of crediting in the four countries.

Country	Loans to agriculture, forestry and fisheries (th) (2017)	Exposure of national banking system to agriculture, forestry and fisheries (%) (2017)	Output of the agricultural industry (2017) (mn euros) <sup>1</sup>	Agricultural land (ha) <sup>2</sup>	Number of farms <sup>3</sup>	Loans as a share of national output	Credit burden as th of euros per ha	Credit burden as th of euros per farm
LV	55 57 58 <sup>4</sup>	4.5 <sup>4</sup> /12.2 <sup>5</sup>	1425.06	1877720	81800	0.39	0.30	6.79
DK		2.7 <sup>5</sup>	10751.48	2619340	38280			
FR		5.4 <sup>5</sup>	71982.39	27739430	472210			
UK		4.7 <sup>5</sup>	30939.38	17096170	183040			

<sup>1</sup> Data from Eurostat (2017a) – Economic accounts for agriculture - values at current prices.

<sup>2</sup> Data from Eurostat (2017b) – Land use: number of farms and areas of different crops by type of farming (2-digit).

<sup>3</sup> Data from Eurostat (2017c) - Key farm variables: area, livestock (LSU), labour force and standard output (SO) by agricultural size of farm (UAA), legal status of holding and NUTS 2 regions.

<sup>4</sup> Data from Financial and Capital Market Commission of Latvia (FKTK 2017).

<sup>5</sup> Data from European Banking Authority (EBA) Risk assessment of the European Banking System (EBA 2017).

This chapter is continued by a short illustration of the situation in the four countries.

## Latvia

The private banking sector in Latvia has developed only during the last 30 years – after Latvia regained independence in the early 90ties. The collapse of the planned economy of the Soviet Union and the following shift to the market economy brought waves of changes. The land that once was collectivized by Soviet authorities now was redistributed to its

historical owners. Consequently, land ownership pattern returned to pre-war period. Due to these processes average farm size fell significantly, the farmers lacked modern machinery yet available technical base was outdated. Furthermore, farmers lacked knowledge about the possible outlet markets all the while the costs of agricultural inputs was exploding (VARAM 1998). Farms were in a desperate need for investments, yet due to a number of reasons they had only limited access to funding. First of all, there was overall lack of capital. Second, long-term loans that farmers needed to modernise had high-interest rates. Third, assets that could be used as collateral to back the loan were of low value (including land) and were risky in terms that banks would probably have difficulties in selling them if there was such a need (VARAM 1998). Recognizing these difficulties nation government early on developed financial support institutions issuing long-term loans (Saeima 1995) and loan warranties to farmers. This helped farmers to grow and to centralise, and eventually, two historically important sectors emerged as dominant in Latvia's agricultural landscape – grain farming and dairy farming. However, almost for decade agriculture funding has been mainly on the shoulders of government-owned financial institutions.

The interest of commercial banks in agriculture started to rise only after Latvia joined EU. The EU membership meant that farmers had access to development projects and regular income from subsidies. Still, the interest from commercial banks was limited, and nationally owned financial institutions remained the biggest financial partner to farmers. A more pronounced shock was needed to attract the full attention of private banks. This shock came in the form of the economic crisis of 2009. During the crisis, agriculture emerged as a sector that is less influenced by national economic shocks. The number of delayed credit payments was much lower in this sector than in other sectors of the economy (authors calculations based on FKTK 2017). Meanwhile, the austerity demands posed by international organisations issuing loans to bail out Latvia's economy demanded from Latvia's policymakers to sell most of it's owned financial instruments. Farmers' resistance to the crisis, growing efficiency of farmers and disappearance of the actor so far dominating the sector pushed banks to reassess their relations with farmers. This resulted in a quick growth of presence of private banks in farmers crediting.

Most of the farmers now have relatively simple access to finances. During the last five years amount of credits issued to farmers have grown by 10%. Agriculture accounts for 4.5% of the total amount of loans issued to non-bank actors. However, the overall credit burden of agriculture is still low - for each ha of agricultural land there are credit obligations worth 300 euros (see Table 1). However, interviews show that banks are keen to collaborate with just the two biggest sectors issuing loans mainly to large farms, operating in these two sectors. Meanwhile, smaller farms and other sectors might still face difficulties access funding. Furthermore, this means that a small share of farms is over-credited and for these farms, credit burden is significantly higher while other agricultural actors are forced to rely on non-bank lenders.

## **Banks' perspective**

### **Collateral VS financial potential**

Land as collateral plays a significant role in the relations between banks and agriculture. However, the examples analysed in this paper illustrates that there might be other grounds for developing agricultural crediting. In all cases, banking representatives talk about the overall efficiency of a farmer as a key aspect allowing to receiving loans. In Denmark benchmarking tools such as SEGES have been developed to assist the evaluation of farms. In Latvia, private banks use efficiency calculations assessing farms economic performance. This approach increasingly tends to limit farms development direction pushing them to follow the intensification track. Consequently, as has been illustrated by Denmark's case, intensifications initiated "race to the bottom" can lead farms with high depth and low income. In Latvia, credit burden is still low, farmers' efficiency is growing, and the land prices are constantly rising. Thus there is low possibility that farmers will not be able to repay the loan.

Meanwhile, the crisis in land prices and consequential bankruptcy of some smaller rural banks in Denmark has forced other banks to reassess their financial involvement in agriculture. Due to this banks are focusing only on the best performing farms. Performance and experience become a significant factor for banks to consider.

To understand how various systems see farmers it is worth unpacking how various systems regard efficiency. Although in Latvia these might differ from bank to bank, still with just some exceptions, in general, these are agriculture unspecific performance indicators measuring financial flows of the farm. Thus, farmers are perceived as any other entrepreneurs. The situation is different in Denmark, where benchmarking tools takes in consideration agriculture-specific aspects.

In all four cases, banks reflect upon difficulties associated with farmers' financial literacy. This is not exactly the reason to reject a loan to farmers. However, this adds to the significance of banks decision because farmers might have a poor understanding of their financial capacity. In Latvia, it goes as far that farmers do not keep a record of their overall financial flow of capital which means that banks inner records become the only source to calculate farms performance.

Finally, there are cases when credits are issued on the basis of the land available to a farmer. A bank in Latvia calculates a credit that can be offered to a farmer by offering a fixed sum for each ha. A representative of the bank suggests that this is an approach that takes in consideration yields that can be harvested from a hectare thus realistically assessing what farmer can repay and taking into account farmers future needs to invest in modernisation.

## **Risk management**

In overall, in Latvia, from the in-depth interviews and the practices adopted by banks, it seems that banks perceive that there is a low probability that farmers they credited would not be able to repay their credit. It was reflected in the quite open crediting policy adopted by most farms where only the perceived potential of the developed project was assessed. However, this most likely was because banks were mainly working with large and already well-established farms. Meanwhile, smaller farms are forced to attract credit warranties from the state. It is also a common requirement that once farmers are credited by a bank farmers uses the bank for all his/hers financial activities. This allows reducing information asymmetries. Also, banks have introduced negotiation procedures meant for the cases when farmers have difficulties to repay their loans. This was different for the only private bank in Latvia being more open to smaller farmers. It was the only private bank employing agronomist, with clear rules regarding the credit ceiling for each farm and strictly set limitations for allowed repayment periods.

Banks in Latvia are focusing mainly on the successful farmers. However, their confidence in the absence of risks have also been a reflection of political support agriculture has been receiving (especially –well connected large farms). Subsidies are an integral part of this support. However, it is also government's willingness to go the extra mile to support the farmers – either by issuing additional support measures to support farmers in years of bad harvests or by announcing a state of emergency in case of extreme weather. Thus, state willingness to intervene have given banks confidence that agriculture is a worthy investment.

## **Conclusions**

Political decisions have a strong connection to presence of the banking sector in the agricultural sectors. For example, Brexit will most likely decrease banks' willingness to invest in agriculture. Meanwhile, the abolition of milk quotas most likely will increase the dairy sector's reliance on banks. In all four cases, governmental decisions have been playing a key role in introducing risk-sharing measures and introducing instruments in order to provide loans whenever it is too risky for private banks.

Paper also illustrates that with a high investment in agriculture co-dependency has been created between the sectors. As the Danish case illustrates – banks that has been heavily involved in financing of agriculture are also highly exposed to risks associated with agriculture. Meanwhile, farmers' need to maintain their competitive edge pushes them to constantly burrow more thus increasing their dependency of financial actors.

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