

Land Transactions in Rural Areas

Markets, Social Networks, and Government Institutions

Yumi Isaka Kato

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School of Natural and Environmental Sciences Newcastle University

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Abstract

This thesis explored the issues around land ownership and land use in rural Scotland and Japan, aiming to examine the mechanism of land transactions focusing both on its socioeconomic characteristics and the influence of policy; and to inform the design of future land policies through answering the following Research Questions: How do social networks and government institutions work in rural land markets?; and What challenges and lessons for ongoing land reform and policy can be drawn from this study?

In the thesis, Scotland and Japan were selected for the study due to their histories of land transactions associated with dynamic changes brought about by a combination of land reforms and policy measures. Chapter 2 reviewed and compared the policy context for land reform and land use policy along with a discussion of the economic trends in agricultural land markets in both countries, then Chapter 3 presented the theoretical frameworks based on the two theories that can account for different social constructs: New Economic Sociology (NES) emphasising the role of social networks and New Institutional Economics (NIE) with a greater emphasis on the role of government institutions. The research combined insights from both of these theories focusing on transaction costs in land markets, and then Chapter 4 explains the utility of a case study approach with Social Network Analysis using qualitative interviews as an appropriate methodology for the research to explore the human relationships in land market transactions.

Chapter 5 provided the results of the exploration of two Parishes (Scotland) and *Shuraku* (Japan), followed by identifying the challenges and lessons for ongoing land reform and policy. As the findings, key actors and their relationship are illustrated followed by the description of the function of intermediaries who act as "trusted brokers" having the impacts on transaction costs. It also revealed the gaps between the institutional goals and activities of social networks before moving onto Chapter 6 which drew the answers to the RQs. The research highlighted the tightness of the existing social networks in rural communities, and how trust and good reputation among the actors enable land transactions to happen through their connections as the market channel. It also pointed the possibility of the exclusion of other actors from outside the community, and stresses the need to build "institutional trust".

Chapter 7 summarised the key findings as 1) Land markets are deeply embedded in social networks; 2) Trust is a key function of agricultural land markets; 3) Future land policy design should involve rural society more broadly. Based on the conclusion that social relationships within/around the community is actually the epicentre of land policy delivery, further research is needed to understand the unique nature of farmland markets in comparison with different types of land and other commodities. Exploring the cultural dimensions of land transactions would be an interesting avenue for future study.

Acknowledgements

Thinking about the role of social network in the rural economy is something what I really wanted to pursue but I had to give it up once when my Master's course was finished in March 2014. Therefore, it was my honest pleasure that the opportunity to start my PhD course was given by the government and I was able to re-start studying since September 2018, with my supportive supervisors Dr Carmen Hubbard and Professor Guy Garrod at Newcastle University.

If it is allowed to mention the toughness of the course - after doing literature review and building theoretical framework without going out to the field over one and half year, I was very excited to do qualitative interviews from the real people in Scotland from March 2020, however it turned into something very different from the expectation due to the Covid 19. The time I had not been able to meet anyone in the field continued until nearly the end of my study abroad programme and the government's decision was made that I had to return to Japan as a full-time worker without any extension. The circumstances got changed to that I made few progress due to my work at the government since September 2021.

However, it seems that I am finally getting to the end of the course, and all I want to state here is my deepest appreciation to my supervisors, Carmen and Guy who have been with my journey from the beginning, and to my examiners, Dr Menelaos Gkartzios and Dr Jane Atterton who kindly understood what I honestly wanted to pursue in the research and gave positive feedbacks, and to my interviewees who took part in my research over the hardest period without seeing each other even once before. Finally, my lovely partner Hiro's meals literally have given me energies to get through the PhD course. This thesis is done with all of their supports.

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Chapter 1. Introduction

1.1 Problem Statement: *Why Land?*

"How is agricultural land in rural areas owned and used?" This is one of the most fundamental questions about rural land ownership and one which this thesis tries to investigate. To explore this simple question, however, requires insights from a range of disciplines and perspectives. This is because land in rural areas is not only a key economic resource providing a variety of commodity and non-commodity outputs, such as food and fibre, environmental protection and recreation, but also an essential component of rural society, associated with values around history, community, culture and place (Munton, 2009, Winter and Lobley, 2009). Therefore, issues around land ownership and use are investigated to address critical concerns for sustainable rural development which will also impact on those who live in urban areas (Hodge, 2016).

While different models of land ownership and use for sustainable rural development exist (Ostrom, 2015), one of the key aspects in seeking a more optimal pattern of land use is to deliver improved economic efficiency (in terms of resource allocation) in producing agricultural products, while achieving a level of social fairness in terms of access to land. However, achieving optimal land use without losing the balance between these two dimensions is challenging. Such difficulties may be rooted in too naive a view of land markets, where land is transacted as a result of economic incentives, while the real mechanism underlying land transactions could be much more complex.

Driven by a desire to understand the complexity of land markets, this research focuses on transactions in rural land markets which allocate agricultural land among landowners and tenants and result in different patterns of rural land use and ownership. Throughout the thesis, I will challenge the idea that land is transacted simply as a commodity. Although this is one (no doubt important) aspect of land markets, rural areas should be understood as places where there are dynamic interactions between the economic and social characteristics of land embedded in rural society and which are influenced by land policy and law. Specifically, this thesis examines the interplay of markets, social networks, and government institutions around land transactions in rural areas of Japan and Scotland.

Importantly, while rural land is used not only for agriculture but also for a wider range of purposes, including residential, commercial, sporting and conservation, this research focuses only on agricultural land as it seeks to explore *inter alia* the relationships that exist between farmers and landowners.

1.2 Research Aims, Research Questions and Research Impacts

This research aims to: i) examine the mechanism of land transactions focusing both on its socio-economic characteristics and the influence of policy; and ii) inform the design of future land policies. Specifically, it explores the different roles of social networks and government institutions in and around land markets, using insights from two different theories: New Economic Sociology, which emphasises the role of social networks in our economic life; and New Institutional Economics, which places a greater emphasis on the role of formal institutions. Therefore, to achieve these aims, the thesis attempts to answer the following two major research questions:

- RQ1. How do social networks and government institutions work in rural land markets?
- RQ2. What challenges and lessons for ongoing land reform and policy can be drawn from this study?

These major research questions are answered by exploring the following specific questions (Table 1):

- RQ1-1. Who are the key actors in rural land markets and how do they interact?
- RQ1-2. Do brokers facilitate rural land transactions? If yes, how do they broker land information and between whom?
- RQ1-3. What are the brokers' contributions in terms of transaction costs, and what is the role of trust in these transactions?
- RQ2-1. Are there any differences between institutional goals and the activities of social networks?
- RQ2-2. If yes, how should they be reconciled?

Research aims	Research Questions			
Research anns	Major questions	Specific questions		
i) Examine the mechanism of land transactions in rural areas	RQ1. How do social networks and government institutions work in rural land markets?	 RQ1-1. Who are the key actors in rural land markets and how do they interact? RQ1-2. Do brokers facilitate rural land transactions? If yes, how do they broker land information and between whom? RQ1-3. What are the brokers' contributions in terms of transaction costs, and what is the role of trust in the transactions? 		
ii) Inform the design of future land policy	RQ2. What challenges and lessons for ongoing land reform and policy can be drawn from this study?	RQ2-1. Are there differences between institutional goals and the activities of social networks? RQ2-2. If yes, how should they be reconciled?		

Table 1.Research aims and questions

Source: Author's own construction

To answer these questions, this research focuses on Scotland and Japan for its comparative analysis. This is because both countries have a history of land transactions associated with dynamic changes brought about by a combination of land reforms and policy measures aimed at achieving better land management. Hence, two constructs, the roles of informal social networks and formal institutions in rural land markets, can be investigated in both countries to explore the nature of land transactions. Finally, lessons for land reform and policy in both countries are drawn in a series of policy recommendations.

Through achieving these research aims, this study will have an impact on the theoretical, methodological, and political aspects of research on rural land markets. To explore how government institutions and social networks are working around land markets, the thesis utilises two different theories which focus on formal institutions and informal networks respectively, before constructing a theoretical framework that underpins the subsequent qualitative case studies. In the case study approach, the thesis will use a Social Network Analysis, with in-depth qualitative semi-structured interviews, to explore rural land markets in two different countries. The research findings lead to the conclusion that informal social relationships within and around the community are at the epicentre of land policy delivery.

1.3 Thesis Structure

This thesis is structured as follows. In Chapter 2, the policy context for land reform and land use policy in Scotland and Japan is reviewed and compared, along with the economic trends in agricultural land markets in both countries. The underlying theoretical framework based on the two theories (NES and NIE) around transaction costs is explained in Chapter 3. Here, the literature review and theoretical framework lead to specific research questions, based on the importance of brokers and their roles in land markets, particularly from the perspective of trust in social networks. The methodology employed and specific methods for data collection and analysis are described in Chapter 4. This is followed by results in Chapter 5 and discussion of findings in Chapter 6. Finally, Chapter 7 provides concluding remarks and makes some recommendations for policy.

Chapter 2. Land Use and Policy Context

2.1 Introduction: Comparing Two Countries

In order to examine the mechanism of land transactions, this study adopts the approach of comparing two countries from different contexts: Scotland and Japan. On one hand, in an effort to balance the economic efficiency and social fairness delivered by land reform and policy, Japan has tried to improve the economic efficiency of land and avoid land abandonment through the amalgamation of holdings. On the other hand, Scotland has tried to promote social fairness through a more equitable distribution of land. Comparing rural land transactions in these two countries can overcome the 'lack of collated information on, and comparative analysis of, the nature and regulation of land ownership, governance, use and management in an international context' (Pollock, 2015). Thus, this approach is taken towards a better understanding of 'what is general and what is specific in our understanding, in order to judge whether and how knowledge gained in a particular context is applicable elsewhere' (Lowe, 2011) in terms of the nature of land transactions.

This chapter is structured as follows. Moving from Scotland (Section 2) to Japan (Section 3), each section starts by describing briefly land use in the agricultural sector. Then past and present and policies associated with land use and reform are reviewed, along with a description of historic trends in rural land markets. Section 4 compares land reform and land policy in both countries in terms of both objectives and instruments. Finally, Section 5 provides a summary of the chapter.

2.2 Rural Land in Scotland

2.2.1 Land use in agriculture

The total agricultural land area stood at 5.6 million ha in 2020, a figure that has remained stable for the last 30 years (Figure 1). Out of this, 55% is rough grazing, 34% grassland and the remaining 10% crops. Most rough grazing is categorised as LFA (Less Favoured Area)¹. The agricultural workforce was 67,000 in 2020, with around 60% as owner occupiers and the remainder employees, including seasonal workers. Over the last 30 years, there has been little change regarding labour force, with the number of people working in agriculture declining by only 5% between 1990 and 2020. This means that the workforce and land area has not changed greatly over this period. However, the proportion of farmers who are aged 65 and over has increased from 27% in 2010 to 34% in 2020, demonstrating an ageing farming population.

¹The land which has a natural disadvantage that makes agricultural production difficult.

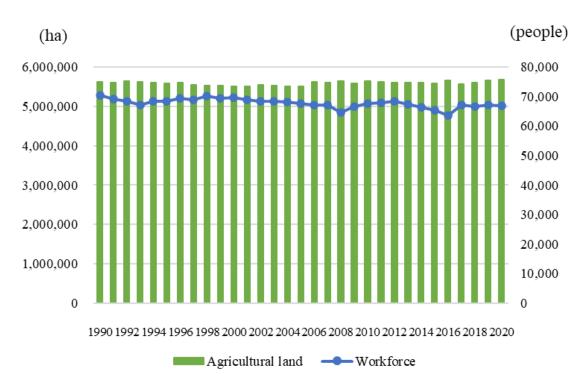


Figure 1. Agricultural area and workforce, 1990-2020, Scotland

When the focus is on the number of holdings and area by holding size, Table 2 shows that almost 90% of the land area is covered by holdings larger than 100 ha. However, in terms of numbers, these large holdings only account for around 20% of the total, while just over half (53%) of the remaining holdings are less than 10 ha. Thus, agricultural land use is characterised by a clear dual structure, with a relatively small share (17%) of very large holdings (over 500 ha on average) controlling about 90% of the agricultural land, and a relatively large share (53%) of very small-scale holdings accounting for less than 2% of land area. This structure has remained much the same over the last 20 years, although it can be argued that larger farms, especially those over 100 ha, have become even bigger during this time. For example, the average size of such farms increased from about 504 ha in 2000 to over 572 ha in 2020 (a 13.5% rise).

Source: Author's own construction based on the Abstract of Scottish Agricultural Statistics (1990-2019) and the June Agricultural Census 2020.

	2000		2020	
Size category	Number of holdings	Area covered (ha)	Number of holdings	Area covered (ha)
0-<10ha	23,356 (47%)	80,451 (1%)	27,261 (53%)	90,562 (2%)
10-<50ha	11,070 (22%)	276,304 (5%)	10,705 (21%)	259,233 (5%)
50-<100ha	5,790 (12%)	419,649 (8%)	4,634 (9%)	335,519 (6%)
>100-ha	9,373 (19%)	4,723,919 (86%)	8,692 (17%)	4,974,312 (88%)
Total	49,589 (100%)	5,500,323 (100%)	51,292 (100%)	5,659,626 (100%)

Table 2. Number of holdings and area by size, 2000 and 2020, Scotland

Source: Author's own construction based on the Economic Report on Scottish Agriculture, 2020 edition and Section C Time Series.

2.2.2 Land reform and policy

Scottish government policy has clear objectives designed to change the pattern of land use and ownership. Since 2003, a series of land reforms has aimed to achieve a fair(er) distribution of land, and its economic, social and environmental impacts on rural development have been discussed by various scholars (Glass *et al.*, 2020). Thus, investigating rural land markets in Scotland will enable us to better understand the processes through which land use and ownership can be changed in order to achieve greater public benefit.

Table 3 shows the main changes brought about by Scottish Land Reform adopted in the last two decades. One of the objectives of the reform has been to change the existing pattern of land ownership, which for years has been concentrated in the hands of a few private owners. In 2012, 83% of Scotland's rural land was privately owned and half of this belonged to 432 owners (Hunter *et al.*, 2014). As summarised by Reid (2015), a series of legislation, including the Land Reform (Scotland) Acts of 2003 and 2016, have led to a more diversified land ownership, especially through strengthening community rights (Bryden and Geisler, 2007, McMorran, 2018, McKee, 2015). Specifically, the Land Reform (Scotland) Act 2003 provides for Community Bodies (CBs) the right of first refusal to purchase land when the owner puts it on the market. It also allows Crofting Community Bodies (CCBs) to purchase crofting land and associated rights without the need to wait for the land to come onto the market (Reid, 2015). As a result, the area owned by communities has increased more than threefold over the last two decades (Scottish Government, 2021).

Year	Legislation/ Policy actions	Landownership	Tenure
1997-	Land Reform	to identify and assess proposals for (i)	
1999	Policy Group	increasing diversity in land ownership	
	established	and (ii) increasing community	
		involvement	
2000	Abolition of	to put an end to feudal superiorities and	
	Feudal Tenure	replace them with a system of 'outright	
	etc. (Scotland)	ownership' (LRRG, 2014)	
	Act		
2003	Land Reform	to introduce the Community Right to	
	(Scotland) Act	Buy (CRtB) and the Crofting	
		Community Right to Buy (CCRtB) as 'a	
		major milestone in the promotion of	
		community land ownership in Scotland'	
		(LRRG, 2014)	
2003	Agricultural		to introduce new
	Holdings		types of tenancy:
	(Scotland) Act		LDTs and SLDTs
			with fixed-terms,
			to give tenants the
			pre-emptive right
2012			to buy
2012-	Land Reform	to examine and evaluate previous	
2014	Review Group	reforms, which resulted in a number of	
	established	amendments especially on the exercise	
2015		of CRtB and CRtB	
2015	Community	to provide CBs with a right to buy	
	Empowerment	abandoned or neglected land in certain	
	(Scotland) Act	circumstances without a willing seller,	
2016	Land Reform	to streamline the CCRtB procedures to emphasise the transparency of	to introduce new
2010	(Scotland) Act	landownership and place more	types of tenancy
	(Scottaliu) Act	responsibilities on landowners to manage	called MLDTs
		land sustainably, and introduce various	replacing LDTs,
		measures (e.g., strengthened community	to remove the
		rights in land use decision-making and in	registration
		land purchase)	procedure for the
			right to buy

 Table 3. Key changes brought about by land reform in Scotland, 1997-2016

Source: Author's own construction based on Reid (2015), Edwards *et al.* (2015) and McMorran (2018) (Ownership part) and Edwards and Kenyon (2014) (Tenure part).

Besides these changes in land ownership, another important objective of the reforms is reflected in changes in the tenure system, which allow farmers to access land without large capital investments (Edwards and Kenyon, 2014).

While the Agricultural Holdings (Scotland) Act 1991 has retained security of tenure with life-time tenancy, the more recent Land Reform Act of 2016 has brought some flexibility to land markets by introducing new types of fixed-term tenancy agreements, while retaining a preemptive right to buy for tenants². For example, Modern Limited Duration Tenancies (MLDTs)³ are for a minimum term of 10 years but can be extended at any time during that period. Short Limited Duration Tenancies (SLDTs) are also permitted for a term of not more than 5 years and can be converted to MLDTs at any time during the lease (Fotheringham, 2020).

Importantly, in Scotland two different directions of travel for land policy have been identified: one aims to achieve more diversified ownership of land; while the other tries to introduce a more flexible tenure system which allows farmers to rent holdings with a well-defined level of security of tenure. Although the two directions could act in opposing ways (i.e., more diversified ownership could lead to less rented land), they provide more options for landowners and farmers to transact their land in markets.

2.2.3 Land market trends

This section examines trends in the agricultural land market. When looking at rental markets (Figure 2), there is a clear decline in rented land area, from 32% in 2001 to 22% in 2020. The current rented area accounts for around 1.3 million ha. Besides the increased number of landowners, three key drivers have contributed to this downward trend of rented land area (LRRG, 2014): i) farm amalgamation to achieve "economies of scale"; ii) landowners' preferences for holding land, allowing them to benefit from Common Agricultural Policy (CAP) subsidies, including direct payments and other farm support; and iii) stronger security of tenure since the 1991 Act has made landowners reluctant to rent land. It also should be noted that the increase in seasonal lets⁴ and contract farming have been excluded from the figures for rented land (Thomson, 2016). Recently, joint-venture farming⁵ 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.

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

³MLDTs were introduced in 2016 as replacements for Limited Duration Tenancies (LDTs) which allowed tenants to rent agricultural land for a term of not less than 10 years with no upper limit. MLDTs came into effect at the end of November 2017.

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

⁵A "form of cooperation, formed in a legal manner, between two or more parties to form a business relationship, other than as landlord and tenant" (Farm Advisory Service, 2017: 1) including contract farming, partnerships, and share farming (McKee *et al.*, 2018).

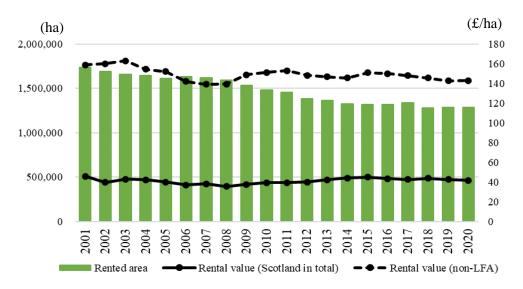


Figure 2. Rented agricultural land (stock) and rental value (in real terms), 2001-2020, Scotland

The tightness on the land supply side can also be seen in the trends in land sales (Figure 3). According to Savills (2021), there has been a long-term downward trend over the past two decades in the amount of farmland placed on the market, and this has been especially pronounced over the last few years during which record low levels of below 10,000 ha⁶ have been observed. The main drivers of the fall are sellers' reluctance to place land on the market due to post-Brexit uncertainties and future agricultural subsidy reforms, whereas the demand for land has been diversified as a result of non-farming objectives (e.g., forestry planting, obtaining carbon credits, lifestyle and amenity). However, average farmland value has remained stable for the last five years, at around £10,500/ha varying by the quality of land, scale of unit, additional buildings and location, while the average rent has also been steady at around £40/ha (£130/ha in non-LFA land) (Scottish Governmnet, 2020a).

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

⁶The amount of marketed farmland hit its lowest figure in 2020 with the impacts of the Covid-19 lockdown, although Savills (2021) also points out that a strong demand has been seen for lifestyle and amenity farmland after the lockdown, fuelled by buyers' desire for more space and green space.

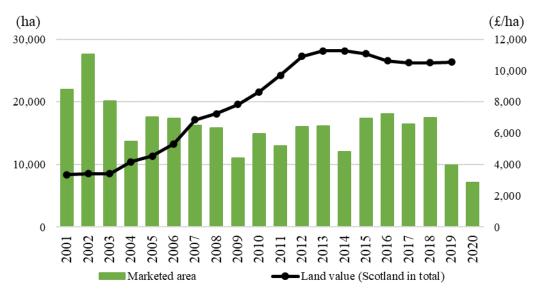


Figure 3. Agricultural land for sale (flow) and land value (nominal terms), 2001-2020, Scotland

Source: Author's own construction based on https://www.savills.co.uk/property-values/rural-land-values.aspx

Note: This graph has been created from data provided by Savills Research, and thus it does not reflect the entirety of land sales in Scotland. However, there are no other means to obtain the figures of marketed land across this long period.

Lastly, but importantly, future domestic agricultural policy should be considered as a key influencing factor. According to the Agriculture (Retained EU Law and Data) (Scotland) Act 2020, the Scottish Government has the power to retain the CAP subsidy regime until 2024, putting an emphasis on food production⁷. However, the agricultural industry and society as a whole need to review solutions for replacing and improving the CAP: for example, Lampkin et al. (2021) have provided an alternative payments proposal based on a series of case studies by farm type, including the options of environmental maintenance and improvement; multifunctional, agroecological farming systems; and environment enhancement and habitat conservation. The expected changes around the successors to the CAP, suggest a need to shift the primary function of some farmland from the production of agricultural commodities to the delivery of environmental services, and this, along with the growing interest in natural capital and commodifying functions like carbon sequestration, is likely to have a significant impact on the market for agricultural land. Mc Morran et al. (2022) argue that the increasing demand for forestry and plantable land will lead to a diversification of land ownership, including a greater number of corporative investors.

⁷https://www.legislation.gov.uk/asp/2020/17/contents/enacted, accessed 05/11/2021

2.3 Rural Land in Japan

2.3.1 Land use in agriculture

The landscape around land and people in the Japanese agricultural sector has seen drastic changes over recent decades. The Census of Agriculture and Forestry shows that the farmed agricultural land area was 3.2 million ha in 2020. Out of this area 55% represented rice paddy fields, 29% fields of other crops, vegetables, and fruits, and the remaining 16% grassland. However, the total agricultural land area has declined by 23% over the last 30 years (Figure 4).

The decline in agricultural enterprises (i.e., business units⁸) has, however, been even more rapid, with 1,076,000 units accounted for in 2020^9 ; this represents a 36% decrease over the last decade. The substantial decrease reflects the problems of an ageing population in the farming industry, where farmers aged over 65 accounted for 53% of the workforce in 2020, compared to only 40% in 2010.

Examining the number of business units and the area they cover by size (Table 4) reveals another important consequence of the rapid decrease in business units, i.e., farm enlargement. Although the basic structure has not dramatically changed, with the vast majority of business units still under 10 ha, the area covered by business units over 100 ha has increased from 6% to 11% over the last two decades. Similarly, there has been a 37% fall in the number of business units and a 32% decrease in the area covered by small-scale units of less than 10 ha between 2000 and 2020. This has been accompanied by a corresponding 58% increase in the number of business units and a 61% increase in the area covered by the large-scale units over 100 ha. These figures show the extent to which farm amalgamation has progressed in Japan. Nonetheless, in comparison to Scotland, Japanese land use is characterised by extremely fragmented and small land holdings.

⁸The term business units refer to those enterprises that produce agricultural products or those that are engaged in agriculture under consignment agreements with the land area/number of heads of livestock for their production/operations (e.g., farms of over 12 ha, outdoor-grown vegetables farms of 6 ha or more, farms with one milking cow, or farms with 150 hens)

⁹The proportion of employers and employees including seasonal workers in the total business units were 50% each respectively.

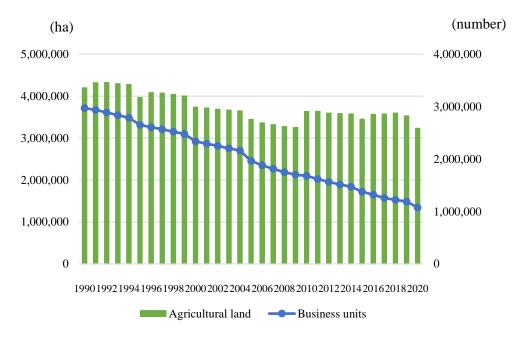


Figure 4. Agricultural area and business units, 1990-2020, Japan

Source: Author's own construction based on the Agricultural Structure Survey (1990-2020 except for years of census) and the Census of Agriculture and Forestry (1990, 1995, 2000, 2005, 2010, 2015, 2020).

Notes: The figures from 1990-2009 refer to the numbers of commercial farm households which is different to "business units" and is defined as farm households with cultivated land under management of at least 12 ha or those that had an income of 500,000 yen or more from selling agricultural products during the year prior to the survey period.

	2000		2020	
Size category	Number of business units	Area covered (ha)	Number of business units	Area covered (ha)
0-<10ha	1,629,542 (97%)	2,117,335 (58%)	1,020,420 (95%)	1,444,779 (45%)
10-<50ha	42,465 (3%)	903,792 (25%)	46,737 (4%)	996,657 (31%)
50-<100ha	5,857 (0%)	387,500 (11%)	6,490 (1%)	432,749 (13%)
>over 100ha	1,220 (0%)	222,958 (6%)	1,933 (0%)	358,513 (11%)
Total	1,679,084 (100%)	3,631,585 (100%)	1,075,580 (100%)	3,232,698 (100%)

Table 4. Number of business units and area by size, Japan, 2000 and 2020

Source: Author's own construction based on Census of Agriculture and Forestry.

2.3.2 Land reform and policy

The Japanese agricultural sector is facing an ageing population and a rapid decrease in its workforce, and the associated labour force retirements have resulted in a large increase in the supply of agricultural land available on the market. Hence, an important objective of land policy has been to match supply and demand in land markets to achieve more sustainable land management and avoid land abandonment in rural areas. The Japanese government has attempted to achieve this goal by adding flexibility to rental markets, where retiring farmers can rent their land to existing farmers or new entrants, rather than selling it. To understand current land policy, a review of the historical changes in legislation following the Land Reforms that occurred after WWII is provided in Table 5.

Year	Legislation/ Policy actions	Land ownership	Tenure
1947-	Land Reform	to realign land ownership and	
1950		increase the number of owner	
1952	A ani avaltar na l T an d	occupiers	
1932	Agricultural Land Act	to retain the ownership structure (i.e., owner	
	<i>n</i> et	occupiers dominated) created	
		by the reform	
		to establish an Agricultural	
		Committee at each Local	
		Authority to approve land-	
		rights transfers	
1970	Agricultural Land	to abolish the limitations on	to abolish the limitations on
	Act Amendment	the area of holdings owned by	the rental value of farmland
1075	A	individuals	
1975	Agricultural Areas		to enable landowners and tenants to make short-term
	Improvement Act		tenancy agreements in
	Amendment		designated rural areas
1980/	Agricultural		to enable landowners and
1993	Land Use Act		tenants to make tenancy
	Agricultural		agreements without
	Management		approval from the
	Framework		Agricultural Committee,
	Reinforcement		based on the land use plan
2000	Act		of each Local Authority
2009	Agricultural		to enable agricultural firms
	Land Act Amendment		to enter lease markets
2013	Farmland Bank		to establish a Farmland
2013	Act		Bank in each prefecture to
			encourage matching people
			and land
	Table 5 Kow	changes in land ownershin and	tonung in Janan

Table 5. Key changes in land ownership and tenure in Japan

Source: Author's own construction based on Hayami and Godo (2002), Sekiya (2002) and https://www.maff.go.jp/j/keiei/koukai/

Land Reform between 1947 and 1950, aimed to deliver a fairer distribution of land than the previous rather unequal landowner-peasant relationships that had existed in rural society before then and which had led to the exploitation of the peasants and serious conflicts between the two parties (Egaitsu and Suzuki, 2015). As a consequence, 1 hectare of land was allocated to most of the peasants¹⁰ which enabled them (the tenants) to became owner occupiers.

¹⁰In effect, landowners had their land confiscated (around 1.7 million ha in total) without compensation by GHQ (General Headquarters, the Supreme Commander for the Allied Powers).

Therefore, Land Reform was associated with a dramatic decrease in the area of tenanted land from 46% of total agricultural land in 1945 to 10% in 1950. After this reform, the Agricultural Land Act was enacted in 1952 which maintained the principle of the reform, i.e. the 'ideal form of land ownership is "land is owned by the occupiers" (Sekiya, 2002). However, the principle turned into a stumbling block for the rural economy as nationwide economic growth began in the 1960s. Although farmers needed to expand their farm size to generate more income from farming, rapid economic development pushed farmland values significantly up, making buying more farmland very difficult. Thus, rental markets became the only the option for farmers to acquire more land, which was against the principle of owner-occupancy (Hashiguchi, 2014, Hayami and Godo, 2002). As a result, the Agricultural Land Act was amended in 1970 and enabled farmers to rent land without limitations on areas and rents.

Since then, land policy has moved in a single direction towards a more flexible tenure system, where farmers who withdraw from farming could rent their land to other farmers wishing to expand their businesses, or to new entrants starting a farming business. In other words, while a wider distribution of land and ownership was achieved by the previous land reform, the main issue since then has been to achieve economies of scale, through the amalgamation of small holdings with appropriate tenure.

2.3.3 Land market trends

Figure 5 and Figure 6 illustrate trends in agricultural land markets, both in terms of rented area and rental value (Figure 5) along with area sold and land price (Figure 6). As already mentioned, the rapid economic growth experienced since the 1960s caused a significant increase in land prices and, therefore, rental markets have become dominant (Hashiguchi, 2014). Since then, compared to the increase in rented area (256,000 ha in 2018), the area sold has remained low (39,000 ha), while both rental value (\pounds 730/ha) and land price (\pounds 78,000/ha¹¹) have decreased over the last 20 years. National Chamber of Agriculture (2020) pointed out that the downward trend in land values stemmed from: i) the reluctance of buyers to purchase land due to uncertainty about the future of agriculture; ii) the reduction in crop prices (particularly rice); and iii) the lack of successors.

It should be noted that the impact of subsidies on land value and rent have not been assessed sufficiently compared to the effects of speculation (Godo, 2006) although there have been some

¹¹Although the high agricultural land price is reflected in speculation for land conversion/development, it should be noted that the land value in Hokkaido has been standing at around £17,000/ha, which is comparable to prime arable land in Scotland (around £22,000/ha); due to the low possibility of development, agricultural productivity alone determines the land price.

direct payments linked to land for communal environmental activities (since 2014) and for planting crops other than rice (e.g., wheat, soy beans and forage crops) (since 2004) while the demand for table rice continues to decline in Japan. The subsidies for crop production are only partially decoupled and aim to fill the gap between production cost and sale price (Tada and Ito, 2018).

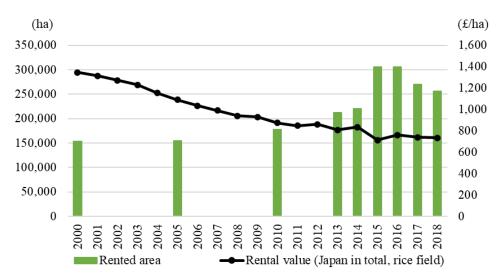


Figure 5. Rented agricultural land and rental value (real terms), Japan, 2000-2018

Source: Author's own construction based on Survey of Agricultural Land Rights Transfer and Rent, MAFF (for rented area 2000-2018 and for rent 2010-2018) and Survey of Rent on Rice Field, National Chamber of Agriculture (for rent 2000-2009).

Notes: Values in Japanese Yen are converted to Great Britain Pound at 1GBP = 150 JPY.

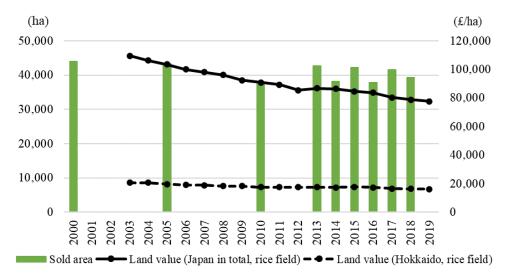


Figure 6. Agricultural land for sale and land value (real terms), Japan, 2000-2019

Source: Author's own construction based on the Survey of Agricultural Land Rights Transfer and Rent, MAFF (for sold area 2000-2018) and the Survey of Land Price and Rent, National Chamber of Agriculture (2003-2019).

Notes: Values in Japanese Yen are converted to Great Britain Pound at 1GBP = 150 JPY.

2.4 Comparison Between the Two Countries

2.4.1 Policy objectives

This section compares the objectives and instruments of land reform and policy in both countries. For this purpose, the proportion of rented agricultural land as a key indicator of achieving their objectives is examined. This is because tenanted land is important both in terms of economic efficiency and social fairness, since it allows farmers to access land without the need for large capital investment (Edwards and Kenyon, 2014). Figure 7 illustrates a timeline over 80 years during which the rented land area has changed differently in the two countries. While the figure in Japan has gradually increased since the 1970s, in Scotland it has constantly decreased.

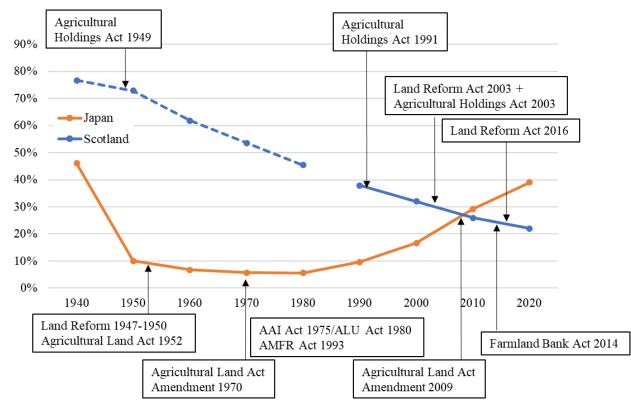


Figure 7. Changes in the percentage of rented area in total agricultural land area, Scotland and Japan, 1940 -2020

Source: Author's own construction based on statistics by Hayami and Godo (2002) (1940 -1950 in Japan), Census of Agriculture and Forestry, MAFF (1960 - 2020 in Japan) for Japan. LRRG (2014) (1940-1980), Abstract of Scottish Agricultural Statistics (1990-2010) and the June Agricultural Census 2020, Scottish Government for Scotland. See also Thomson (2016) and Edwards and Kenyon (2014). Notes: The figures for Scotland between 1940 and 1980 (a dotted line) are the percentages of the number of rented holdings not the area of rented land, because figures for the area of rented land are only available from 1982.

Intriguing contrasts begin to emerge when land reform and policy implementation are examined over longer periods. The Japanese government implemented land reforms after WWII to achieve a fairer distribution of land, as Scottish land reform attempts to do at present. After WWII, Scottish agricultural policy measures (including measures under the CAP) promoted farm amalgamation to improve efficiency and achieve economies of scale (Edwards and Kenyon, 2014), the same objective that is currently being pursued in Japan (Ministry of Agriculture Forestry and Fisheries, 2015). Table 6 summarises the reforms and policies in both countries. These have had different impacts on rented land area. In Japan, post-WWII land reform, which led the state to purchase land from large traditional landowners and transfer its ownership to peasants, resulted in a dramatic decline in the area of rented land. The Agricultural Land Act (1952) was enacted to maintain the owner-occupancy dominated structure. In contrast, Scottish land reform (particularly since 2000) has diversified not only the ownership of land, but also the different types of tenancy to encourage land lease through the Agricultural Holdings Act (2003). Hence, the Scottish government's aims could lead either to an increase or a decrease in the area of rented land.

Japanese land policy, associated with a set of legislative changes since the 1970s, has also sought a more flexible tenure system to achieve farm amalgamation through tenancy in the context of high land prices. This direction has been strengthened since the establishment of the Farmland Bank in 2013, as a statutory institution supporting land lease. By contrast, the buying and selling of land has been common in Scotland and has been supported by the introduction of the pre-emptive right to buy for tenants under the Agricultural Holdings Act 2003. As a result, farm amalgamation through tenancy has increased the area of rented land in Japan, whereas in Scotland this phenomenon could be one of the reasons for the decline in the rented area. It should, however, be noted that there have been other long-term factors that explain the decline in rented land in Scotland, including taxation (particularly inheritance tax) and the economic recession of the 1920s and 30s which resulted in the break-up of large estates (Edwards and Kenyon, 2014, Glass *et al.*, 2020).

Factors	Impacts on rented land %	Japan	Scotland
Land Reform to deliver diversified ownership	\downarrow	Post WWII	since 2000s
Land policy to deliver more flexibility in the land tenure system	1	since 1970s	since 2000s
Farm amalgamation (through tenancy)	1	since 1970s	Post WWII to
Farm amalgamation (through buyout)	Ļ	Not happened	present
Economic recession	\downarrow	-	1920/30s

Table 6. Key influencing factors on rented land, 1920 – 2020

Source: Author's own construction.

In short, both countries have implemented land reform and land use policies with similar objectives but at different times, which reflects their different historical contexts. Thus, impacts on rented land vary over the period. The pattern in Japan is that past land reform has decreased the rented area and then ongoing land policy has increased this area. In Scotland the effects seem more complex. While appearing to follow a simple downward trend, there has been a mixture of impacts on rented land, where land reform has led to diversification of both ownership and tenancy, while farm amalgamation has happened as a result of both land purchase and lease.

2.4.2 Policy measures

Land reform and policy development have been accompanied by a wide range of policy instruments. Table 7 lists various measures/instruments linked to tenancy control in both countries. Although the pattern of ownership or tenure is eventually contingent upon the nature and degree of government control and political preferences, as argued by Thomson *et al.* (2014), a number of important issues are highlighted.

Measures 1 (Restrictions on owners' eligibility) and 2 (Maximum/Minimum area owned) show that restrictions on owning land in Japan are stricter and place a greater value on local ownership¹² compared to Scotland, where there are currently no restrictions on landowners' eligibility (Thomson *et al.*, 2014, Glass *et al.*, 2018).

Measure 3 (Land consolidation) relates to the unique feature of Japanese land markets where farms consist of extremely small and dispersed land parcels rather than a single farm, which requires specific measures for farm consolidation. To resolve this problem, the Farmland Bank was established in 2013 as an intermediary scheme that pools and realigns tenure rights to achieve greater land consolidation.

Measures 4 (Maximum sale price), 5 (Maximum/Minimum rent) and 6 (Maximum/Minimum lease duration and Continuity of tenure) show that neither government intervenes directly in land markets with price or rent controls¹³, but data on average rental values are provided by the

¹²There have been arguments about whether or not this has prevented new entrants, including agricultual firms HATTA, T. & TAKADA, S. 2010. *Industry of Agriculture, Forestry and Fisheries in Japan [in Japanese]*, Tokyo, Nikkei Publishing Inc, HAYAMI, Y. & GODO, Y. 2002. *Agricultural Economics [in Japanese]*, Tokyo, Iwanami Shoten..

¹³Rent control and its historic impact on land markets in Japan are analysed by DAWSON, P. J. 2014. Market Failure and Japanese Farmland Rents. *Journal of Agricultural Economics*, 65, 406-419, SANJUáN, A., DAWSON, P., HUBBARD, L. & SHIGETO, S. 2009. Rents and Land Prices in Japan: A Panel Cointegration Approach. *Land Economics*, 85, 587-597, SHIGETO, S., HUBBARD, L. & DAWSON, P. 2008. On farmland prices and rents in Japan. *Agricultural Economics*, 39, 103-109.

Agricultural Committee in Japan, and a regular rent review process is recommended in Scotland. Additionally, both governments allow flexible duration of tenancy agreements.

Measure 7 (Land specific court or other body for dispute resolution) reveals that there are specific institutions to resolve disputes between parties and these have been assigned new roles in line with recent land reforms/policies in both countries. The Agricultural Committee in Japan has been given a role in land consolidation under the Farmland Bank Act, in addition to its existing roles (i.e., approval for land rights transfer and dispute resolution). The Scottish Land Commission was established in 2016 to support the implementation of Land Reform (McIntosh, 2019, Edwards *et al.*, 2015) and proposed a new Intermediation Scheme as an alternative to the Scottish Land Court.

Measure 8 (Tenant right to buy) highlights that recent land reform in Scotland has enhanced the security of tenants with the introduction of a pre-emptive right to buy, whereas Japan has not discussed this sort of right for tenants.

Measure 9 (Tax breaks on transfers/ownership) shows that complex taxation systems for farmland are operating in both countries, including tax exemptions or reductions. The Japanese government has added a change in the taxation system where tax reductions can be applied through Farmland Banks, while in Scotland a review of farmland taxation (e.g., the Agricultural Property Relief for Inheritance Tax) has been proposed (Alma Economics, 2020, Hughes *et al.*, 2018).

Measure 10 (New entrant support) shows that there are schemes that support new entrants financially, as well as institutions working to support the rented sector through allocation of land to new entrants in both countries (i.e., the Farmland Bank in Japan and the Scottish Land Matching Service in Scotland).

To conclude, the comparison above highlights a range of differences and similarities. For example, Japanese land policy has focused on farm amalgamation and especially on consolidation, with some restrictions on land ownership/rental imposed in past land reforms. Scotland, by comparison, has had a relatively low level of intervention in these areas. Instead, the Scottish government has provided a pre-emptive right to buy for tenants as a part of recent land reforms, which provides more security of tenure. Nonetheless, various similarities can be found between the countries in terms of institutional bodies, including overlapping functions observed in Japanese Farmland Banks, the Agricultural Committees, the Scottish Land Matching Service, and the Tenant Farming Commissioner. Their functions in practice are investigated later in the thesis.

Policy measures	Japan	Scotland
1. Restrictions on owners' eligibility (e.g., nationality)	• Agricultural Land Law excludes ownership by foreign nationals and imposes restrictions on corporate ownership.	None
2. Maximum/ Minimum area owned	 The restriction on the maximum area was removed in 1970. The restriction on the minimum area was deregulated in 2009 to allow new entrants to acquire land easily. 	None
3. Land consolidation	 Land policy since the 1970s has attempted to achieve land consolidation. Farmland Banks were established as an intermediary scheme in 2013. 	None
4. Maximum sale price	None	None
5. Maximum/ Minimum rent	• Agricultural Committees provide data on average rents to help landowners and tenants to agree on fair rents (Committees previously provided a reference rent which was abolished in 2009).	• A recommended process exists for reviewing rents every 3 years.
6. Maximum/Minimum lease duration and Continuity of tenure	• The maximum duration is 50 years, and the contract is renewed unless a landowner notifies a tenant the termination of the contract.	• The duration and continuity of tenure varies across the type of tenancy agreements (e.g., 1991 Act Tenancy, Short Limited Duration Tenancies)
7. Land specific court or other body for dispute resolution	• Agricultural Committees mediate settlements related to land issues between parties.	 The Scottish Land Court and less costly voluntary resolution processes exist. Scottish Land Commission, including Tenant Farming Commissioner, established in 2016, set up the Intermediation Scheme (Edwards <i>et al.</i>, 2015, McIntosh, 2019)
8. Tenant right to buy	None	• Agricultural Holding Act 2003 provides tenancies under the 1991 Act with a pre-emptive right to buy.
9. Tax breaks on transfers/ownership	 Capital transfer tax or inheritance tax are exempted or given a grace period, as well as lower property taxes being applied. Farmland taxation is relaxed when you rent land through Farmland Banks. 	• Farmland and associated buildings are exempt from business rates. Stamp duty, capital gains and inheritance taxes can also be reduced under certain tax schemes.
10. New entrant support	 Farmland Banks help new entrants to find farms. New entrants who meet certain criteria can utilise the loan scheme. 	 The Scottish Land Matching Service launched in 2019 matches farmers to available land (Lacey, 2019). Limited financial support for new entrants was available under the Scottish Rural Development Programme (Pillar II of CAP).

Table 7. Policy instruments for tenancy control in Japan and Scotland

Source: Author's own construction based on Thomson *et al.* (2014) and Ministry of Agriculture Forestry and Fisheries (2019) unless otherwise cited.

2.5 Summary

This chapter has provided an overview of land use in the agricultural sector, current directions of land reform and policies, and market trends in Scotland and Japan, followed by a comparison of those policy objectives and measures that impact on rented land. There are large differences between Scotland and Japan in terms of the ageing workforce and the size of holdings, as well as in the demand and supply balance for agricultural land and the level of land price and rent. Moreover, the motivations of current land reform and policies in both countries are different. Scotland is dealing with an extreme concentration of land among relatively few owners by diversifying land ownership and providing flexibility in tenure, whereas Japan is addressing the extreme fragmentation of land by supporting the rental sector¹⁴. This chapter also highlighted the nature of land reform and its potential to deliver changes in landownership and tenure, as well as changing in land policy and measures, and the institutions that influence rural land markets. It provides a strong context from which to begin examining the mechanism of land transactions. Before examining land transactions in practice there is a need for robust theoretical and methodological frameworks. These are presented in Chapter 3 and Chapter 4 respectively.

¹⁴This could also reflect the historical and geographical differences between European and Asian countries.

Chapter 3. Literature Review and Theoretical Framework

3.1 Introduction: Combining Two Theories

This research explores the mechanism of land transactions in land markets, not as an abstract concept based simply on the operation of economic factors but as a process that happens in a real place where social networks and government institutions interact. Therefore, the research framework is built on two theories both of which reject the view of neo-classical economics and develop their own perspectives focusing on different social constructs: New Economic Sociology (NES) which emphasises the role of social networks, and New Institutional Economics (NIE) which has a greater emphasis on the role of formal institutions. Combining insights from these theories helps us to build an analytical lens which is used to explore rural land markets, beyond neo-classical economics.

This chapter is structured as follows. First, existing research is reviewed in Section 2 to help understand the specific attributes of land markets discussed among scholars in Agricultural Economics. This leads to a discussion of market failures caused by transaction costs in land markets, followed in Section 3 by an examination of the similarities and differences between NES and NIE around transaction costs. Then, as an important difference between the theories, attention is paid to the role of brokers, particularly from the point of view of trust among social networks. Section 4 applies the theories to rural land markets, highlighting certain key issues suggested by the theoretical framework. Lastly, Section 5 summarises the chapter.

3.2 Land Markets in Agricultural Economics

3.2.1 Land as an economic resource

Agricultural land has been treated as an economic resource by agricultural economists and studied mainly in the context of economies of scale. In other words, "literature has extensively considered land markets as a mechanism creating opportunities for land transfers from less to more productive farms" (Kvartiuk and Petrick, 2021). Therefore, research on farmland markets has been linked closely to arguments around farm structural change (Balmann *et al.*, 2010, Csaki and Lerman, 2000, Davis *et al.*, 2013, Ortmann, 1998, Reining, 1990), such as for example the increase in average farm size as the number of farms decreases (Eastwood *et al.*, 2010, Lowder *et al.*, 2016). In this sense, land rental markets play an important role in enhancing farm efficiency (Sadoulet *et al.*, 2001) and the increasing share of rented land has been argued to be one of the key drivers contributing to farm size growth (Bojnec and Ferto, 2021).

One of the reasons for this is the lower transaction costs for land rentals compared to land sales (Deininger and Feder, 1998, Sadoulet *et al.*, 2001, Swinnen *et al.*, 2016), which will be

explored in later sections. Although much discussion in the literature focuses on social fairness, its main emphasis has remained on the economic aspects of land and on improvements in farm management.

Recently, as further perspectives have been used to consider the operation of land markets, including the impacts of subsidy policies and environmental regulations (Hodge, 2016) the role of institutions (e.g., government intervention) has come under greater scrutiny (Deininger and Feder, 1998). This thesis examines the proposition that institutions can reduce transaction costs in land markets but before this, the basic economic features of land markets need to be reviewed and understood. The role of transaction costs in land markets will also be reviewed. Finally, trust between participants in land markets, as an alternative to the intervention of institutions, will be discussed when comparing the two theories.

3.2.2 Market failures

Land markets are often characterised by market failures which arise when free markets fail to develop, or when they fail to allocate resources efficiently (Bator, 1958). Table 8 compares specific attributes of agricultural land markets that can lead to market failure, against the concept of "perfectly competitive markets".

Perfectly competitive markets	Agricultural land markets
Goods produced are homogenous (identical)	Land is heterogenous
There is freedom of entry and exit to and from the market and there are many buyers and sellers in the market. No one individual buyer and seller is big enough or has the power to be able to influence price (price taker).	A few large estates or farms can exercise local monopoly power in land markets (price maker) and the number of market participants is restricted (the supply of land is very inelastic).
Buyers and sellers act independently and only consider their own positions in making decisions. There are clearly defined property rights which mean that producers and consumers	Landowners' and farmers' behaviours do not necessarily maximise their own economic benefits (e.g., community benefits may be a consideration).
consider all costs and benefits when making decisions.	Information between parties about land markets may be restricted.

Table 8. Attributes of agricultural land markets

Source: Author's own construction based on Mankiw (2017) for "perfectly competitive markets" and Wu and Duke (2014), Ciaian and Swinnen (2006), and Currie (1981) for agricultural land markets.

Market imperfections refer to any aspects of economic markets that do not meet the assumptions of perfectly competitive markets (left column of Table 8) and such factors can lead to an inefficient allocation of resources. Land, as a commodity, is very heterogeneous and depends, among other things, on climate and geography which makes land markets imperfectly competitive (Wu and Duke, 2014). In addition, as discussed below, knowledge and information gaps between farmers and landowners are argued to be a problem in land markets where there are few transactions and can lead to monopolies (Ciaian and Swinnen, 2006). Moreover, landowners' and farmers' behaviour may reflect social norms in their communities and may not lead to profit-maximising decisions (Currie, 1981), whereas neoclassical-economic actors are generally considered to make decisions independently based on their own profit maximisation. All these attributes explain how agricultural land markets are different from the perfectly competitive markets described in neoclassical economics, which highlights the importance of the social aspects of land, rather than simply treating land as a material basis for the economy (Owens, 2007).

3.2.3 Transaction Costs

Market failures 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). Therefore, TCs have been applied to the theory of agricultural tenure markets, and defined as: i) the costs of establishing contracts and negotiations, such as searching for suitable properties, verifying their characteristics and negotiating with owners/buyers; and ii) the costs of implementing the final contract, such as conveyancing fees (Currie, 1981, Ciaian *et al.*, 2012). Ciaian *et al.* (2012) name the costs for search and negotiation as "implicit" transaction costs (associated with monopoly by large corporate farms, unresolved or unknown ownership, and high withdrawal costs and unclear boundaries) whereas the administrative costs (e.g., fee/tax) are referred to as "explicit" transaction costs which largely affect land supply and demand and hinder structural change in the agricultural sector.

Within the literature, there are several quantitative analyses which incorporate TCs into their econometric models of agricultural land markets (Table 9). 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. Skoufias (1995) explored Indian land tenancy markets and found that significant TCs were associated with a reduction in the leasing of land, while Deininger and Jin (2005) examined decentralised land rental transactions in China, where they found that TCs and informational imperfections limit the administrative reallocation of land. In addition, Takahashi *et al.* (2018) focused on the coordination of farmland use in Japan and pointed out the

importance of social capital in mitigating TCs in this process. Most recently, Léger-Bosch (2019) also studied coordination mechanisms in French farmland markets and found that public and collective processes can improve their performance by reducing TCs, particularly negotiation costs. According to these studies, one of the specific issues in the operation of land markets is asymmetric information among participants (one possesses more information than the other), which can result in increasing TCs and thus function as a market barrier.

Author (Year)	Study site	Measurement costs	Enforcement costs	
Currie (1981)	Theory	The costs of establishing contracts and negotiations (e.g., searching for suitable properties, verifying their characteristics and negotiating with owners/buyers).	The costs of implementing final contracts, such as conveyancing fees.	
Skoufias (1995)	India	The fixed costs of obtaining information, negotiating and communicating the terms of transactions.	The variable costs of monitoring and enforcing the conditions, and the profits lost from imperfect supervision.	
Deininger and Jin (2005)	China	The costs include obtaining information on rental rates and market participants, the negotiation of contractual terms, and contract enforcement.		
Ciaian <i>et al.</i> (2012)	EU member states	"Implicit" costs include search and negotiation fees.	"Explicit" costs include for example, registration costs, and notary fees.	
Takahashi <i>et al.</i> (2018)	Japan	The costs for farmland concentration, e.g., searching for reliable participants and the costs for collective cultivation, e.g., forming and maintaining a farming unit.		
Legar- Bosch (2019)	France	Information costs, negotiation costs, implementation costs	Monitoring costs, enforcement costs	

Table 9. Key studies on Transaction costs in agricultural land markets

Source: Author's own construction.

Notes: Descriptions are the costs considered in their models and which are re-categorised into measurement/enforcement costs by the author. Where there is no categorisation in the original research, they are shown together in a single column.

Existing research on TCs in land markets helps us to understand more realistic mechanisms for 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 scholarly debates regarding TCs. For example, research on US farmland markets shows that social relationships between parties are essential factors in land transactions (Kostov, 2010, Robison *et al.*, 2002, Tsoodle *et al.*, 2006) (it should particularly be noted that Robison and Ritchie (2016) applied behavioural economics to farmland exchanges, highlighting farmland transaction anomalies from the perspective of personal relationships). Robison *et al.* (2002) conducted a survey of

1,500 farms in the US to explore the impacts of social capital on minimum land price. This survey categorised the type of relationship with different levels of social capital as 'Stranger', 'Friendly relative', 'Friendly neighbour', 'Influential person' or 'Unfriendly neighbour' and found that 'Friendly relative' and 'Friendly neighbour' obtained discounts in the minimum sales price compared to 'Stranger', while 'Influential person' and 'Unfriendly neighbour' faced higher premiums than 'Stranger'. 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 renters. It should be noted that Currie (1981) discussed 'non-economic considerations' in his theoretical analysis on historic farmland markets, arguing as follows:

"That the relationship between landlord and tenant is more than simply an economic one is particularly evident in the treatment of sitting tenants. For example, English landowners have often not extracted the highest possible rents from tenants. In some cases, this 'leniency' was designed to secure the goodwill of the local community at election time. In other cases, it was undoubtedly due to a sense of moral obligation or to a family tradition of being easy with the estate tenants." (p.100)

However, studies that have employed econometric models using social indicators, cannot fully explain 'how' characteristics such as trust and social networks influence TCs in rural land markets, although they have been able to demonstrate that social capital is an important factor in such markets. In particular, such studies have not been able to clearly explain the qualitative impacts of social capital on mitigating TCs and the motivations for and information around farmland transactions for different participants. To address this research gap, I have argued that it is important to introduce a sociological lens to examine the mechanisms of land transactions embedded in social networks.

The next section introduces the New Economic Sociology theory focusing especially on the role of trust among social networks in the real economy. This will be compared and contrasted with the social constructs referred to in the New Institutional Economics as 'informal institutions'. After examining ideas from both theories, an analytical framework will be developed and specific research questions proposed.

3.3 New Economic Sociology vs New Institutional Economics

3.3.1 New Economic Sociology

New Economic Sociology (NES) (Granovetter and Swedberg, 2018, Guillén, 2003, Smelser and Swedberg, 2005) provides a valuable analytical framework for this research. NES emphasises that "the economy is part of the social world, not isolated from the rest of society, and economics should deal with people in their everyday economic activity" (Granovetter and Swedberg, 2018, p. 1) and criticises economists' use of a radically non-social approach, with simplified assumptions, to analyse real people, and where social interactions among people are replaced by theoretical models of behaviour.

To explain economic phenomena with the help of sociological apparatus, Granovetter (2017) observed three levels of economic phenomena: individual economic action, economic outcomes (regular patterns of individual action), and institutions (larger complexes of action experienced as external and objective aspects of the world). In his study, the role of social networks is an important focus, as these connect individual actions and institutions. Therefore, both relational embeddedness (the nature of relations that individuals have with specific other individuals, which is determined by their particular personal relationships and influenced by their history of interactions) and structural embeddedness (the impact of the overall structure of the network that individuals are embedded in) are examined and the function of norms and trust among social networks are explored.

Granovetter (2017) highlights the positive role of norms and trust among social networks in mitigating social costs in the real economy. He stresses that people seek not only economic motives but also the non-economic goals of sociability which are available only in a social context through the networks of others. Moreover, economic costs are often reduced when people pursue economic goals through non-economic practices, and thus, economic goals can at times be achieved most efficiently through contact with known others. People may prefer to channel their economic activity through networks of relatives, friends and acquaintances, and the trust and obligation that exists in these relationships can result in increased economic efficiency (Ibid., p. 24). Consequently, the existence of trust in social networks can mitigate economic costs (i.e., TCs) as an unintended by-product of individual actions.

Some NE sociologists have revealed the important role of social constructs in the formation of industry and development organisations. For example, Lazerson (1995) found that the success of the Italian knitwear industry was supported by cohesive family units, cooperative relationships between business and community actors, and an appropriate institutional environment. Uzzi (1997) conducted field and ethnographic analysis with fashion firms in New York City and argued that trust, fine-grained information transfer, and joint problem-solving arrangements are key factors which improve performance in an organisation. Similar findings were revealed in studies of the electric utility industry (Granovetter and McGuire, 1998) and in US and Japanese car manufacturers (MacDuffie and Helper, 2007, Saxenian, 2006) using comparative case studies and interviews.

3.3.2 New Institutional Economics

The NES position should be compared carefully with the social constructs described by New Institutional Economics (NIE) (Ménard and Shirley, 2008), within which TC theory is subsumed. NIE rejects the neoclassical assumptions of perfect information and instrumental rationality, and instead, assumes that individuals have incomplete information and rather limited rational capacity. Hence, the importance of the role of institutions that emphasise the economic activity.

Compared to Granovetter's examination of three levels of economic phenomena and embeddedness, Williamson (2013) conceptualised a three-level schema: individual, institutional environment, and governance (organisation) bracketed both by individuals and the institutional environment. NIE has a greater focus on the role of governance which can improve the institutional environment as well as influencing individuals' behaviours. Particularly, NIE emphasises that people inevitably face uncertainty about unforeseen events and outcomes which will incur transaction costs. To counter such uncertainties, people construct both formal (constitutions, laws, contracts and regulations) and informal institutions (norms, belief and habits of thought and behaviour) to reduce risk and transaction costs (Ménard and Shirley, 2008).

Macher and Richman (2008) provided a comprehensive review of the empirical literature of TC theory across the social sciences. Their analysis covered not only business management but also political science, law, public policy, agriculture and health. In agricultural economics, Allen and Lueck (2002) applied TC theory to agricultural contracts, focusing on contracts between farmers and landowners for leasing land. Their study observed that, in the US, farmland was often leased through simple oral contracts, and argued that this helps to reduce transaction costs, pointing out that "in close-knit farming communities, market enforcement of contracts via reputation" can reduce the need to use detailed written contracts (Allen and Lueck, 2008; p.479). Their research was further developed by Polman and Slangen (2009) and applied to Dutch land markets. In this case, an official contract was found to be more likely to be chosen if public organisations are involved, whereas farmers themselves were more likely to use less explicit contracts in which trust and reputation play an important role.

3.3.3 Conflicts between the two theories

TCs have long been a concern for both NES and NIE theorists, and thus there have been dialogues between them, particularly after the concept of "transaction cost" became part of the sociological language (Nee and Swedberg, 2008). However, one area where these two frameworks collide is the scope of trust (Table 10). NES argues that trust works in larger social structures with the help of brokerage bridging information flows 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 informal institutions are generally personal and small-scale, and are replaced by government institutions as the development, complexity and differentiation of societies increase (Ellickson, 1991, Cook *et al.*, 2005).

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

Table 10. The NES and NIE positions around the scope of trust

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

In this respect, Granovetter (2017, p. 57) criticised Williamson (1993) and other new institutional economists who "stressed organisational and institutional solutions and downplayed the significance of "trust" as being confined mainly to families and close personal relationships". Rather, NES stresses that ties encompassing trust are scattered across more than the small, localised communities, with the presence of brokers bridging the distance between small-scale exchange and larger economic structures.

This research focuses on the conflict between these two positions and aims to test empirically the role of social networks and government institutions in rural land markets. Particularly, attention is paid to trust and brokers and their functions in reducing transaction costs.

3.4 Trust and Brokers in Rural Land Markets

3.4.1 Empirical application

When it comes to the application of these theories in rural studies, Atterton (2007) and Meador (2019) have applied NES theory to rural businesses and examined the role of different types of ties/networks in rural development. Atterton (2007) compares rural businesses in three different towns in Scotland from the point of view of Granovetter's "the strength of the weak ties" (a range of dispersed, less well-known individuals having lower levels of trust can bring access to different information) and analysed how the structure of local and extra-local networking works for rural development. Meador (2019) brought more econometric network analysis using a case study of US rural community development.

Additionally, the practice of social networks has broadly been analysed in the context of resource management (Prell *et al.*, 2009). Attention has increasingly been paid to the functions of trust between actors (Rust *et al.*, 2020), including the notion of interrelations between institutional and interpersonal trust (de Vries *et al.*, 2019). However, few studies have explored rural land markets from this (NES) perspective, although some NIE researchers have discussed the role of social relationships in this field.

Similarly, network brokers who act as agents and build bridges between people, contribute to notions of trustworthiness and reputation (Burt, 2008) and have information advantages in terms of breadth, timing and arbitrage in the markets . While Burt and Soda (2021) research on brokers has rapidly increased across disciplines (Kwon *et al.*, 2020), few studies were found in land market analysis, despite the fact that the presence of land agents acting as intermediaries has long been debated by scholars (Nix *et al.*, 2003). The need for government support to link those buying and selling farmland has also increased (McKee *et al.*, 2018). Therefore, examining the functions of brokers in rural land markets may help to fill some of our research gaps, specifically the understanding of how trust, correlated with information flows, could affect transaction costs.

3.4.2 Specific research questions

This literature and theoretical framework allow for the identification of specific research questions that will address the principal research questions as detailed in Table 1. Therefore, to address RQ1, which aims to examine the roles of social networks and government institutions in rural land markets, the following will be considered. First, the identification of the key actors and their relationships in and around the markets (RQ1-1). Second, the role of intermediaries within the networks in brokering information is discussed (RQ1-2). Third, brokers' contributions to mitigating transaction costs in rural land markets is explained in relation to the

role of trust (RQ1-3). RQ2, which focuses on the identification of challenges and best lessons regarding land reforms and the policy recommendations that can be drawn from this study, will be addressed as follows. First, by identifying gaps between institutional goals and the activities of social networks (RQ2-1). Second, if there are any gaps, how they should be reconciled (RQ2-2). The answers to these specific research questions will allow for a robust investigation of rural land markets as places where the complex interplay of land policy and the economic and social characteristics of land transactions can be observed.

3.5 Summary

This chapter has proposed a robust analytical framework to better understand the transactional mechanisms that operate in rural land markets that have historically been characterised by market failure. Specifically, existing research highlighted the presence of high TCs due to the asymmetric information between landowners and farmers as one of the main issues contributing to land market barriers. To analyse the influence of trust and social networks that could contribute to changes in TCs, New Economic Sociology and New Institutional Economics, two contrasting theoretical approaches that emphasise different social constructs to mitigate TCs (i.e., trust among social networks (NES position) and the operation of government institutions (NIE position)) are employed. Here, attention is focussed on the role of brokers who contribute to the information flow among actors and reveal differences between the two theories around the scope of trust.

Based on this theoretical framework, this chapter raises key issues for each principal research question. Since there has been relatively little research exploring rural land markets from the view of trust and brokers, a new perspective can be achieved by combining the two theories to address research gaps and explore issues around land markets. Following this, it is important to discuss which methodological approach and research methods are best suited to finding realworld answers to the above research questions.

Chapter 4. Methodology

4.1 Introduction: Connecting to the Theory

This chapter discusses the methodological approach and specific methods to be employed to answer the research questions, with a focus on the issues raised by the theoretical framework proposed in the previous chapter. As this research tries to understand the rural land market as a complex system, it adopts a qualitative approach with a focus on the people who participate in farmland transactions. Thus, the focus is on analysing data collected from individuals engaging with land markets (e.g., farmers, landowners, land agents, and policy makers). Specifically, this chapter argues that the chosen methodology, based around a case study approach, has a strong connection to the theories discussed in the previous chapter.

This chapter is structured as follows. Section 2 explains why a case study approach was adopted and describes its limitations. Section 3 introduces Social Network Analysis as an appropriate tool to explore the human relationships involved in land market transactions. This research looks particularly at local community-based networks, defining the scope of rural land markets by conducting in-depth interviews with actors and applying Social Network Analysis. This is followed by a description of the study sites in Section 4. Section 5 summarises the chapter.

4.2 Case Study Approach

4.2.1 Qualitative research

Although there is a risk of exaggerating the contrasts between quantitative and qualitative approaches (Bryman, 2012, Denzin and Lincoln, 2018), the research questions explored in this thesis are a good fit to qualitative research methods which, according to Creswell and Poth (2017), have the following features:

- i. they use theoretical frameworks to address a social or human problem;
- the approach to inquiry is based on the collection of data in a natural setting sensitive to the people and places under study, and data analysis establishes patterns or themes; and
- iii. they include the voices of participants and the reflexivity of the researcher to provide a complex description and interpretation of the problem.

Case studies are one of the approaches that are most frequently used in the social sciences (Creswell and Poth, 2017) and are defined as a form of qualitative research method in which a

real-life, contemporary bounded system is explored over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observations and interviews) and which reports a case description and associated themes.

The key feature that explains why case studies based on a qualitative approach can be used both in theory building and testing, is that they are particularly useful in identifying causal mechanisms (the connecting process between cause and effect) rather than causal effects (Della Porta, 2008, Heritier, 2008). However, as Gerring (2011, p. 12-13) asserts "it is difficult to arrive at a reliable estimate of causal effects across a population of cases by looking at only a single case or a small number of cases", as case studies only "allow one to peer into the box of causality to locate the intermediate factors lying between some structural cause and its purported effect". This is a common criticism applied to case study research, arguing that such approaches "pay little attention to problems of causal complexity, particularly equifinality and multiple interactions effects" (George and Bennett, 2005, p. 12).

This thesis adopts a qualitative approach based around case study research to explore the complex mechanism of land transactions in rural land markets as a social and human issue. In particular, this study employs semi-structured interviews of key informants to investigate people's real relationships in and around land markets. Semi-structured interviews with the actors working in and around land markets can help us to understand land markets as a real social system rather than as an abstract construct. The justification for and limitations of taking this approach are discussed next, before moving onto the specific methods used for qualitative data collection and analysis.

4.2.2 Justification and limitations

A case study approach is adopted as an effective methodology to help understand complex issues in the real world (Yin, 2014). Case studies are particularly useful when theoretical frameworks support the explanation of specific problems associated with causal complexity.

However, this approach also has limitations, especially in the sense that it is characterised as studying only a small number of cases and thus is not easily generalizable, compared to large-sample statistical studies. This often leads to the common criticism that case studies are 'microscopic' and therefore unable to bring out the bigger picture in terms of how society can be understood and, thus, they can only supplement the broader insights of statistical studies (King *et al.*, 1994).

By contrast, it can be argued that studying a small number of cases is not necessarily insignificant in promoting a wider understanding. Such approaches strive for theoretical generalisation with purposive sampling, rather than the statistical generalisation from a large sample (Yin, 2014, Silverman, 2017, Creswell and Poth, 2017). In other words, case studies are considered not as samples of the population *per se* but as theoretical concepts, where an understanding of selected cases can help to account for the processes and outcomes observed in the real world. Additionally, case studies are useful to explain causal complexity with multiple interaction effects, which are difficult to identify in statistical studies (George and Bennett, 2005, Gerring, 2011).

As an example of rural case study which connects theory to practice and leads to a new understanding, Burton and Wilson (2006) applied social psychology theory to investigate the formation of identity in post-productivist era farming communities. Based on identity theory a conceptual framework was established recognising productivist, post-productivist and multifunctional farmer self-identities, which were then investigated in a survey in the Marston Vale area of Bedfordshire in the UK (60 structured surveys, followed by 13 qualitative interviews). Their findings showed that despite the development of an increased post-productivist conservation element in farming, farmers' self-concepts were still dominated by production-oriented identities.

Another qualitative case study exploring farm afforestation (Duesberg *et al.*, 2013), was based on in-depth interviews with 62 farmers was conducted in the North-West and Mid-Western regions of Ireland. The interviews were based on the economic theory of farmers' goals and values developed by Gasson (1973), which uses motivation (of being a farmer) as an important parameter to explain their economic behaviour. They found that farmers' decision-making is largely guided by their 'intrinsic values' (e.g., farming as a way of life, independence to perform their job) rather than only by profit maximisation.

Therefore, the reasons why this research adopts a case study approach despite its limitations, can be set out as follows: i) a case study approach has advantages when investigating cases exploring specific theoretical frameworks, such as testing and developing NES and NIE theories; and ii) it can help to explain causal complexity, i.e., it can examine rural land markets as complex units where policy, economic and social factors interact with each other.

4.3 Social Network Analysis

4.3.1 Analytical perspective

Regarding data collection and analysis, a Social Network Analysis (Scott and Carrington, 2011, Borgatti *et al.*, 2009) is employed as an effective analytical method consistent with the theories explored in this study. This approach provides a comprehensive perspective from which to analyse the relational features of social structures, and to examine interpersonal relationships (e.g., friendship and neighbourliness) as well as institutional relationships (e.g.,

economic transactions and political conflicts).Network studies have been at the centre of much of the NES research (Scott, 2017) and have particularly been linked to the theory of social capital (the resources embedded in social networks) (Lin *et al.*, 2017).

Jackson (2010) and Jackson and Zenou (2013) examined social networks as the framework for many economic interactions and highlighted the interactions between social structure and economic outcomes in social economics. They explored the networks that exist in labour markets and found that reputations and ongoing relationships between actors have advantages in contracting work. This study looks at the actors who participate in land transactions in rural land markets and their relationships, with a focus on the function of brokers and the role of trust, which is an important aspect of social capital (Burt, 2002). As a theoretically-informed method, Social Network Analysis enables us to explore the dynamic network practice in and around rural land markets as part of a social structure.

4.3.2 Local community-based networks

Social Network Analysis (SNA) is rooted in community studies (Hollstein, 2011, Scott, 2017). Communities can be viewed as social networks where individuals have direct or indirect links with others and the flow of information and transfer of resources and services between them can be analysed. Our research uses SNA as a community-based approach, to examine land transactions and the related information flow between actors at a local scale.

As an example of SNA, Prell *et al.* (2009) employed a local qualitative case study to investigate resource management in the Peak District National Park in the UK. They conducted SNA combined with a stakeholder analysis to identify which individuals and categories of stakeholders play more central or peripheral roles in resource management decisions, providing useful insights about key actors which could inform future resource management initiatives.

Sutherland (2020) highlights the value of parish-level studies which focus on the population within a well-defined small geographical region for qualitative rural research. She argues that the parish study has great value for the empirical testing of theories and provides an opportunity for new concepts to emerge, which means that it is well-suited to empirical case studies. This research follows her idea and defines its "cases" as land transactions between actors based in local community areas in Scotland and Japan. While there is an important difference between the parish study method, which uses a geographical map to identify the land owned/tenanted, and this research which explores the social relationships between landowners and tenants, the benefits of the approach still apply.

4.4 Field Research Design

4.4.1 Case selection

This study focuses on two parishes (Scottish townships) and a *shuraku* (Japanese township), which are the smallest local community areas in both countries and tests NES and NIE theories in these contexts. In other words, it analyses the roles of social networks and government institutions in rural land markets for each case. Here, two parishes from the Lothian and Borders region and one *shuraku* from Kanto and Tosan in Japan are selected as case study areas. These areas were selected as they each have a high proportion of rented land (Figure 8 and Figure 9), hence actors (e.g., farmers, landowners, and brokers) are commonly engaged in land transactions.

Lothian and Borders is an important area especially for crop production (11% of the total holdings of crop and fallow in Scotland), while other farm types (e.g., cattle and sheep) are well represented. The size of holdings also varies but is relatively large as the region accounts for about 15% of the total holdings of over 100 ha in Scotland. The selected parish reflects these regional characteristics.

Kanto and Tosan is an important area especially for vegetables and fruit (29% of farms of this type in Japan), while various other farm types (e.g., pigs, poultry and crops) are also well represented. Most holdings in the area are of medium size, as this region accounts for 22% of total farms under 10 ha, and 4% of farms over 100 ha. The selected *shuraku* reflects these regional characteristics.

	<u>(</u>		(people)
0% - <25%	Parish profile	X	Y
25% - <50%	Geography		
50% - <75%	Area	26.8km²	94.3km²
75% and over	Residents		
	Population	95	4,614
	Household	45	2,184
AND LE AND	Age structure		
Lothian and Borders	0-19	13	1,020
A sha down	20-64	60	2,619
	65+	22	1,010
	Employment in industry		
15-7-	Agriculture	4	87
	Manufacturing	2	382
iften so	Wholesale and retail	7	303
	Public administration	5	120
	Education	6	138
Non garbath rate base many de dh sagt bancing garbat en estant encourse de di adabigat phanologie adale adaletat hubing. Wate analises tate laters manyai	Health	8	316
Theory would note: The major wave automation. I config control and the company industries. Control configure and configure and part (20.4 configure and and configure and and and and part (20.4 configure and and configure and	Other	17	876

Figure 8. Percentage of tenanted agricultural land by parish and selected parish profile

Source: Scottish Government. Parish profile is author's own construction based on Scotland's census 2011, which are the latest figures published.

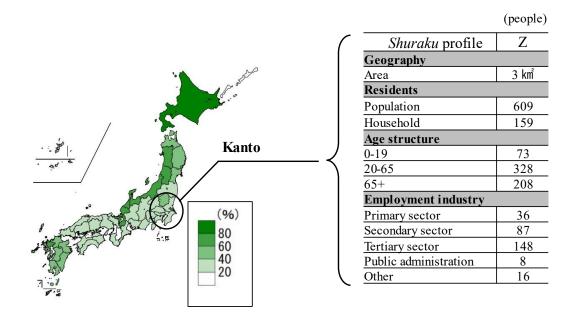


Figure 9. Percentage of consolidated agricultural land by prefecture and selected *shuraku* profile

Source: MAFF. *Shuraku* profile is author's own construction based on Japanese national census 2010, which are the latest figures published.

4.4.2 Theoretical positions applied in practice

Before moving on to data collection and analysis, the theoretical positions for each case, which helps theoretical generalisation, are clarified as follows. For each case, it is observed whether or not the land market is characterised by tight social networks that are based on trust, or is strongly influenced by government institutions. In other words, this research assumes that if informal social networks work in land markets without being replaced by government institutions, then this reflects the NES position, whereas if government institutions play a greater role than social networks, this may be a better fit to NIE theory.

Some existing studies and reports are reviewed below to underpin the theoretical positions for the case studies.

<u>Scotland</u>

Regarding social networks, according to a nationwide land-ownership survey conducted by the Scottish Tenant Farming Commission in 2018 (McIntosh, 2018), over 80% of a total of 1,035 participants (121 landlords and 914 tenant farmers) stated that landlord-tenant relationships are good and regular face-to-face contacts help to build strong relationships. Nevertheless, 60% of landlords and 25% of tenants employ an agent to assist with their business

transactions¹⁵. At the same time, it is a common occurrence that '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), an observation which also strengthens the importance of social relationships between contracting parties.

As for government schemes, 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). As of April 2021, the number of people registering their interest in the SLMS reached 150, with six agreements in place across Scotland¹⁶. The idea of the scheme was inspired by the Irish Land Mobility Service, which "provides Options for Land Owners and Opportunities for Young Farmers through advice on and facilitation of collaborative farming arrangements"¹⁷ that will lead to a win-win situation for both parties (Banović *et al.*, 2015). Nevertheless, attention should also be drawn to the new Intermediation Scheme launched by the Scottish Land Commission in 2021. This new scheme is designed to resolve disputes between landlords and tenants by using mediators who are introduced by Tenant Farming Commissioner (TFC), rather than going to a Land Court, and trying to find a reasonable outcome for both parties (McIntosh, 2022).

<u>Japan</u>

Historically, some studies in Japan have pointed out the importance of social networks in rural land markets. For instance, Senbokuya (1991) and Tojo (1992) found that informal channels among farmers and landowners, including kinship, were often used to facilitate land transactions (Tamasato, 1995, Yoshida, 2012). In addition, Akitsu (1998) emphasised that trustworthiness among community members plays a significant role in land transactions. These studies highlight the positive roles of informal human relationships in agricultural land markets.

When it comes to government institutions, Farmland Banks were established in 2014 as statutory bodies in each prefecture across Japan. The purpose of the scheme is similar to that of the SLMS, that is matching land supply and demand for land consolidation.

¹⁵Agents 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, and legal issues relating to the lease.

¹⁶Information is provided by SLMS. Arrangement types vary and include joint ventures.

¹⁷https://landmobility.ie/

Although the government set a target consolidation rate at 80% by 2023, this has yet to be achieved (59% as of 2021) (Ministry of Agriculture Forestry and Fisheries, 2022). To encourage these activities, a recent amendment of the Farmland Banks Act in 2019 required Farmland Banks to liaise more with Agricultural Committees and other organisations engaging in land transactions and to intervene in dispute resolutions between parties.

Based on the literature, the predicted theoretical position for each case is shown in Table 11. Although it might be expected that both social networks and government institutions work together in practice, government schemes (e.g., SLMS and the Intermediation Scheme in Scotland and Farmland Banks working with the Agricultural Committee in Japan) have not had a long history and are yet to establish themselves within local communities with already established social networks. Thus, we assume that rural land markets in Parish X and Y and *Shuraku* Z might fit better with NES theory. Nonetheless, government institutions and their influences which are more aligned to NIE theory, are also investigated and compared. Both theories should be tested carefully before drawing conclusions.

	Scot	land	Japan		
Case studies	Parish X Parish Y	SLMS and TFC	Shuraku Z	Farmland Bank and Agricultural Committee	
Theoretical position	NES	NIE	NES	NIE	

Table 11. Case studies and predicted theoretical positions

4.4.3 Data collection and analysis

Table 12 and Table 13 show the steps employed for data collection and analysis for each RQ. For RQ1 (How do social networks and government institutions work in rural land markets?), 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 structured interviews based on multiple choice questions (MCQs) in order 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 in-depth semi-structured interviews (which lasted between one and two hours) exploring how brokers obtain information and build trust and identifying the advantages of direct/intermediated land transactions for farmers. The questions for brokers are posed to the actors who intermediate land transactions in Parish X, Y and *Shuraku* Z, as well as to representatives of the SLMS and SLC in Scotland, and the Farmland Bank and Agriculture Committee in Japan.

Steps order	Methods	Interview items	Relevant specific questions
Step1 : Mapping a social network of the land market		 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. 	1. Key actors and relationships
Step2: Tracing the connections between actors	Structured interviews using MCQs	 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) 	 Key actors and relationships Function of intermediaries bridging information
Step3: In-depth interviews with actors	Semi- structured interviews sharing question list (1-2 hours)	 For brokers: What is the key information, and how did you obtain it? And what are the key things that build trust with clients? What are the advantages you offer compared to direct land transactions? For farmers: 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? 	 2. Function of intermediaries bridging information 3. The brokers' contributions to TCs and the role of trust

Table 12. Data collection and analysis for RQ1(Social networks and Government institutions in practice)

Source: Author's own construction.

For RQ2 (What challenges and lessons for on-going land reform and policy can be drawn from this study?), in-depth semi-structured interviews were conducted with policy makers and academic experts (from both Scotland and Japan), which lasted between one and two hours. In addition to the questions about policy goals and instruments in practice (Part 1), interviewees'

feedback on the research results are provided as a valuable perspective for comparative analysis between Scotland and Japan (Part 2).

Methods	Interview items	Relevant key focuses
In-depth semi- structured interviews (1-2 hours)	 Part 1: Policy goals and Challenges What is the future for Scottish/Japanese land policy? Do you work closely with farmers, landowners, and brokers?* Do social relationships matter in rural land markets? 	4. Gaps between institutional goals and social networks
with policy makers and academic experts	 Part 2: Results from each country Is the result applicable for other regions?** Are there any implications from Scottish/Japanese cases? 	Comparative perspective

Table 13. Data collection and analysis for RQ2(Challenges and lessons from land reform/policy)

Source: Author's own construction.

Note: (*) Questions for policy makers only. (**) Questions for experts only.

As interview participants themselves are important actors in this research, participant profiles are provided in Chapter 5 (see Table 14 toTable 18, and Table 26 to Table 28). All interviews were conducted with participants' informed consent (at the beginning of the interviews, interviewees are told that "any information that you provide will not be disclosed under any circumstances and will only be used for research purposes. You can withdraw from the interview at any time.") and recorded with their permission. Data used in are anonymised and will not be shared before being processed. Thematic content analysis was employed for data analysis in which interview data were transcribed and theoretical key words (e.g., trust, information, transaction costs) were selected and analysed (Robson and McCartan, 2016).

Lastly but importantly, the translation from Japanese to English was undertaken by an experienced translator (a Japanese living in the USA) after transcriptions were made by the author. Even though the word 'Rural' cannot be accurately interpreted in translation (Gkartzios et al., 2020) (the word 'Rural' spoken by a farmer in Japan may not be the same as the word used by a policy officer), the research tried to translate the Japanese quotes into English so that they can be interpreted by the reader in an appropriate context.

4.4.4 Impacts of Covid-19

This research was significantly affected by the Covid-19 pandemic, especially in terms of the fieldwork which could not be conducted as originally planned both in Scotland and Japan.

The first lockdown was implemented in the 18th month of the research project in March 2020, when the first meeting had been arranged with a key informant for the fieldwork in Scotland. Subsequently, contact with the key informant was only made through emails and phone calls due to travel restrictions, and it was not until April 23rd 2021 that the first face-to-face meeting was arranged. Regarding fieldwork in Japan, all data collection was done remotely.

Conducting the primary research using only alternative communication methods (e.g. emails, phone calls, and Zoom or Teams) has had significant impacts on the research, which specifically places value on the qualitative data obtained from face-to-face interviews with people living in the local rural areas. The original plan for data collection was to obtain the contact details of potential interview subjects from those who were interviewed. However, this approach was far harder to implement without in-person visits (especially when not having met the interviewee before), thus the amount of data collected this way was very limited. The information that could be obtained through emails or phone calls, from people I had never met in person, was limited in comparison to that which could have been obtained from face-to-face meetings, especially in the case of more sensitive questions such as those asking about the relationships between farmers and landowners. Online interviews, despite their immediate benefits, have restricted the ability of the researcher to assess the participant's body language and environment, which often produce rich contextual data. It was important to make questionnaires easy to understand, especially for those participants who do not use video calls or emails, and obtaining answers was much harder in comparison to face-to-face interviews. Lastly, but importantly, the research participants had also been placed in a difficult situation by Covid, so there were some difficulties in making appointments and asking interviewees to spare time to participate in the study.

Due to these restrictions in data collection, the research moved away from the original plan by shifting its focus towards examining a smaller number of social relationships using semistructured interviews, rather than creating a broader social mapping using structured interviews (the interview guide is provided in the Appendix). Additionally, the small size map analysis was covered using the results of interviews with experienced policy and academic interviewees with their broad knowledge of dealing with the identification of transferrable characteristics. The academic interviewees were selected based on their existing research, while policy interviewees were contacted using the emails provided on the government's relevant websites on land policy. From this point of view, these interviewees could be regarded as knowledge cocreators in this research. Data collection took place between June 2020 and July 2021, with the interviewees listed in the Appendix. If this research would have overcome the limitations caused by Covid19, more effective comparative methods (e.g., a combination of both quantitative and qualitative methods) could be used. For example, representative surveys (online or face-to-face) with private land agencies across each country to better understand how land markets, function could be undertaken before carrying out interviews with landowners and tenant farmers. Future research with mixed methods will address both specificity and generality of the issues around rural land and people and allow to explore optimal patterns of landownership and use in each specific region. Analysis beyond the limitations of this thesis can further enhance the understanding of how complex markets such as rural land markets function.

4.5 Summary

This chapter has discussed research design and methods. In particular, it has described the use of a case study approach as an effective qualitative methodology to test and develop theories in a real-world situation. Case study research will be used to explore rural land markets at the local community level. Specifically, two parishes in Scotland and one *shuraku* in Japan are selected to be explored by Social Network Analysis and in-depth semi-structured interviews. Using this methodology, social networks that support land transactions in rural land markets can be investigated at the local level.

In terms of theoretical generalisation, it is assumed that rural land markets in Parishes X and Y and *Shuraku* Z may be a better fit to NES theory, where strong social networks function with trust. This is compared to the role of relevant government initiatives which reflect NIE theory. To test these theories, qualitative data were collected from actors participating in land markets (e.g., farmers, landowners, brokers, as well as policy makers and experts) and analysed, hence enabling to explore what is happening in and around rural land markets in real-world situations.

Chapter 5. Results

5.1 Introduction

Based on the theoretical framework proposed in Chapter 3 and the methodology outlined in Chapter 4, this chapter explores rural land markets in the real world to find the answers to our research questions. Table 14 provides an overview of the case studies and research participants. To examine the roles of social networks and government institutions in practice (RQ1), NES theory is tested in Parish X and Y (Scotland) and *Shuraku* Z (Japan) by conducting interviews with farmers, landowners and brokers involved in the transactions. Here, the results of interviews with representatives of the government intermediary schemes in both countries, which represent the NIE position, are described and compared. Additionally, to identify the challenges and lessons from ongoing land reform and policy (RQ2), interviews with policy makers and experts were also conducted and will be reported here.

	Scotland Japan						
Interviewees	Parish X	Parish Y	SLMS and TFC	Shuraku Z	Farmland Bank and Agricultural Committee	RQs to be	answered
Theoretical position	NES	NES	NIE	NES	NIE		
Farmers	A, B*, C	L, M		А		RQ 1: Social	
Land owners	E, H, I	Т	-	W*, Z	-	networks and government	
Brokers	D: agent	-	Independ- ent advisors and TFC	F: Individual broker	Committee member	institutions in practice	RQ2: Challenges and lessons from land
Policy makers	s a Scottish officer		a Japanese offi	cer		reform/	
Experts	a Scottish expert			a Japanese exp			policy

 Table 14. Case studies and Interviewees

Source: Author's own construction.

Note: * are female interviewees although gender was not considered in the selection of interviewees.

Interview results from Scotland (Section 2) are reported first, followed by those from Japan (Section 3). Results are presented in the order of specific questions (see Table 1) in each section; First, "1. Key actors and their relationship in/around rural land markets" are illustrated by farm profiles and diagrams. Next, "2. The function of intermediaries brokering land information" and "3. The broker's contribution changing the transaction costs, and the role of trust in the transactions" are shown by brokers' profiles and their interview results. Lastly, "4. Gaps between the institutional goals and activities for social networks" are examined by reporting the interview results from policy makers. Section 4 provides a comparison between the countries, with interview results from academic experts. Section 5 summarises the chapter.

5.2 Results in Scotland

5.2.1 Key actors and their relationships

<u>Parish X</u>

The profile of farmers in and around Parish X is provided in Table 15. There are three farmers¹⁸ 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 on off-farm jobs for a substantial part of their incomes.

There are estate owners around Parish X selling or leasing their land to farmers, some of whom are listed in Table 15. The farmers in this parish own a large amount of land (E, H, I own 280ha, 930ha, and 800ha, respectively) and they manage their land for agriculture and a range of other uses, including, a restaurant, a church, a castle and gardens. Only owner I defines his occupation as a farmer, whereas E and H do not engage in farming. In the social network analysis below, only owner I is described as a farmer.

¹⁸Other than these three farms, four or five workers who come into Parish X to undertake contract farming 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 bus	siness						
Farm type	Livestock: Breeding ewes and cows	Crops: Barley and grass	Livesto ck	Main occupation	Construction contractor	Chartered surveyor	Landowner/ farmer
Size category	>100 livestock	10-100ha	N.A.	Business type	Construction Manufactur-	Property (e.g.,	Property (e.g., castle
Employme nt	Family only	Family + One contractor	Family only		ing Property (e.g.,farm/	church) manage- ment	and garden) management
Other income source	Off-farm jobs (>50%)	Off farm jobs + Other * (>50%)	N.A.		restaurant) management		
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 15. 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 10 illustrates the land transactions between these actors. There are eleven actors involved in the network, including six farmers, four landowners and one broker. It should be noted that transactions are observed not only between farmers and landowners but also among farmers (e.g., among I, B and C). Specifically, Farmer I (listed as an estate owner in Table 15) farms the land he owns while letting some of his land to Farmers A and B. Farmer B rents 13 parcels comprising 100 ha directly from her business associate Farmer A, through a 1991 Tenancy Agreement, within which four parcels sized 20 ha are also let to her relative Farmer C through seasonal lets. Farmer A farms his own land while he also rents five parcels from three different individuals, including his neighbour Farmer I, through an intermediary, Broker D (discussed in more detail below). Although the contract with Farmer I is a seasonal let, their relationship has remained stable for the last 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 on a headage basis.

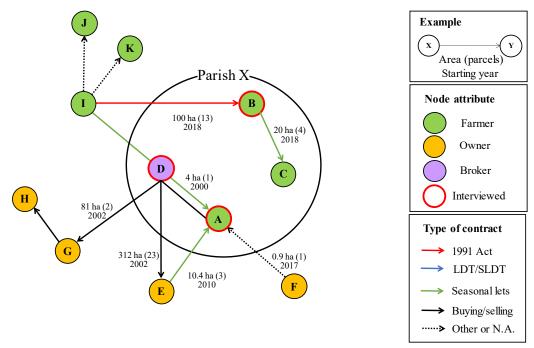


Figure 10. Land transactions in/around the Parish (Step 1-X)

Source: Author's own construction based on interviews. Notes: In this figure, a land market is defined in terms of people who transact land inside and outside the parish.

Figure 11 shows that most of transactions are made through personal contacts between relatives, neighbours and friends, which mean that land transactions are embedded in informal networks. At the same time, when examining the main reasons for transacting land, beyond 'Price' (which is key in any transaction), 'Obligation' and 'Trust' are also identified as important for the transactions between Farmer A and Broker D. "Succession" seems also to be important for the transactions between Farmer B and Farmers I, B and C.

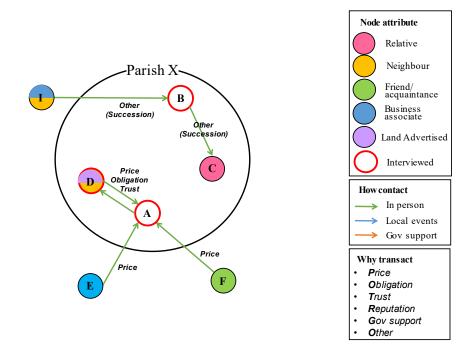


Figure 11. Social relationships around the land transactions (Step2-X)

Source: Author's own construction based on interviews. Notes: This is an extracted diagram from Figure 10 which shows the results from a limited set of interviewees.

Parish Y

The profile of farmers in and around Parish Y is provided in Table 16. Although there are 50 or 60 farms within the parish other than those described, the joint venture between Farmers L and M is our focus. That is because both farmers operate large enterprises with a small number of employees and make their living mainly by farming. Farmer T grazes sheep on a few hectares of his own land, but rents out the vast majority of his holding.

Farmers					
	L	М	Т		
	Α	ctors			
Gender and age	Male, 70-79	Male, 40-49	Male,70-79		
	Curren	nt 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)		
	La	nd area			
(A) Rent from someone else	93 ha (14 parcels)	93 ha (14 parcels)	None		
(B) Own for their own farm	382 ha (37 parcels)	81 ha (7 parcels)	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 16. Profile of farmers 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 12 illustrates the land transactions in and around Parish Y involving these three actors. In all, there are eleven actors involved in the network, including five farmers, four landowners and two brokers. As also seen in the case of Parish X, farmland is transacted among farmers. Farmer L has bought and sold land since 1991 and owns 301 ha of land (30 parcels) at present, which are for crop production (he owns 382 ha of which 81 ha are share-owned with Farmer M for livestock). He built a partnership with Farmer M in 2008, and the latter is in charge of their joint sheep enterprise, sharing 81 ha (7 parcels) of land purchased from his neighbour (Owner V) and 93 ha of land (14 parcels) rented from his friend (Farmer T). Other than this, Farmer T also rents land to Farmer U within the parish.

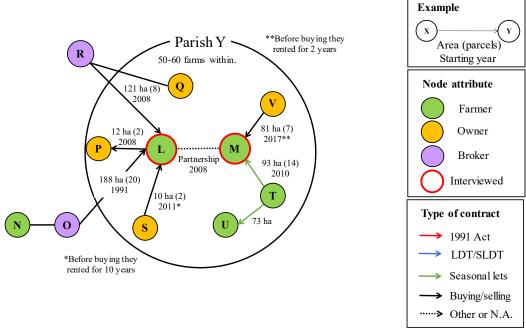


Figure 12. Land transactions in/around parish (Step1-Y)

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 13 shows that most land transactions are made through personal contacts, mainly among neighbours and friends, and the relationship between Farmers L and M is 'Business associates' which means that they have worked together in the past (Farmer M was an employee of Farmer L). As also seen in the case of Parish X, 'Trust' is chosen as the reason for the transactions between Farmers L and M, as well as between Farmers M and T, in addition to other reasons including the 'Price', 'Location' and 'Size' of the parcels. It should be noted that Farmer L used two brokers (R and O) for land transactions, however this was done through advertisements in magazines and by telephone rather than in person.

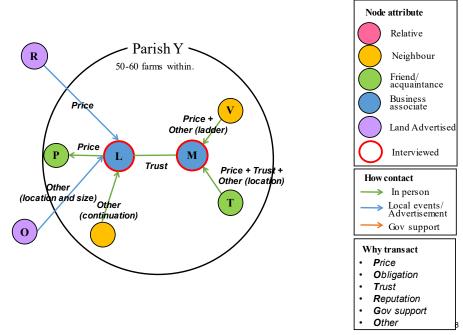


Figure 13. Social relationships around the land transactions (Step2-Y)

Source: Author's own construction based on interviews. Notes: This is an extracted diagram from Figure 12 which shows the results from limited interviewees.

5.2.2 Brokers bridging information

Within the land market explored in Parish X, a private agent D is identified as a network broker, whose profile has already been shown in Table 17. Although this research focuses on small local communities, Broker D (a well-established private agent) covers the whole of Scotland and beyond. Broker D bridges sellers and purchasers both by finding prospective purchasers who meet the conditions and price suggested by the seller in the 'private' market and by advertising the land widely in the 'public' market. In brokering transactions, Broker D obtains information about clients' interests (e.g., who is interested in buying land and why this particular land is of interest to them) by visiting farms as well as by sharing information with colleagues.

	Broker D (Private agent)			
Service offered	Rural agency which covers the buying and selling of rural property, farms, estates and forestry. Other rural sectors also cover farm management, valuation and farming as their services.			
Area covered	Four offices in Scotland out of 40 across the UK. 130 offices in other sectors across the UK and internationally.			
Scope	Some 25% of marketed farmland in Scotland			
Key information and how this is obtained	 Key information - Clients' interests: Who is interested? Why is this particular farm of interest to them? Where are they coming from? Can they move in a certain time? Can they afford it? How to obtain information: Go and meet people on their farm Ring colleagues across the UK/around the world 			
Table 17. Profile of Broker D and information				

Source: Authors' own construction based on interviews.

No similar brokers were found in Parish Y, where communications between Farmer L and Brokers R/O was through magazines and by telephone and not achieved by building a close relationship through face-to-face meetings. The partnership between Farmers L and M is highlighted as a model case of a successful joint venture supported by the Scottish Land Matching Service (SLMS) acting as a public intermediary. Table 18 shows the function of this organisation, the role of which includes contacting individuals who have registered their interest through their dedicated website and gathering information about the objectives of these individuals in order to match land owners with potential land users. To obtain the information, they often meet with farmers, landowners and other agents or estates.

	SLMS (Public institution)			
Service offered	A free service for users, matching people who are seeking and offering opportunities through arranging agreements that fit both parties			
Area covered	All regions across Scotland			
Scope	150 people were registered with the service in 2020			
Key	Key information - Clients' objectives:			
information	• Objectives of both parties, to find a solution in the role of intermediary			
and how to	How to obtain it:			
obtain	• Go and visit people and have a face-to-face discussion			
	• Have meetings with land agents and estates			
	Table 18. Profile of SLMS and information			

Source: Authors' own construction based on interviews.

Additionally, one of the latest initiatives in Scotland's land market is the new intermediation scheme operated by the Tenant Farming Commissioner (TFC) at the Scottish Land Commission. This scheme aims to build a good relationship between landlords and tenants, especially when they are involved in a dispute, and to try to find reasonable outcomes for both parties. This process is based on seeking a resolution through mediation, rather than going to a Land Court. A pilot scheme ran between 2018 to 2020 and the scheme was formally launched in January 2021. The mediation process has three steps: i) submit an application form to the TFC for consideration; ii) if the case is eligible for funding under the scheme, a panel of mediators will be selected; and iii) the mediation is carried out, with the mediator's contribution costing up to £1,000. While this initiative is not designed to facilitate land matching it is still relevant to this study as a potential means of resolving disputes between parties involved in land transactions.

5.2.3 Impacts on Transaction Costs and the role of Trust

<u>Parish X</u>

This section focuses on the 'Trust' between Farmer A and Broker D. In this case a manager of a well-established private company dealing with land transactions (Broker D) lives in Parish X and the land transactions between Farmers A and I were intermediated by him as an individual.

Table 19 shows that there is an advantage in direct transactions which can allow farmers and landowners to solve potential problems together even after the land transaction has been completed (e.g., fixing fences on the land), whereas an important advantage of intermediated transactions is 'appropriate price setting' for land sales or rents.

The following advantages of direct transactions were described by Farmer A:

"If you get on well with them [brokers] and you build a relationship you can speak to each other about any situation, so sometimes if [for example] the fences need to be sorted out you can ask them."

Some advantages of intermediated transactions were described by Farmer A as follows:

"Advantages are that you have somebody there to deal with the price setting. You have help for what the price should be."

In this regard, the broker has an important role to play in reducing 'Search costs', both in terms of finding the best traders among those interested in the transaction, and the best land and property available on the market. These activities enable traders to interact with more market participants than might otherwise have been possible, and to make decisions based on more and better information about the available land.

Advantages of intermediated transactions were described by Broker D:

"When you sold a farm or an estate or a property, [...] you have to look into their eyes and say..., I have tried to find any buyer 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."

"There is nothing to stop private individuals talking and doing a deal. [...] The reason we've grown [as an agency] is because I think our preparation. [...] So when I go to the market, [...] I tried to make sure 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 a team. And that's why the landowners don't do it between themselves."

	Farmer A	Broker D
Interview items	What are the advantages of direct land transactions 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 [brokers] and you build a relationship you can speak to each other about any situation, so sometimes if [for example] the fences need to be sorted out you can ask them."	N/A
Intermediated transactions	Reducing verification costs "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 into their eyes and say, <u>I have tried</u> to find any buyer anywhere in the world who might be interested in your farm or estate [] and therefore you can retire or stop farming, <u>knowing that you've</u> got the best price that the market could give you at that time." "There is nothing to stop private individuals talking and doing a deal. [] The reason we've grown [as an agency] is because I think <u>our preparation</u> . There are so many things to think about when you're selling a farm. [] So when I go to the market, [] <u>I tried to</u> <u>make sure there's nothing he can't see or he didn't</u> <u>know because I have told him absolutely everything</u> <u>about the farm</u> . That's why we are a team. And that's why the landowners don't do it between themselves."

Table 19.	Interview	results:	Advantages in	transactions	(Step 3-2	X)
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Source: Authors' own construction based on interviews.

Note: Label names (e.g., Problem-solving, etc.) and underlines are made by the author.

Trust between parties (farmers and agents) also benefits farmers by ensuring that they have access to more information about what land is available, which can be considered as reducing their search costs for future transactions.

The role of Trust was described by Farmer A as follows:

"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."

"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, [and] I thought Broker D would do the job better. [...] just thought that Broker D would get a better price for us."

Regarding building trust, Broker D values 'Reputation' and 'Personal contact' in rural land markets that he describes as operating in '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 complete the transaction and to benefit from reduced transaction costs.

The role of Trust was described by Broker D as follows:

"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."

"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."

Regarding the answer to the question about the benefit from government support such as Scottish Land Matching Service, Farmer A described that it works well in cases of business transfer, offering a sort of trial period during which both parties can build 'mutual respect'. Thus, offering participants in land transactions the opportunity (time) to communicate with each other could significantly contribute to mitigating negotiation costs. The role of Government support was described by Farmer A as follows:

"Farmers that are closer to retiring, they don't want to sell the farm ... but to achieve an income and maybe helps them to find somebody they can trust and they can try a bit. Transfer it piece by piece. [...] There's a bit of time to figure out how the whole thing works. You can build up a mutual respect. [...] and also means it might allow that [...] incoming farmers to work on a personal loan and then they potentially buy it in the future."

Table 20 emphasises the role of trust and government support as perceived by both Farmer A and Broker D in land transactions.

Interview	Farmer A	Broker D	
items	Do trust and/or government support make land transactions easier or more difficult for you?		
	Reducing search costs	Reputation	
Trust	"You trust the agent and the agent trusts you, and work well together, <u>you're</u> <u>probably more likely to get the land another</u> <u>time</u> . If you're looking for to expand your land, and the agent will think and coming up and let you know."	"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."	
	Reputation and personal contacts " <u>Trust, because he is a neighbour</u> . [] 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 <u>I've heard that, [and] I thought</u> <u>Broker D would do the job better</u> . [] just thought that Broker D would <u>get a better</u> price for us."	Personal contact "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."	
	Reducing negotiation costs	N/A	
Government support	with financial support "Farmers that are closer to retiring, they don't want to sell the farm but to achieve an income and maybe <u>helps them to find</u> <u>somebody they can trust and they can try a</u> <u>bit</u> . Transfer it piece by piece. [] <u>There's</u> <u>a bit of time to figure out how the whole thing works. You can build up a mutual</u> <u>respect</u> . [] and also means it might allow that [] <u>incoming farmers to work on a</u> <u>personal loan and then they potentially buy</u> <u>it in the future</u> ."		

 Table 20. Interview results: Trust and Institutional support (Step 3-X)

Source: Authors' own construction based on interviews.

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

<u>Parish Y</u>

Within the networks explored in Parish Y, the relationship between Farmers L and M as business partners is examined. First, Table 21 shows that Farmer L recognises the advantages of direct transactions to simplify the process of the contract implementation. In contrast Farmer M mentions the role of agents in ensuring that transactions are conducted fairly.

The advantages of direct transactions were described by Farmer L as follows:

"It's a lot easier [...]. They always seem to make problems from how would you deal directly ... you can just sale all at the other end. [...] And they always put a complication in somewhere. I mean, I bought land, everything I have done, I thought what's it worth to me? [...] that's how I've always worked".

Advantages in intermediated transactions described by Farmer M:

"The agents are there for a reason, I suppose, to keep things right and fair presently, [...] they get the deal done".

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

Table 21. Interview results: Advantages in transactions (Step 3-Y)

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

When we look at the trust required in the joint venture (Table 22), both farmers discussed the importance of 'Personal contact' based on their previous working experience. Knowing each other through shared experience established trust and led to the decision that initiated their joint venture as an alternative to working with someone who they did not know so well.

The role of Trust was described by Farmer L as follows:

"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 ... [Farmer M] has worked for me previously, [...] And my wife said why don't ask ... [M] if he [would] be keen enough to do it. So that's sort of how it started."

The role of Trust was described by Farmer M as follows:

"We've worked [together for] about 10 years [...] It's a huge thing for two strangers to trust each other right away. Without knowing what kind of business you're in ... 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."

The other side of the coin is the observation that government initiatives, such as the SLMS, can reduce time-consuming negotiation costs, especially for new entrants, offering financial support which is otherwise hard to find.

The role of Government support was described by Farmer M as follows:

"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 should 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."

Testamian	Farmer L	Farmer M	
Interview items	Do trust and/or government support make land transactions easier or more difficult for you?		
Trust	Personal contact "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 [Farmer M] has worked for me previously, [] And my wife	Personal contact and knowing each other "We've worked [together for] about 10 years [] It's a huge thing for two strangers to trust each other right away. Without knowing what kind of business you're in It's bit like two people going on a blind date and then, all of a sudden, they're married the	
	said why don't ask [M] if he [would] be keen enough to do it. So that's sort of how it started."	next day. It doesn't happen really, does it? [] <u>it takes time to build up trust</u> ."	
Government support	N/A	Reducing negotiation costs "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 should 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 22. Interview results: Trust and Institutional support (Step 3-Y)

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

SLMS and TFC

The aim of the SLMS is to act as an independent 'honest broker' building trust by ensuring 'fairness' to both parties in a land-matching transaction, while maintaining 'confidentiality'.

The key things required to build trust with clients are described by the SLMS representative as follows:

"Trust is a really big thing in this. [...] I'm independent in this, I have no particular one side or the other. I'm there to try and facilitate. So, I have no financial interest in it. [...] There's no fixed way but whatever they do it must be fair to both parties."

"... anything that is said to me in any conversation with a client is confidential. [...] Because if I was to spoil their confidence, then my credibility as an intermediary is not there."

When examining the advantages offered by the SLMS, an interesting contrast to Broker D emerges. Broker D emphasises that he can reduce 'search costs' for his clients both in terms of finding the best trader among those interested in the transaction, and the best land and property on the market. By contrast, the SLMS argues that they can mitigate 'negotiation costs' in

transactions by providing expert advice and offering solutions to problems that arise when trying to reach an agreement between the parties (Table 23). Their involvement can encourage more reserved actors to enter into the market and to engage with participants. These interview results are consistent with the answers from Farmers A and M.

The advantages that the SLMS offers are described by the SLMS representative as follows:

"I know there are agreements happening locally between people who talk to each other and that's great. [...] but for those who may be a little bit more reserved about what we want to do, may be a bit shy ... I hope that we could offer something different. Some of it may just be, [e.g.,] they want to know what the best option would be for them but that's fine."

"I get to the stage where I bring the two parties and I get them down to the table and talk to them. I can be very blunt, not in an aggressive way, but I can ask the difficult questions that probably both of them want to ask, but if they were doing on a one to one basis, could cause tensions."

Interview items	SLMS (Public institution)
What are the key things that build trust	Fairness "Trust is a really big thing in this. [] <u>I'm independent in this, I have no particular</u> one side or the other. I'm there to try and facilitate. So, I have no financial interest in it. I want to hear from both sides. And if I can help, advise how they may both meet their objectives and come together, that's fine for me. [] <u>There's no fixed way</u> <u>but whatever they do it must be fair to both parties</u> ."
with clients?	Confidentiality " anything that is said to me in any conversation with a client is confidential. [] Because if I was to spoil their confidence, then my credibility as an intermediary is not there. That's it. To me, that's important."
What are the advantages SMLS offers compared to direct land transactions?	 Negotiation costs (expert advice) "I know there are agreements happening locally between people who talk to each other and that's great. [] but for those who may be a little bit more reserved about what we want to do, may be a bit shy I hope that we could offer something different. Some of it may just be, [e.g.,] they want to know what the best option would be for them but that's fine. I just want to be able to give advice." Negotiation costs (contract agreement) "I get to the stage where I bring the two parties and I get them down to the table and talk to them. I can be very blunt, not in an aggressive way, but I can ask the difficult questions that probably both of them want to ask, but if they were doing on a one to one basis, could cause tensions. [] And I always say that whatever comes of this, part of the agreement must include an exit strategy for both parties [] nobody
Table 22 Ir	knows what's around the corner. Everybody must know the way out of this." terview results from brokers (SLMS): Information and Trust (Step 3)

 Table 23. Interview results from brokers (SLMS): Information and Trust (Step 3)

Source: Authors' own construction based on interviews.

Notes: Label names (e.g., Fairness, etc.) and underlines are made by the author.

The TFC also values on 'contact and discussion' and acknowledges the role of social relationships in land transactions (Table 24).

The key things required to build trust with clients are described by the TFC representative as follows:

"Yes, [human relationship] absolutely makes a big difference. It comes down to personalities. [...] I think lots of contact between them, lots of discussion, are important so they can build up a relationship. Both parties trying to be reasonable and compromise. That's all it takes really. [...] And if they're not inclined, if they say I'm not interested and just let [the] agent deal with it. I always encourage them to meet whenever they can talk to each other and try and resolve things that way."

As for the advantages of their intermediation scheme, 'negotiation costs' should be reduced particularly in clarifying legal requirements and implementing rent reviews. However, interestingly, the TFC representative also pointed out a disadvantage in employing intermediaries, which is that it sometimes means the parties involved have fewer opportunities to discuss matters with each other and therefore have less time to reach an agreement by themselves. Therefore, it should be noted that the intermediary could help to mitigate negotiation costs, while also encouraging tenants and landlords to meet in-person to discuss and potentially resolve any issues around the proposed land transaction.

Advantages that the TFC offers are described by the TFC representative as follows:

"There are lots of legislation and it's quite complicated sometimes to interpret it. So, the average landowner or tenant doesn't want to go and take a course in how to understand the agricultural law and he employs an agent or at least ask to do it for him. And that's the main reason why there's so much work for agents and solicitors here. [...] So, there is a lot of work for solicitors and land agents in helping to guide the relationship between landlord and tenant."

"Where the landlord and tenant have a good relationship, they sit down over the kitchen table, they talk about things, and they agree. A small rent increasing, fine. But that doesn't happen everywhere, unfortunately. [...] But some landlords just employ an agent to try and get as much money as they can from the tenant for the rent regardless of how much is justified. And, of course, the agent thinks, well, the bigger the rent increase I can get, the more my fee will be, and the more the landlord thinks that I'm a good agent he will employ me again."

Interview items	TFC (Public institution)
What are the key things that build trust with clients?	Contact and discussion "Yes, [human relationship] absolutely makes a big difference. It comes down to <u>personalities</u> . If the landlord is you know, a decent guy who likes to talk to his tenants, and the tenants that are reasonable people everything goes fine, but if one of them is unreasonable then you have a problem. I think <u>lots of contact between</u> them, lots of discussion, are important so they can build up a relationship. Both parties trying to be reasonable and compromise. That's all it takes really. [] And if they're not inclined, if they say I'm not interested and just let [the] agent deal with it. <u>I always encourage them to meet whenever they can talk to each other and try and resolve things that way</u> ."
	Negotiation costs "There are lots of legislation and it's quite complicated sometimes to interpret it. So, the average landowner or tenant doesn't want to go and take a course in how to understand the agricultural law and he employs an agent or at least ask to do it for him. And that's the main reason why there's so much work for agents and solicitors here. [] they're buying the expertise of the agents because the agent knows the law, he probably knows how to negotiate. And the tenants probably are not very good at understanding the law and not very good at negotiating and he thinks his landlord has an agent and a lawyer, so he [as a tenant] better has one too. So, there is a lot of work for solicitors and land agents in helping to guide the relationship between landlord and tenant."
What are the advantages you offer compared to direct land transactions?	Disadvantages "It's because it costs them both lots of money, and it means that the landlord and tenant aren't able to build up a relationship because they're not talking to each other. Talking is all done through their agents when it would be better if the landlord and tenant sat down together and try to agree. So yes, they're often too quick to go to agents and solicitors, rather than trying to resolve it themselves. And, of course, some of the landowners are not actively involved anyway."
	Rent review "Where the landlord and tenant have a good relationship, they sit down over the kitchen table, they talk about things, and they agree. A small rent increasing, fine. But that doesn't happen everywhere, unfortunately. As soon as you get an agent on both sides, then of course the agents have to try to do the best for their clients. One is trying to get the rent down, one is trying to get the rent up and then move back and forwards. It doesn't help the relationship between landlord and tenant. [] But some landlords just employ an agent to try and get as much money as they can from the tenant for the rent regardless of how much is justified. And, of course, the agent thinks, well, the bigger the rent increase I can get, the more my fee will be, and the more the landlord thinks that I'm a good agent he will employ me again."

Table 24 Interview results from brokers (TFC): Information and Trust (Step 3)

Source: Authors' own construction based on interviews. Notes: Label names (e.g., Contact and discussion, etc) and underlines are made by the author.

5.2.4 Institutional goals and network's activity

The network's activities relating to the policy goals identified previously and any gaps between them were examined as follows. The interviewee (a policy maker) recognises that the reduction in the area of tenanted land, in contrast with the policy goal, is due to a mixture of factors including succession between family members. He also suggests that existing relationships between landowners and established tenants could make it hard for new entrants to gain access to land, especially for the longer term. By contrast, SLMS's support and the new "relinquishment and assignation" provision, introduced in 2021, encourages new entrants and younger farmers to apply for tenancies. Thus, the strength of existing networks could be a barrier to achieving policy goals around encouraging wider access to land, while institutional support, such as that offered by the SLMS, offers important support and encouragement to potential new entrants who are not part of the established networks.

Policy goals and instruments described by the policy maker:

"The main theme or target is to actually stop the current trend [...] the actual number of tenant farmers has dropped quite dramatically over 30 odd years now. [...] when they retire or when unfortunately pass away, succession kicks in and it's passed on to the family member. You've also got in the mix of well-established tenants [...] so there's quite a few things that make it hard, and just to say to somebody that's interested in that farm and wants to get start, first step on the ladder is to get themselves a tenancy."

"There is that continued support of the Land Matching Service. It all came out of the new entrants. The EU had a new entrants' scheme and subsidised it, then we had a new entrants' scheme. [...] So in the tenants farm and agricultural holding legislation we've put in some new provisions around relinquishment and assignation, where if they want to assign, they have to assign it to someone new to farming or to someone who's progressing, to someone who's done it already and is moving through step 2, step 3 but certainly".

Additionally, the nature of future agricultural support payments following the UK's exit from the EU and the withdrawal of CAP support will also be important for landlords and tenants. Although the farming sector is likely to have to wait till 2024 to get a clearer picture of the policy package in Scotland, the level of subsidies offered and who is eligible to claim them will be an important factor affecting relationships between tenants and landlords.

Policy goals and instruments described by the policy maker:

"It's conflicting policy initiatives and new pieces of legislation, particularly the one after 2024/2025 which will replace the CAP. If you actually look at tenant farmers and speak to the statisticians, they'll tell you that without subsidies and grants and whatever, a lot of the farms, about 70% - 80%, aren't viable. So, if the policy dramatically changes, they're going

to have a tenant farming sector that's not viable. It's all about going forward and how we replace CAP and what we replace the CAP with."

In either case, whether or not future support for farmers, including new entrants, will be effective depends at least to some extent on how they operate within existing networks. Working closely with stakeholders (e.g., farmers, brokers and landowners) will give policy makers "wee snippets of information" that may help them find ways to make institutional support work more effectively.

Policy makers' working closely with stakeholders were described by the policy maker as follows:

"We went out and spoke to people. You'll get that, we're fortunate enough to have a good relationship with stakeholders and that's organisations and individual tenants themselves. They'll have a reasonably good relationship and they'll give you these wee snippets of information".

It should be noted that high levels of rent encourage more agents to join the network than was the case in the past, which leads existing networks to become more dependent on private brokers and, thus, more complex.

The importance of social relationships was described by the policy maker as follows:

"If you went back 50 years [...] they'd have a reasonable relationship because at that time, the tenant-farmer and landlord relationship was that the landlord provided the land and a bit of capital and the tenant farmer provided the labour and a bit of knowledge. [...] That slightly changed over the years. The biggest thing in the tenant sector is the rent. [...] A lot of the estates now don't have the estate managers running it, so they'll discuss everything and anything with the tenant; but the one thing they actually get the land agent to discuss it is the rent".

Table 25 reflects on some of these points, highlighting the importance of the relationships between tenant farmers and landowners, but also the role played by the agricultural subsidies, particularly from 2024 onwards.

Interview	A
items	Answers
	Policy goals and challenges "The main theme or target is <u>to actually stop the current trend</u> [] the actual number of tenant farmers have dropped quite dramatically over 30 odd years now. [] There's also the normal course [] when they retire or when unfortunately pass away, succession kicks in and <u>it's passed on to the family member. You've also got the tie up. You've also got in the</u> <u>mix of well-established tenants</u> [] so <u>there's quite a few things that make it hard, and just</u> <u>to say to somebody that's interested in that farm and wants to get start, first step on the ladder</u> <u>is to get themselves a tenancy</u> ."
What are the policy goals and instruments?	New entrants support "There is that continued support of the Land Matching Service. It all came out of the new entrants. The EU had a new entrants' scheme and subsidised it, then we had a new entrants' scheme. Again, we're trying to encourage them to sell or offer farms to new entrants or people progressing. So in the tenants farm and agricultural holding legislation we've put in some new provisions around relinquishment and assignation, where if they want to assign, they have to assign it to someone new to farming or to someone who's progressing, to someone who's done it already and is moving through step 2, step 3 but certainly."
	CAP replacement "We got a new administration, but it's the same administration as before. [] it's conflicting policy initiatives and new pieces of legislation, particularly <u>the one after 2024/2025 which</u> <u>will replace the CAP</u> . If you actually look at tenant farmers and speak to the statisticians, they'll tell you that without subsidies and grants and whatever, a lot of the farms, about 70% - 80%, aren't viable. So, <u>if the policy dramatically changes</u> , they're going to have a tenant <u>farming sector that's not viable</u> . It's all about going forward and how we replace CAP and what we replace the CAP with. I've had discussions with NFU when they were looking at Brexit and, <u>it all depends what level the subsidies are at</u> . [] So again, it's quite important what happens, not just now, but in this transition."
Are you working closely to farmers, landowners, and brokers?	"We went out and spoke to people. You'll get that, we're fortunate enough to have a good relationship with stakeholders and that's organisations and individual tenants themselves. They'll have a reasonably good relationship and they'll give you these wee snippets of information".
Do social	Duration of the tenancy "You'll probably find that the good farmers that don't have any problems with the landlord, will probably be offered in most cases a long duration tenancy [LDT]or a medium duration tenancy [MDT], because they've known the tenant for so long and no problems. Where they might give the short duration tenancy [SDT] is to someone who is new to them. So they will give the SDT and if everything is ok, when this comes up for renewal, they will receive a MTD or even a LDT.
relationships matter in the rural land markets?	Rent "If you went back 50 years [] they'd have a reasonable relationship because at that time, the tenant-farmer and landlord relationship was that the landlord provided the land and a bit of capital and the tenant farmer provided the labour and a bit of knowledge. [] That slightly changed over the years. <u>The biggest thing in the tenant sector is the rent</u> . As I was saying back in the 60s and 70s, rents weren't very high. [] A lot of the estates now don't have the estate managers running it, so they'll discuss everything and anything with the tenant; but the one thing they actually get the land agent to discuss it is the rent". Pable 25 Interview results from a policy maker (Part 1)

Table 25. Interview results from a policy maker (Part 1)

Source: Authors' own construction based on interviews.

5.3 Results from Japan

5.3.1 Key actors and their relationships

The profile of farms in the *shuraku* is provided in Table 26. In *Shuraku* Z there are four farms and the largest farm is Farm A, farming 20 ha of land for crops (rice). Although the farmer from Farm A currently has an off-farm job (in construction), he is planning to expand the size of his holding and use more labour, including his son, which should lead to some decrease in his level of involvement in off-farm employment. Farms B, C and D in the same *shuraku* are all around 10 ha crop/livestock farms.

	Shuraku Z			
	Farm A	Farm B	Farm C	Farm D
	Inte	rviewee		
Gender and age	Male, 50-59	-	-	-
	Curren	t business		
Farm type	Crops: Rice	Crops: Rice	Crops: Rice	Crops: Rice Livestock: pigs
Size category	10-100ha	>10ha	10-100ha	10-100ha
Employment	Family + one seasonal worker			
Other income source	Contract farming + Off-farm jobs (<25%)			
	Lan	d area		
(A) Rent from someone else	18 ha (64 parcels)			
(B) Own for their own farm	3 ha (6 + x parcels)			
(C) Rent out to someone else	1 ha (x parcels)			
Farmed area (A)+(B)-(C)	20 ha	7 ha	12-13 ha	10-12 ha
	Table 26. Profile o	f farms in Shi	uraku 7	1

Table 26. Profile of farms in Shuraku Z

Source: Author's own construction based on interviews.

Notes: (*) Other includes for example pensions, social security benefits, investment income.

Figure 14 illustrates the land transactions in and around *Shuraku* Z. There are 44 actors in the network, including five farmers (of which four are in Z), 38 owners (of which 22 are in Z) and four brokers, three of whom are also counted as owners. This typical picture reflects the structures imposed by Post WWII Land Reform, in which most tenants were given small parcels of land to allow them to become owner occupiers. Subsequently, economic growth since the 1970s has encouraged these owners to seek employment outside farming and rent out their land (Table 27 shows the typical profiles of landowners). The ageing population among farmers has increased over time, hence an associated increase in the number of lettings, especially since the 1990s, can be observed. According to a local government officer in the area covering *Shuraku* Z, the structure of land transactions that Farm A is involved in, is highly likely to be applicable

to farmers B, C and D¹⁹, and thus further interviews with B, C, D were deemed to be unnecessary.

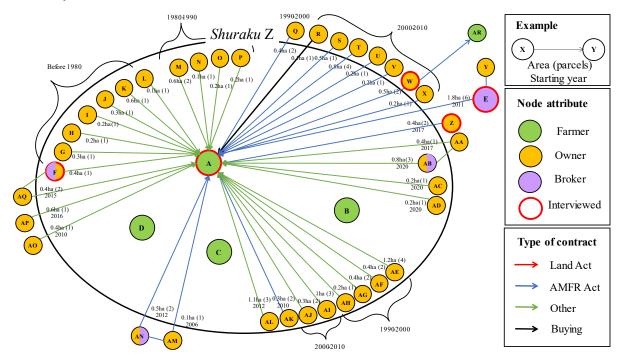


Figure 14. Land transactions in/around the Shuraku Z (Step 1)

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 *shuraku*.

	Shuraku Z and surrounding area		
	Owner F	Owner Z	Owner W
	Inter	viewee	
Gender and age	Male, 80 - 89	Male, 60-69	Female, 60-69
	Current	business	
(Previous) Occupation	Public service until his retirement	Employment (education) actively working	Public service until her retirement
Main income source	Pension	Salary	Pension
Rent	£400/year	£400/year	£800/year
Future plans for the land	Continue to rent	Continue to rent	Continue to rent
Land area			
(A) Rent from someone else	None	None	None
(B) Own for their own farm	None	None	None
(C) Rent out to someone else	0.4 ha (1 parcel)	0.4 ha (1 parcel)	1 ha (3 parcels)

Table 27. Profiles of landowners in/around Shuraku Z

Source: Author's own construction based on interviews.

¹⁹According to a local government officer, direct transactions between farmers and landowners are dominant in this area, and where a landowner owns several parcels of land, he/she is likely to rent them out to the same person. Thus, B, C and D are likely to rent land from roughly 20 different landowners for each farm (given that Farm A rents 20 ha from roughly 40 landowners, a farm sized 10 ha might rent land from 20 different landowners).

When examining the type of tenancy under which Farm A rents 64 parcels of land from 38 landowners, there is evidence that Farm A made most transactions within the *shuraku* before the year 2000, and these are categorised as 'other' suggesting that they were based around informal agreements. By contrast, after 2000, Farm A has made transactions with owners outside of the *shuraku* which are based on the Agricultural Management Framework Reinforcement Act (1993) which required more formal agreements to be made.

The social relationships around these transactions are shown in Figure 15. They are categorised as relatives (4), neighbours (19) and friends/acquaintances (12) and all of them were made on the basis of personal contacts. As for the reasons underlying the personal transactions, almost all were based solely on 'Trust' which strongly supports Granovetter's theory. However, it should be noted that the reason why 'Price' was not chosen can be explained by the fact that the rents were proposed by Farmer A, which reflects the power balance between supply and demand in this case.

Other than these local landowners, three business associates and one officially introduced case are identified, all of whom are from outside Y and were introduced to Farmer A through intermediaries. It is intriguing to see that the three business associates were each introduced by individual brokers (F, AB, AN) through their own personal networks, and 'Location (of the land)' was chosen as the transaction reason by Farmer A. There was only one transaction that relied on Government support, which came from the official/institutional broker E (Agricultural Committee) which acted as an intermediary between Farmer A and Owner Y.

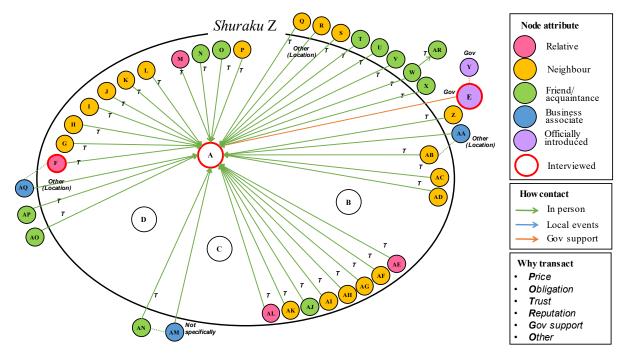


Figure 15. Social relationships around the land transactions (Step 2)

Source: Author's own construction based on interviews.

5.3.2 Brokers bridging information

As already mentioned, three individual brokers (F, AB, AN) and one institutional broker (E: Agricultural Committee) have been identified within the land market being explored. Although the profile of F as a landowner is already shown in Table 27, Table 28 summarises their function as an individual broker, compared to the Agricultural Committee as an institutional broker. One of the notable features of individual brokers is their ability to link actors informally, which means that they do not have to offer a formal intermediary service but can act as informal brokers at the request of their acquaintances. In the case of Broker F, he introduced Farmer A to owner AQ, and information was exchanged through their informal relationship as former classmates.

By contrast, the Agricultural Committee has the specific aim, as a legislative body, of matching people and land in the municipality while working closely with the Farmland Bank. The Committee obtains information on landowners and farmers and on the quality and location of their land, through official registration documents and regular meetings with members. However, it should also be noted that the committee members (i.e., local farmers) also get information through informal channels (e.g., conversations with landowners) in their community.

Broker F (Individual owner)	Broker E: Agriculture Committee (Public institution)
None	Civil services cover the approval for transferring/registering land rights, farmers' pension, disputes, land succession. Farm amalgamation and land patrol have been added as specific roles since 2016.
None	Each municipality has one committee and there were 1,703 committees across Japan in 2018.
Informally being asked by their acquaintance to introduce them to someone who could farm their land.	22 members across four wards (small areas) are assigned by the mayor (*) and work in one municipality, in cooperation with the Farmland Bank
 Process for brokering A and AQ AQ is one of the classmates in the school in the village AQ and A's mother know each other AQ was asked to introduce someone who would be able to farm his land F only made an introduction and was not involved in the contract. 	 Key information Who is going to retire and what is the quality and condition of his/her land? Who is farming the land nearby? Which farms are sustainable with successors or employees? How to obtain it Landowners and farmers look at advertisements in newsletters, leaflets, and their website and come to the office to enquire about the process. Having regular meetings with committee members Street corner conversations with landowners.
	(Individual owner) None None None None Informally being asked by their acquaintance to introduce them to someone who could farm their land. Process for brokering A and AQ • AQ is one of the classmates in the school in the village • AQ and A's mother know each other • AQ was asked to introduce someone who would be able to farm his land • F only made an introduction and was not involved in the

Table 28. Profile of brokers

Source: Authors' own construction based on interviews.

Note: (*) The Mayor of the municipality assigns half of the members from local farmers, avoiding bias in terms of gender and age (Agricultural Committee Act).

5.3.3 Impacts on Transaction Costs and the role of Trust

Within the explored networks in *Shuraku* Z, the relationships between Farmer A and owner W as friends, as well as Farmer A and owner Z as neighbours, are examined. First, Table 29 shows that both Farmer A and owner Z recognise the advantages of direct transactions in simplifying the process of contract implementation. Verbal and unofficial transactions in rural areas are straightforward for both parties.

Advantages in direct transaction are described by Farmer A:

"As you know, a direct contract is simpler when it comes to paperwork."

Advantages in direct transaction are described by Owner Z as follows:

"A direct transaction is simpler, not cumbersome. I would think it's easier for farmers as those transactions aren't official. [...] They're verbal. Besides that, farmers could keep it between themselves, so it might be easier for them, [...] So when done under the table, we just say "Can you please?" "Okay" then it's done in rural areas. That's why I said it's easier."

In contrast, Farmer A finds that intermediated transactions offer advantages in searching for land, while owners mentioned the advantages they have for finding people to whom they can rent their land. However, it should be noted that the intermediation referred to by Owner Z is more formal, while Owner W describes more informal and personal connections. Additionally, mitigating negotiation costs for conflict resolution was also noted to be an advantage of intermediated transactions by Owner Z.

The advantages in intermediated transaction are described by Farmer A:

"An advantage is that you will find out which land is available, which you wouldn't have known unless you go through a place like that."

Advantages in intermediated transaction are described by Owners W and Z as follows:

"I would feel no obligation from a place such as Shuraku Y or Z. You see, it doesn't matter if they come from other areas or who comes. In that sense, shall I say, it's more likely you find someone from a broader pool of farmers." (Z)

"I don't know about other people but for me, just like my dad, I get a hunch, perhaps this is the person. Before going there directly, I would ask people I know, do you know anyone who can farm my land? If they reply, "He/She will probably be able to do it", then I would go and talk to him/her. If I feel "He/She can do it", and furthermore if I feel "I can trust this person to farm my land", then I will decide on that person. That's how I try to find someone." (W)

"Since it's a referral, you can complain to the referral agency that the farmer should work harder if they don't. I was considering using the Farmland Bank. [...] No one likes to be turned down, right? You make an offer, but the farmer says, "I don't want to do it", then, well, you would feel bad, right? So, I would think it's a fairly good system if you can just give it to the third party and they will find someone for you." (Z)

Although these advantages of intermediation are well recognised by both parties, it seems that both farmers and landowners prefer direct transactions that have fewer 'implementation costs'.

Trada and a sec	Farmer A	Owners W and Z	
Interview items	What are the advantages of direct land transaction and of intermediated land transactions?		
Direct transactions	Implementation costs "As you know, <u>a direct contract is</u> <u>simpler when it comes to</u> <u>paperwork</u> ."	Implementation costs "A direct transaction is simpler, not <u>cumbersome</u> . I would think <u>it's easier for</u> <u>farmers as those transactions aren't official</u> . [] <u>It's verbal</u> . Besides that, farmers could keep it between them, so it might be easier for them, [] So when done under the table, <u>we</u> just say "Can you please?" "Okay" then it's <u>done</u> in rural areas. That's why I said it's easier". (Owner Z)	
Intermediated transactions	Search costs (land) "An advantage is that <u>you will find</u> <u>out which land is available, which</u> <u>you wouldn't have known unless</u> <u>you go through a place like that"</u> .	 Search costs (people) "I would feel no obligation from a place such as <i>Shuraku</i> Y or Z. You see, it doesn't matter if they come from other areas or who comes. In that sense, shall I say, <u>it's more likely you find someone from a broader pool of farmers.</u>" (Z) "I don't know about other people but for me, just like my dad, I get a hunch, perhaps this is the person. Before going there directly, I would ask people I know, do you know anyone who can farm my land? If they reply, "He/She will probably be able to do it", then I would go and talk to him/her. If I feel "He/She can do it", and furthermore if I feel "I can trust this person to farm my land", then I will decide on that person. That's how I try to find someone." (W) Negotiation costs (conflict resolution) "Since it's a referral, you can complain to the referral agency that the farmer should work harder if they don't. I was considering using the Farmland Bank. [] No one likes to be turned down, right? You make an offer, but the farmer says, "I don't want to do it", then, well, you would feel bad, right? So, I would think it's a fairly good system if you can just give it to the third party and they will find someone for you." (Z) 	

 Table 29. Interview results: Advantages in transactions (Step 3-Z)

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

When looking at the trust among farmers and landowners in Table 30, the quotes from Farmer A and owner W show that trust based on a mutual relationship between the parties leads to a secure transaction. Furthermore, trust affects farmers' behaviour and has a positive impact on their reputation among landowners.

The role of Trust is described by Farmer A below:

"Since I'm renting it, I want to farm it well. Landowners are watching how their land is farmed. They watch when they pass by their own land. [...] it works both ways, so if we, renters, farm the land, say, as neatly and carefully as possible, then the landowners would probably feel, "I want to rent my land to him/her". I believe this is most important because it ultimately comes down to a relationship between one person to another".

The role of Trust is described by Owners W and Z:

"Looking ahead, someone who will be able to work for a long time is preferable. Like someone who has passion, who wishes to expand the land would work hard. This is what's called trust, I guess. Reputation, probably". (Z)

"A trusting relationship would fall apart even when one thing goes wrong. When I rent my land, I look at the person, feeling comfortable renting my land to him/her. [...] so when he delivers rice to me to pay rent this year again, I make sure to thank him for his hard labour by saying "I'm grateful that you farmed my land again this year."" (W)

However, the importance of personal relationships around land transactions was not referred to when it comes to institutional support. Farmer A argues that, while Government support will be needed more in the future, to deal with the potential increase in abandoned land, informal processes are dominant in the community at present, underpinned by different mechanisms to those which formal institutions would offer.

The role of Government support is described by Farmer A as follows:

"I haven't really used them. I would expect more of their involvement in the future when there will probably be lots of abandoned land. Then local authorities and those places will start taking action".

Interview	Farmer A	Owners W and Z
items	Do trust and/or government support make land transactions easier or more difficult for you?	
Trust	Reciprocal relationship "Since I'm renting it, <u>I want to farm it</u> well. Landowners are watching how their land is farmed. They watch when they pass by their own land. <u>They are</u> happy to see their land is being farmed. [] I believe that's the case, it works both ways, so <u>if we</u> , renters, farm the land, say, as neatly and carefully as possible, then the landowners would probably feel, "I want to rent my land to <u>him/her</u> ". I believe this is most important <u>because it ultimately comes</u> <u>down to a relationship between one</u> person to another."	Reputation "Looking ahead, someone who will be able to work for a long time is preferable. Like someone who has passion, who wishes to expand the land would work hard. This is what's called trust, I guess. Reputation, probably." (Z) Reciprocal relationship "He looks like a nice person, and he works diligently. He promptly brings rice to me as his rent, so I want him to farm my land with no worries. [] <u>A trusting relationship</u> would fall apart even when one thing goes wrong. When I rent my land, I look at the person, feeling comfortable renting my land to him/her. If I feel comfortable, <u>I will think</u> that he/she would also reciprocate my feelings. I believe that if I feel worried, he/she would also be worried. I feel comfortable, so when he delivers rice to me to pay rent this year again, <u>I make sure to</u> thank him for his hard labour by saying "I'm grateful that you farmed my land again this year. Thanks to you, we can enjoy your delicious rice." (W)
Government support	Abandoned land "I haven't really used them. I would expect more of their involvement in the future when there will probably be lots of abandoned land. Then local authorities and those places will start taking action."	N/A

 Table 30. Interview results: Trust and institutional support (Step 3-Z)

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

Individual brokers and the Agricultural Committee

When asking individual brokers about building trust (Table 31), Broker F, described the factors that made him personally choose Farmer A as being the 'diligence' and 'youth' of the farmer, which are consistent with the answers in Table 29Table 30.

Key things to build trust with clients are described by Broker F below:

"I first rented my land to A and then 2-3 years later I referred AQ to A. [...] I felt Farmer A, rather than other farmers, would be the right one (for AQ). No one but Farmer A came to

my mind. [...] Yeah, I felt he would be the one since he's diligent in farming our land. [...] And also, you know, unless the renter is diligent, I wouldn't be able to trust or refer him/her to anyone".

"Farmer A is young, so he will be able to farm for a while, but I'm not sure about other farmers. There are other ones farming rice in Y, but Farmer A is the youngest, so he should be able to farm for a while."

In contrast, the answers from the Agricultural Committee tend to reflect the power balance of supply and demand in the land markets, where farmers can choose the land with 'better infrastructure' from a range of options offered by landowners, whereas landowners generally have to accept any offers to farm their land otherwise it would be abandoned.

Key things to build trust with clients are described by Broker E (Agricultural Committee) as follows:

"If possible, I would bring it up with the person who farms the nearby field that needs to be rented. Otherwise, the fields would be too scattered. [...] so first I would speak to the landowner. I would say, "Your field will be rented to this farmer because he/she is already farming here". Yeah, I go to talk to the landowner then now they wouldn't object. [...] Otherwise the land would go desolate. I wouldn't really insist on it but these days they would agree with me as they would need their land to be farmed."

"The Committee members in the district would try to find farmers for them. But even when we bring up the land to some farmers, refer the land to them, they go "no", they wouldn't want to rent it if the land condition is bad. So, I believe infrastructure for land must be improved for that land. [...] so I wish more public grants, etc. were available for improving land infrastructure."

This finding highlights the contrasting characteristics of the two different channels: the personal social relationship matters in informal channels mediated by the individual broker, while economic priorities matter more in the formal channels mediated by the institutional broker.

When examining the advantages offered by brokers, the findings suggest that some people will approach individual brokers (their acquaintances) before considering going to an institutional broker. In contrast, the Agriculture Committee representative argued that the official institution may be better placed to resolve conflicts between parties, which can be

categorised as mitigating 'Negotiation costs'. This advantage was also noted by owner Z, who suggested that an intermediated approach could help to prevent arguments between participants (Table 29).

Advantages Agricultural Committee offers described by Broker E:

"It's normal to experience things like difficulties in leasing land. So, I would tell them "In case you encounter difficulties in leasing your land, we will sort it out for you. You will encounter no problems. You will be safe to rent your land through us." But those who had issues in the past would go, "No way." But these days, the number of farmers has declined, so farmland has naturally been consolidated to existing farmers."

Unolson L'	Drokon E. A grigulture Committee
Broker F	Broker E: Agriculture Committee
	(Public institution)
 Diligence "I first rented my land to A and then 2-3 years later I referred AQ to A. [] I felt Farmer A, rather than other farmers, would be the right one (for AQ). No one but Farmer A came to my mind. [] Yeah, I felt he would be the one since he's diligent in farming our land. [] Since I was asked, I referred Farmer A to AQ, but I cannot just refer anyone to others. And also, you know, unless the renter is diligent, I wouldn't be able to trust or refer him/her to anyone." Youth "Farmer A is young, so he will be able to farm for a while, but I'm not sure about other farmers. There are other ones farming rice in Y, but Farmer A is the youngest, so he 	Landowners' agreements "If possible, I would bring it up with the person who farms the nearby field that needs to be rented. Otherwise, the fields would be too scattered. [] For that, so first I would speak to the landowner. I would say, "Your field will be rented to this farmer because he/she is already farming here". Yeah, I go to talk to the landowner then now they wouldn't object. They would say, "By all means. Feel free to do whatever you like" [] Otherwise the land would go desolate. I wouldn't really insist on it but these days they would agree with me as they would need their land to be farmed." Better infrastructure for farmers "The Committee members in the district would try to find farmers for them. But even when we bring up the land to some farmers, refer the land to them, they go "no", they wouldn't want to rent it if the land condition is bad. So, I believe infrastructure for land must be improved for that
	<u>land</u> . [] so I wish more public grants, etc. were available for improving land infrastructure".
	Negotiation costs (conflict resolution) "It's normal to experience things like difficulties in leasing land. So, I would tell them <u>"In case</u> you encounter difficulties in leasing your land, we will sort it out for you. You will encounter no problems. You will be safe to rent your land through us." But those who had issues in the past would go, "No way." But these days, the number of farmers has declined, so farmland has naturally been consolidated to existing farmers".
	(Individual owner) Diligence "I first rented my land to A and then 2-3 years later I referred AQ to A. [] <u>I felt Farmer A, rather than</u> other farmers, would be the right one (for AQ). No one but Farmer <u>A came to my mind.</u> [] Yeah, I felt he would be the one since <u>he's</u> diligent in farming our land. [] Since I was asked, I referred Farmer A to AQ, but I cannot just refer anyone to others. And also, you know, unless the renter is diligent, I wouldn't be able to trust or refer him/her to anyone." Youth "Farmer A is young, so he will be able to farm for a while, but I'm not sure about other farmers. There are other ones farming rice in Y, but

Table 31. Interview results from brokers: Information and Trust (Step 3)

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

5.3.4 Institutional goals and network activity

As already discussed in section 2.3.2, Farmland Banks aim to increase the land consolidation rate to 80% by 2023. According to the interviewee (with a policy maker) (Table 32), a review associated with the amendment of the Agriculture Act was completed in 2019 in order to achieve the 80% target, so that Farmland Banks can better reflect the voice of local actors when liaising with organisations such as the Agricultural Committees.

Policy goals and instruments were described by the policy maker:

"So, our policy to consolidate farmland mainly through Farmland Banks has not changed,[but], Farmland Banks function at the prefectural level, so they are a long way from the field. So, a Bank should ensure it works with the Agricultural Cooperatives, municipalities, Agricultural Committees, and other municipal organisations, thereby linking them to the stakeholders and the Farmland Plan. [...] It ensures that the voices of people working in the sector will be communicated to the Bank through the Bank's close working relationship with actors in the sector as well as with the Agricultural Cooperative."

This policy has been introduced in the context of both declining and aging rural populations (see also 2.2.1) with the lack of new entrants into farming, making policy makers rethink their ideas about the definition of "core farmers²⁰".

Policy goals and instruments were described the policy maker as follows:

"The biggest issue is, ultimately the people, as the number of farmers is decreasing, and they are ageing. No new entrants and, agriculture, as you know, is facing difficulties, see, it's low profit. [...] Regarding that, how do we consolidate farmland in those cases? [...] we can discuss and decide who will farm the land at the local community level based on the stakeholders and Farmland Plan, not at the state level. This is the main idea, but I don't know how it will turn out yet. So, we are discussing whether local people should be able to take things forward rather than being decided by the state".

However, there is a clear gap between the informal processes adopted across social networks and the formal processes based around institutional brokers. Differences in attitudes between farmers and Government institutions are reflected in comments such as "Ultimately farmers in the field don't believe they need to consolidate land. They feel the current situation would do."

²⁰Core farmers are defined as those who are categorised as either (1), (2), (3) or (4).

⁽¹⁾ Certificated farmers: farmers who are certified by municipal governments on their management plan, based on Agricultural Management Reinforcement Act article 12.

⁽²⁾ Certificated new farmers: farmers who are certified by municipal governments on their new engagement plan, based on Agricultural Management Reinforcement Act article 14.

⁽³⁾ Municipal plan standard farmers: farmers who meet the standards set in municipal plans, including farm size, production methods and management methods.

⁽⁴⁾ Community-Based Farm Cooperatives: farm cooperatives consist of farming households in certain regions that have developed a relationship through the local community or other geographical bases. In these cooperatives, farming households conduct agricultural production as a collaborative enterprise.

or "Land consolidation is already proceeding (via under-the-table agreements) on its own. It's just that it doesn't show up in the official figures because it's done under the table."

Policy makers' working closely with stakeholders described by the policy maker:

"Before Covid, especially when we started to discuss a new bill, the staff at relevant divisions used to travel to five or six places a month to exchange views with municipalities, Agricultural Committees, and farmers. [...] Most of the time I asked them about the reasons why farmland consolidation is not happening and what measures could be taken to encourage it. The most common reply is "Ultimately farmers in the field don't believe they need to consolidate land. They feel the current situation would do." A lot of people also say that "Land consolidation is already proceeding (via under-the-table agreements) on its own. It's just that it doesn't show up in the official figures because it's done under the table."

Policy makers attempt to improve land consolidation and argue that building trust in the Banks will be the key to ensuring that the scheme is better utilised in the future where there will be more land available from aging and retiring farmers, which might otherwise be abandoned.

The importance of social relationships is described by the policy maker:

"The five year-review of the Farmland Bank Act indeed revealed the fact that farmland lease decisions are made within the community. It also re-evaluated the importance of community effort, that is an effort through thorough discussions in the community; [...] Nonetheless, farmland is still private property, ..., while land is leased on the basis of "trust", [but] their trust in the Farmland Bank is not quite there yet, so I can't say that it has been successful".

Interview items	Answers
What are the policy goals and instruments?	 Policy goals and challenges "So, our policy to consolidate farmland mainly through Farmland Banks has not changed, so we are still thinking how this can be achieved mainly through the Farmland Bank. [][but], Farmland Banks function at the prefectural level, so they are a long way from the field. So, a Bank should ensure it works with the Agricultural Cooperatives, municipalities, Agricultural Committees, and other municipal organisations, thereby linking them to the stakeholders and the Farmland Plan. This review addresses the need to consolidate banks and the Plan, by prioritising mutual understanding in the field and bringing this understanding back to the Bank. It ensures that the voices of people working in the sector will be communicated to the Bank through the Bank's close working relationship with actors in the sector as well as with the Agricultural Cooperative. Such is this review, I feel. Who farms the land? "The biggest issue is, ultimately the people, as the number of farmers is decreasing, and they are ageing. No new entrants and, agriculture, as you know, is facing difficulties, see, it's low profit. While we see no newcomers, no matter what and how [] you produce, the number of those who rent out the land, and those who are entrusted with the land is in decline, so there's nothing we can do about that. [] There aren't renters, and even if there are, they are indeed elderly and cannot be core farmers []. Regarding that, how do we consolidate farmland in those cases? <u>There's been a question about whether the "core farmers" who are currently farming are really sufficient? It's like we should take another look at this, [] we can discuss and decide who will farm the land at the local community level based on the stakeholders and Farmland Plan, not at the state level. This is the main idea, but I don't know how it will</u>
Are you working closely to farmers, landowners, and brokers?	turn out yet. So, we are discussing whether local people should be able to take things forward rather than being decided by the state". "Before Covid, especially when we started to discuss a new bill, the staff at relevant divisions used to travel to five or six places a month to exchange views with municipalities, Agricultural Committees, and farmers. During these visits, I would indirectly share with them a rough idea of the direction we were considering, and asked them how they felt about it. [] Most of the time I asked them about the reasons why farmland consolidation is not happening and what measures could be taken to encourage it. The most common reply is "Ultimately farmers in the field don't believe they need to consolidate land. They feel the current situation would do." A lot of people also say that "Land consolidation is already proceeding (via under-the-table agreements) on its own. It's just that it doesn't show up in the official figures because it's done under the table. The latter applies more to situations with good land conditions where actual land consolidation is happening through farmers' own efforts, whereas the former applies to situations with poor land conditions. It makes me feel helpless as it is difficult to improve the situation through implementing policies".
Do social relationships matter in the rural land markets?	Informal process in local community "The five year-review of the Farmland Bank Act indeed revealed the fact that farmland lease decisions are made within the community. It also re-evaluated the importance of community effort, that is an effort through thorough discussions in the community; they are trying to transform the current leases, implemented privately and sporadically, into public and collective leases as far as possible. Nonetheless, farmland is still private property,, while land is leased on the basis of "trust", [but] their trust in the Farmland Bank is not quite there yet, so I can't say that it has been successful". Table 32. Interview results from a policy maker (Part 1)

Source: Authors' own construction based on interviews.

5.4 Comparison Between the Two Countries

5.4.1 Differences and similarities

There are some differences and similarities between the findings in Scotland and those in Japan, and these are summarised in Table 33.

Specific questions	Differences	Similarities
1. Key actors and their relationships:	 Large difference in the number of actors involved in the land market. Land transactions happen among farmers in Scotland, whereas they occur 	 Land transactions happen among relatives, neighbours and friends in/around the local parish and <i>shuraku</i>. Most land transactions are made through
Figure 10-13 for Scotland Figure 14, 15 for Japan)	between farmers and landowners (who do not farm themselves) in Japan.	 Regarding the reasons for transactions, "Trust" is chosen in both countries.
ioi Japan)	• Reasons for transactions: "Price" is often important in Scotland whereas this is not often the reason in Japan.	Trust is chosen in both countries.
2. Brokers	• There are private agents in Scotland whereas Japan has no such agents but instead there are individual brokers.	• Where the broker is an organisation, they share information among colleagues or other organisations across wider geographical areas.
bridging information: Table 17, 18 for Scotland	• SLMS works more independently to build trust than does the Agricultural Committee in Japan which deals with high supply and attempts to prevent	• The public institutions in both countries function similarly and aim to match people and land.
Table28forJapan	land abandonment.	• Although their scale is different, private agents in Scotland and individual owners in Japan are both working in tightly knit communities, building close relationships with farmers and landowners.
3. Impacts on the transaction costs and the role of Trust:	 Scottish private agents can reduce search costs and verification costs, through gaining trust and reputation. Individual brokers in Japan do not 	• Farmers and owners find that direct transactions offer advantages in mitigating implementation costs as well as recognising that intermediated transactions have advantages in reducing search costs.
Table 19-24 forScotlandTable 29-31 forJapan	make visible contributions to transaction costs but they are embedded in informal process based on trust with the sense of reciprocity.	• The SLMS, TFC and the Agricultural Committee contribute to mitigating negotiation costs.
4. Institutional goals and	• The focus in Scotland is how to increase access to land to a greater number of new entrants, while the problem in Japan is dealing with an	• Both governments amended existing legislation to support the work of institutions, such as the SLMS and Farmland Banks.
network's activities: Table 25 for Scotland Table 32 for Japan	increased supply of land following ageing and retiring farmers with few new entrants looking for land.	• The target of the institution's activities (as an active farmer/core farmer) matters in achieving their goals.
		• Policy makers in both countries appreciate the importance of human relationships in land markets and make efforts to engage with stakeholders.

Source: Authors' own construction based on interviews.

1. Key actors and their relationships

When examining the differences between the two countries, there is a large difference in the numbers of actors involved in the land markets studied, with approximately 10 actors in the Scottish case and more than 40 actors in the Japanese case. One of the reasons for this is the difference in the size of the land parcels and holdings being exchanged²¹ to help farmers to achieve economies of scale. The smaller the land parcels transacted, the more actors need to be involved.

It should also be noted that land transactions happen mostly among farmers in Scotland, compared with Japan where land is transacted between farmers and landowners who do not farm themselves. This is due to the withdrawal of many landowners from farming in Japan. However, if future changes in the Scottish agricultural sector (e.g., changing population demographics or subsidy packages.) lead farmers to withdraw from the sector, the picture could turn into something more like the Japanese case.

Despite these differences, there are similarities in the nature of land markets where land is transacted mainly among relatives, neighbours and friends in and around the local community through direct personal contacts. Also, "Trust" is chosen as one of the main reasons underlying land transactions in both countries, although it is selected more often in Japan than in Scotland, where "Price" is also important. This might reflect the imbalance of supply and demand in Japanese land markets where farmers rather than landowners tend to set prices due to the lack of alternative buyers or renters.

2. Brokers bridging information

Regarding brokers in rural land markets, there are similarities in the function of public institutions (such as the SLMS and TFC in Scotland and the Agricultural Committee in Japan) but also notable differences in the types of private broker operating in each country (private agents working for large organisations in Scotland and individual land owners in Japan). Brokers working for commercial organisations or Government institutions have connections across a wide area enabling them to share more information and to match more people and land.

When it comes to the role of official institutions, the SLMS works with both parties in the land transaction to come to an agreement, compared to the Agricultural Committee in Japan which first obtains agreement from landowners and then offers the land to farmers who can

²¹Although it depends on farm types, according to the research results, only one or two parcels of land in Scotland may be needed to increase a farm by 20 ha, whereas in Japan this could require 40 or 50 small parcels. As we have already seen in Chapter 2, the different sizes of land parcels being transacted could reflect the historical and geographical differences between European and Asian countries.

offer the best infrastructure. This is largely affected by the imbalance of supply and demand in Japanese rural land markets.

By contrast, in spite of the considerable differences in their forms and scale, private agents in Scotland and individual owners in Japan both work in tightly knit communities, building close relationships with farmers and landowners to obtain information about the land. Therefore, they can be seen as an essential part of existing social networks, and the importance of their roles in land markets is likely to increase in the future.

3. Impacts on Transaction Costs and the role of Trust

When looking at the impacts of transaction costs, farmers and landowners in both countries find that direct transactions can reduce implementation costs, making the transaction process simpler. As for intermediated transactions, both parties find that they can reduce search costs for both land and people. As intermediaries, large private agents contribute to reducing transaction costs in Scotland, and often enjoy a good reputation and trust in the community. By contrast, individual brokers in Japan do not have a visible impact on transaction costs. However, their unique characteristics, embedded in informal processes based on trust and reputation with a sense of reciprocity, should not be ignored. This informal and personal approach has allowed Japanese rural land markets to work independently from governmental institutions.

Regarding official institutions, such as the SLMS and TFC in Scotland and the Agricultural Committee in Japan, these could contribute to reducing negotiation costs by functioning as an independent intermediary between parties. Thus, this could be considered as one of the common roles of government institutions in rural land transactions.

4. Gaps between networks and institutions

The governments in both countries address the issues raised from a different context, i.e., in Scotland the demand is higher than supply in rural land markets and increased access to land for new entrants is a goal. By comparison, in Japan large numbers of older and retiring farmers have led to an excess supply in land markets and there are relatively few new entrants looking for land. However, many similarities have been found when examining the gaps between the activities of existing social networks and the goals of government institutions.

First, both the Scottish and Japanese governments have amended relevant legislation (i.e., in the Land Reform Acts in Scotland to include a new relinquishment and assignation provision, and in Japan the Farmland Bank Act requires banks to liaise more with the Agricultural Committee). In the longer term, the level and focus of agricultural subsidies could be important to encourage land transactions in rural areas. Second, but crucially, policy makers understand the importance of human relationships in rural land markets and engage with stakeholders such as farmers, landowners and relevant organisations including brokers. Government involvement in, and interaction with, existing social networks in rural land markets could make an important contribution to bridging the existing gaps.

5.4.2 Transferable characteristics

To compare the results more broadly across the two countries, interviews were conducted with academic experts in Scotland and Japan (Table 34). Before the interviews, the author shared her results (diagrams) for both countries by screen share on Teams/Zooms and asked about their broader applicability and implications.

In comparing these results to other regions in the Scotland, the Scotlish expert suggested that there could be less intermediated cases in other regions where there are fewer large estates.

Potential application of these results to other regions is discussed by the Scottish expert below: "In the borders you're dealing with larger estates and those estates will have Factors [...] that then mean that sometimes farmers will go through those routes, or deal with them more often, compared with other areas where there are less estates or large estates ownership."

The Japanese expert pointed out that there could be more intermediation by public institutions, such as the Agricultural Committee, in Hokkaido, (the northernmost of Japan's main islands) although the findings could be applicable across Japan. Therefore, the findings of this research could be applied to other regions, subject to some variation in the level of intermediation by private agents and public institutions.

Potential application of these results to the other region was described by the Japanese expert: "There is no discrepancy between the findings of these numerous field studies and the research results in this shuraku, thus it represents that perfectly. This is true, in particular, in the Kanto area, and it is almost perfectly valid in other areas as well. I believe it's applicable everywhere in Japan. Hokkaido is the only region where the farmland transactions are slightly different. It has a little, slightly public, I'm not sure if we can call them public, but it has some unique mechanisms in land transactions where the Agricultural Committee functions as something like a regional community and the Agricultural Cooperative intervenes in the land transactions, among others." When it comes to the implications for the other country, the Scottish expert focused on the small size of land parcels and the dispersion of land as features of Japanese rural land markets. However, he suggested that Aberdeenshire has a similar structure with a larger number of small farms. Moreover, he pointed out that this is a common problem in other EU countries (e.g., Spain and Greece) and even in other parts of the UK, where there are dispersed and small sized parcels of land due to holdings being shared across a number of successors or the need to distribute livestock across different land parcels in order to reduce risks of disease spreading across the whole herd (a measure specifically applied following the outbreak of Foot and Mouth disease in 2001). As already noted, it is likely that as land parcels get smaller, more actors will become involved in land transactions.

Implications of this research for the Japanese case are discussed by the Scottish expert below: "I think it's going to come back into Scottish governments' minds if it's 20 years since footand-mouth disease and when you have lots of disparate units. [...] quite a lot of the EU countries have a very similar process and it's to do with hereditary rights and families. In Scotland and the UK it's tended for centuries to go to the eldest son where in more modern ways of thinking it's split between family members which then means land is always getting smaller and smaller. [...] Spanish and the Greeks, [...] they were specifically looking at could there be a re-bargaining, a re-alignment. [...] It's a common problem. [...] It will probably make more in Aberdeenshire because there are more small holdings."

The Japanese expert focused on the role of human relationships in Scottish rural land markets. He emphasised how trust, reputation and personal relationships continue to matter even where there are opposing economic considerations, such as the need to achieve economies of scale. Therefore, it was argued that sociological aspects should also be taken into account in designing land policy.

Implications of this research for the Scottish case are discussed by the Japanese expert as follows:

"We tend to think that Japan is an extremely unique society, that farmland transactions in Japan are extremely unique, but having heard the situation in Scotland, it strongly suggests that human relation issues in rural areas cannot be ignored, [...] I personally feel that the Scottish case strongly suggests that indeed Japan must consider policy instruments reflecting the social relations aspect in addition to the economic mechanism."

Interview items	Answered by a Scottish expert	Answered by a Japanese expert
Is the result applicable for other regions?	"In the borders you're dealing with larger estates and those estates will have Factors [] that then mean that sometimes farmers will go through those routes, or deal with them more often, compared with other areas where there are less estates or large estates ownership."	"We have done more field research. There is no discrepancy between the findings of these numerous field studies and the research results in this <i>shuraku</i> , thus it represents that perfectly. This is true, in particular, in the Kanto area, and it is almost perfectly valid in other areas as well. <u>I believe it's applicable everywhere in Japan. Hokkaido is the only region where the farmland transactions are slightly different. It has a little, slightly public, I'm not sure if we can call them public, but it has some unique mechanisms in land transactions where the Agricultural Committee functions as something like a regional community and the Agricultural Cooperative intervenes in the land transactions, among others."</u>
Any implications from Scottish/Jap anese cases?	"I think it's going to come back into Scottish governments' minds if it's 20 years since foot-and-mouth disease and when you have lots of disparate units. I wonder if that's an issue that farmers in Japan or the authorities in Japan have ever thought about. Farms that are working in multiple areas, multiple farms in multiple locations [] quite a lot of the EU countries have a very similar process and it's to do with hereditary rights and families. In Scotland and the UK it's tended for centuries to go to the eldest son where in more modern ways of thinking it's split between family members which then means land is always getting smaller and smaller. [] Spanish and the Greeks, [] they were specifically looking at could there be a re-bargaining, a re- alignment, so you could pull land back and give it to someone else. I think they worked out that it was going to be far too difficult. It's a common problem. [] It will probably make more in Aberdeenshire because there are more small holdings."	"Even in areas such as Scotland where it has large-scale farms, rent is definitely a key factor, but <u>rent is not</u> <u>the only factor that drives farmland</u> <u>transactions. Farmland is transacted</u> <u>by various factors such as trust,</u> <u>reputation, and personal</u> <u>relationships.</u> [] we tend to think that Japan is an extremely unique society, that farmland transactions in Japan are extremely unique, but having heard the situation in Scotland, it strongly suggests that <u>human relation issues in rural areas</u> <u>cannot be ignored,, it is not that</u> <u>an abstract market exists where</u> <u>things are just traded—this is not</u> <u>always the case, at least with land</u> . If that is the case, I personally feel that the Scottish case strongly suggests that indeed Japan must consider policy instruments reflecting the social relations aspect in addition to the economic mechanism."

 Table 34. Interview results from academic experts (Part 2)

Source: Authors' own construction based on interviews.

5.5 Summary

This chapter reported findings from the interviews with farmers, landowners, brokers, government organisations as well as policy makers and academic experts. The results were analysed by each specific question as follows.

For the first question (Key actors and their relationship in/around rural land markets), Figure 10 and Figure 12 illustrated the land transactions in/around the Parish X and Y in Scotland, as well as Figure 14 showed those in *Shuraku* Z, followed by Figure 11, Figure 13, and Figure 15 for the social relationships around the land transactions in each parish and *shuraku*. The results suggested that land is transacted mainly among relatives, neighbours and friends in and around the local community through direct personal contacts, and trust is one of the key reasons for the transactions, even though there are large differences in the numbers of actors involved and the size of holdings being transacted.

For the second question (the function of intermediaries brokering land information), there is a private agent in Parish X (Table 17) and a public institution (SLMS) working across Scotland (Table 18), whereas various individuals, acting informally, and the Agricultural Committee work as brokers in *Shuraku* Z (Table 28). Despite the differences in forms and scale, private agents in Scotland and individual brokers in Japan are tend to operate in tight, integrated communities, building close relationships with farmers and landowners. The SLMS in Scotland and the Agriculture Committee in Japan also work towards the same aim of matching people and land in different contexts. Where the broker is an organisation, they obtain information from field visits and share it among colleagues or other organisations across a wider geographical area.

For the third question (the impacts on transaction costs and the role of trust), Table 19 to Table 22 reported the views of both farmers and brokers in Scotland, and Table 29 and Table 30 focused on the views of farmers and landowners in Japan. Direct transactions are considered to reduce implementation costs, whereas intermediated transactions have advantages in terms of reducing search costs. There is a large difference in the form of non-government intermediation in both countries, in which large private agents contribute to reducing search costs in Scotland, whereas individual brokers in Japan work more informally and do not have direct impacts on transaction costs. However, both are rooted in the community and function based on trust and reputation. Regarding official institutions, such as the SLMS and TFC in Scotland (Table 23 and Table 24) and the Agricultural Committee in Japan (Table 31), these could contribute to reducing negotiation costs by functioning as independent intermediaries between parties.

For the fourth question (Gaps between the institutional goals and activities of social networks), Table 25 and Table 32 showed results of interviews with policy makers in Scotland and Japan, respectively. Both governments appreciate the importance of human relationships in rural land markets and the need to work with stakeholders. Institutional interaction with existing social networks in rural land markets could be key to bridging these gaps.

The results in both countries were compared in Table 33, followed by interview results from two academic experts (Table 34), which leads to a conclusion about the generality and specificity of land transactions in rural land markets. Particularly, analysis of questions 1, 2 and 3 enable us to better understand the nature and the practice of networks and institutions (RQ1), while the examination of question 4 helps us to draw policy lessons and recommendations (RQ2). Based on the results reported in this chapter, discussion regarding more practical topics around land transactions in rural areas is presented in Chapter 6.

Chapter 6. Discussion

6.1 Introduction

The research results reported in chapter 5 raise a variety of discussion points around the practice of land transactions in Japan and Scotland. This chapter connects those results to the research questions posed earlier. The discussion of RQ1 (How do social networks and government institutions work in rural land markets?) should be drawn from answers to the specific questions RQ1-1 (key actors and their relationship in and around rural land markets), RQ1-2 (the function of intermediaries brokering land information), and RQ1-3 (the broker's contribution to changing the transaction costs, and the role of trust in the transactions) are presented in Section 2 as follows. First, the tight connections of existing social networks will be discussed as one of the key features of land markets in relation to NES theory. Next, the role of brokers in existing networks will be discussed, with the concept of the "Trusted broker" proposed. Their functions are discussed along with their impacts on transaction costs. Thirdly, NIE theory will be contrasted with NES theory in order to examine government interventions in the context of a land market firmly embedded in the community. Here, the institution could be described as a construct isolated from the existing network.

Next, the discussion will move to RQ2 (What challenges and lessons for ongoing land reform and policy can be drawn from this study?) in Section 3. The answer should be drawn from the analysis of RQ2-1 (differences between institutional goals and the activities of social networks) and RQ2-2 (how should they be reconciled?) and by examining the concept of "Institutional trust". How to involve institutions in networks will be a key lesson learned from the case studies, which will lead to policy recommendations focusing on government support for new entrants in the land market. This is one of the most important aspects of land policy design aiming at sustainable rural development.

Before these sections are summarised, Section 4 provides three essential findings of the thesis:

- 1) Land markets are deeply embedded in social networks.
- 2) Trust is a key function of farm land markets.
- 3) Future land policy design should involve rural society more broadly.

6.2 Practice of Social Networks and Institutions (RQ1)

6.2.1 Existing social networks

Results of case studies from two Scottish parishes and one Japanese *shuraku* reveal a striking feature of agricultural land markets. Although the scales of the markets are different, actors involved in land transactions are highly likely to have personal contacts in the area and may already know each other. Land transactions can be direct or intermediated, and existing social networks established around the community have a strong influence on land markets. In other words, land is likely to be transacted through the tight connections that exist in local social networks, many participants in which may be relatives, neighbours and friends. and the existing trust in these relationships is an important factor in facilitating the transaction. Additionally, reputation has an important role to play in ensuring that transactions proceed smoothly.

This situation can be characterised in NES theory as "over-embedded", as the existing social networks are so strong they may lead to fewer transactions as external actors are excluded from the market (Atterton, 2007, Uzzi, 1997). Hence, the risk of exclusion can be seen as an obstacle to other actors trying to engage with the network (e.g., new entrants from other communities). However, the existing social networks are the dominant channels for land transactions, especially when they are associated with trust and good reputation. Moreover, trust and reputation are key factors in making connections in transaction channels. Interview results suggest that although attitudes and individuals' motivation for farming are important, it is the daily informal behaviour of individuals in the community that is most influential in demonstrating their suitability to participate in land transactions. The findings of this research emphasise that beyond economic factors (e.g., price of land, rents) the social factors around human relationships are particularly important and can enable economic transactions as suggested over 40 years ago by Currie (1981).

6.2.2 Role of trusted brokers

Among the actors in these existing social networks, brokers are particularly important for this research. They are an essential part of the network and gather information and facilitate transactions. Such intermediated transactions have the obvious advantage of reducing search costs, whereas direct transactions reduce implementation costs. More specifically, results showed that brokers can help to identify the best land available and the best person to farm it based on comprehensive preparation (private agents) or through his/her personal experience and belief (individual brokers). Hence, the existence of these brokers within the community can be explained by NES theory, although a private agent can extend his/her business beyond the community.

Furthermore, the fact that building trust with stakeholders (e.g., farmers and landowners) is a crucial part of their role as brokers, offering services that provide information and facilitate deal-making, underpins Burt's view of brokerage. He points out that network brokers build bridges between people based on trustworthiness and reputation (Burt, 2008) and have information advantages in the markets. Thus, it is clear that trust plays a key role in brokering actors in land markets, characterised by the operation of informal social networks. In other words, not just a broker but only a "Trusted broker" can make the bridge between actors and expand the transaction channels.

6.2.3 Government institutions and existing social networks

In contrast to the explanation of the role of brokers based on NES theory, the Scottish Land Matching Service or the Tenant Farming Commissioner in Scotland and the Farmland Banks or the Agricultural Committee in Japan can be considered as government institutions which represent the NIE position. Their functions in land markets are clearly important in intermediated transactions where they reduce negotiation costs by providing independent advice and helping participants to reach an agreement. This demonstrates how they contribute to the mitigation of transaction costs in different ways compared to private agents or individual brokers, though both address issues around information asymmetry and market barriers as highlighted by previous studies.

However, it is important to note that we could not find evidence of active government engagement in terms of the numbers of cases found in both countries. In practice, the number of successful cases where they offer help with intermediation among actors are small and their services are rarely used. Thus, while NIE theory suggests that government institutions should, in theory, play an important role, in practice this is not necessarily the case. Although farmers and land owners recognise the benefits which the public agents can offer, in practice they do not actually take advantage of their services. This situation can be described as the government institution being isolated from existing social networks. Some land markets exhibit strong ties among their network of farmers and owners and in such cases only trusted brokers are able to participate in land transactions, and land is distributed through informal channels based on trust and reputation.

An awareness of the isolation of government institutions from existing networks links to the next Research Question, which focuses on the challenges and lessons for ongoing land reform and policy.

6.3 Policy Lessons and Recommendations (RQ2)

6.3.1 Institutional trust

Based on the previous section, the answer to RQ2-1 (Are there any differences between institutional goals and activities of social networks?) is yes, because the ideal allocation of land through intermediated transactions has yet to be achieved through government schemes and there is a gap between the goals of government institutions and the outcomes of the operation of existing social networks. Therefore, RQ2-2 (If yes, how should they be reconciled?) needs to be answered.

This section will start by exploring the concept of "Institutional trust", since both private and individual brokers can function only as "Trusted brokers" and finding how public institutions can become "Trusted brokers" should help to answer RQ2. This concept has been discussed and examined by institutional economists, especially in organisation studies (e.g., Bachmann and Inkpen (2011), Fuglsang and Jagd (2013)). As de Vreis *et al.* (2019) summarised in the context of agri-environmental management, this is distinguished from interpersonal trust, which is conceptualised as "individuals' expectations about the thoughts, behaviour, and decisions of other people within a specific trust context, based upon past experiences and their interpretation" (p.4). By contrast, institutional trust (or organisational trust) is defined as "the unconscious expectation that institutions will work as they always did and is based on long-standing experiences of the functioning of these institutions" (p.4) as explored in Luhmann (2000). However, both types of trust are interrelated in complex ways: institutional trust forms the context within which interpersonal trust develops, while interpersonal trust relations can also influence trust in institutions.

This concept should be the key to open an existing social network, firmly built on interpersonal trust among actors, to external actors including unknown or unfamiliar individuals and organisations. In other words, without institutional trust in the government scheme which is open to those who are not in the existing network, there is also a risk of the community becoming exclusive and therefore isolated. When this concept is applied to the context of the land markets that we have explored in this study, governmental initiatives, such as the SLMS and TFC in Scotland or the Farmland Banks and Agricultural Committee, should look for more opportunities to engage with farmers, including new entrants.

6.3.2 Support for new entrants getting into existing networks

Public agencies' efforts to build institutional trust will enhance the function of government institutions in many ways, particularly in creating channels for new entrants who wish to acquire land for their farms. Land acquisition is one of the most difficult aspects for young farmers who try to enter the agricultural sector, due not only to financial constraints but also because of challenges in communication within the community. It is often difficult to find appropriate sources of information about land: its price/rental value, the condition and location of plots, and most importantly who owns the land and whether or not it might be available. Even after obtaining this information, there are a number of other hurdles to be jumped, including forming good working relationships with landowners and negotiating about price, as well as developing relationships with other members of the community, including other farmers who farm neighbouring land. The research findings show that these challenges can be significantly mitigated by public organisations such as the SLMS or Farmland Banks that aim to connect land and people in rural areas.

However, the benefits that such organisations potentially or theoretically have for new entrants have not been fully realised in practice, largely due to a lack of institutional trust. This problem should be resolved by both sides, including both suppliers and potential buyers or renters, and from the point of view of new farmers, public institutions should provide information about the available options for land acquisition. For example, land agencies could attend events that attract new entrants or even visit new entrants' farms to explain the service that they offer to farmers.

Such activities are already undertaken by the SLMS and Farmland Banks, and therefore it is now more important to focus on landowners and the strong networks that they belong to. As discussed in this study, existing landowners have tight connections with other local actors which can potentially lead to the exclusion of new entrants coming in from outside. A particular challenge is to build trust with those actors who typically do not have a high opinion of public institutions and distrust strangers. Here, this research suggests that there may be advantages to be gained from using private agencies or individual brokers who have already gained the trust of existing landowners and their networks. Government organisations should encourage those actors to become more actively involved in land market activities (for example, forming partnerships with them or inviting them to join working groups on land markets). This kind of collaborative work with private actors could be described as "extending ties" from existing networks to other relevant actors to ensure that existing networks become larger and more inclusive. These recommendations will improve the performance of existing government schemes around land reform and policy which provide support for new entrants by reducing some of their transaction costs.

6.3.3 Towards sustainable rural land markets

The importance of expanding networks around land markets in the modern rural context is an important goal to ensure their future sustainability. As seen in Chapter 2, at a time when the number of farmers is decreasing (especially in Japan and possibly in Scotland in the future), one of the crucial policy challenges is to keep the agricultural industry active which means retaining the sustainable function of land in rural areas. In many places, sustainable land management is most likely to occur when undertaken by farmers who are embedded in their rural communities and that research into the social networks that underpin rural land markets is crucial in understanding the complex relationships that underpin land transactions.

The main aims of land reform and land policy in Japan and Scotland are to ensure a more equitable and efficient distribution of agricultural land while addressing the issue of a declining and ageing farming population, while at the same time improving access for new entrants by matching them with existing landowners looking to sell or rent their land. So far, the role of government in such activities has included the design of initiatives and corresponding institutions such as the SLMS in Scotland and Farmland Banks in Japan; however, these institutions are relatively small in scope and have not yet been able to support the optimal allocation of land in the markets. Examination of the situation so far through our case studies, suggests that without expanding the range of participants in the social networks that underpin land transactions in rural communities, land markets will shrink and new entrants will find it increasingly difficult to find land to farm. To avoid this scenario, governments need to build "institutional trust" in rural communities and work with stakeholders to develop and expand the scope of existing initiatives.

Lastly, a further development illustrating the work of public bodies working with local communities on land-use planning is recent legalisation around the Stakeholders and Farmland Plan in Japan, which encourages municipalities to decide on a regional plan through consultation with farmers, agricultural committees, Farmland Banks, and agricultural cooperatives. The plan will set out the future agricultural landscape of the region and goals required to achieve the efficient use of agricultural land in the community. This is a good example of the government re-working an existing regional scheme with local stakeholders. Initiatives such as these face the challenge of reaching agreement following consultation with diverse stakeholders but such cooperative and participatory approaches are required to achieve genuine sustainable rural development.

6.4 Key Findings

6.4.1 Land markets embedded in social network

From the research findings, it is clear that land markets are embedded in the social networks that exist within and around a rural community (informal social relationships at a local level) rather than in a more abstract environment where a number of anonymous participants transact their land. Such a finding has tended to be overlooked by traditional economic analyses (even in transaction costs economics) but, by contrast, has been highlighted in the economic sociology literature. In particular, this research has analysed the scope of markets at a regional level and sought to understand the channels for land transactions which are often enabled by the informal and personal connections that exist between relatives, neighbours, and friends. This feature of land markets is likely to constitute "over-embeddedness" which can be considered as a factor which makes land markets imperfectly competitive.

6.4.2 Trust as a key function of farm land markets

The scope of trust is one of the biggest theoretical conflicts between NES and NIE. However, the research findings highlight the importance of building trust to ensure that the market functions efficiently (economic transactions). In other words, trust and the good reputation that arises from it, helps to ensure that the personal connections between actors in local land markets become the channels for many land transactions. Additionally, our research shows that long-established trust and good reputation are built on the attitudes and behaviour exhibited in everyday interactions within the community.

Land markets in the study areas would not work without trust, and thus would be unable to achieve a more optimal resource allocation. Building trust as a non-economic factor around human relationships can be an essential element to help to counter market failure as an economic phenomenon. This finding was achieved by combining the insights provided by both NIE and NES.

6.4.3 Future of land policy in rural society

Therefore, regarding the theoretical conflicts, this research can conclude that trust plays a key role in farmland markets even in cases where government institutions work beyond any existing informal social networks. This means that, as New Institutional Economists predict, government intervention is required to allocate land in rural areas when the number of market participants increases beyond the existing social networks. However, as both the cases of the SLMS and Farmland Banks reveal, government schemes cannot be successful until they account for the fact that they have to operate in a context within which tight social networks are

closely embedded and where they need to build trust with potential scheme users at a local level. This thesis describes the situation where governments dismiss this important point as "government institutions isolated" from existing networks, meaning that policies cannot achieve their goals even where policy design is theoretically correct.

In this sense, while institutions such as the SLMS and Farmland Banks are part of the policy approach designed to achieve sustainable rural development, in practice their isolation from the network prevents them from functioning properly. This research reminds us that such institutions have to function in the rural community and its existing social networks and must recognise the importance of relationships between local people as important channels through which land markets operate and many associated transactions occur.

Furthermore, the research referred to the concept of "institutional trust" discussed in existing studies in NIE. When governments build institutional trust using existing networks, this means that those networks are opened up and expanded to include new entrants and others who do not currently participate in land transactions. This enables government initiatives to work in a broader network that is not limited to the existing participants. To achieve this, this research recommends that public organisations should engage and collaborate with the private trusted brokers who have already built good relationships with stakeholders. Therefore, institutional trust in land markets can be improved when public institutions collaborate with existing trusted network actors.

Being aware of these points is the key to designing and implementing more successful land policy in rural areas, especially when the government aims to change the pattern of land use and ownership through land markets. These research findings can inform a more viable land policy in the future to achieve a more sustainable rural economy and society, of which land is essential component.

6.5 Summary

This chapter is devoted to finding answers to the research questions presented earlier in this thesis. RQ1) How do social networks and government institutions work in rural land markets?; and RQ2) What challenges and lessons for ongoing land reform and policy can be drawn from this study? As for the answer to the first questions, the research analysed the tightness of existing social networks in rural communities, as well as the importance of trust and good reputation among the actors and how this helps establish the connections that can form a successful land transaction channel. Furthermore, the research found that private agencies and individual brokers play important roles as "trusted brokers" in the communities in terms of expanding the transaction channels. However, this situation could be described by NES theory

as being "over-embedded" and may work to exclude other actors outside the community such as new entrants.

Regarding the answer to the second question, government institutions do not always involve the local community and thus cannot function well enough to achieve their goals, which is described as "institutions isolated" from existing networks. Therefore, the research stresses the need to build "institutional trust" as proposed by NIE theory, which enables the community to be open and inclusive to other stakeholders. To improve the institutional trust of stakeholders, we recommend that government institutions should collaborate with the existing trusted brokers within their initiatives, for example, forming partnerships with them and assigning them to roles in working groups or task forces.

To summarise key findings of the research, we conclude that land markets are deeply embedded in social networks and that trust is one of the most important elements in wellfunctioning markets. Thus, future land reform and policy should be predicated on an understanding of market structure and should be achieved by working closely with local social networks. This sociological approach is the only means of achieving certain economic goals, especially those based around land use and ownership which are deeply embedded in social networks.

Chapter 7. Conclusion

7.1 Summary of Chapters

This thesis started with the question "How is land in rural areas owned and used?", and explored the issues around land ownership and land use in rural Scotland and Japan. The basic approach of the research is to consider farmland not only as an economic resource but also an essential component of rural society, associated with values around history, community, culture and place. Therefore, this thesis has challenged the view of land markets as places where land is transacted as a result of economic incentives, and has gone on to explore the complexity of the real mechanisms underlying land transactions in Scotland and Japan by adopting a novel theoretical framework supported by an appropriate qualitative methodology. In short, this thesis has looked into the dynamic interactions between the economic and social characteristics of land embedded in rural society and influenced by land policy and law. In other words, this thesis examined the interplay of markets, social networks, and government institutions around land transactions in rural areas.

Based on the ideas set out above, the research aiming to i) examine the mechanism of land transactions focusing both on its socio-economic characteristics and the influence of policy; and ii) inform the design of future land policies, has raised the following specific research questions:

RQ1. How do social networks and government institutions work in rural land markets?

- RQ1-1. Who are the key actors in rural land markets and how do they interact?
- RQ1-2. Do brokers facilitate rural land transactions? If yes, how do they broker land information and between whom?
- RQ1-3. What are the brokers' contributions in terms of transaction costs and what is the role of trust in these transactions?
- RQ2. What challenges and lessons for and ongoing land reform and policy can be drawn from this study?
 - RQ2-1. Are there any differences between institutional goals and the activities of social networks?

RQ2-2. If yes, how should they be reconciled?

To answer these questions, two countries, Scotland and Japan, were selected for study due to their histories of land transactions associated with dynamic changes brought about by a combination of land reforms and policy measures. Through a comparative analysis of the nature of land transactions in these countries, lessons for land reform and policy in both countries have been drawn in a series of policy recommendations.

As a precursor to the comparative study, Chapter 2 reviewed and compared the policy context for land reform and land use policy in Scotland and Japan, along with a discussion of the economic trends in agricultural land markets in both countries. First of all, there are large differences between Scotland and Japan in terms of the aging workforce and the size of holdings, as well as in the demand/supply balance for agricultural land and the levels of land price and rent. Moreover, as a result of a comparison of land policy objectives and instruments, the motivations for current land reform and policies in both countries were found to be different. On one hand, Scotland is dealing with an extreme concentration of land among relatively few owners by diversifying land ownership such as increasing the community ownership and providing flexibility in tenure, to promote some social fairness through a more equitable distribution of land. On the other hand, Japan is addressing the extreme fragmentation of land by supporting the rental sector, aiming to improve the economic efficiency of land and avoid land abandonment through the amalgamation of holdings. Chapter 2 also highlighted the general nature of land reform as well as land policy and its associated instruments, along with its potential to deliver dramatic and far-reaching changes in land ownership and tenure in both countries.

After the context surrounding the land markets in the two countries had been provided, Chapter 3 presented the theoretical frameworks that would be used to examine rural land transactions in practice. Since this research explores the mechanism of land transactions, considering not only economic factors but the roles of both social networks and government institutions, the underlying theoretical framework was based on two theories that can account for each of these different elements. Both of the theories reject the view of neo-classical economics and develop their own perspectives focusing on different social constructs: New Economic Sociology (NES) emphasises the role of social networks, while New Institutional Economics (NIE) places a greater emphasis on the role of formal (e.g., government) institutions. The research combined insights from both of these theories to construct an analytical lens which can be used to explore the operation of rural land markets beyond the confines of neo-classical economics.

First, existing research was reviewed to reveal that rural land markets have historically been characterised by agricultural economists using the concept of market failure. In particular, existing research highlighted the high transaction costs (TCs) that exist in rural land markets and which are often attributed to the information asymmetry that exists between landowners and farmers which has been argued to be one of the main issues contributing to market barriers.

Second, discussion focused on the different potential contributions that NES and NIE could make towards a better understanding of rural land markets, i.e., the two contrasting theoretical approaches emphasise different social constructs that can be used to mitigate TCs namely: trust among social networks (the NES position); and the operation of government institutions (the NIE position). Based on an understanding of the critical difference between these theories around the scope of trust, the theoretical framework was developed to apply insights from both approaches to rural land markets. Attention was paid to the discussion of the role of brokers who contribute to the information flow among actors, particularly from the perspective of their contribution to the formation of trust in social networks.

To follow the analytical framework developed in Chapter 3, Chapter 4 discussed the methodological approach and methods adopted in this study. These have a strong connection to the two theories outlined in Chapter 3 and are argued to be well suited to exploring the specific research questions proposed. As this research tries to understand the rural land market as a complex system, it adopts a qualitative approach with a focus on the people who participate in land transactions in the rural economy. In particular, the limitations and utility of a case study approach were discussed, as an effective qualitative methodology to test and develop theories in a real-world situation. A case study approach at the local community level was adopted in two parishes in Scotland (Parishes X and Y) and one *shuraku* in Japan (*Shuraku* Z). Specifically, Social Network Analysis was introduced as an appropriate tool to explore the human relationships involved in land market transactions. In addition, data was collected from individuals engaging with land markets (i.e., farmers, landowners, land agents, and policy makers) using in-depth semi-structured interviews. Before moving to the investigation of land transactions in rural land markets at community level using the approaches outlined above, it has been assumed that the operation of the rural land markets in Parishes X and Y and Shuraku Z might be a better fit to NES theory, where strong social networks function with trust. This was compared to the role of relevant government initiatives which reflect the NIE position (i.e., the Scottish Land Matching Service and Tenant Farming Commissioner in Scotland, and Farmland Banks and the Agricultural Committee in Japan).

Chapter 5 provided the results of the exploration of the roles of social networks and government institutions in practice in Parish X and Y (Scotland) and *Shuraku* Z (Japan), followed by identifying the challenges and lessons for ongoing land reform and policy. For the first specific question (Key actors and their relationship in/around rural land markets), key actors and their relationship are illustrated by farm profiles and diagrams. The results suggested that land is transacted mainly among relatives, neighbours and friends in and around the local community through direct personal contacts, and trust is one of the key reasons for the

transactions, even though there are large differences in the numbers of actors involved and the size of holdings being transacted between two countries.

Regarding the second question (the function of intermediaries brokering land information), there is a private agent in Parish X and a public institution (SLMS) working across Scotland, whereas various individuals, acting informally, and the Agricultural Committee all work as brokers in Japanese *shuraku*. Despite the differences in their forms and scale, private agents in Scotland and individual brokers in Japan are both working in tightly-knit communities, building close relationships with farmers and landowners. The SLMS and Agriculture Committee also work towards the same aim of matching people and land in different contexts. Where the broker is an organisation, they obtain information from field visits and share it among colleagues or other organisations across a wider geographical area.

As for the third question (the impacts on transaction costs and the role of trust), direct transactions are considered to reduce implementation costs, whereas intermediated transactions have advantages in terms of reducing search costs. There is a large difference in the form of non-government intermediation in both countries: large private agents contribute to reducing search costs in Scotland, whereas individual brokers in Japan work more informally and do not have direct impacts on transaction costs. However, both are rooted in the community and function based on trust and reputation. Regarding official institutions, such as the SLMS and the Tenant Farming Commissioner in Scotland and the Agricultural Committee in Japan, these can help to contribute to reducing negotiation costs by functioning as independent intermediaries between parties.

The answer to the fourth question (Gaps between the institutional goals and activities of social networks) was examined by reporting the interview results from policy makers. Both the Scottish and Japanese governments appreciate the importance of human relationships in rural land markets and the need to work with stakeholders. Institutional interactions with existing social networks in rural land markets could be key to bridging these gaps.

Additionally, the transferable characteristics of each country were discussed based on the analysis of interviews with two academic experts. The Scottish expert focused on the issues caused by small-scale land parcels and the dispersion of land, as features of Japanese rural land markets which are applicable to some regions of Scotland as well as other EU countries (e.g., Spain and Greece) and even other parts of the UK. The Japanese expert focused on the role of human relationships in Scottish rural land markets, which reinforces how trust, reputation and personal relationships continue to matter even where there is a need to achieve economies of scale. Therefore, it was argued that social aspects should also be taken into account when designing land policy.

Based on the forgoing discussions, Chapter 6 drew the answers to the Research Questions posed earlier. Regarding RQ1 (How do social networks and government institutions work in rural land markets?), the research analysed the tightness of the existing social networks in rural communities, and how trust and good reputation among the actors help to establish their connections into the land transaction market. Furthermore, the research found that private agencies and individual brokers play important roles as "trusted brokers" in the communities in terms of expanding the transaction channels and mitigating transaction costs. However, this situation could be described as "over-embedded" in NES theory and may work to exclude other actors from outside the community, such as potential new entrants into agriculture. Here we find the need for public intermediation in the land markets which is examined by answering the next question.

When it comes to the answer to RQ2 (What challenges and lessons for ongoing land reform and policy can be drawn from this study?), it was pointed out that government institutions do not involve the community and thus cannot function well enough to achieve all of their goals, a situation which is described as "institutions isolated" from existing networks. Therefore, the research stresses the need to build "institutional trust" as proposed by NIE theory, which can enable the community to be open and inclusive to other stakeholders. To mature the institutional trust with stakeholders, we recommend that government agencies collaborate the existing trusted brokers within their initiatives, for example, making partnerships with them and assigning them to roles as task force members.

To conclude the thesis, the key findings are summarised in the following three points:

- 1) Land markets are deeply embedded in social networks.
- 2) Trust is a key function of agricultural land markets.
- 3) Future land policy design should involve rural society more broadly.

7.2 Policy Lessons and Recommendations

Policy lessons and recommendations are clarified again based on the previous section 6.3. Given the discussion that private and individual brokers function as "Trusted brokers" with their interpersonal trust built within and around the communities, the first step is to identify those existing actors and their relationships which the scheme will target to expand. To make the government scheme such as the Land Matching Service or the Farmland Bank fully functioning in the real-world land markets in rural areas, public institutions need to obtain "Institutional trust" from the scheme users, i.e., landowners and farmers. Therefore, the second step is to make the best use of the experience and knowledge of private agencies or individual brokers who have already gained the trust of the existing social networks. For example, there

should be more collaborative work to encourage existing brokers to get involve in the government-initiated activities by forming partnerships with them or inviting them to join working groups that focus on land markets. These would help to extend the ties from existing networks to other actors with an interest in rural land, including new entrants to agriculture, hence improving the performance of the government schemes around land reform and policy.

Consequently, public service will contribute to mitigating transaction costs for stakeholders, hence enhancing their role within the rural land markets. This study highlighted that government institutions have positive impacts on reducing negotiation costs by creating channels for new entrants who wish to acquire land for farming, but they are facing challenges in communicating within communities in general. Any government scheme that aims to change the pattern of land ownership and use, needs to connect land and people in rural areas, and should be designed by considering the developing of good and trusty relationships between farmers and landowners in and around the communities.

In short, land reform and policy should be implemented based on a better understanding of the structure of rural land markets, which are deeply embedded in social networks, and which cannot function without trust among participants. Governments' working closely with social networks is key in achieving the economic goals around land use and ownership in rural society.

7.3 Research Contributions and Future Research

The thesis concludes by discussing some of the contributions of this research in terms of theory, methodology, and land policy. Firstly, from a theoretical point of view, one of the impacts of the thesis is that it explores the interlinkages between two different theories both of which have been developed in response to the question of why classical economics does not fully explain the economy of human lives. New Institutional Economics attempts to explore this question by focussing on the power of institutions, while New Economic Sociology focuses more on human relationships and trust. This research draws on the dialogue between the two theories to explore the conflicts that arise around the scope and role of trust in the rural economy. Comparing these two theories enabled me to build a framework for the research before making some assumptions about the operation of land markets in practice, which led to an analysis of how government institutions and social networks operate around land markets.

Secondly, in terms of methodology, a qualitative case study based on the theoretical framework constructed was employed to examine the extent to which NIE and NES can be applied to land transactions in rural communities. One of the outcomes of the research is that it demonstrates the successful use of a Social Network Analysis, based on in-depth qualitative semi-structured interviews, to explore rural land markets in two different countries. Social

Network Analysis, based on a small amount of qualitative data derived from exploration of the human relationships in and around communities, illustrated that complex human relationships beyond economic incentives underpin the functioning of rural land markets. Furthermore, comparison of the structure of the function of social networks and government institutions in land markets in Scotland and Japan suggested that the above findings could be applied in a more global context rather than just to the two countries being studied.

Thirdly, the research results provided by the semi-structured interviews with farmers, landowners and agents, highlighted the important aspects of both existing social networks and public institutions and allowed me to draw specific policy lessons and recommendations around land use. In other words, the research also provides a policy contribution by emphasising the important finding that policy delivery cannot be successful without accessing the channels used by social networks. This finding was provided by the qualitative analysis of social actors in land markets who facilitate land transactions through their informal social relationships within and around the local community. This finding can be applied to other rural policy areas, which could lead to further examination of the interplay between government institutions and trust within social networks in policy delivery.

Finally, there are two areas which were not examined in the thesis but which could be further explored based on the findings of this research. One reflects the distinctive nature of agricultural land transactions compared to other types of land transaction. The latest report on the Scottish rural land market (Mc Morran et al., 2022) uses evidence from interviews with agents across Scotland to argue that there have been significant shifts in buyer types, with more corporate bodies and investment funds now in the market for plantable land or forestry, a trend which has been driven by the increasing interest in the financial opportunities offered by carbon-offset. As reported in section 2.2.2 research by McKee (2015) shows that even on large estates, estate-community engagement comprises a constant dialogue and negotiation around expectations and outcomes, supporting the development of trusting relationships. Therefore, exploring the characteristics of social actors' mindsets and behaviours around different types of land transaction could be the key to understand more about the interplay between economic incentives and social motivation in land transactions.

The other area of future interest is the unique nature of land transactions, compared to transactions for other commodities, such as labour or services. One of the principal differences between land and other commodities is that it is related to the nature being a part of community's scenery which means that land reflects its cultural importance as farmers' labour on/into the farmland (cultivating plants or looking after animals) connect human to the nature and grow the sense of rooting in the place with a history of the community. Thus, exploring these cultural

dimensions of land transactions would be an interesting avenue for future study, which will lead to find the ways of human beings to coexist with nature and to have a connection with communities, even where the capitalised economic system has highly developed.

Appendix

Scottish Interviewees	When and How
Farmer A	2 nd and 4 th June, 2020 – Email and phone 16 th December, 2020 – Phone 23 rd May, 2021 17 th , 22 nd and 23rd July, 2021 – Phone and text
Farmer B	20 nd , 28 th and 29th July, 2020 – Email and phone 16 th February, 2021 - Email
Broker D	14 th August, 2020 – Zooms
Farmer L and M	26 th May, 2021 – Site Visit 9 th and 10 th June, 2021 – Phone and text 27 th July, 2021 – Site visit
SLMS	25 th September, 2020 – Zooms 4 th May, 2021 - Zooms
TFC	23 rd April, 2021 - Zooms
Policy maker	13 th May, 2021 - Zooms
Academic expert	7 th May, 2021 - Zooms

Interviewees lists are as follows:

Japanese Interviewees	When and How
Farmer A	30 th October, 2020 - Skype
Broker Z	21th December, 2021 - Phone
Owner W	23th December, 2021 - Phone
Owner Z	13 th December, 2021 – Zooms
Agricultural Committee	9 th and 12 th November, Phone and Emails 13 th November, 2020 – Zooms 17 th December, 2020 - Zooms
Policy maker	30 th March, 2021 – Zooms 30 th March and 10 th April - Emails
Academic expert	7 th April, 2021 - Zooms

Interview guides are as follows:

PART1 A: Profile of the farm

Q1. Name

Q2. Gender

Male
Female

Q3. Age group

Q4. Location

The name of the Parish where you live

The name of the Parish where your farm is

Q5. Farm type			
What do you produce on your farm? Please tick all that apply:			
Crops (arable or field)			
Vegetables and fruit			
Livestock including breeding			
Other (please specify below)			

Q6. Farm size		
Total area of land:	Under 10 ha	
	10-100 ha	
	100 ha and over	
Total livestock:	Under 10	
TOTAL INVESTOCK.		_
	10-100	
	100 and over	
Q7. Who works on the farm	n?	
Please tick all that apply:		
Family members		
Permanent employees		
Less than 10 peo	ple	
10 or more people	e	
Others (e.g. seasonal workers) (please specify below)		

Q8. Other income sour	ces
-----------------------	-----

Please tick all that apply to your household:

Contract farming	
Diversification activities (e.g. tourism, renewable energy)	
Off-farm jobs (e.g. retail, manufacturing, service sector)	
Other (e.g. pensions, social security benefits, investment income)	
None	

Share of all of the above to your annual household income:

Under 25%	
25-50%	
50% and over	

Q9. Future of	your farm
---------------	-----------

In the coming 10 years, you will	∫ remain	the agriculture sector.
	leave	ſ

If you ticked '**remain**' above, please tick of the below all that apply to you and your business:

	Increase	Stay same	Decrease
Farmed area			
Livestock numbers (if applicable)			
Employee members (if applicable)			
Involvement in other enterprises (if applicable)			

Please provide a short explanation of your plans.

PART1 B: About farmland

Q1. Supply and demand for agricultural land				
In the agricultural land market in this area,				
There are more tenants than landowners				
There are more landowners than tenants				
The number of tenants and landowners is similar				
Don't know				
Q2. Land price and rent				
Concerning the price of agricultural land in this area,				
The price is set by: the landowner \Box the farmer \Box	negotiation			
depends on the circumstances \Box				
Please tick the most important factor influencing the price of land:				
The quality of the land				
Location of the land				
Land availability				
The availability of subsidies				
Development potential				
Other (please specify below)				

Concerning the rent for agricultural land in this area,

The rent is set by: the landowner □ the farmer □ negotiation □ depends on the circumstances □

Please tick the most important factor influencing the **rental value** of land:

The quality of the land	
Location of the land	
Land availability	
The availability of subsidies	
Development potential	
Other (please specify below)	

Q3. Agricultural land area

Please fill in the approximate area of land that you rent, own, or lease to tenants.

N.B. The land for agricultural use ONLY.

N.B. 1 hectare ≒ 2.5 acres

A Land you RENT from someone else		ha	
Land you OWN (B+C)		ha	
	B for your own farm	ha	
	C for letting out to someone else	ha	N.B. If you are a tenant , this box may NOT be applicable but if you lease land to someone else, please fill it in.

PART2 Land transactions

A This is for those who have stated in Part 1 that they (A) rent land.

Q1. Profile of each land parcel

Please fill in the table on the next page, for **any** land parcels that you have started to rent **in the past 20 years**:

Parcel Area No. (ha)			 land? Where does the landowner live?	When did you start to rent it? (Year) If you renew the contract, please fill in the first year you rented	Type of tenancy agreement?	Duration of tenancy?
		Officially introduced	Same parish Same county Outside	Tenteu	1991Act	

Please tick all that apply for the landowner from:

- Relative: a person connected by blood/marriage
- Neighbour: a person living near to you
- Friend or acquaintance: a person who you are familiar with
- Business associate: a person or an organisation connected to you through business
- Officially introduced: a person introduced to you by government/official institution
- Land advertised: a person connected to you through the advertised land
- Other: please give a short description of the relationship.
- If the landowner is the same to the parcel already mentioned, please give only his or her name. No need to tick the boxes againt

Q2. Channel to rent the land

Please fill in columns (1) and (2) in the table on the next page for **each** land parcel mentioned in Q1:

Parcel		(2) If you have a broker,				
No.	contact the landowner?	What is your relationship with the broker?	Where does the broker live?			
	Landowner directly	No need to answer here.				
	Professional agent					
	Someone in-between	Please answer here:				
	Other	Name (initial):	Same parish Same county			
		The broker is:				
		Relative	Outside			
		Neighbour 🗌				
		Friend or acquaintance				
		Business associate				
		Officially introduced				
		Land advertised				
		Other				

Please tick all that apply for the broker from:

- Relative: a person connected by blood/marriage
- Neighbour: a person living near to you
- Friend or acquaintance: a person who you are familiar with
- Business associate: a person or an organisation connected to you through business
- Officially introduced: a person introduced to you by government/official institution
- Land advertised: a person connected to you through the advertised land
- Other: please give a short description of the relationship.
- If the broker is the same to the parcel already mentioned, please give only his or her name. No need to tick the boxes again.

3

Q3. Relationship with the landowner/broker

Other: please give a short description of how you got in touch with the

landowner/broker

Please fill in columns (3) and (4) in the table on the next page for **each** land parcel specified in Q1:

Parcel No.	Answer to Q2 (1) is	(3) How did you contact?		(4) Why did you transact?				
	Landowner	er 🚽	Transact with landowner No need to answer here					
	directly	In person		Price or rent				
		Local events		Obligation				
		Government support		Trust				
		Other	_	Reputation				
				Government support/				
				official recommendations				
	OR			Other				
	••••		Transact with landowner	r 🔳	Transact with broker:			
	agent/	In person		No specific reason other than				
	Someone	Local events		introduced by the broker				
	in-between/ Other	Government support		Price or rent		Price or rent		
		Other		Obligation		Obligation		
				Trust		Trust		
				Reputation		Reputation		
				Government support/		Government support/		
				official recommendations		official recommendations		
				Other		Other		
	-							
 In person: got in touch through private informal means such as meeting in person, telephone, or email Local events: got in touch through local events such as community meetings Government support: connected through governmental supports or recommendations 			Please tick all apply for the reasons from:					
			 Price or rent: because you are satisfied with the price or rent of land they suggested 					
			 Obligation: because you feel an obligation to look after him/her or to get a contract through the person/organisation 					
			 Trust: because you trust them personally or trust their professional abilities 					

- **Reputation**: because they have a good reputation as a landowner or a broker
- Government support/Official recommendations: because you apply for government support including grants, or he/she was recommended by a public official
- **50ther**: please give a short description of why you transacted with the landowner/broker

PART3: Free discussion

Q1. Advantages and disadvantages for each channel

Please tell me the advantages and disadvantages of the two different channels of land transaction for you;

Direct: In cases you transact the land directly

Intermediated: In cases you transact the land through an agent

Example: Easy or difficult in

- getting the land in/at/with the favourable timing, location, person
- getting the information about the land and the person whom you would transact with
- searching the land, verifying the quality of land, negotiation with the person whom you would transact with
- implementing the final contract

Q2. The role of the relationship

How the following factors you answered make land transaction easier or more difficult for you?

- Obligation, Trust, or Reputation
- Government support or Official recommendation
- Other

Example: To be able to get the information about the land available easily

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