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Financial subjectivities in the agricultural sector: a comparative analysis of relations between farmers and banks in Latvia, Denmark and the UK

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Abstract: Access to financing is crucial for farmers to ensure competitiveness and to facilitate change. A better understanding of how farmers can access funds could help farmers to remain profitable and to adopt more sustainable farming practices. However, most of the academic literature discussing agricultural financing depicts farmers' access to funds as impersonal and universal – emerging from the idea of "optimal financial behaviour". This paper takes a different approach and introduces the concept of "financial subjectivities" to show how financial markets are constructed as locally embedded reinterpretations of the financialisation of agriculture that guide local agro-financial relations. We examine financial subjectivities in Latvia, Denmark and the UK respectively to understand how stakeholders co-constitute contextually embedded relations between farmers and banks and to assess processes of agro-financial relations in specific national contexts. The cases illustrate different relationships between banks and farms. In Latvia, agricultural crediting has developed comparatively recently and is heavily supported by government intervention; in Denmark, agriculture has undergone a period of financial crisis, and farmers are struggling to refinance and remain profitable; meanwhile, in the UK, relations between farmers and banks are well established but increasingly strained as agricultural producer returns on investment yield less profit. Each case thus reflects historical development trajectories and the regulatory engagement of agro-financial relations, asserting the importance of embedding analysis of agricultural financing in specific socio-political contexts.

Keywords: *agriculture, banks, agricultural financing, financial subjectivities*

1. Introduction

Well-established connections between banks and agriculture are crucial for any transformation or development that a farmer may wish to pursue. This process of farmers' increasing dependency on access to capital (Langford 2019; Henry and Prince 2018) and the growing influence financial actors have over agro-food systems (Martin and Clapp 2015; Bjorkhaug, Magnan and Lawrence 2018) is often referred to as the financialisation of agriculture. Financialisation is an inherently global phenomenon, which is typically maintained by actors that are global in their nature and foci (Hall 2010; Clapp 2014). Most authors discussing the role of financial actors in agro-food systems have characterised relations between the financial and agricultural sectors as "impersonal" and "universal" – emerging from the idea of "optimal financial behaviour" (Ouma 2014), based on sophisticated mathematical models that ignore reciprocal adaptations needed to link any two systems (Boulton et al. 2015). Within this abstracted characterisation, relations between farmers and financial institutions are the sum of a universal equation that is easily replicable across the globe (Hall 2010). However, in practice, financial relations are locally embedded and locally reimagined (Fernandez and Aalbers 2016; Henry and Prince 2018) and when locally reimagined, financialisation can be neither a homogenous nor inevitable process. Thus, the nature and the impacts of agro-financial relations can only be understood if local expressions of financialisation are captured (Ouma, 2014; Langford, 2019; Williams, 2014). In this article, locally embedded reinterpretations of the financialisation of agriculture materialise as grounded sets of agro-financial relations, which we term "financial subjectivities".

This article discusses the formation and reproduction of financial subjectivities in three agricultural contexts – Latvia, Denmark and the UK, respectively. It does so by exploring the practices and opinions of two key groups of actors – banks and farmers – and by presenting historical trajectories of agro-financial relations in the three countries. The article focuses on two main research questions. Firstly, how do banks and farms contribute in constructing and reproducing financial subjectivities? Secondly, are there differences in this regard across the three contexts examined in the paper? The article employs a constructivist perspective to address these questions, illustrating how these two key

stakeholder groups are actively constructing financial subjectivities and in turn shows how agro-financialisation is the outcome of local activities rather than globally established sets of rules. Banks or farmers of course are not the only actors that construct financial subjectivities. Local financial discourse is shaped by a broader circle of actors and is more complicated, nested and variegated. Accepting this variability, our argument is that we can use banking and farming agro-relations as an entry point to examine how financial subjectivities are constructed.

This introductory section of the paper is followed by a brief discussion of the research methods and data used in the analysis. The article relies mostly on qualitative data. The third section of the paper presents theoretical arguments substantiating the differences in how financing of agriculture is set in different national economies. This illustrates how financial actors have to adapt to and reproduce trends and institutional arrangements dominating in particular socio-political contexts. This need to adapt to particular political economy relations explains why agricultural financing is re-negotiated in each case study separately. The fourth section expands on these ideas by providing three different financial subjectivities. In Latvia, banks have just discovered agriculture as a potential market, there are public support measures that make the sector very appealing to banks and larger farmers have accumulated substantial power to negotiate arrangements to suit their needs. In Denmark, a high share of farmers are heavily indebted and in need of refinancing, whilst concomitantly the banking sector is undergoing a process of restructuring and strategic reorientation. In the UK, agricultural financing is centralised in the hands of a few large banks. A critical issue in the UK is increasing farmer debt, which has led to major financial problems for farms and banks, highlighting vulnerabilities and the potential for stranded assets. This section is followed by the main results section, which reveals similarities in the rhetoric used by banks and farmers in each case study. However, there are also notable differences in the practices and choices made that underline the role of local contextual knowledge and local relations in maintaining financial subjectivities. The paper concludes by comparing the three case studies, outlining the effects financial subjectivities may have on farmers and farms.

2. Methodological approach

Authors analysing the roles of financial actors have mostly been concerned with financial consumers (Hall 2011), that is, in the case of agriculture, with farmers. This article takes an alternative approach – it looks at the interpretation of actors representing financial institutions (in this case, representatives of key banks that lend to farmers) and agriculture. In particular, the article focuses on dairy farmers and farmers' organisations, but situated in the wider banking and farming context of the three countries. The focus on the dairy sector is important for three reasons: firstly, it ensures that sectoral differences do not overshadow the comparison of financial subjectivities; secondly, a focus on one sector was preferable for comparable data gathering across nation states; and finally, the dairy sector is intensifying across Europe in response to the recent liberalisation in dairy markets, which means dairy farmers access to capital is critical, as indeed is analysis of relations (Maye et al. 2018; Thorsoe et al. 2020).

The article focuses on three cases – Latvia, Denmark and the UK. The three countries represent diverse contexts in terms of historical and political development, agricultural and banking development and socio-cultural trends. Agricultural financing varies in terms of the national banking sectors' exposure to agriculture and the centralisation of financial services provided to farmers (see Section 4). The analysis is based primarily on data collected as part of the "Sustainable Finance for Sustainable Agriculture and Fisheries (SUFISA)[1] project, with supplementary in-depth interviews also conducted specifically for the purposes of this article. Data collection during the SUFISA project captured the particularities of the dairy sector in Latvia, Denmark and the UK. A wide range of qualitative and quantitative data were collected during the project, including: in-depth interviews with stakeholders in respective of national dairy markets, focus groups with dairy farmers, workshops and a producer survey. The fieldwork and analysis from which this paper is based, was conducted from May 2016 to April 2018 and the full range of resources and materials used are outlined in Appendix 1. The overall methodology was designed to capture the perspectives of farmers and financial actors

[1] A more detailed description of the methooldogy and data collected for the SUFISA project can be found here: www.sufisa.eu (accessed: 10.03.2021).

(including banks). The data were analysed using the conditions-strategies-performance (CSP) approach (Grando et al. 2019), which was developed as an analytical approach to structurally engage with farmers' decision-making processes. The approach conceptualises agricultural processes as a series of producers' strategies aimed at reacting to internal and external conditions. Finance-related aspects emerged both as conditions to which processors have to react and as a strategy used to deal with these conditions. The approach developed for the SUFISA project had a broader focus than needed for the article. For the purposes of the article, we focus mostly on finance-related issues.

In the analysis of the data from all three countries, finance emerged as a crucial theme featuring prominently in the interviewee responses. The article focuses on how finance related issues emerged in explanations (mainly focusing on the relations, access to services, turning points) presented by farmers (and actors related to farming) and bankers. Bankers represent the perspective of the financial sector in this paper because, for the most part, banks (at least in the UK and across EU member states) play a central role in agricultural financing and remain the entry point for farmers to access funding for investments, including for succession and the expansion of on-farm activities (Hilkens et al. 2018; Bjorkhaug, Magnan and Lawrence 2018).

3. The construction of agricultural financing

Financialisation is a global phenomenon (Clapp 2014) strongly related to global organisations and corporations, agreements and protocols, policies and ideologies (Bourdieu 2005). Consequently, most discussions tend to link financial practices observed locally to universal principles associated with global financial arrangements (Bjorkhaug, Magnan and Lawrence 2018) – either seeing them as a manifestation of global objectives (universal rules guiding financial relations) or perceiving them in the context of global structural shifts. However, this is not a perspective adopted by everyone, and there is a growing body of literature within cultural economy criticising the approach for its high level of abstraction and inability to provide meaningful answers to local challenges. Magnan (2015), for example, argues that more attention should be directed towards mapping the role of individual agency, with financial relations a more nested part of the local context. Drawing on Foucauldian

discourse analysis, Williams (2014) suggests that once financialisation meets the everyday contexts of routinised life, financial subjectification takes place. This paper extends Williams' claim by introducing the notion of financial subjectivities. Financial subjectivities are maintained by the system and society itself: actors, their relations, social institutions, values, and many other social factors. As a first step to develop this concept, we focus on banks and farms as a lens to observe local financial subjectivities, particularly to assess how farmers and banks engage in this local reality.

3.1. The constructed nature of the financialisation of agriculture

There are discrepancies between the financialisation rhetoric and reality. As Williams (2014) suggested, it is misleading to see agro-financial relations merely as a mirror of globally uniform financial logic. First, this is because localised modes of agriculture differ. Differences can manifest themselves through factors like sectors' structural characteristics, locally rooted contextual possibilities, or local or regional restrictions (Magnan 2015, Fernandez and Aalbers 2016). For instance, agriculture is in the centre of a critical debate regarding its environmental impacts. The significance of this debate differs across the world. Hence, policies may be employed to encourage different behaviours of banks and financial actors (Martin and Clapp 2015). Besides, soil and ecosystems' properties might be favourable to different farming strategies. Consequently, while relations between the financial sector and agriculture are expected to follow a uniform logic, in practice how agro-financing is organised needs to be adapted to reflect sectoral arrangements as contextually embedded.

Second, agro-finance does not exist in a vacuum. Instead, it is embedded in particular historical development trajectories. The financialisation of agriculture is a place has therefore evolved over time and builds upon pre-existing institutions (Williams 2014). Institutions have history and memory on which current reality is based. Historical ties ensure institutions' legitimacy (Berger and Luckmann 1966). These institutional arrangements are also intimately intertwined with power relations (Henry and Prince 2018; Sippel et al. 2017; Hall 2011). In short, the significance, legitimacy and even possibility of financial relations are ensured by aligning emerging structural arrangements of agro-

finance with particular historical trajectories (see, for example Fernandez and Aalbers 2016; van der Ploeg et al. 2015).

Finally, financial markets are in fact reproducing, reacting to and reintroducing local peculiarities (Bourdieu 2005). Thus, instead of regarding the relations between financial actors and agricultural sectors as linear – with predetermined rules causing particular impacts – we should perceive these relations through the practices they imply. It is "financialisation as work" rather than the "financialisation at work" that researchers should prioritize – that is, the financialisation of agriculture should be seen as a process (Williams 2014). Discussing the constructed nature of reality, Berger and Luckmann argue that "social order exists only as a product of human activity" (Berger and Luckmann 1966, 70). By extension, it is possible to suggest that the social order of agricultural financing exists only through the practices that maintain local peculiarities. We can also go a step further in that these practices will also have to reflect the "motivations, knowledge, and identity" of actors enacting them (Bjorkhaug, Magnan and Lawrence 2018, p.5). Functioning relations between agriculture and financial markets cannot be a-spatial or a-historical: these relations have to be locally made and remade and cannot be perceived as given (Hall 2010).

3.2. Reconstructing the financialisation of agriculture

Financialisation has to be renegotiated in diverse contexts and as a part of a broad set of potential development trajectories. This is the background from which financial subjectivities emerge – as re-enactment of finance-related beliefs by local actors who are connecting these beliefs to local historical agricultural and financial trajectories. For a researcher, adopting this interpretative perspective means focusing on "financialisation as work" – in other words, accepting agro-financial relations observed at the ground level and without trying to frame locally observed interactions and conditions within predefined expectations. From this more grounded perspective, each activity related to the financing of agriculture is informed through a combination of individual and collective beliefs and knowledge related to how local agro-financial systems operate.

Being continuously performative might seem like a precondition for rapid change; however, it has precisely the opposite effect. This is because all actors are bound to their expected roles and have to present their practices in the light of expectations, which means that changes are invariably slow (Henry 2017). Re-enactment of activities ensures stability. The question then is, who are the actors constructing financial subjectivities? The performative discourse in theory is created and maintained by all actors in society. However, Bourdieu (2005) identifies three particular groups of actors to consider when looking at how locally adapted markets are constructed. He argues that next to consumers' (or in this case, farmers') expectations, the role of governments and financial actors (in this case, banks) is critical.

Although the interest of banks in agriculture is becoming ever more apparent (especially since the 2007-2008 financial crisis), the agri-food sector remains poorly understood by financial actors and is perceived by analysts as relatively risky (see Ouma 2014). Some studies suggest that banks until quite recently were hesitant to engage with the sector without additional assurances (see Larder et al.'s 2018 from Australia, for example). Historically, the safety of these investments has been to some extent guaranteed by national governments (Martin and Clapp 2015) and international institutions, e.g., the EU. National governments have also been crucial in creating historical structural financial support for farmers and, of course, in regulating the actors engaged in agriculture. Meanwhile, the capital to which banks have access to has given them considerable bargaining power in their negotiations with national governments. Consequently, in this case, the principles structuring farmer-banker relations are largely formed via contextually bounded negotiations between financial actors and the government. Power relations are a crucial aspect of these negotiations. Farmers (as financial consumers) also play a critical role in this equation. It is crucial for farms to maintain competitiveness and, as they are able to set rules for accessing loans, financial actors have strong means to shape farmers behaviour. For farmers to have access to funds, they have to demonstrate financial literacy (Sippel et al. 2017), display promising enterprise and show willingness to repay the loan (Meyer 2011). Correspondingly, the visions of financial actors will strengthen particular farming models that, in turn, shape agriculture's development trajectory and influence farmers' overall perception of agriculture,

thus affecting the farmers' professional identity (Bjorkhaug, Magnan and Lawrence 2018; Legoarde-Segot and Paranque, 2018). Furthermore, because of the complexity of these relations and the complexity of financial processes, bankers emerge as key advisors to which farmers turn for farm management advice (Hilkens et al. 2018). At the same time, banks are interested in maintaining relations with farmers (especially farmers that own and/or manage large and successful farms (see Section 5)). Farmers are thus similar to any other consumer group that has certain power (or not) over the providers of services (Langford 2019).

In summary, financial subjectivities are maintained by all finance-related practices. This article cannot capture all of them, so instead focuses on two groups of actors central to agro-financial relations – farmers and bankers. These actors negotiate their financial relations against the background of globally set expectations and particular contextual preconditions. Not all of the contextual preconditions were created to shape relations between the financial sector and agriculture in particular, yet their presence has an impact on how these relations can be structured.

4. The three cases

Previous sections underline the crucial role of particular local trajectories that agriculture and finance follow. Thus, it is impossible to understand financial subjectivities without first outlining the political economy context. This section offers a short overview of the diversity of historical development trajectories of agricultural financing in Latvia, Denmark and the UK, respectively.

4.1. Linking farmers and finance in Latvia

The private banking sector in Latvia is relatively new: it re-emerged after Latvia regained independence in the early 1990s. The collapse of the planned economy of the Soviet Union and the shift to a market economy brought waves of change. Land that was once collectivised by the Soviet authorities was redistributed to its historical owners; previously state ensured outlet markets

disappeared while the population's purchasing power was low. Kolkhozes[2] disbanded, the average farm size fell significantly and farm equipment that was previously operated by kolkhozes was now unevenly distributed and often outdated. In addition, the costs of agricultural inputs were increasing exponentially (VARAM 1998). Farmers knew little in terms of how to operate in these new market conditions. However, it was clear that any successful commercial farming would need investments.

Most private banks in this period were busy issuing short-term loans with high interest rates. Agriculture did not attract attention – it was too risky and the predicted profits were too low to be interesting or attractive financially. Meanwhile, the government did not have the money or the political will to address the issue seriously (Kučinskis 2003). The "Mortgage and Land Bank of Latvia" – a state-owned bank that was specifically designed to address the lack of finance in agriculture – was established in 1993. However, it was the World Bank that, in 1993, *inter alia*, decided to engage in a partnership with the national government and helped to establish financial support institutions issuing loans and loan warranties to farmers (Saeima 1995). The solution introduced – via an organisation called "Laukkredīts" – operated independently from already established government institutions. Due to the low credibility of existing institutions, it also chose to internalise most of the services that normally would have been externalised. Eventually, Laukkredīts was integrated into the state-owned "Mortgage and Land Bank of Latvia" in 1997. In reality, only a small group of farmers received financing, and quite a few farm enterprises were not able to repay their loans and so lost their land during the early period of agricultural financing in Latvia (Kučinskis 2003), which seriously undermined farmers' trust in banking credit as an option for development. That said, the programmes ensured that at least some farms in Latvia had access to funds. Furthermore, "Laukkredīts" became a training ground for the first generation of market-oriented agricultural economists, some of whom later continued their careers in commercial banking.

After the merging of the two financial institutions, there was no bank with a particular focus on agriculture. For a while, despite the lack of explicit interest in agriculture, "Mortgage and Land Bank of Latvia" remained the bank with the highest number of agricultural clients. However, during this period

[2] A form of collective farm in the Soviet Union.

the commercial banking sector had matured and by the early 21th century a handful of national and multinational banks were now dominant in Latvia's financial market and were looking for long-term clients. Latvia joining the EU in 2004 also ensured that farmers had access to CAP subsidies, which made them much more attractive to banks. This resulted in a growth in agricultural financing – both in terms of real numbers and as a short spike in the share of loans issued overall. However, interviews with bankers stressed that genuine interest in agriculture from the banking sector really only emerged after the economic crisis of 2009. As one interviewee (#4) explained:

> "*…after the economic crisis banks compared how different sectors were behaving during the crisis and it turned out that farmers were the most stable group in repaying their loans… That's when it was recognised that the sector needed to be developed.*"

After the 2008-09 financial crisis, the number of credits issued to farmers grew by more than 15% (FKTK, 2018). This period has also brought other changes in terms of bank-farmer relations. For instance, some banks have developed internal structures to support their relationships with farmers. Meanwhile, the state sold "Mortgage and Land Bank of Latvia", and thus the most significant agricultural loan portfolio, has switched hands. The interest of the private sector is also facilitated by farmers' continuous access to EU funds and their relatively low credit burden (for each ha of agricultural land there are credit obligations worth 300 euros). Banks are also attracted by the state support to the sector and the ongoing process of concentration and consolidation in agriculture (interviews with bankers, for instance, showed that banks were mainly interested in large dairy and arable farms). To summarise, agricultural financing in Latvia is a relatively new phenomenon. It has been mostly maintained by targeted government activities, but private banks have shown an interest in the sector in recent years. For agriculture, the initial experience with crediting was bad.

4.2. Bursting a financial bubble: the case of Denmark

The financial sector in Denmark has had an important role as a facilitator of the continuous modernisation of the Danish agricultural landscape over the past 200 years. The Danish real estate mortgage system has traditionally been among the cheapest in Europe and Danish farmers generally

have access to cheap finance. The banking sector is split into many small banks with different geographical areas of operation and a small number of national and multinational banks. A number of small rural banks have a very high proportion of the portfolio of their loans to the agricultural sector, some as much as 35 % of their loans.

Traditionally private ownership has been the dominant enterprise form in Danish agriculture and although the proportion of private ownership has decreased slightly in recent years, around 85% of farms are still privately owned (Olsen & Pedersen 2014). Unlike shareholder companies where capital can be obtained by issuing new bonds, private companies are susceptible to changes in the asset value and huge investments (Olsen & Pedersen 2016). Furthermore, in successions, the entire property value is usually refinanced by loans. Therefore, vast sums are extracted from the agricultural sector in each succession, and the system has resulted in the build-up of massive debt. Olsen (2015) assessed the need for new capital: in total about 3000 farmers are in a critical need for capital (primarily pork and dairy producers) because they have high debt, their liquid funds are low and because they operate with a deficit. This has recently worsened due to low commodity prices and the 2018 drought. Meanwhile, the access to loans has changed quite a lot in recent years.

A number of different components constitute the current situation. First, there is an unusually high rate of bankruptcies among Danish farmers, and, simultaneously, the number of traded agricultural properties is lower than it has been for years. For instance, Olsen (2016), based on accountancy data, has documented that around 25% of Danish farmers are on the brink of bankruptcy. Second, a large share of Danish farmers have a significant income problem; approximately 30% of all farms operate with high debt and an income deficit. The financial situation on Danish farms is also the result of a strategy dominated by high investments, high debt and high reliance on world market production. Third, the total liability of Danish farmers today amounts to 370 billion DDK (~€50 billion), or what equals 65% of the asset value, which is 10-50 percentage points higher than other countries in Europe (Olsen & Pedersen 2014). Furthermore, this debt, which is considered unlikely to be repaid in full, is also claimed to be the main cause of lacking income (Asmild, Lind and Zobbe 2015). Fourth, the debt is partly due to a lending practice in which banks and financial institutions provided loans as asset-based

loans, based on inflated land prices. The financial situation in Danish farming is also the result of a strategy which is dominated by high-tech production facilities financed by increasing debt and a significant equity loss following the financial crisis in 2008 (Hansen and Zobbe 2012; Jakobsen 2013; Kjeldsen-Kragh 2010; Kyed, Zobbe and Østergaard 2012). Hence, prior to the financial crisis a number of the loans were “risky”, as they were provided as interest swap loans, based on Swiss franc, loans exempt from repayment or adjustable rate mortgage, which are all very sensitive to increasing interest rates or decreasing land prices (Olsen and Pedersen 2016).

The ownership structure and the low equity for some farmers have enormous implications for the access to and price of finance for the farmers. Following the financial crisis, farmers’ equity has become of paramount importance for access to loans and the interest rate of loans. The Danish implementation of the Third Basel Accord means that banks now adhere to a more rigid risk management model and a more thorough assessment of the farm’s business case. Banks have now become much more reluctant to grant loans to the agricultural sector. However, due to decreasing land prices and consequent equity loss, many farmers experience increasing costs of finance. Furthermore, the finance costs now vary much more between different groups of farmers, depending on their equity. Therefore, on average Danish farming had a negative investment in the wake of the financial crisis of around €300 million annually.

In short, the history of agricultural development and finance are therefore closely aligned in Demark. Agricultural financing has been concentrated in smaller rural banks, many of which have had a substantial portion of agricultural credits in their portfolio. Historical land policies, the need to invest and irresponsible borrowing have resulted in a substantial credit burden for farmers and a liquidity crisis. Because of this agro-financing in Denmark is undergoing substantial changes.

4.3. The pressure for cash flow, contractualisation and stranded assets: the case of the UK

After a long period of growth, agricultural assets dropped by around 6 percentage points during the period 2013 to 2017 in the UK. The trend is ambiguous but is partly be explained by a drop in land prices. Meanwhile, the amount of liabilities for the agricultural industry has risen by 18 percentage

points during the same period, mainly because of the growth in bank loans issued to farmers (DEFRA 2018a). The growth in liabilities is part of a long-term trend – the amount of long-term liabilities for the agriculture industry have more than tripled in the last two decades, from £4 528 million in 1998 to £13 836 million in 2017 (DEFRA 2018b).

Agricultural financing in the UK is centralised in the hands of a few large banks. Lloyds and HSBC are key lenders and pioneered the development of "specialist agricultural teams", although HSBC no longer has a specialist agriculture team. Lloyds has a long history of lending to the agriculture sector. About 20% of lending in Barclays Bank is to agriculture. Relations between agriculture and banking are thus well-established and significant. Banks lend against land and normally lend 60-80% loan to value and up to a maximum of 50% if lending against no-land assets. Lending to agriculture was viewed as relatively low risk. Interviewees explained, for example, that farming was a safe place to lend because farmers were generally good at repaying debt.

However, as the figures above show, a critical issue is increasing debt. In 2016, for example, half of farms in the UK were no longer making a living from farming itself, with 20% generating a loss even before accounting for family labour and capital (Andersons 2016). At this time 17% of farms faced major financial problems, with a liquidity ratio that indicated a lack of ability to pay off short-term debt. A large portion of farms across most sectors saw a widening gap between cash required and actual profit. Levels of borrowing have almost doubled in the past 10 years or so, with an increase by around 15% in 2015 (Andersons 2016). In 2017/18 average debt across all farms in England was £227.500 per farm, which was a slight increase on the year previous. The highest average debt per farm was for dairy (£398,200), general cropping (£386,800) and pigs and poultry (£386,300) (DEFRA 2019).

Interviews with bank lenders revealed that historically most agricultural financing was in two forms: capital investment on farms or land purchases. More recently, borrowings have increased to cover shorter-term shortfalls in cash flows. This has created fluctuations in income and cash pressures and has meant that farming is becoming a more risky proposition, at least compared to traditional perceptions. Farms are moving up the "at risk watch list", for example, particularly tenanted farms

that can only provide security on live and deadstock. Moreover, changes in banking regulations, introduced since the financial crisis of 2008, means that banks are less willing to lend farmers money based simply on the assets that they own (Andersons 2016). Banking analysts have called for better support mechanisms on the side of banking, e.g., banks should offer loans with flexible repayments linked to farm gate prices, or provide credit to farmers for input purchases to improve cash flow.

These issues are particularly challenging for dairy farmers in the UK, given high average debt and with the least amount of off-farm income compared with other sectors (Farm Business Survey of Household Income), meaning fewer opportunities to subsidise declining farm incomes. Another factor that is particularly important for dairy farmers is the nature of their milk contract. This is something to which bank lenders pay increasing attention and that points towards increasing financialisation in the sector. Volatility in milk prices, power asymmetry in favour of corporate retailers and processors and the selective recruitment of 'dedicated suppliers' to processing contracts has resulted in structural vulnerability (Marsden et al., 2019). Within dairy farming, many are quitting the sector, with six farms on average foreclosing in England and Wales in 2015-16. Managing price volatility has become a key challenge for agriculture and for banks that lend to the sector. Certain forms of milk contract arguably offer dairy farms some "protection" from market volatility but this locks them in to specific contract arrangements. Banking is also responding to the wider environmental and climate crisis, the rise of the bioeconomy and the need for a post-carbon transition, which means increased fears of investing in carbon-based investments that may become "stranded assets" (Caldecott et al. 2013; Marsden et al., 2019). To summarise, agro-financial relations in the UK are well-established, with the portfolio of agricultural financing concentrated in the hands of a few large banks. Historically, agriculture has been associated with stability, but liabilities have tripled in recent decades and the value of agricultural assets has dropped, which has created vulnerabilities for farms and banks.

5. Financial subjectivities

In this section, we consider how banks and farmers articulate agro-financial relations as financial subjectivities. The section starts by taking a closer look at how banks structure their engagement with

farmers and how they use the means available to them to construct a particular vision of agro-financial relations. The second discusses the farmers' ability to shape financialisation of agriculture and to use their individual and collective voice to articulate their needs. Both sub-sections are supported with illustrations and examples of particular contextual considerations that bind the process financialisation to historical local trajectories.

5.1. Banks engaging with farmers

Banks' internal policies set out how farmers should be engaged with, assessed and serviced. In a sense, they are inherently local arrangements, but the policies are also bound by broader international principles and protocols that banks must follow. However, actions implemented by banking representatives are not just influenced by the strategic vision of agriculture; they too are nested within particularised bank and farmer agro-relations.

5.1.1. Target markets that banks focus on

Global risk management expectations are strongly reflected in the interviews with banking representatives. Respondents stressed that they were not just providing loans to whoever had the collateral. This is captured by a banker from the UK (interview #2) as follows: "*…we are responsible lenders, the crux behind us, is that we will not knowingly put somebody in to a position of debt which they cannot fulfil and get their way out of…"* Another respondent from the UK (interview #1) further strengthens this claim regarding responsibility: *"We operate under the auspices of the Financial Conduct Authority (FCA), which obviously regulates all the banks, so that's our predominant regulator… We do work with other organisations to try and make sure we are doing the right things for the industry at the right time… We are very close to Government…"* In the three national cases, responsibility translates as looking at the same target group of farmers, i.e., those which show a promising performance profile. In Denmark, for example, banks tend to favour the "*top 25%",* and if a farmer is not assessed to be within this category, banks are usually reluctant to finance investments. The same pattern emerged for Latvia and the UK – respondents in both countries gave a similar

assessment. Although banks claim that all farms are their clients, in reality they are focusing on a short list of larger more profitable farms. This implies that the devices that banks use in their risk assessment of farmers are increasingly relevant to understand the relationship between banks and farmers. In the wake of the financial crisis, such technical risk management has gained prominence over more experience-based assessments. Benchmarking has become a central tool for bankers in their management of farmers, and it forms the basis of agreements among bankers and farmers. However, this does not mean the same thing in all three countries. A farmer (interview #1) representing one of the largest and most productive dairy farms in Latvia explained, for example, that for her last approved loan she did not have to call the bank – the bank's representative visited the farm and granted a loan even before she had decided that she needed one. This experience reflects the fact that agricultural financing is relatively new in Latvia and is not yet experiencing the problems observed in the UK or Denmark.

In the three cases the governing actors reiterated that they tried to use the means available to them to broaden the interpretation regarding the circle of farmers that have access to finances. The main engagement that governing institutions have with financial and risk management aspects of farms is oriented towards broadening the relations between farmers and banks, as well as empowering farmers. Supranational measures like CAP direct payments (applicable in all three cases at the time of interview) ensure a continuous cash flow that serves as additional insurance to lenders that farmers will have a stable income. However, several other instruments serve the same purpose, including state-run disaster funds, credit warranties and EU or national risk management support instruments, such as coverage of a share of insurance expenses. These interventions serve two purposes. On the one hand, they reassure everyone (including banks) that governments are willing to back up the issues related to unknown and unpredictable aspects of farming. On the other hand, these interventions prove that agriculture is a priority for nation states and, where applicable, the EU. As one banker (interview #6) puts it: "*we should take into consideration how many project application calls the Rural Support Service (RSS) has announced in the period* [au: last decade, Latvia]. *The whole of agricultural crediting is built upon the availability of RSS project money"*. A clear example of this was the case when

Latvia's government decided to partially cover the losses farmers incurred after a major flood in 2017. Experts at the time argued that the decision would have complicated side effects, for example, undermining insurance as a developing service. The interviewed bankers, however, claimed that, although state support to farmers did not affect their decisions, it was reassuring that the government was willing to engage in normalising the crisis.

Decisions like the above are affected by the national context. For example, in Latvia where agricultural financing is in its infancy, RSS calls facilitate agricultural crediting in general while the state has been open to maintain measures for groups not on the target list of banks (e.g. very small farms). In Denmark, where a considerable share of farmers struggle to repay loans, the support measures have been oriented towards encouraging banks to restructure non-performing loans and to increase risk sensitivity (fi-compass, 2019).

5.1.2. The offers banks make

Benchmarking has become a central tool for bankers in their management of farmers, and it forms the basis of agreements among bankers and farmers. However, there are differences in terms of how it is implemented in nation states. To identify credit ceilings, several approaches were brought up in interviews with bankers in each country. Land-to-value bank loans has historically been a common approach in Denmark, and was also adopted by banks interviewed in the UK. In Latvia just one bank was using this approach, with the majority of Latvia's banks using the earnings before interest and taxes (EBIT) approach. These banks claimed that this was a much more realistic assessment of a farm. The EBIT approach also allows farmers to develop their farms much more quickly and ensures that the bank can easily raise or lower a farm's credit ceiling. In Latvia's case, although these banks were employing agricultural economists, they still had very little information about farms that would go beyond the official financial performance. In Denmark, digital benchmarking tools have become increasingly important in bankers' assessment of farm performance. This approach is also common in the UK. These benchmarking tools are developed using a national database of farm accountancy data. The rise in the importance of benchmarking tools illustrates another common theme emerging across

the three cases: the way that banks approach farmers tends to change alongside what is considered to be “best farming practices”. As a banker (interview #2) from the UK put it, *“Probably two years ago, we were looking very much at things like robotics coming in. That seems to have dried up… Systems now are looking to be low cost, low input systems, so when the dairy goes in, it tended to be the basic dairy, you know, without the bells and whistles, to make sure the costs are kept low….”.*

In all three cases, responsibility is a keyword used by banks to explain their services. Contextual differences mean that you get different perspectives and approaches to how banks perceive and present their activities. In Denmark, for example, banks’ services are discussed in the context of benchmarking, reflecting the financial difficulties farmers and the banking sector are facing.

However, there are cases when financial actors or national governments feel that they should ensure that there is an alternative to the perspective of private banks. For example, because the financial sector is still new in Latvia, the government established a state-run bank to support farmers. However, as the Latvian government was recommended by supranational organisations to leave the banking sector, the government restructured the bank into a development finance institution that now helps smaller farms to commercialise and to restructure the agricultural landscape in general. This is done by offering farms an opportunity to remain outside the development narrative of commercial banks and to concentrate more on on-farm performance rather than on financial performance. In Denmark the government offers loans to ease investments and succession through the “vækstfonden” programme; however, the loans are provided on market terms and thus are perceived as expensive. In the UK, an ethical bank that supports organic and agroecological enterprises explained that: *“…we're all about that sustainability; the whole reason we do organic agriculture really is born out of the environment and reducing carbon input…”* These initiatives and examples illustrate how new ideas are put on the agenda of financial subjectivities. Some of these issues are responding to local needs – e.g., support provided to small farms in Latvia. However, others are trying to link global financial discourse with new ideas about sustainable farming futures.

5.1.3. Communication with farmers

There are differences in banking structures, created to engage and maintain communication with farmers. In Denmark, the current financial crisis has led to a reconfiguration of banks' financial decision-making, and therefore indirectly also the decision-making of farmers. For example, the decision to finance a farm or not is no longer made by the financial advisor. Instead – particularly in smaller banks it must now be approved by the executive, and some larger banks have established "agricultural centres", where economists are responsible for the decision to fund a particular project or not. Furthermore, in the wake of the financial crisis, the use of farm boards ("gårdråd") have been promoted to farmers in Denmark as a strategic management tool. This means that the farm gathers an expert board, the members of which are then either responsible for formal decision-making or for advising the farmer concerning his or her strategic decisions. This shift goes hand in hand with the focus on benchmarking and technical comparisons using performance indicators that are detached from personal relations and that guide a bank's assessment of their clients.

The level of specialisation of persons working with decisions to provide or turn down the loan differs among banks in the other two cases. Some banks have hired agricultural economists, and some have tried to attract at least some agricultural expertise going beyond economic performance. Banks in Latvia and the UK have also hired employees who maintain proactive links between the bank and farmers. Trained in agriculture, business and finance, these specialist actors serve as consultants to farmers. These actors have access to banks' internal assessments regarding processes in agriculture and also serve as consultants offering advice to farmers. In Latvia, one such consultant (interview #4) explained this process as follows: *"My colleague and I…. we are travelling all across Latvia to meet farmers and to discuss their problems and their daily life.... we are meeting with everybody trying to understand where we are better than other banks and what financial instruments farmers need."* To some extent, this approach reflects Latvian banks' willingness to expand their loan portfolio in the sector. However, it also reflects the personal nature of financial subjectivities. Meanwhile, a banker from the UK (interview #2) explained that *"[Our] business managers were trained first and foremost as business managers, secondly they're trained in agriculture, not to become agricultural advisors in any form, but so that they can identify issues on the farm, to be able to help and add value to that farmer,*

to be able to help to take that business forward …" This is an example of how personal relations between banks and farmers are also futures-orientated.

5.1.4. Communication with the agri-food sector in general

Quite a few choices that banks make are not guided by an attempt to engage directly with farmers. Instead, they are guided by a willingness to reproduce a particular strategic vision of themselves or to ensure a strategic market position. For some banks, lending to farmers is not a particular priority. However, in some interviews bankers explained that they did have strategic goals related to agriculture – be that in terms of a share of clients or a change in farming practices. These development goals shape the decisions that banks make and force them to rethink the way they assess farmers looking for loans. In both cases, respondents claim that their willingness to operate outside the conventional pool of clients has forced them to introduce new ways to assess farmers' performance. An example of this is the quote presented earlier where a respondent from the UK explained how their bank is taking into consideration sustainability performance indicators before lending to farms. This approach poses new challenges to banks as well as ensures that new competencies emerge that are later channelled back to the farming community. A respondent from Latvia (interview #6) captured this point well: *"…when you work with a tiny farm, your loan will not change a lot… We don't expect that there will be an explosion of efficiency. Thus, we have to understand the farmer's daily routine to assess him."* These examples illustrate ideas that are outside mainstream agricultural crediting discussions.

A separate practice observed in Latvia and the UK was close relations maintained between banks and organisations shaping farmers' practices. That means engaging with governing actors, key NGOs, cooperatives and other relevant stakeholders. This is done, on the one hand, to maintain a close relationship with actors in powerful positions, while also engaging in shaping the sector, on the other. It both cases this is an illustration that from all sides there is support in maintaining personal relations between the key actors. However, while in the UK these personal relations are an attempt to maintain a joint vision, in Latvia they are more oriented towards ensuring that all actors remain interested in

the sector and that farming is well protected. The efforts of the MoA to quickly summon representatives from the main banks working with the agricultural sector to discuss the possibility of providing loans to farmers affected by the 2017 floods is a good example of this. In Latvia the actors engaged in agricultural financing are very keen to have a good relationship with one another.

5.2. Farmers

Despite farmers being a crucial actor for agricultural investments, their opportunities to shape agro-financial relations are much more limited compared to banks. Farmers' dependency on access to finance is a cause for power imbalance, leaving farmers with a passive role when engaging with banks.

5.2.1. Adapting market thinking

The extent to which farmers need access to finance is shaping relations between farmer and financial institutions. Danish farmers represent one extreme in this regard. Danish farming is currently in a significant financial crisis and many farmers depend on an overdraft. Hence, banks are in a position where they must decide who they will support and who will have to leave farming either through bankruptcy or by selling their property. Olsen (2016), based on accountancy data, has shown that around 25% of Danish farmers are on the brink of bankruptcy. Hence, agricultural economists assume that the number of bankruptcies would be even higher if banks and financial institutions were less hesitant to push for bankruptcies, due to a fear of further decreasing real estate prices. A large share of Danish farmers has a significant income problem; around 30% of all farms operate with both high debt and a deficit. The financial situation on Danish farms is the result of a strategy which has been dominated by high investments, high debt and high reliance on world market production. Furthermore, due to the importance of getting access to loans, farmers hire private consultants to develop and align their business plans with the expectation of banks, thereby professionalising farmers for their engagement with banks. Thus, instead of shaping the system, the farmers are looking for a way to adapt to the desired expectations.

In Latvia, the situation is very different. The most successful farms that banks target often have their own savings, they may have a positive credit record, and it is likely that they own significant blocks of land. Additionally, this group has constant access to subsidies and other policy instruments granting them support in potential purchases of land and infrastructure. Thus, because they have options and resources, these actors are in a better position than, for example, farmers from Denmark. This is illustrated by the fact that, in Latvia, it is often banks, not farmers, that make the initial contact. This position of power was reflected earlier when discussing markets that banks focus on – in essence, if you are a successful farmer, then banks in Latvia (and indeed elsewhere) are very motivated to work with you (banker, interview #6). Finally, it is also worth noting that the strategy of some farms presupposes a very conscious distancing from banks. In the UK, some respondents reported distancing as a deliberate strategy. Meanwhile, in Latvia, it may reflect the lack of experience with banks and negative connotations associated with the idea of "being in debt".

5.2.2. Resources that can be used for bargaining

There are also indirect ways that farmers engage with banks. Already we have illustrated how farming decisions – such as accountancy, advisory and farm management choices – can have a very real effect on farmers' relations with banks. There is also what might be termed "the right way to farm", in that certain approaches are rewarded with banks trust and support. This "right way to farm" was noted in a number of interviews with descriptions such as "a farmer as an entrepreneur", or "business-orientated". In the case of Denmark, for example, a farmer was not granted a loan because, when asked about the aspect of farming that he most enjoyed, he talked about milking his cows in the morning rather than his farm's financial performance. Thus, the farmer's personality may come into play when a farm's financial opportunities are evaluated. In some interviews, bankers also stressed the importance of farmers being critical and able to make fact-based decisions instead of relying on rumours or feelings. Farmers, in other words, should be able to think on their own and use this skill to make their farms profitable and enterprising.

Additionally, land is used as a bargaining chip. Farmers tend to push governments to make land related decisions that would improve their position vis-a-vis banks. Land, being the key collateral as well as one of the objects of trade that requires loans, is seen as both resolving and posing finance-related challenges in all three cases. It has a direct effect on farmer-banker relations. In Latvia, a decision made after regaining independence to return land to historical owners created a fragmented farm structure that caused a situation where only a few farms had sufficient collateral to obtain bank loans. In the UK, this problem is most evident for tenanted farms. However, perhaps the strongest example comes from Denmark: farmers do own the land, but according to local statues, upon inheritance heirs typically purchase the farm for the market price. Because of this, a significant share of funds is withdrawn from the sector with every new generation of farmers. After a major agricultural crisis, the Land Code (*Landbrugsloven*) was revised in 2012 and 2015 and the previous ownership restrictions were abandoned. Attracting investment capital was a major motivation in this revision. The new and updated version of the agricultural law enables new actors willing to invest in farmland – such as non-farmers, liability companies or pension funds. Latvia's government did the opposite: it used a state-owned finance institution to create a Land Fund – an institution that purchased land to ensure its availability to local farmers and preservation. However, according to several experts, the plan backfired and the fund started to act as an investment company. It has also been accused of unintentionally raising land prices.

5.2.3 Accumulating bargaining power

There are also solutions that are orientated towards balancing the power between banks and farms and ensuring that farmers have options. Typically, as with other agricultural processes, various forms of cooperation are among the ways of accomplishing this most effectively. In the UK, even the biggest banks report that they are consulting with farmer organisations. In Latvia, some cooperatives are taking collective loans and some sectors are heavily engaged in risk mitigation (introducing new contracts and working to introduce affordable insurance, for example).

6. Discussion

Although financial actors have always been important for farming, all three cases illustrate how relations between financial actors and farmers have become increasingly close in recent years. The growing influence that financial actors have over farmers and the pressure farmers feel to invest, encourages farmers to accept the practices and mindset favoured by banks (Chiapello, 2015; Lai, 2018). This is what banks describe as 'responsible practices' – ensuring that the farms that are engaged in relations with the financial sector fit with certain risk performance descriptions and hold a certain agro-financial vision. Farmers who embrace approaches to farming stipulated by banks are prioritised when providing investments, and vice versa. Thus, banks have the power to encourage certain farmers' decisions as well as to frame these decisions, which implies that financialisation, as described in this paper, produces new local versions (Hall, 2010). Thus, financialisation implies new roles and identities for farmers as well as a change of the skills that are needed to be a farmer, particularly highlighted by a shift away from being production focused to being more management focused. The financial actors interviewed described this as a process of "professionalisation". This is one of the key commonalities of the three cases discussed here.

However, the three cases also illustrated local differences in terms of what this responsibility implies and in turn how farmers are expected to react to it. In Denmark the recent financial challenges associated with agro-financing has resulted in a very technical reinterpretation of these principles. In the UK, the same principles have resulted in an assessment of farmers' vision. Meanwhile, in Latvia, the interpretation is much simpler and farms commercial success might be a sufficient factor to ensure that banks issue a loan. Services and daily practices that bankers describe thus illustrate how bankers are interpreting the notion of responsibility. In fact, the interviews illustrate that bankers brought forward different ways to structure their services, including how they engage farmers and how they maintain conversations with other actors in turn restructuring financial subjectivities.

The evidence reported in this paper also illustrates that contextual factors play a crucial role in shaping agro-financial relations. Interviews from Latvia illustrate that farmers (or, to be more precise, farmer

organisations) are effective in encouraging national governments to develop instruments aimed at improving the position of farmers in agro-financial relations. Farmers are active in trying to shape the financial subjectivities to their favour. Furthermore, the interviews show that governing actors may be keen to engage with farmers and bankers just to maintain a certain development trajectory. This highlights the dual and slightly paradoxical role of governments. On the one hand, governments like to bolster farmers, but, on the other hand, they also need to sustain the free financial market. Banks as we have seen are also keen to engage with governments – these relations are potentially an instrument that helps to reduce risks (governments, for instance, can support farmers in moments of need and banks receive early notice of regulations that might structurally impact them). These are mutually beneficial relations.

7. Conclusions

The cases discussed in this paper illustrate three different outcomes of relations between banks and farms: in Latvia, agricultural crediting has developed comparatively recently and is heavily supported by the government (national and pan-European); in Denmark, agriculture has undergone a major financial crisis and farmers are struggling to refinance and remain profitable; meanwhile, in the UK, relations between farmers and banks are well established, but relations are strained as agricultural producer returns on investment yield less profit.. The shape of these cases is a result of historical development trajectories and the regulatory engagement of these relations. Despite the development trajectories of the three cases being quite different, similarities were evident in terms of general perspectives offered by interviewed bankers (services, for example). The cases then reveal contextual diversity through the adaptation and interpretation of services that banks provide and the activities they engage in. Across the three cases, the same global perspective leads to particular local reinterpretations that are nested with local structural arrangements.

Furthermore, banks and farmers are strongly connected in all three cases and more so than previously reported. This has allowed banks to accumulate influence across agriculture, or at least in relation to dairy, which is the main commodity sector reported on here. The extent of this process differs across

the three cases but very rarely do farmers harness the power to restructure established relations with financial actors. Meanwhile, the government, while ever-present, only engages with the sector when the official institutions believe that some steering is needed; in the three cases, there are quite pronounced differences regarding when a government thinks that the relations need to be adjusted. The most prominent actor continually reproducing relations between farmers and financial institutions is banks. Banks, with some exceptions, are profit oriented and risk sensitive, whilst also trying to be responsible. In general, banks favour particular farmers, which inevitably are those that pursue particular farming practices, see farming as a business, and that prove they can make a profit. Access to finances can encourage farmers to accept the practices favoured by banks. Therefore, banks play an important role in facilitating a shift towards new modes of farming. More work is needed to deepen the links between farming, agri-food governance and financialisation outlined in this paper, including influences on farmer subjectivities, good farming, new risk management instruments (public and private) and the variegated influence of socio-political context.

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Appendix 1. Data sources.

The data was collected in the period from 2016 to 2018.

Latvia	Denmark	The United Kingdom
7 in-depth interviews with representatives of banks. The bankers represent the 4 largest commercial banks (all of them branches of international banks) and 1 state-owned development finance institution. Two focus groups with dairy farmers (11 and 11 participants. 22 in total). 15 interviews with farmers, representatives of farmers' organisations and farm advisors, and 3 interviews with policy makers. A national workshop with attendance of various actors engaged in the dairy sector (n=24).	12 in-depth interviews: 6 bankers, 3 consultants and 3 representatives of the public administration. Two focus groups with dairy farmers (6 and 7 participants; 13 in total). Two national workshops with mixed attendance (N=70).	13 in-depth interviews, including 3 banks (all are large international banks, including one focusing on ethical banking), 2 dairy market consultants, and 5 dairy farming organisations, to assess market and regulations. Focus group with dairy farmers in Somerset (8 participants in total) 11 interviews with dairy cooperatives and processors National workshop with key actors from the dairy sector, including dairy farming, prcessing and banking (n=14).