Trust in Scottish Farmland Market: Tenancy or Joint Venture?

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Abstract

This paper explores how social networks work in farmland markets, with a special focus on the role of trust. For this purpose, New Economic Sociology (NES) is applied and compared to New Institutional Economics (NIE) to build a theoretical framework, and a Social Network Analysis is adopted to individual case studies. Specifically, parish case studies were conducted in Scotland, where dynamic land pattern changes can be observed. It allowed for the comparison of one parish dominated by tenancies in the land market with another parish where a joint venture unfolds. After the entire land market network for each parish was identified, the connections between actors were traced through in-depth interviews. The paper examines the role of trust in farmland markets, especially in relation to the information flow between actors (e.g., tenant, private agents, landowner and business partner). Results highlight how trust as social capital works in land transactions, in addition to the economic impacts (e.g., price, rent and transaction costs). The findings support the NES theory and suggests the importance of trust in designing governmental schemes that could support and encourage the development of farmland markets in the future.

Keywords Land market, Trust, Tenancy, Joint Venture

JEL code Q15 Agriculture: Land Ownership and Tenure

1. Introduction: Research aims and Research questions

Land in rural areas is a key economic resource providing a variety of goods and multiple functions, such as food production, environmental protection and recreation, but it is also an essential component of rural society, associated with various values around history, community, culture and place (Munton, 2009, Winter and Lobley, 2009). Thus, insights from a range of disciplines and perspectives need to be brought in to answer the simple but fundamental question: "How is land in rural areas owned and used?"

While there are different models of land use and ownership for sustainable rural development (Ostrom, 2015), one of the key aspects in designing and implementing rural land policy is to deliver improved economic efficiency in producing agricultural products while at the same time to achieve a level of social fairness in accessibility to the land. However, achieving an optimal land use without losing the balance between these two dimensions is challenging. Such difficulties may be rooted in too naïve a view of land markets where land is transacted simply as a result of economic incentives, while the real mechanism underlying land transactions could be much more complex.

Driven by the complexity of land markets, this research focuses on transactions in rural land markets, aiming to examine the mechanism of land transactions focusing both on their social and economic characteristics, and to inform the design of future land policies. It explores the different roles of social networks and government institutions using insights from two different theories, the New Economic Sociology (NES) which emphasises the role of social networks in our economic life, and the New Institutional Economics (NIE) which has a greater emphasis on the role of formal institutions. Specifically, the paper aims to answer the following research questions:

- 1. Who are the key actors in social networks in rural Scottish land markets, and how do these actors interact?
- 2. What is there a role for trust within land transactions?

To answers these questions, the paper looks into the example of rural Scotland that has a history of land transactions, associated with dynamic changes brought about by an ongoing Land Reform and the adoption of various policy measures (Warren and McKee, 2011, Wightman, 2015). Moreover, an intriguing feature has been seen in Scottish farmland markets where not only tenancy but also more flexible business called joint venture have become popular. Hence, two constructs, the role of the informal social networks and formal institutions in rural land markets are investigated in these two types of markets in local communities (parishes) in Scotland.

This paper is structured as follows. First, the policy context of Scottish land reform and economic trends in agricultural land markets are reviewed in Section 2, reviewing the differences in tenancy and joint venture. Second, the underlying theoretical framework built from NES and NIE are explained in Section 3. Here, attention is paid to the role of social capital (trust) among social networks within the land market. This is followed by some preliminary results in Section 5 and conclusion in Section 6.

2. Context: Rural land markets in Scotland

Scotland is a country where the government has clear objectives designed to change the pattern of land use and ownership. For over two decades, Land Reforms in Scotland have mainly aimed to achieve a fairer distribution of land, and their impacts on land management have been discussed by several scholars (e.g., Combe *et al.*, 2020). Thus, investigating rural land market

in Scotland will enable to get a better understanding of the processes through which land use/ownership can be changed to achieve greater public benefit.

The main policy objective of the Scottish Land Reforms is to change the existing pattern of land ownership which for years has been concentrated on a few private owners¹. As Reid (2015) summarised, the series of legislation, including the Land Reform (Scotland) Acts of 2003 and 2016, has led to a more diversified land ownership, especially through strengthening community rights (Bryden and Geisler, 2007, McMorran, 2018, McKee, 2015). As a result, the area owned by community has increased more than three times over the last two decades (Scottish Government, 2020a).

Besides these changes in landownership, another important stream of the reforms is reflected in changes in the tenure system, which allows farmers to access the land without large capital investments (Edwards and Kenyon, 2014). While the Agricultural Holdings (Scotland) Act 1991 has retained the security of tenure with life-time tenancy, the recent Land Reform of 2016 has brought pre-emptive right to buy for tenants², as well as some flexibility to the land markets by setting new types of tenant agreements with fixed-term (Table 1).

Legislation	New tenancy types	Pre-emptive right to buy
Agricultural Holdings (Scotland) Act 2003	It introduces Limited Duration Tenancies (LDTs: not less than 10 years with no upper limit) and Short Limited Duration Tenancies (SLDTs: not more than 5 years)	It gives tenant farmers the pre- emptive right to buy
Land Reform (Scotland) Act 2016	It introduces Modern Limited Duration Tenancies (MLDTs: a minimum term of 10 years but can be extended at any time during that period) replaced for LDTs, as well as Repairing Tenancies (minimum term of 35 years)	It removes the registration procedure for the right to buy

Table 1. Key Changes in Tenure System, Scotland

Source: Author's own construction based on Edwards and Kenyon (2014) and the Scottish Government (2019).

Interestingly, when examining trends in the tenanted agricultural land (Figure 1), there is a clear decline in rented land area, from 32% in 1999 to 22% in 2019. The current rented area accounts for around 1.3 million ha. Besides the increase number of landowners³, three key drivers have contributed to this downward trend (LRRG, 2014): i) farm amalgamation that has occurred to achieve 'economies of scale'; ii) landowners' preference for holding land, hence benefiting from direct payments and other farm grants as compared to rent; and iii) strong security of tenure since the 1991 Act caused reluctance of landowners to lease land. It also should be noted that the increase in seasonal lets⁴ or contract farming are excluded from the figures for rented land (Thomson, 2016).

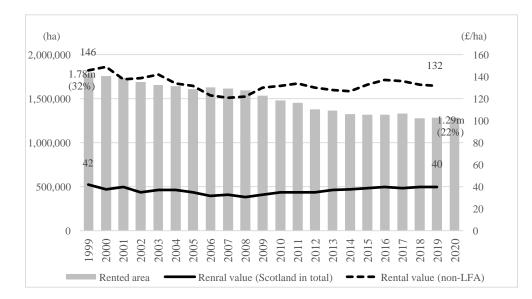
^{183%} of its Scotland's rural land is privately owned, of which 50% belonged to 432 owners in 2012 (Hunter *et al.*, 2014).

²The Agricultural Holdings (Scotland) Act 2003 provides for tenant farmers to register an interest in the land in order to be allowed the first refusal before it is put onto the market.

³It followed the economic recession of the 1920s and an increase in taxation, which resulted in the break-up of the large estates. The proportion of agricultural holdings with rented land decreasing from 93% in 1913 to 73% in 1949, followed by a further fall to 45% in 1980 (LRRG, 2014).

⁴This is rented land for less than 365 days in a year, and it has increased from 520,000 ha in 2005 to 770,000 ha in 2014 (Scottish Government, 2020b). Most of it is rough grazing, driven by the CAP Single Farm Payment entitlements (Thomson, 2016).

Figure 1. Rented agricultural land and Rental value (in real terms), 1999 -2020, Scotland



Source: Author's own construction based on the Abstract of Scottish Agricultural Statistics (1999-2019) and June Agricultural Census 2020 for rented area; the Tenanted Agricultural Land in Scotland (1999-2016) and December Agricultural Survey (2017-2019) for rental value. See also Edwards and Kenyon (2014) and Thomson (2016).

It should be remarked that joint-venture farming has grown as a more flexible option for new entrants as opposed to tenancies (McKee *et al.*, 2018, Williams and Slee, 2008), following some government support. It is defined as a "form of cooperation, formed in a legal manner, between two or more parties to form a business relationship, other than as landlord and tenant (FAS, 2017)" including contract farming, partnerships, and share farming (McKee *et al.*, 2018, p.19). This paper especially focuses on a case of share farming in comparison with a case of tenancy as a well-established mechanism for providing access to land. Share farming is a form of cooperation whereby parties join resources to operate the farm together, but operate as independent businesses. Typically the existing farmer provides land and other fixed assets and the new entrant provides labour and other variable inputs. Table 2 summarises the benefits for landowners and for tenants/share farmers.

Alongside these dynamic policy directions and trends, the Scottish Land Commission was established in 2016 to support the implementation of the Land Reform (McIntosh, 2019, Edwards *et al.*, 2015). It is now debating new options for changes within the wider package of land reform, including a review of farmland taxation (e.g., the Agricultural Property Relief for Inheritance Tax) (Alma Economics, 2020, Hughes *et al.*, 2018).

Lastly, but importantly, the future domestic agricultural policy should be considered as a key influencing factor. The Scottish Government will retain the CAP regime until 2024, putting an emphasis on food production (Scottish Government, 2018).

	Tenancy	Share farming		
Benefits	Receiving a regular income from the leasing	It is an option to reduce their level of		
for	of their land, and retains ownership of the	involvement whilst retaining control of the		
landowner	land.	land asset.		
	It is an option to scaleback by renting part/all of their land.	Parties are not tied to the requirements of <u>a tenancy</u> or partnership agreement.		
	It is possible to include machinery and farm buildings within an agreement.	It provides an opportunity for farmers to transfer skills and knowledge to new entrants.		
Benefits	Increasing access to land for new entrants to	Developing experience and learning from		
for tenants	develop a business and experience through	an existing farmer, whilst gaining access		
or share- farmer	independent management of a piece of land.	to the land.		
	Longer-term agreements provide a more secure opportunity for business investment.	It is an opportunity for farmers who wish to expand their farm business, but have <u>financial limitations</u> .		

Table 2. Tenancy and share farming

Source: Author's own construction based on Scottish Land Commission (2018).

3. Theoretical Framework: NES and NIE and the role of Trust

Historically, land markets are characterised by market failures (Bator, 1958) which 'often mirror readily understood notions of appropriate neighbourly behaviour and the interdependencies of modern life' without transaction costs (TCs) taken into account (Wu and Duke, 2014). TCs have been applied to the theory of agricultural tenure markets, and defined as: i) costs of establishing contracts and negotiations, such as searching for suitable properties, verifying the characteristics and negotiating with owners/buyers; and ii) costs of implementing the final contract, such as conveyancing fees (Currie, 1981, Ciaian *et al.*, 2012).

Within the literature, there are several quantitative analyses which incorporate TCs in agricultural land markets (Ciaian and Swinnen, 2006, Deininger and Jin, 2005, Skoufias, 1995, Takahashi *et al.*, 2018, Léger-Bosch, 2019). These analyses reveal that the presence of TCs can lead to a smaller number of market participants or to a smaller amount of land being transacted.

Existing research on land markets with TCs help us to understand more realistic mechanisms of land transactions, and it is worth noting that the influence of social capital, such as trust among social networks, has been considered as a significant factor in recent scholar debates regarding land markets. For example, research on the US farmland markets shows that social relationships between parties are essential factors in the land transactions⁵ (Kostov, 2010, Robison *et al.*, 2002, Tsoodle *et al.*, 2006).

This is important since land markets in rural areas, where family and rural community networks have a strong influence (Halfacree, 1994), cannot be understood without observing the social relationships between landowners and farmers. However, these studies which employed econometric models using social indicators, cannot fully explain how characteristics such as trust and social networks influence rural land markets. To address this research gap, we argue that it is important to introduce a sociological lens to examine the real mechanism of land transactions embedded in social networks.

⁵Robison and Oliver (2016) applied behavioural economics in farmland exchanges, highlighting farmland transactions anomalies from the perspective of personal relationships.

The New Economic Sociology (NES) (Smelser and Swedberg, 2005, Granovetter and Swedberg, 2011, Guillén et al., 2003) provides a valuable analytical framework for this research. NES emphasises the positive role of trust among social networks in mitigating social costs in the real economy (Granovetter, 2017). Nonetheless, this framework should be compared carefully with the social constructs described by the New Institutional Economics (NIE) (Ménard and Shirley, 2008), within which TC theory is subsumed, as 'informal' (norms, belief, habits and behaviour) and 'formal' institutions (constitutions, laws, contracts and regulations). According to Nee and Swedberg (2008), both NES and NIE reject the neoclassical assumptions of perfect information and instrumental rationality around TCs. However, one area where these two frameworks collide is the scope of Trust (Table 3). NES argues that trust works in larger social structures with the help of brokerage among social actors (Burt, 2005, Burt, 2002), described by Granovetter (2017) as 'a little trust goes a long way'. By contrast, NIE places less emphasis on trust in economic transactions (Williamson, 2013), asserting that these informal institutions are generally personal and small-scale, and are replaced by government institutions, as the development, complexity and differentiation of societies increases (Ellickson, 1991, Cook et al., 2005).

New Economic Sociology	New Institutional Economics
Social norms and trust among social	<u>Trust</u> works in personal transactions but <u>not</u>
networks play a critical role, connecting	in most economic transactions, thus it has
individual actions and social institutions.	minor economic significance (Williamson,
Structural embeddedness, i.e. the structure of	2013).
the network that individuals are embedded in is	Informal institutions are generally personal
examined carefully.	and of small-scale, thus are often replaced by
Focus on the role of brokerage , which bridges the distance between small-scale exchanges and larger economic structures.	government institutions as the growth, complexity and differentiation of societies increase.

Table 3. NES and NIE positions around the scope of Trust

Source: Authors' own construction based on Granovetter (2017).

When it comes to the application of these theories in rural studies, Atterton (2007) and Meador (2019) have applied NES to rural businesses and examined the role of different types of ties/networks in rural development. Additionally, the practice of social networks has broadly been analysed in the context of resource management (Prell *et al.*, 2009). Particularly, attention paid to the functions of trust between actors has also increased (Rust *et al.*, 2020), including the notion of interrelations between institutional trust and interpersonal (de Vries *et al.*, 2019). However, a few studies have explored rural land markets from this (NES) perspective.

Therefore, this paper aims to test empirically these two theories by examining both the role of social networks and government institutions in rural land markets, with a special focus on trust. Against this theoretical framework, this paper will approach the posed RQs in the following order. First, the key actors in social networks and the relationships between them are identified both in tenancy-dominant land market and in joint venture. Second, the role of trust within these social networks and the impacts on land transactions are discussed. Through answering RQs, the paper also aims to suggest some key recommendations regarding future land policy design in Scotland that could be applied to other countries.

4. Methodology: Parish case study with Social Network Analysis

A case study approach is adopted as an effective methodology to explore and understand complex issues in the real world (Yin, 2014). Case studies are particularly useful when theoretical frameworks support the explanation of specific problems and identify the causal complexity. Hence they help to evaluate and refine the associated theories (George and Bennett, 2005, Vennesson, 2008, Gerring, 2011). Such approach strives for theoretical generalisation with purposeful sampling, rather than the statistical generalisation from a large-number of cross-case studies (Yin, 2014, Silverman, 2017, Creswell and Poth, 2017).

Additionally, Sutherland (2020) highlights the utility of a parish study that continues the tradition of community-based approaches for a qualitative rural research. For this research, two parishes (Scottish township) from South East of Scotland (the Borders and the Lothian)⁶ are selected. This region has a high ratio of rented land (Figure 2), hence actors (e.g., farmers, landowners, and brokers) are commonly engaged in land transactions.

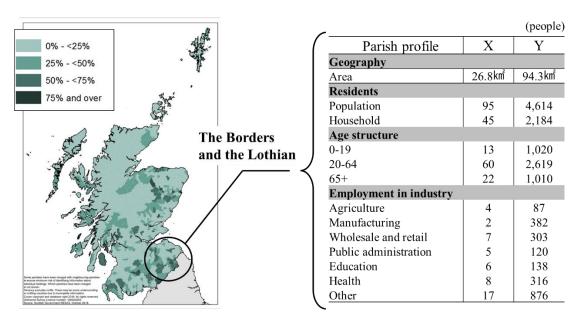
Specifically, the research conducts a comparative analysis to explore different types of farmland markets in practice. Comparison between Parish X characterised by tenancydominant markets with tight social networks within small population, and Parish Y where a successful case of joint venture is found within much larger population, may reflect variations between the NES and NIE positions in rural land markets. In other words, this research tries to find the land markets in two parishes from the view from the NES position where informal social networks work without being replaced by government institutions, as well as the NIE theory, where government institutions play a greater role than social networks.

According to a 2018 nation-wide landownership survey conducted by the Scottish Tenant Farming Commission (McIntosh, 2018), over 80% of a total of 1,035 participants (121 landlords and 914 tenant farmers) answered that the landlord-tenant relationships are good and regular face to face contacts help to build strong relationships. Nevertheless, 60% of landlords and 25% of tenants do employ an agent to assist with their business transactions⁷. At the same time, the common behaviour where 'when a tenant retires or terminates a lease, the landlord motivation is to lease to an existing tenant rather than an unknown entity' (Thomson *et al.*, 2014) also strengthen the importance of social relationships.

As for the government scheme, the Scottish Land Matching Service (SLMS) was established in 2019 as 'a structural option to increase land availability' (McKee *et al.*, 2018). SLMS aims to address the issue of an ageing farming population and to improve access for new entrants at the same time, through matching farmers who rent surplus land or transfer their businesses with new entrants starting a farming business or existing farmers expanding their businesses (Lacey, 2019). By the end of October 2020, the number of people registering their interests reached 150 and four joint-ventures are in progress (SLMS, 2020).

⁶South East is an important area especially for crop production (around 30% of the total holdings of crop and fallow in Scotland), while other farm types are well represented. The size of holdings also varies, but is relatively large as the Scottish Borders and the Lothian accounts for about 15% of the total holdings sized over 100 ha in Scotland. The selected parish reflects these regional characteristics. ⁷Agents are defined as land agents, or other professionals who act as an intermediary between two parties (e.g. solicitors, valuers and agricultural advisors). Business transactions include rent reviews, valuations, legal issues relating to the lease.

Figure 2. Percentage of tenanted agricultural land by parish and selected parish profiles



Source:

https://www.webarchive.org.uk/wayback/archive/20180514170654/http://www.gov.scot/Topics/Statis tics/Browse/Agriculture-Fisheries/agtenancy [Accessed 05/03/2021]. Parish profiles are author's own construction based on Scotland's census 2011, which is the latest figures published. *Note:* Although Scotland's census no longer shows the data by parish, the Output Area (the smallest geography produced by grouping postcodes together) which covers almost of the same geographic area was chosen to obtain the area profile.

Regarding data collection and analysis, a Social Network Analysis (Scott and Carrington, 2011, Borgatti *et al.*, 2009) was conducted with qualitative interviews. These are well-suited for exploration of networks and their practices (Hollstein, 2011). The following steps were employed (Table 4). First, the social networks in which a farmer is embedded, were mapped through the identification of the relevant landowners and agents. Second, the connections between individual actors were traced using multiple choice questionnaires to identify: a) the types of relationships between them; b) how contact between actors takes place; and c) the main reasons for transactions. This was followed by semi-structured interviews about the advantages of direct/intermediated land transactions as well as the benefits of trust and government support. Given the Covid-19 restrictions, the interviews were conducted by phone and Zoom, and supplemented by information provided by interviewees via emails. Thematic and content analysis was employed for data analysis (Robson and McCartan, 2016).

Steps order	Methods	Interview items	Analysis
Step1: Mapping a social network of the land market in the parish	Structured	 Who are the landowners/tenants you transact the land with? Are there any intermediary agents? Where do the landowners/tenants/agents live? (Same parish/Same county/Outside parish) Areas and numbers of land parcels transacted. Type of the agreement and duration. 	Figure 3: Parish X Figure 5: Parish Y
Step2 : Tracing the connections between actors	using multiple choice questionnaire	 What is your relationship with the landowner/tenant/agent? (Relative/Neighbour/Friend or acquaintance/Business associate/ Land advertised) How did you make contact with the landowner/tenant/agent? (In person/Local events/Government support/Other) Why did you transact the land with the landowner/tenant/agent? (Price or rent/Obligation/Trust/Reputation/Government support or Official recommendation/Other) 	Figure 4: Parish X Figure 6: Parish Y
Step3 : In-depth interviews with actors	Semi- structured interviews sharing question list (1-2 hours)	 What are the advantages of direct land transaction (not using agents) and of intermediated land transactions (using agents)? Do trust and/or government support make land transactions easier or more difficult for you? 	Table 6,7: Parish X Table 9,10: Parish Y

Table 4. Data collection and analysis

Source: Author's own construction.

5. Results: Social networks and Trust in farmland markets

Results are shown in the order from Parish X to Y, providing the analysis to answer each RQ.

Case of Parish X (Tenancy)

RQ1. Key actors in social networks and their interactions

The profile of farms in/around Parish X is provided in Table 5. There are three farmers⁸ in the parish and all of them operate family farms. Farmer A and Farmer C have 26 ha and 20 ha of land respectively for grazing whereas Farm B has 80 ha of land for crops and grass. Both A and B rely a substantive part of their income on off-farm jobs.

⁸Other than these three farms, there are four or five workers coming to Parish X for contract farming who are excluded from this case study.

Farmers			Estate owners				
	А	В	С		Е	Н	Ι
Actors							
Gender and age	Male, 40-49	Female, 50-59	Male, 50-59	Gender and age	Male, 70-79	Male, 70-79	Male, 50-59
Current busine	SS						
Farm type	Livestock: Breeding ewes and cows	Crops: Barley and grass	Livestock	Main occupation	Construction contractor	Charter surveyor	Landowner/ farmer
Size category	>100 livestock	10-100ha	N.A.	Business type	Constructions Manufacture	Property (e.g.	Property (e.g. castle
Employment	Family only	Family + One contractor	Family only		Property (e.g. farm/restaurant) management	church) manage ment	and garden) management
Other income source	Off-farm jobs (>50%)	Off farm jobs + Other * (>50%)	N.A.				
Land area	-	-	-			-	-
(A) Rent from someone else	13 ha (5 parcels)	100 ha (13 parcels)	20 ha (4 parcels)	Owned area	280 ha	930 ha	800 ha
(B) Own for their own farm	13 ha (3 parcels)	None	None				
(C) Rent out to someone else	None	20 ha (4 parcels)	None				
Farmed area (A)+(B)-(C)	26 ha	80 ha	20 ha (4 parcels)				

Table 5. Profile of farmers and estate owners in/around Parish X

Source: Author's own construction based on interviews and Companies House websites. *Notes:* (*) Other includes for example pensions, social security benefits, investment income.

Figure 3 illustrates the land transactions among them. There are eleven actors involved in the network, including six farmers, four owners and one broker. It should be noted that transactions are seen not only between farmers and landowners but also amongst farmers (e.g. among I, B, C). Specifically, Farmer I (he is put as an estate owner in Table 5) farms his owned land while letting his land to Farmer A and B. Farmer B rents 13 parcels sized 100 ha directly from her business associate Farmer A through a 1991 Tenancy Agreement, within which four parcels sized 20 ha are let to her relative Farmer C through seasonal lets. Farmer A farms his own land while he rents five parcels from three different individuals, including his neighbour Farmer I through an intermediary, Broker D. Although the contract with Farmer I is a seasonal let, their relationship has remained stable for 20 years. He also rents land from his business associate E and a friend F who both live outside the parish, through seasonal lets and headage basis.

Figure 4 shows that most of transactions are made through personal contacts between relatives, neighbours and friends, which mean that land transactions are embedded in the informal networks. At the same time, not only 'Price' but also 'Obligation' and 'Trust' are chosen as the reason for the transactions between Farmer A and Broker D. Concerning 'Other' for the transactions between Farmer B and Farmer I/C, she does not find any reasons other than 'succession' in 2018.

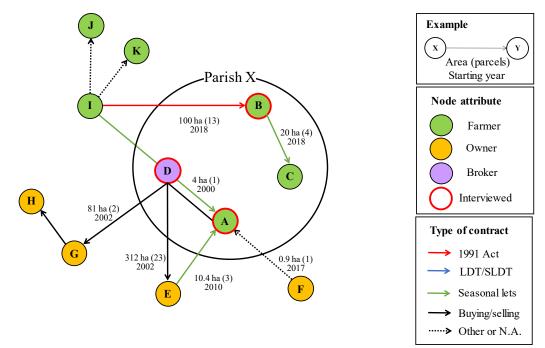
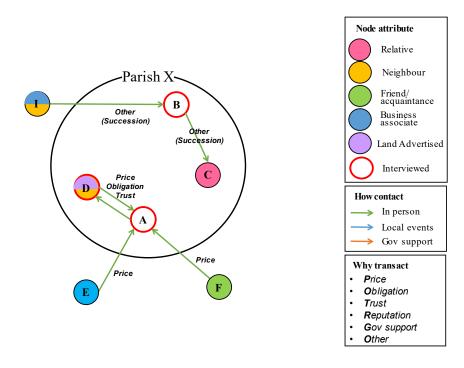


Figure 3. Land transactions in/around parish (Step1-X)

Source: Author's own construction based on interviews.

Notes: In this figure, a land market is defined in terms of people who transact the land inside and outside the parish.

Figure 4. Social relationships around the land transactions (Step2-X)



Source: Author's own construction based on interviews. *Notes:* This is an extracted diagram from Figure 3 which shows the results from limited interviewees.

RQ2. The role of 'Trust' in farmland transactions

Within the explored networks, this paper focuses 'Trust' between Farmer A and Broker D. Here, a brief profile of Broker D is given as follows: D is a private agent offering services for buying and selling of rural property, farms, estates and forestry as well as providing other services such as managing, valuation and farming of land. Although this study focuses on the small local communities, D covers the entire the UK and beyond. However, the point is a manager of the company lives in Parish X and land transaction between Farmer A and I were intermediated by him as an individual.

Table 6 shows that there is an advantage in direct transaction which could allow farmers and landowners to solve the possible problems together even after the land transaction happened (e.g., fixing fences on the land), an important point for intermediated transactions is 'appropriate price setting'. In this regard, the broker also emphasises that they can reduce especially 'Search costs', both in terms of finding the best trader among those interested in the transaction, and the best land and property on the market. These activities enable traders to make the decision among more participants in the markets, and with more available information on the farm.

	Farmer A	Broker D
Interview items	What are the advantages of direct land transaction and of intermediated land transactions?	What are the advantages you offer compared to direct land transactions?
Direct transactions	Problem-solving 'If you get on well with them and you build a relationship you can speak to each other about situation so sometimes if the fences need to be sorted out you can ask them.'	N.A.
Intermediated transactions	<i>Reducing verifying costs</i> 'Advantages are that you have somebody there to deal with the <u>price setting</u> . You have help for what the price should be. '	Reducing search costs 'When you sold a farm or an estate or a property, [] you have to look their eyes and say, [] <u>I have tried to find any buyer</u> anywhere in the world who might be interested in your farm or estate [] and therefore you can retire or stop farming, knowing that you've got the best price that the market could give you at that time.' 'The reason we've grown is because I think our preparation. [] <u>I tried to make sure</u> there's nothing he can't see or he didn't know because I have told him absolutely everything about the farm. That's why we are the team. And that's why the landowners don't do it between themselves.'

Table 6. Interview results: Advantages in transactions (Step 3-X)

Source: Authors' own construction based on interviews. *Note:* Label names (e.g., Search costs, etc) and underlines are made by the author.

Interview	Farmer A	Broker D
items	Do trust and/or government support make land	transactions easier or more difficult for you?
Trust	Reducing search costs 'You trust the agent and the agent trusts you, and work well together, you're probably more likely to get the land another time. If you're looking for to expand your land, and the agent will think and coming up and let you know.' Reputation and personal contacts 'Trust, because he is a neighbour. [] Well, we didn't know each other terribly well before the sale but we knew each other, yes. [] I didn't know any other land agents, possibly, the local auctioneers could have done it but I've heard that, I thought Broker D would do the job better. [] just thought that Broker D would get a better price for us.'	 <i>Reputation</i> 'Third party reference is the best reference in the world. [] For the market in Britain, it is a very tightly knit community. You either trust each other or you don't. [] As long as I'm still getting good deals, my reputation goes on. If I did bad deals or did underhand deals and that does go on, then nobody would trust you.' <i>Personal contact</i> 'If you're a farmer, a bit worried about employing an agent from a big name company, as long as you met the individual, and you sat around the kitchen table, and talk about what he wants to do, what his dreams are and what his beliefs are, that's fine. [] Everything in service and selling is psychology. Psychology, trust, and detail. Never, ever forget the detail.'
Government support	Reducing negotiation costs with financial support 'Farmers that are closer to retiring, they don't want to sell the farm possibly but to achieve an income and maybe <u>helps them to find</u> somebody they can trust and they can try a bit. Transfer it piece by piece. [] <u>There's a bit of</u> time to figure out how the whole thing works. You can build up a mutual respect. [] and also means it might allow that [] <u>incoming</u> farmers to work on a personal loan and then they potentially buy it in the future.'	N.A.

Table 7. Interview results: Trust and institutional support (Step 3-X)

Source: Authors' own construction based on interviews. *Note:* Label names (e.g., Search costs, etc) and underlines are made by the author.

Trust between parties (farmers and agents) also benefits farmers from obtaining further information when more farmland is available, which is considered as diminishing search costs for future transactions. Regarding building trust, Broker D values 'Reputation' and 'Personal contact' in rural land markets that he describes as 'tightly knit' communities, both of which are clearly reflected in Farmer A's answer. In either case, building trustworthy relationships is essential for both sides to make the transaction and agreement and to be benefitted in reducing several types of transaction costs.

In contrast, government support seems to be more fit to business transfer with a sort of trial period in which both parties can build a 'mutual respect'. Thus, offering the time to communicate to each other could significantly contribute to mitigating negotiation costs.

Case of Parish Y (Joint venture)

RQ1. Key actors in social networks and their interactions

The profile of farms in/around Parish Y is provided in Table 8. Although there are 50 or 60 farms within the large parish other than described, the joint venture between Farmer L and M is focused for the research objective. Both of them operate large farms with a couple of employees and make their living mainly by farming. Farmer T is farming small sized land owned by own, and mostly rent out their land.

Farmers					
	L	М	Т		
Actors	•				
Gender and age	Male, 70-79	Male, 40-49	Male,70-79		
Current business					
Farm type	Crops: Oats Livestock: Cows	Livestock: Sheep	Livestock: Sheep		
Size category	>100 ha 10-100 livestock	>100 livestock	10-100 livestock		
Employment	One employee	Family + Two employees	None		
Other income source	Other* (<25%)	None	Other (rent)		
Land area					
(A) Rent from someone else	93 ha (14 parcels)	93 ha (14 parcels) of 93	None		
(B) Own for their own farm	382 ha (37 parcels)	81 ha (7 parcels) of 382	4 ha		
(C) Rent out to someone else	None	None	93 ha (14 parcels) + 73 ha		
Farmed area (A)+(B)-(C)	475 ha (51 parcels)	174 ha (21 parcels) of 475	-162 ha		

Table 8. Profile of farmers and estate owners in/around Parish Y

Source: Author's own construction based on interviews and Companies House websites. *Notes:* (*) Other includes for example pensions, social security benefits, investment income.

Figure 5 illustrates the land transactions among them. There are eleven actors involved in the network, including five farmers, four owners and two brokers. As also seen in the case of Parish X, farmland is transacted amongst farmers. Regarding the share farming found in this parish, Farmer L bought and sold land since 1991 and owns 301 ha of land (30 parcels) at present, which are for the crop sector of his business. He built a partnership in 2008 with Farmer, who is in charge of sheep sector, by sharing 81 ha (7 parcels) of owned land and 93 ha of rented land (14 parcels) from his neighbour (Owner V) and friend (Farmer T). Other than this, Farmer T also rent his land out to Farmer U within the parish.

Figure 6 shows that most of transactions are made through personal contacts amongst neighbours and friends again, and the relationship between Farmer L and M is 'Business associate' which mean that they worked together in the past (Farmer M was an employee of Farmer L). As seen in the case of Parish X, 'Trust' is chosen as the reason for the transactions between Farmer L and M as well as Farmer M and T, in addition to other reasons including 'Price', location and size of the parcels. It should be noted that Farmer L preciously used a couple of brokers (R and O) for land transactions, however, the ways of communication were only through magazines and phones which are different to the case of Broker D in Parish X.

RQ2. The role of 'Trust' in farmland transactions

Within the explored networks, the relationship between Farmer L and M as business partners is examined. First, Table 9 shows that Farmer L recognises the advantages of direct transactions in the simplicity of the process of the contract implementation. On the other hand, Farmer M mentioned about the fairness in agents' involvement.

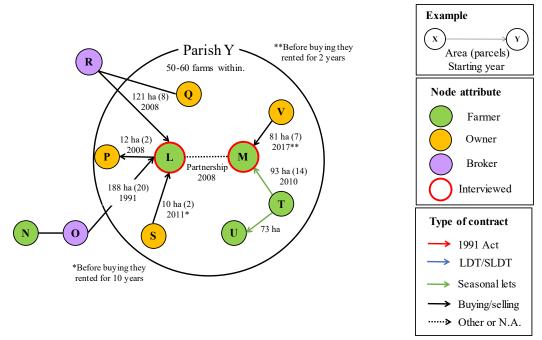
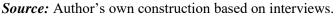
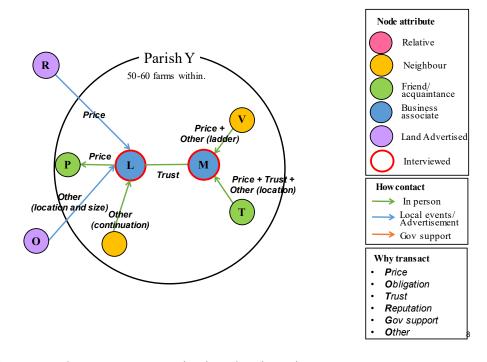


Figure 5. Land transactions in/around parish (Step1-Y)



Notes: In this figure, a land market is defined in terms of people who transact the land inside and outside the parish.

Figure 6. Social relationships around the land transactions (Step2-Y)



Source: Author's own construction based on interviews. *Notes:* This is an extracted diagram from Figure 5 which shows the results from limited interviewees.

Interview	Farmer L	Farmer M			
items	What are the advantages of direct land transac	What are the advantages of direct land transaction and of intermediated land transactions?			
Direct transactions	<i>Reducing implementing costs</i> ' <u>It's a lot easier</u> []. They always seem to make problems from how would you deal with direct you can just sale all of this at the other end. [] And <u>they always put a</u> <u>complication in somewhere</u> . I mean, I bought land, everything I bought have done, I thought what's it worth to me. [] that's how I've always worked'	N.A.			
Intermediated transactions	N.A.	<i>Fairness</i> 'The agents are there for a reason, I suppose, <u>to keep things right and fair</u> presently, [] they get the deal done.'			

Table 9. Interview results: Advantages in transactions (Step 3-Y)

Source: Authors' own construction based on interviews. *Note:* Label names (e.g., Search costs, etc) and underlines are made by the author.

Interview	Farmer L	Farmer M	
items	Do trust and/or government support make land transactions easier or more difficult for y		
Trust	<i>Personal contact</i> 'So if I had a son, he would probably take on, you know, come in and work with me, you carry on. So I said, why don't I just find somebody else to take on. And this is really how it started. And <u>Farmer M has</u> worked for me previously, [] And so my wife said why don't ask M if he be keen enough to do it. So that's sort of how it started.'	Personal contact and knowing each other 'We've worked about for 10 years [] We knew each other and then getting together. [] It's a huge thing for two strangers to trust each other right away. Without knowing what kind of business you're in or It's bit like two people going on a blind date and then, all of a sudden, they're married the next day. It doesn't happen really does it? [] it takes time to build up trust.'	
Government support	N.A.	Reducing negotiation costs with financial support 'I think the hard thing is that the youngsters that's looking to go into this job, they have to be prepared to work very hard for very little to start with to get in. And on the other side of this coin, the farmers or the landowners that's letting people in have to be prepared to give them a chance and not take all the money and let the youngsters have some of it. Otherwise, it'll not work.'	

Table 10. Interview results: Trust and institutional support (Step 3-Y)

Source: Authors' own construction based on interviews.

Note: Label names (e.g., Search costs, etc) and underlines are made by the author.

When we look at the trust in the joint venture, both of them described 'Personal contact' based on the previous working experience. Knowing each other through shared experience build trust and led the decision to start the business with the specific person than someone else. The other side of the coin is that government scheme can reduce the time-consuming negotiation costs especially for new entrants, with financial support which is usually difficult to be agreed.

6. Conclusion

This research aims to understand the complex mechanism of land transactions in rural Scotland. For the purpose, this paper identified social actors in rural land markets and explored their interactions using Social Network Analysis supplemented by semi-structured interviews. Results of case studies in two different types of farmland markets found, where case of Parish X for tenancy-dominant market examined and the case of Parish Y for a joint venture explored. In both markets, informal social networks among relatives, neighbours, and friends function in both direct and intermediated transactions among actors. These results highlight that land transactions are embedded in the informal networks, empirically verifying how NES theory work in rural land markets in practice.

Featured difference between Parish X and Parish Y is the presence of a private broker as intermediation. An agent functions in land transactions between land owners and farmers in Parish X, and one of the advantages of the intermediation recognised is fair price setting between parties. From the in-depth interviews with social actors, using personal contact and reputation are the key factors to build a trustworthy relationship and then lead to reduce transaction costs especially search costs and verifying costs.

On the other hand, direct transactions are valued in joint venture in Parish Y where less implementing costs without intermediation are mentioned as one of the advantages. However, the same point as Parish X is that both landowner and share farmer build trust on the personal contact which is from their previous working relationship in the case. The simplicity of the contract implementation and future problem solving can be found in case they have reliable relationship.

It can be concluded that trust plays a key role in the rural land markets, especially among informal social network within the local communities, which underlies the NES position. However, there also is recommendation for the government institutions such as Scottish Land Matching Service which aims at working as an official intermediation to build shorter tenancy agreements or joint ventures, as interview results stresses that farmers consider the role of government support as mitigating the negotiation costs to reach the contract agreement between the parties especially for new entrants. This study suggests that entering into the tightly knit community and building trust with market participants are crucial even in the case where government institutions work beyond the informal social networks as NIE theory describes.

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