



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Land Transactions in Rural Areas: Comparative analysis between Japan and Scotland

Yumi Isaka Kato*, Carmen Hubbard and Guy Garrod

Newcastle University

**Discussion Paper prepared for presentation at the 94th Annual Conference of the
Agricultural Economics Society, KULeuven, Belgium**

15 - 17 April 2020

*Copyright 2020 by Yumi Isaka Kato, Carmen Hubbard and Guy Garrod. All rights reserved.
Readers may make verbatim copies of this document for non-commercial purposes by any
means, provided that this copyright notice appears on all such copies.*

* A PhD student at the School of Natural and Environmental Science, Newcastle University.
Email: Y.Kato2@newcastle.ac.uk

Abstract

This study aims to explore the interactions between land policy/reform and the social and economic characteristics of land markets and inform the design of future land policies in Scotland and Japan. Specifically, it aims to understand how social networks and political institutions work in the market, based on a theoretical framework drawn from New Economic Sociology (NES) and New Institutional Economics (NIE). For this, Social Network Analysis is conducted for a small number of cases in both countries, where dynamic land pattern changes can be observed. After identifying the entire network of a land market, the connections between key actors are traced through interviews. Results could show the existence of contrasting dominant channels in the markets, e.g., one based on norms or trust which represents the NES position or the other based on rules/regulations or government support which reflects the NIE position. Moreover, the presence of norms, trust and power in the network, the contribution of brokers in the information flow, and the influence of each channel on transaction costs will be clarified. Lastly, if there are gaps between institutional goals and social networks' motivations, whether and how they should be reconciled is discussed, with lessons and recommendations for ongoing land policy/reform.

Keywords Land markets, Social Network Analysis, Japan, Scotland
JEL code Q150

1. Introduction

“How is land in rural areas owned and used?” This is a fundamental question about land ownership and tenure system which relates not only to the allocation of land as an economic production factor but also to the wider involvement of social actors in rural resource management (Munton, 2009). To answer this question requires insights from a range of disciplines and perspectives. While there are different models of land use and ownership, rural land provides a variety of public goods and performs multiple functions (Ostrom, 2015), including food production, environmental protection and recreation (Winter and Lobley, 2009). Therefore, land management is a concern for sustainable rural development, and will also impact on those who live in urban areas (Hodge, 2016).

This research focuses on transactions in land markets in rural areas which allocate agricultural land among landowners and farmers and result in different patterns of rural land use and ownership. More optimal patterns could deliver improved economic efficiency in which agricultural products are produced without excessive costs, while at the same time achieving a level of social fairness in which land can be accessed by more than a few wealthy individuals. However, achieving a more optimal pattern of land use without losing the balance between these two dimensions is very challenging policy. Such difficulties may be rooted in too naïve a view of land transactions, where land is transacted simply as a result of economic incentives. Although this is an important aspect of land markets, the real mechanism underlying land transactions could be much more complicated. Therefore, land should be considered not only as a resource but also as an essential component of rural society in a broader context including a range of meanings and values around history, community, culture and place (Owens, 2007; Carruthers, 2009).

From this perspective, this research aims to examine the dynamic interactions between land policy and the social and economic characteristics of land markets, in order to inform the design of future policies. To this end, the research compares changes in land use/ownership in Japan and Scotland, two countries that have a history of land transactions, associated with changes brought about by land reform/policy aimed at achieving better land management. As discussed in section 2, on the one hand, Japan has to improve the economic efficiency of land through consolidation of holdings and avoiding the land abandonment; on the other hand, Scotland has to promote social fairness through more equitable distribution of land. Although the two national contexts seem very different, overcoming 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, p. 5) is a valuable means of understanding ‘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, p. 18).

Alongside these research aims, a set of research objectives and research questions (RQs) are listed in Table 1. First, the economic functions of land markets such as supply, demand, rent and price of land are explored (RQ1). Second, the social characteristics of land transactions and the associated social networks are examined (RQ2), particularly the roles of brokers (RQ3). Third, when it comes to the interactions between these economic/social aspects and land policy/reform, the roles of both social networks and political institutions (e.g. policy instruments) in land markets are investigated, in terms of their role in facilitating/impeding transactions (RQ4). Lastly, the challenges of ongoing land policy/reform should be clarified and the findings of the research should be brought into practice through a series of recommendations. Here, any political challenges in relation to the activities of social networks will be identified (RQ5), and if there are gaps between policy goals and the motivations of social networks, the question of their reconciliation will be

Table 1. Research aims, objectives and questions

Research Aims	Research Objectives	Research Questions
<ul style="list-style-type: none"> • To examine the dynamic <u>interactions between the land policy/reform and the social and economic characteristics of the land markets</u> in Scotland and Japan 	<ul style="list-style-type: none"> • To describe the function of land markets [RQ 1] • To identify the <u>social networks</u> in the land transactions [RQ 2 & 3] • To understand how <u>social networks</u> and <u>political institutions</u> work in the land market [RQ 4] 	<ol style="list-style-type: none"> 1. <u>How do land markets work?</u> 2. <u>Who are the actors in social networks</u> and <u>how do the networks work</u> in land transactions? 3. Are there any <u>brokers who facilitate land transactions</u>? <u>Who</u> are they, <u>how</u> are they brokering <u>between whom</u> and <u>why</u>? 4. <u>How do social networks and political institutions facilitate/impede land transactions?</u>
<ul style="list-style-type: none"> • To inform the design of <u>future land policy in Scotland and Japan</u> 	<ul style="list-style-type: none"> • To identify the <u>challenges</u> to ongoing land policy/reform and draw <u>lessons and recommendations</u> [RQ 5 & 6] 	<ol style="list-style-type: none"> 5. <u>What are the challenges</u> around achieving the institutional goals of land policy/reform and <u>do the goals facilitate the activities of social networks?</u> 6. Are there any <u>gaps between the institutional goals and what social networks</u> want to achieve? If so, <u>should they be reconciled?</u>

Source: Author's own construction.

discussed (RQ6).

In addition, this research focuses on the different roles of social networks and political institutions using insights from two different theories: New Economic Sociology (NES), which emphasises on the role of social networks in our economic life, and New Institutional Economics (NIE), which has a greater emphasis on the role of formal institutions. This research selects Japan and Scotland for its comparative analysis because they allow the influence of different aspects of the two constructs to be explored: strong informal social networks in Japanese land markets and the influence of formal institutions in Scottish land markets. Underlying theoretical assumptions and differences and similarities between the two frameworks are described in sections 3 and 4.

2. Political Background

In order to understand the way in which land policy/reform influences land markets, the relevant political context needs to be understood. This paper compares Japan and Scotland where governments have clear objectives designed to change the pattern of land use/ownership in different ways. In Japan land policy attempts to overcome the extreme land fragmentation caused by previous land reform (Sekiya, 2002; Egaitu and Suzuki, 2015), whereas in Scotland since 2003, land reform has aimed to achieve a fairer distribution of land (Warren, 2009; Wightman, 2015) and its impacts on land management have been discussed (Glass *et al.*, 2013; McMorran, 2016). Comparing these two countries which have different histories and objectives will enable us to understand the processes through which land use/ownership can be changed to achieve greater public benefit.

This section compares the ends and means of land policy/reform in both countries at both macro and micro levels. First of all, we look at the proportion of rented agricultural land¹ as a key indicator of achieving policy objectives at the macro level, since tenanted land is important both in terms of economic efficiency and social fairness, as it allows farmers to access the land without the need for large capital investment (Edwards and Kenyon, 2014). Figure 1 shows a timeline during which the percentage of rented agricultural land has changed differently in the two countries: while the proportion in Japan has gradually increased since the 1970s, that in Scotland has continued to decrease. However, intriguing contrasts begin to emerge when policy implementation is 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. During the same period in the 1950s, Scottish land policy 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).

These reforms and policies have had different impacts on rented land. 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 and the Agricultural Land Act was enacted to maintain the owner-occupier dominated structure.

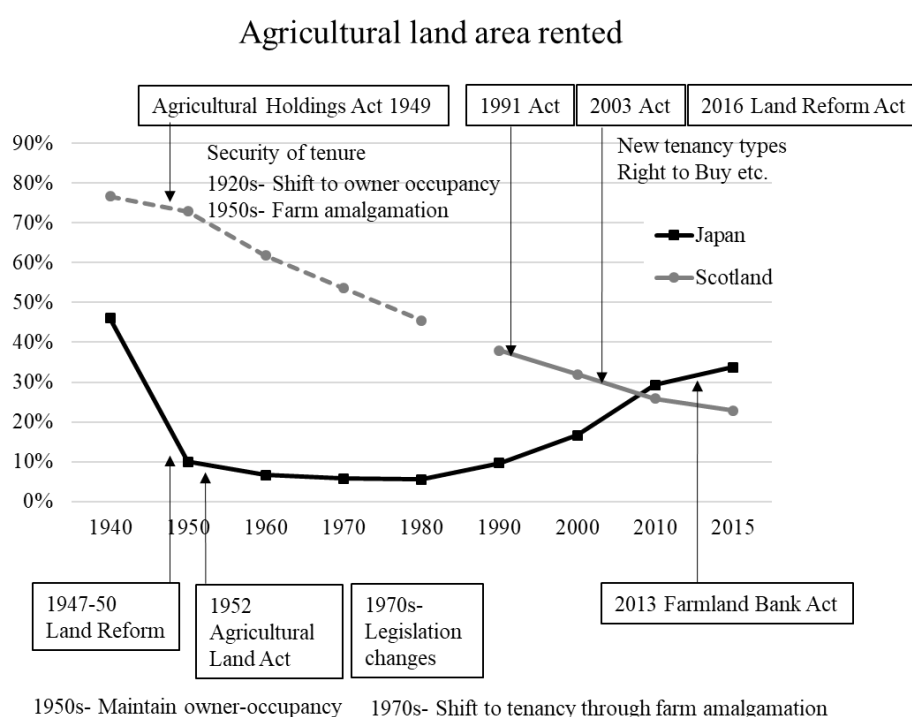


Figure 1. Agricultural land area rented in Japan and Scotland

Source: Author's own construction based on statistics by Hayami and Godo (2002) (1940 -1950 in Japan), Ministry of Agriculture Forestry and Fisheries (2018a) (1960 - 2015 in Japan) and (Scottish Government, 2019a) (1940 - 2015 in Scotland). See also Thomson (2016) and Edwards and Kenyon (2014).

Notes: The figures for Scotland between 1940 and 1980 are represented by a dotted line since it is the percentage of land holdings rented instead of the area of rented land, because figures for the area of rented land are only available from 1982.

¹While rural land is used not only for agriculture but also for a wider range of purposes including residential, commercial, sporting and conservation, here we focus on the agricultural land, such as arable and grassland, as we seek to explore the relationships between farmers and landowners.

In contrast, Scottish land reform has diversified not only the ownership of land but also the different types of tenancy (Thomson, 2016); hence, the government has aimed to increase rented land by introducing new types of tenancy agreements allowing more flexibility within land markets².

On the other hand, farm amalgamation in Japan since the 1970s has been promoted through a set of legislative changes³ that have not resulted in the buying and selling of land but in the increased rental of land caused, at least in part, by the extremely high price of land, linked to increased urbanisation, that made land purchase impossible for many farmers (Hashiguchi, 2014). Farm amalgamation through the leasing of land has been strengthened since the establishment of Farmland Bank in 2013, as a statutory institution supporting farmland lease. By contrast, the buying and selling of land has been common in Scotland, and has been supported by the introduction of pre-emptive right to buy for tenants under the Agricultural Holdings Act 2003. As a result, farm consolidation through leasing land has increased the area of rented farmland in Japan, whereas farm amalgamation in Scotland could be one of the causes for the decline in the rented area⁴.

In short, at the macro level, in spite of the fact that both governments currently aim to expand the rented land, they implement different policy objectives and instruments which reflect their different historical contexts. Land reform has decreased the percentage of rented land in Japan dramatically since WWII, whereas the Scottish government has tried to increase the percentage of rented land since the 1990s though it still remains low. Conversely, recent land policy has helped to increase the ratio of tenanted land in Japan, whereas farm amalgamation in the past has reduced the the proportion of rented land in Scotland.

Based on these land policy/reform directions, governments set a wide range of tenure control measures. When our focus goes down to specific policy measures at the micro level, Table 2 lists tenancy control measures in both countries (the control measures in Scotland are based on Thomason *et al.* (2014)). Although the pattern of tenure is contingent upon the nature and degree of government control and political preferences as argued by Thomason *et al.* (2014), the following points are highlighted.

The first two measures show that restrictions on owning land in Japan are stricter and place a greater value on local ownership⁵ compared to Scotland. Measure 3 suggests that land consolidation has been a specific issue in Japan, whereas Scotland does not face this challenge at present. Measure 4, 5 and 6 show that both governments do not intervene directly in land markets with price or rent controls⁶, but allow a certain amount of flexibility around the duration of tenancy agreements. Measure 7 reveals that there are specific institutions to resolvedisputes related to land issues and they have been assigned new roles in

²However, as shown in Figure1, despite efforts to increase the rented land, it has been a downward trend associated with different negative drivers; the main factors include the reluctance of landowners to let their land out due to the possibility that tenants might obtain an absolute right to buy, the intention of landowners to take their land in-hand in order to claim CAP support payments, and the increase in the amount of contract farming or seasonal lets which are excluded from the figures for rented land (Thomson, 2016; Williams and Slee, 2008).

³These changes included permitting tenant farmers and landowners to terminate their contracts freely in designated areas, as exemptions to the Agricultural Land Act (Sekiya, 2002).

⁴As seen in Figure1, a long-term factor in the decline in rented land is taxation and the economic recession of the 1920s, which led the break-up of estates associated with the shift from tenants to owner-occupiers (Edwards and Kenyon, 2014).

⁵There have been opposing opinions as to whether or not it has prevented new entrants, including corporate farmers (Hayami and Godo, 2002; Hatta and Takada, 2010).

⁶Rent control and its historic impact on land markets in Japan are analysed by Shigeto *et al.* (2008), Saujuan *et al.* (2009) and Dawson (2014).

Table 2. Tenancy control measures in Japan and Scotland

Policy measures	Japan	Scotland
1. Restrictions on owners (e.g. nationality, residency, or qualifications)	<ul style="list-style-type: none"> • Agricultural Land Law excludes ownership by foreign nationals and imposes restrictions on corporate land ownership. • Restrictions on leasing land have been deregulated since 2005. 	None
2. Maximum/Minimum area owned	<ul style="list-style-type: none"> • The restriction on the maximum area of land was removed in 1970. • The restriction on the minimum area of land was deregulated in 2009 to allow new entrants to acquire land more easily. 	None
3. Land consolidation	<ul style="list-style-type: none"> • Land policy since the 1970s has attempted to achieve land consolidation. • Farmland Banks were established in 2013. 	None
4. Maximum sale price	None	None
5. Maximum/Minimum rent	<ul style="list-style-type: none"> • Agricultural Committees provide data on average rents in the region, so that landowners and farmers can decide on fair rents (the reference rent was abolished in 2009). 	<ul style="list-style-type: none"> • A recommended voluntary process exists for reviewing rents. • The Scottish Land Court adjudicates on disputes over rent between parties.
6. Maximum/Minimum lease duration and Continuity of tenure	<ul style="list-style-type: none"> • The maximum duration is 50 years and the contract is renewed unless a landowner notifies a tenant about the termination of the contract. 	<ul style="list-style-type: none"> • The duration and continuity of tenure varies across the type of tenancy agreements (e.g. Limited Duration Tenancies, 1991 Act tenancy)
7. Land specific court or other body for dispute resolution	<ul style="list-style-type: none"> • Agricultural Committees mediate settlements related to land issues. 	<ul style="list-style-type: none"> • The Scottish Land Court and less costly voluntary resolution processes. • Scottish Land Commission, including Tenant Farming Commissioner, established in 2016 set the codes of practice (Edwards <i>et al.</i>, 2015; McIntosh, 2019)
8. Tenant right to buy	None	<ul style="list-style-type: none"> • Agricultural Holding Act 2003 provides tenancies under the 1991 Act with a pre-emptive right to buy.
9. Tax breaks on transfers/ownership	<ul style="list-style-type: none"> • Capital transfer tax or inheritance tax are exempted or given a grace period, as well as lower property taxes being applied. • Different farmland taxation levels are applied if you rent land via Farmland Banks. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Farmland Banks help new entrants to find suitable land. • New entrants who meet certain criteria can utilise the loan scheme. 	<ul style="list-style-type: none"> • FONE group established in 2016 makes publicly owned land available to new entrants (Scottish Government, 2019b). • Limited financial support for new entrants was available under Scottish Rural Development Programme (Pillar II of CAP).
11. Other non-tenure legislation	<ul style="list-style-type: none"> • Targets for rice production were abolished in 2018 and this could have had an impact on land markets. (Arahata, 2015) 	<ul style="list-style-type: none"> • CAP payments could influence land markets.

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

line with recent land policy/reforms in both countries; while measure 8 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 shows that complex taxation systems for farmland are operating in both countries, including tax exemptions or reductions. Measure 10 shows that there are various 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. Lastly, as shown in measure 11, indirect influence of other agricultural policies (CAP payments in Scotland and targets for rice production in Japan (Arahata, 2015)) should also be taken into account.

To conclude, the comparison above emphasise the fact that Japanese land policy has focused on land consolidation, with some restrictions on land ownership/rental imposed in past land reforms, whereas the Scottish government has provided a pre-emptive right to buy for tenants as a part of recent land reforms, which could lead to a more diverse ownership of land.

3. Theoretical Framework

Here our focus shifts from the political background to land markets to the characteristics of land transactions themselves, and starts by reviewing how the features of land markets are described. As described in land economics, land markets are characterised by market failures, which occur when markets fail to develop or allocate resources efficiently (Bator, 1958). In particular, land uses are heterogeneous and depend on location, which leads to land markets being characterised as imperfectly competitive (Shogenji, 1998; Nix, 2003; Wu and Duke, 2014). Moreover, neoclassical economists have argued that land markets have some special features that mitigate against the achievement of perfectly competitive markets: specifically, this research addresses ‘barriers to market entry’ and ‘information failure’, two issues which are often the focus of transaction costs analysis.

Transaction costs (TC) theory (Williamson and Masten, 1995) is often applied to the analysis of the function of land markets (Currie, 1981; Skoufias, 1995; Sadoulet *et al.*, 2001; Deininger and Jin, 2005; Ciaian and Swinnen, 2006; Takahashi, 2012). These analyses reveal that the presence of TCs⁷ can lead to a smaller number of participants in land markets or to a smaller amount of land being transacted, and that the TCs involved in obtaining information in land markets are an important issue in their operation. This suggests that TCs function as barriers to market entry resulting in a reduced number of market participants, and that asymmetric information among these participants can itself result in increasing TCs.

Although incorporating TCs into models of land transactions can make them more realistic, this does not explain how different factors affect TCs. In this respect, it is worth paying attention to the fact that the role of social capital, such as trust or social networks, has been considered in econometric models of land transactions (Arimoto and Nakajima, 2010; Takahashi *et al.*, 2018). However, models using social indicators cannot explain how things such as social norms and trust actually influence TCs in imperfectly competitive markets. Therefore we argue that it is important to introduce a sociological lens to help understand the real mechanism of land transactions among social networks.

⁷While North (1990) defined two components of the TCs, i.e. measurement costs and enforcement costs, Currie (1981) defined the transaction costs in land markets as the following: the costs of establishing contracts and preliminary negotiations (e.g. searching for suitable properties, verifying their characteristics and negotiating with owners, or locating and negotiating with prospective buyers); and the cost of actually implementing the final contract, such as conveyancing fees, etc. Also, Allan and Lueck (2004) applied TC theory to the pattern of contracts and organisations in the agricultural sector and defined TCs as ‘the costs of enforcing and maintaining property rights’.

New Economic Sociology (NES) (Granovetter and Swedberg, 2001; Guillén, 2003; Smelser Neil and Swedberg, 2005) provides a valuable analytical framework for this research. NES emphasises the positive roles of social norms and trust among social networks in mitigating social costs in the real economy (Granovetter, 2017). This is important since land markets in rural areas, where family and rural community networks have a strong influence, cannot be understood without observing the social relationships between landowners and farmers. Nonetheless, this framework should be carefully compared with the social constructs described in New Institutional Economics (NIE) (Ménard and Shirley, 2008) as ‘informal’ (norms, belief, habits and behaviour)⁸ and ‘formal’ institutions (e.g. constitutions, laws, contract and regulations).

As summarised in Table 3, according to Nee and Swedberg (2008), both NES and NIE reject the neoclassical assumptions of perfect information and instrumental rationality around TCs. However, one area where these two frameworks collide is around the scope of norms and trust: NES argues that social norms and trust work in larger social structures with the help of brokerage bridging information flows among social actors (Burt, 2005), described by Granovetter (2017) as ‘a little trust goes a long way’. By contrast, NIE places less emphasis on social norms and trust in economic transactions (Williamson, 2013), asserting that these informal institutions are generally personal and small-scale, and are thus often replaced by political institutions as the growth, complexity and differentiation of societies increase (Ellickson, 1991; Cook *et al.*, 2005).

When we look at the application of these theories, various empirical studies have analysed the role of social constructs and government institutions mainly in the formation of enterprises and the development of organisations (Macher and Richman, 2008). In addition,

Table 3. Similarities and differences between NES and NIE

	New Economic Sociology	New Institutional Economics
Similarities	<ul style="list-style-type: none"> • Both <u>reject the neoclassical assumptions</u> of perfect information and instrumental rationality. • Both are concerned with <u>the role of networks or institutions</u> in <u>reducing transaction costs</u>. • Both theories are applied to explain the <u>formation of enterprises</u> and <u>development of organisations</u>. 	
Differences	<ul style="list-style-type: none"> • <u>Social norms and trust among social networks</u> play a critical role, connecting individual actions and social institutions. • <u>Structural embeddedness</u>, i.e. the structure of the network that individuals are embedded in is examined carefully. • There is a focus on the role of <u>brokerage</u>, which bridges the distance between small-scale exchanges and larger economic structures. 	<ul style="list-style-type: none"> • <u>Trust</u> works in personal transactions but <u>not in most economic transactions</u>, thus it has minor economic significance (Williamson, 2013). • <u>Informal institutions</u> are generally <u>personal and small-scale</u>, and are thus often <u>replaced by political institutions</u> as the growth, complexity and differentiation of societies increase (Ellickson, 1991; Cook <i>et al.</i>, 2005).

Source: Authors’ own construction based on Nee and Swedberg (2008) and Granovetter (2017).

⁸It should be noted that there are much research around social capital, which is related to accessibility and usage of embedded resources (Lin *et al.*, 2017). Social capital is often considered as a mechanism to reduce TCs, which is largely equivalent to the ‘informal’ institutions described by NIE (Hayami, 2009).

Social Economics (Benhabib *et al.*, 2011; Jackson and Zenou, 2013), which provides the economic analysis of social networks, focusing mainly on network formation and its modelling, has developed with a wide range of empirical application into labour markets, education, crime, diffusion and the innovation of technology (Jackson, 2010; Sanjeev, 2011). However, while Atterton (2007) and Meador (2019) have applied NES in the field of rural studies, few studies have explored the role of social networks in land markets. Following other research which has reported trust and moral obligation based on a long standing landlord-tenant relationship linked by kinship in the past (Scott, 1976; Popkin, 1979; Currie, 1981; Smith, 1984), this study is based around an empirical investigation of land markets in modern rural society where economic and demographic change has challenged these traditional landlord-tenant relationships.

Based on this literature, key sub-questions are drawn, especially under Research Questions 2, 3 and 4 (Table 4). First, norms, trust and power in social networks are identified as key concepts from theory, that will be explored in RQ2. Second, when we look at the role of brokers in land transactions in RQ3, there are important questions around trust and information flow. Finally, RQ4 explores the link with TCs, in the context of imperfect competition in land markets, i.e. barriers to market entry and information failure due to the close links between these features and positive TCs. Answering these questions will help us to understand the function of land markets where we can observe the complex interplay of land policy and the economic and social characteristics of rural areas.

4. Methodology⁹

This section discusses the approach used to answer the RQs posed in the previous section. Here a case-study approach is adopted as an effective methodology to explore and understand complex issues in real world settings (Yin, 2014). Case studies are useful when theoretical frameworks are used to explain particular cases and identify the causal complexity, and help us to evaluate and refine the associated theories (George and Bennett, 2005; Vennesson, 2008; Gerring, 2011). Such approaches strive for theoretical generalisation rather than the

Table 4. Sub-Research Questions under RQs

Research Questions	Key sub-questions based on theoretical framework
2. <u>Who are the actors in social networks</u> and <u>how do the networks work</u> in land transactions?	<ul style="list-style-type: none"> • Do the social networks work based on <u>norms</u> and <u>trust</u>? Where does the <u>power</u> lie?
3. Are there any <u>brokers who facilitate land transactions</u> ? <u>Who</u> are they, <u>how</u> are they brokering <u>between whom</u> and <u>why</u> ?	<ul style="list-style-type: none"> • How does brokerage contribute to <u>information flow</u> and why?
4. <u>How do social networks and political institutions facilitate/impede land transactions</u> ?	<ul style="list-style-type: none"> • What is the role of social networks and institutions in terms of <u>barriers to entry into the land market</u> and <u>information asymmetry</u>? • Do the social networks and institutions increase or reduce <u>transaction costs</u>?

Source: Author's own construction.

⁹Given that this research is in its early stages where the author is selecting suitable communities/regions for case study analysis, constructing questionnaire and designing interviews, some potential approaches to data collection and analysis are discussed here.

statistical generalisations that can be found in large-number cross-case studies (Yin, 2014; Silverman, 2017).

In this research, a comparative analysis between Japan and Scotland is conducted to explore NES and NIE theories in practice. In line with the theoretical framework constructed in the previous section, Japan and Scotland are selected as case study areas because they are expected to deliver contrasting results. Specifically, comparison between rural Japan, which is characterised by communities with tight social networks, and rural Scotland, where political power has a strong influence, may reflect differences between the NIS and NIE positions in the ways that social networks and political institutions work in land markets. In other words, this research assumes that land markets in Japan are closer to NES position where social networks work without being replaced; by political institutions, whereas Scottish land markets may be a better fit to NIE theory, where political institutions play a greater role than social networks.

This assumption is supported by existing rural studies with in-depth case investigations. For instance, in Japan, informal relationships between landowners and farmers associated with reliability and trustworthiness have been as argued to be a key factor in rural land transactions (Senbokuya, 1991; Tojo, 1992; Tamasato, 1995; Akitsu, 1998; Yoshida, 2012; Isaka, 2017). In contrast, in rural Scotland, more businesslike relationships between two parties, often brokered by professional land agents and based on political instruments, appears to be dominant in land markets (McIntosh, 2018). Nonetheless, it is also expected that both social networks and political institutions will work together in practice, rather than one being dominant¹⁰. Hence, both theories should be tested carefully in each case.

This study will adopt a strategy of positive case selection which focuses on cases where a phenomenon of interest is present (Della Porta, 2008). As small number (one or two) of communities/regions will be selected in both countries, these cases should reflect communities/regions where there is a high density of rented land, and where actors (e.g. farmers, landowners, brokers) are commonly engaged in land transactions. As Sutherland (2020) proposed, a parish study method which continues the tradition of community-based approaches has great value in the empirical testing of theories and provides the opportunity for new concepts to emerge. She also stressed that the locale-based approach could be utilised to assess social networks and structures.

Regarding data collection and analysis, Social Network Analysis (Borgatti *et al.*, 2009; Scott and Carrington, 2011), which is able to describe and explore the patterns apparent in the social relationships that individuals and groups form, will be conducted in the following two steps in selected cases (Scott, 2017, p. 47) (Table 5). The first step, for which a land market in one parish/community is set as the unit of analysis, is to identify the entire network in the area, using structured and multiple choice questionnaires to answer RQs 1, 2 and 3. In this step, data are collected from actors (e.g. farmers, landowners, brokers), from questions including ‘what is the relation between the lender/borrower (e.g. relative, neighbour, acquaintance, business associate, or official), ‘how accessed the land (e.g. face to face meetings, reputation, formal meetings, or recommendations from local government)’, ‘why transacted the land with him/her (e.g. rent level, norm, trust, governmental support)’, to map their network (Figure 3). The second step, in which key actors in the network are identified as

¹⁰There are cases in Japan where political institutions, such as Farmland Banks and Agricultural Committees have been successfully involved in land markets to encourage land consolidation (Ministry of Agriculture Forestry and Fisheries, 2018b), as well as cases in which ‘when a tenant retires or terminates a lease the landlord motivation is to lease to an existing tenant rather than an unknown entity’ (Thomason *et al.*, 2014, p. 37) implying the importance of social relationships between contracting parties in Scotland.

Table 5. Plans for data collection and analysis

Unit of analysis (Definition of the “case”)	Criteria for case selection	Methods of data collection and analysis to answer RQs	* Boundaries of the network (Snowballing sampling)
Step1: A land market in a parish/community for identifying the whole network (* see the rightmost column in this table)	<ul style="list-style-type: none"> • High density of rented land • Fluent land transactions by number of actors 	<ul style="list-style-type: none"> • Structured and multiple choice questionnaires • Analysis of data by mapping the network with RStudio (image is shown in Figure 3) • Answer RQs 1, 2 and 3 	<ol style="list-style-type: none"> 1. Visit the Local Area Office/City council to identify the location of farm businesses in a parish/community¹. 2. Visit the businesses to identify the whole land parcels they occupy on the map² and ask who is the landowner/land manager and agents for each parcel. 3. Visit the landowners/land managers and agents to determine which other farmers lease land from them. 4. Stop the snowballing.
Step2: Key actors (individuals/organisations) in the land market for tracing the connections	<ul style="list-style-type: none"> • Large-sized farmers • High degree, closeness and betweenness 	<ul style="list-style-type: none"> • Semi-structured, in-depth interviews • Analysis of word/text data with NVivo • Answer RQs 2, 3 and 4 	

Source: Author’s own construction.

Notes: 1. In this definition, a land market is defined not in terms of the geographical area where the transacted land belongs, but in terms of people who transact the land, based on the parish/community. 2. Nonetheless, the geographical area of land parcels is also identified using map. This mapping approach was used in Burton (2004) and Sutherland (2020).

Data collection

Questions
For each parcel the interviewee is occupying;
Q1. What is the relation between you and the lender?
Q2. How did you accessed the land?
Q3. Why did you transact the land with him/her?

Land No.	Lender	Borrower	Possible answers to		
			Q1	Q2	Q3
1	D	A	Neighbour	Reputation	Trust
2	E	A	Relative	Face to face	Trust
3	D	B	Acquaintance	Community meeting	Norm
4	E	F	Official	Government recommendation	Governmental support
4	F	C	Official	Government recommendation	Governmental support

Mapping

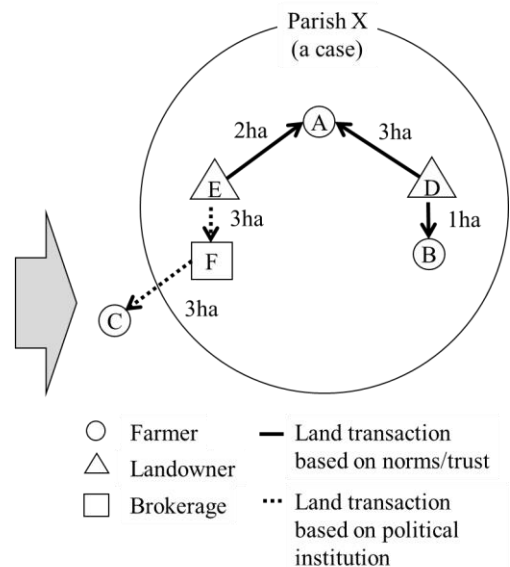


Figure 3. Mapping network from collected data (image)

Source: Author’s own construction.

Notes: To simplify, this figure does not include owner-occupiers who do not transact land nor mixed tenures who own and rent land at the same time, both of whom are assumed to exist in the community (Thomason *et al.*, 2014).

a sub-unit of analysis, is to trace the connections between individual actors, using semi-structured in-depth interviews to answer RQs 2, 3 and 4. Here, key actors are selected by farm-size and the numbers of relationships with other actors (e.g. degree, closeness and betweenness¹¹) and their answers to questions are explored. As Hollstein (2011) emphasised, qualitative approaches in network research are most suitable for exploration of network and network practices, and combining standardised surveys and in-depth interviews enhance the validation of network data; thus, this two-steps data collection fit to answer RQ 1 to 4. Finally, workshop discussions among key stakeholders are conducted to answer RQ5 and RQ6¹².

Lastly, it must be noted that although this research does not address the issue of sampling from large populations, there is still a problem in generalising the structure of overall network of small groups, i.e., the boundedness of social relations. This research responds to this problem by using snowball sampling which is often employed as an useful approach to develop theories, focusing on social networks (Bryman, 2012; Robson and McCartan, 2016). Generally, this approach draws an initial sample and then collects information on all the contacts of the sample members (Scott, 2017, p. 53). In this research, the whole businesses in one parish/community are identified as the initial sample, then collects contacts of their landowners/managers as the second sample, and finally, snowballing will be stopped when the third sample members, who are other tenants renting land from the second sample members, are all identified.

5. Possible results and discussions¹³

After identifying the economic factors underlying land markets (e.g. supply, demand, rent and price), dominant market channels will be identified for each country. In Japan, the main relationships between farmers and landowners could be more informal and conducted between ‘relatives’, ‘neighbours’, and ‘acquaintances’ through ‘face-to-face meetings’ and supported by ‘reputation’ which could be interpreted as ‘land transaction based on informal networks’; whereas in Scotland, relationships could be more ‘official’ and conducted through ‘formal meetings’ or based on ‘recommendations from local government’ which could be interpreted as ‘land transaction based on political institutions’. These channels for land transactions could be chosen for different reasons. For example, informal network-transactions may be based on the norms and trust which underlie the NES position and political institution-transactions may be based on rules and regulations or government support, which reflects the NIE position.

Subsequently, specific reasons for choosing each channel would be identified from interviews, enabling us to identify the presence of norms, trust and power in the network (for RQ2). If there is any brokerage, the results of the interviews would indicate the contribution of brokers to the information flow (for RQ3). Furthermore, the role of each channel in the land market as well as its influence on TCs (for RQ4), should be clarified through in-depth

¹¹‘Degree’ is the number of other points to which a point is adjacent, which means that an actor with high degree transacts land parcels with many other actors, ‘closeness’ is the number of lines of which it is composed, which means the actor with high closeness is accessible to other actors with less intermediaries, and ‘betweenness’ measures the extent to which an actor play a part of ‘broker’ or ‘gate-keeper’ (definitions from Scot (2017)). All of them can be calculated by R Studio.

¹²Glass *et al.* (2012) which conducted workshops among stakeholders including community members and rural estate representatives to explore the challenges and opportunities for collaborative initiatives between estates, communities and other partners, showed the value of workshops to identify the challenges of policy/reform and gaps between the actors.

¹³Given that this research is in its early stages, some potential analyses are discussed in this section.

interviews. Finally, the institutional goals of land policy and participants' opinions of these goals would be explored by organising a workshop including farmers, landowners, brokers and government officials to discover potential conflicts between them or challenges around achieving their goals (for RQ5).

These results are expected to highlight the various actors and their roles in land markets. It is also expected that, in practice, both social networks and political institutions work together, rather than one being dominant. When it comes to the issue of market barriers to entry and information asymmetry, which are often highlighted as features of land markets in the presence of TCs, social networks and political institutions may improve or hinder these problems in different ways at the same time. However, if any gaps between institutional goals and the motivations of social networks are identified, then whether and how these gaps should be reconciled will be discussed. These findings should help us to draw lessons and recommendations for ongoing land policy and reform in both countries.

References

- Akitsu, M. (1998) *Rural Life and Human Network [in Japanese]*. Tokyo: Ochanomizu Shobo.
- Allen, D. and Lueck, D. (2003) *The Nature of the Farm: Contracts, Risk, and Organization in Agriculture*. Cambridge, MA: MIT Press.
- Arahata, K. (2015) *The abolition of rice acreage reduction programme [in Japanese]*. Tokyo: Nikkei Publishing Inc.
- Arimoto, Y. and Nakajima, S. (2010) 'Review on liquidization and concentration of farmland in Japan [in Japanese]', *Japanese Journal of Rural Economics*, 82(1), pp. 23-35.
- Atterton, J. (2007) 'The 'Strength of Weak Ties': Social Networking by Business Owners in the Highlands and Islands of Scotland', *Sociologia Ruralis*, 47(3), pp. 228-245.
- Bator, F.M. (1958) 'The Anatomy of Market Failure', *The Quarterly Journal of Economics*, 72(3), pp. 351-379.
- Benhabib, J., Bisin, A. and Jackson, M.O. (2011) 'Social Economics: A Brief Introduction to the Handbook', in Benhabib, J., Bisin, A. and Jackson, M.O. (eds.) *Handbook of Social Economics*. North-Holland. Available at: <http://www.sciencedirect.com/science/article/pii/B9780444531872000206>.
- Borgatti, S.P., Mehra, A., Brass, D.J. and Labianca, G. (2009) 'Network Analysis in the Social Sciences', *Science*, 323(5916), pp. 892-895.
- Bryman, A. (2012) *Social research methods*. 4th edn. Oxford: Oxford University Press.
- Burt, R.S. (2005) *Brokerage and closure : an introduction to social capital*. Oxford New York: Oxford University Press.
- Burton, R.J.F. (2004) 'Seeing Through the 'Good Farmer's' Eyes: Towards Developing an Understanding of the Social Symbolic Value of 'Productivist' Behaviour', *Sociologia Ruralis*, 44(2), pp. 195-215.
- Carruthers, P. (2009) 'The Land Debate: 'Doing the Right Thing'', in Winter, M. and Lobley, M. (eds.) *What is land for? : the food, fuel and climate change debate*. London, Sterling, VA: Earthscan, pp. 293-318.
- Ciaian, P. and Swinnen, J.F.M. (2006) 'Land Market Imperfections and Agricultural Policy Impacts in the New EU Member States: A Partial Equilibrium Analysis', *American Journal of Agricultural Economics*, 88(4), pp. 799-815.
- Cook, K.S., Hardin, R. and Levi, M. (2005) *Cooperation without trust?* New York: Russell Sage Foundation.

- Currie, J.M. (1981) *The economic theory of agricultural land tenure*. Cambridge, New York: Cambridge University Press.
- Dawson, P.J. (2014) 'Market Failure and Japanese Farmland Rents', *Journal of Agricultural Economics*, 65(2), pp. 406-419.
- Deininger, K. and Jin, S. (2005) 'The potential of land rental markets in the process of economic development: Evidence from China', *Journal of Development Economics*, 78(1), pp. 241-270.
- Della Porta, D. (2008) 'Comparative analysis: case-oriented versus variable-oriented research', in della Porta, D. and Keating, M. (eds.) *Approaches and Methodologies in the Social Sciences*. Cambridge University Press. Available at: <https://ebookcentral.proquest.com/lib/ncl/detail.action?docID=358875>.
- Edwards, T. and Kenyon, W. (2014) *Tenant farming*. Edinburgh: Scottish Parliament Information Centre (SPICe). [Online]. Available at: <https://www.parliament.scot/parliamentarybusiness/79586.aspx> (Accessed: 01/03/2019).
- Edwards, T., Kenyon, W., Pollock, S. and Reid, A. (2015) *Land Reform (Scotland) Bill*. Edinburgh: Scottish Parliament Information Centre (SPICe). [Online]. Available at: <https://www.parliament.scot/parliamentarybusiness/91617.aspx> (Accessed: 13/03/2019).
- Egaitsu, F. and Suzuki, N. (2015) *Agricultural Economics [in Japanese]*. 4th edn. Tokyo: Iwanami Shoten.
- Ellickson, R.C. (1991) *Order Without Law : How Neighbors Settle Disputes*. Cambridge, Mass: Harvard University Press.
- George, A.L. and Bennett, A. (2005) *Case studies and theory development in the social sciences*. Cambridge, Mass: MIT Press.
- Gerring, J. (2011) 'The Case Study: What it is and What it Does', in Goodin, R.E. (ed.) *The Oxford Handbook of Political Science*. Oxford University Press. Available at: <https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199604456.001.0001/oxfordhb-9780199604456>.
- Glass, J., McMorran, R., Price, M. and McKee, A. (2012) *Working Together for Sustainable Estate Communities: Exploring the potential of collaborative initiatives between privately-owned estates, communities and other partners*. [Online]. Available at: <https://www.perth.uhi.ac.uk/t4-media/one-web/perth/news/images/Working-Together-for-Sustainable-Estate-Communities.pdf> (Accessed: 23/01/2019).
- Glass, J., Price, M.F., Warren, C. and Scott, A. (2013) *Lairds, Land and Sustainability*. Edinburgh: Edinburgh University Press Ltd.
- Granovetter, M.S. (2017) *Society and economy : framework and principles*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.
- Granovetter, M.S. and Swedberg, R. (2001) *The sociology of economic life*. 2nd edn. Boulder, CO: Westview Press.
- Guillén, M.F. (2003) *The new economic sociology : developments in an emerging field*. New York: Russell Sage.
- Hashiguchi, T. (2014) 'Japan's Agricultural Policies After World War II: Agricultural Land Use Policies and Problems', in Usio, N. and Miyashita, T. (eds.) *Social-Ecological Restoration in Paddy-Dominated Landscapes*. Springer. Available at: https://doi.org/10.1007/978-4-431-55330-4_1.
- Hatta, T. and Takada, S. (2010) *Industry of Agriculture, Forestry and Fisheries in Japan [in Japanese]*. Tokyo: Nikkei Publishing Inc.
- Hayami, Y. (2009) 'Social Capital, Human Capital and the Community Mechanism: Toward a Conceptual Framework for Economists', *The Journal of Development Studies*, 45(1), pp. 96-123.

- Hayami, Y. and Godo, Y. (2002) *Agricultural Economics [in Japanese]*. 2nd edn. Tokyo: Iwanami Shoten.
- Hodge, I. (2016) *The Governance of the Countryside: Property, Planning and Policy*. Cambridge University Press. Available at: <https://www.cambridge.org/core/books/governance-of-the-countryside/8D35141FB73C46CB2859E76F496230EA>.
- Hollstein, B. (2011) 'Qualitative Approaches', in Scott, J. and Carrington, P.J. (eds.) *The SAGE Handbook of Social Network Analysis*. London: SAGE Publications.
- Isaka, Y. (2017) 'Classification of Farmland Transaction Mechanism and Actual Situation of Non-market Transactions [in Japanese]', *Japanese Journal of Rural Economics*, 89(1), pp. 32-49.
- Jackson, M.O. (2010) *Social and Economic Networks*. Princeton University Press. Available at: <https://www.degruyter.com/view/product/540503>.
- Jackson, M.O. and Zenou, Y. (2013) *Economic Analysis of Social networks*. Cheltenham, Northampton: Edward Elgar Publishing.
- Lin, N., Burt, R.S. and Cook, K.S. (2017) *Social capital : theory and research*. London: Routledge.
- Lowe, P. (2011) 'The Agency of Rural Research in Comparative Context', in Brown, D.L., Shucksmith, M., Shortall, S., Vergunst, J. and Warner, M.E. (eds.) *Rural transformations and rural policies in the US and UK*. London: Routledge.
- Macher, J.T. and Richman, B.D. (2008) 'Transaction Cost Economics: An Assessment of Empirical Research in the Social Sciences', *Business and Politics*, 10(1), pp. 1-63.
- McIntosh, B. (2018) *A Review of the Conduct of Agents of Agricultural Landlords and Tenants*. Inverness: Scottish Land Commission. [Online]. Available at: <https://landcommission.gov.scot/our-work/tenant-farming/reviews> (Accessed: 08/03/2020).
- McIntosh, B. (2019) *Codes of Practice: Agreeing and Managing Agricultural Leases*. Inverness: Scottish Land Commission. [Online]. Available at: <https://landcommission.gov.scot/our-work/tenant-farming/codes-of-practice> (Accessed: 05/03/2020).
- McMorran, R. (2016) 'Socio-economic and environmental outcomes from different landownership models in rural Scotland', in Skerratt, S., Atterton, J., McCracken, D., McMorran, R. and Thomson, S. (eds.) *Rural Scotland in Focus 2016*. Edinburgh: Scotland's Rural College.
- Meador, J.E. (2019) 'Reaching rural: Identifying implicit social networks in community development programmes', *Journal of Rural Studies*, 68, pp. 285-295.
- Ménard, C. and Shirley, M.M. (2008) 'Introduction', in Ménard, C. and Shirley, M.M. (eds.) *Handbook of New Institutional Economics*. Springer. Available at: https://doi.org/10.1007/978-3-540-69305-5_1.
- Ministry of Agriculture Forestry and Fisheries (2015) *Basic Plan on Food, Agriculture and Rural Areas*. Tokyo: Ministry of Agriculture Forestry and Fisheries. [Online]. Available at: https://www.maff.go.jp/e/policies/law_plan/index.html (Accessed: 22/10/2018).
- Ministry of Agriculture Forestry and Fisheries (2018a) *Census of Agriculture and Forestry [in Japanese]*. Tokyo: Ministry of Agriculture Forestry and Fisheries. [Online]. Available at: https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00500209&tstat=000001016170&cycle=0&tclass1=000001112708&tclass2=000001112709&cycle_facet=tclass1%3Atclass2 (Accessed: 01/03/2020).

- Ministry of Agriculture Forestry and Fisheries (2018b) *Good practices of Farmland Banks [in Japanese]*. Available at: <http://www.maff.go.jp/j/keiei/koukai/kikou/attach/pdf/index-112.pdf> (Accessed: 14/02/2019).
- Ministry of Agriculture Forestry and Fisheries (2019) *About Farmland System [in Japanese]*. Available at: <https://www.maff.go.jp/j/keiei/koukai/index.html> (Accessed: 05/03/2020).
- Munton, R. (2009) 'Rural land ownership in the United Kingdom: Changing patterns and future possibilities for land use', *Land Use Policy*, 26(SUPPL. 1), pp. S54-S61.
- Nee, V. and Swedberg, R. (2008) 'Economic Sociology and New Institutional Economics', in Ménard, C. and Shirley, M.M. (eds.) *Handbook of New Institutional Economics*. Springer. Available at: https://doi.org/10.1007/978-3-540-69305-5_30.
- Nix, J. (2003) *Land and estate management*. 4th edn. Chichester: Packard Publishing.
- North, D.C. (1990) *Institutions, institutional change, and economic performance*. Cambridge: Cambridge University Press.
- Ostrom, E. (2015) *Governing the commons : the evolution of institutions for collective action*. Cambridge : Cambridge University Press. Available at: <https://doi.org/10.1017/CBO9781316423936>.
- Owens, S. (2007) 'Response to 'A land fit for the future'', in *20:26 Vision: What future for the countryside?* London: Campaign to Protect Rural England pp. 22-25.
- Pollock, S. (2015) *International Perspectives on Land Reform*. Edinburgh: Scottish Parliament Information Centre (SPICE). [Online]. Available at: <https://www.parliament.scot/parliamentarybusiness/91179.aspx> (Accessed: 13/03/2019).
- Popkin, S.L. (1979) *The rational peasant : the political economy of rural society in Vietnam*. Berkeley: University of California Press.
- Portes, A. and Mooney, M. (2003) 'Social Capital and Community Development', in Guillén, M.F. (ed.) *The new economic sociology : developments in an emerging field*. New York: Russell Sage.
- Robson, C. and McCartan, K. (2016) *Real World Research : A Research for Users of Social Research Methods in Applied Settings*. 4th edn. Hoboken: John Wiley & Sons Ltd.
- Sadoulet, E., Murgai, R. and De Janvry, A. (2001) 'Access to Land via Land Rental Markets', in de Janvry, A., Gordillo, G., Platteau, J.-P. and Sadoulet, E. (eds.) *Land, Rural Poverty, and Public Action*. Oxford University Press. Available at: <https://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199242177.001.0001/acprof-9780199242177>.
- Sanjeev, G. (2011) 'Social Networks in Economics', in Scott, J. and Carrington, P.J. (eds.) *The SAGE Handbook of Social Network Analysis*. London: SAGE Publications.
- Sanjuán, A., Dawson, P., Hubbard, L. and Shigeto, S. (2009) 'Rents and Land Prices in Japan: A Panel Cointegration Approach', *Land Economics*, 85, pp. 587-597.
- Scott, J. (2017) *Social Network Analysis*. 4th edn. London: SAGE Publications.
- Scott, J. and Carrington, P.J. (2011) *The SAGE Handbook of Social Network Analysis*. London: SAGE Publications.
- Scott, J.C. (1976) *The moral economy of the peasant : rebellion and subsistence in Southeast Asia*. New Haven: Yale University Press.
- Scottish Government (2019a) *Abstract of Scottish Agricultural Statistics 1982 to 2019*. Edinburgh: Scottish Government. [Online]. Available at: <https://www2.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/Publications/Abstract2019> (Accessed: 01/03/2020).
- Scottish Government (2019b) *Farming opportunities for new entrants (FONE): information pack*. Edinburgh: Scottish Government. [Online]. Available at: <https://www.gov.scot/publications/farming-opportunities-for-new-entrants-fone-information-pack/> (Accessed: 05/03/2020).

- Sekiya, S. (2002) *Farmland system in Japan [in Japanese]*. Tokyo: Agricultural Policy Research Committee, Inc.
- Senbokuya, Y. (1991) 'The primary Factors of Land Transaction, From the View Point of the Relationship between the Farm Families [in Japanese]', *The Review of agricultural economics, Hokkaido University* 47, pp. 71-88.
- Shigeto, S., Hubbard, L. and Dawson, P. (2008) 'On farmland prices and rents in Japan', *Agricultural Economics*, 39, pp. 103-109.
- Shogenji, S. (1998) *Economic Analysis of Modern Agricultural Policy [in Japanese]*. Tokyo: University of Tokyo Press.
- Silverman, D. (2017) *Doing Qualitative Research*. 5th edn. Los Angeles: SAGE Publications.
- Skoufias, E. (1995) 'Household Resources, Transaction Costs, and Adjustment through Land Tenancy', *Land Economics*, 71(1), pp. 42-56.
- Smelser Neil, J. and Swedberg, R. (2005) *The Handbook of Economic Sociology*. Princeton University Press. Available at: <https://www.degruyter.com/view/product/451395>.
- Smith, R.M. (1984) *Land, kinship and life-cycle*. Cambridge, New York: Cambridge University Press.
- Sutherland, L.-A. (2020) 'Finding 'Hobby' Farmers: A 'Parish Study' Methodology for Qualitative Research', *Sociologia Ruralis*, 60(1), pp. 129-150.
- Takahashi, D. (2012) 'Farmland Liquidization and Transaction Costs', *The Japanese Journal of Rural Economics*, 14, pp. 1-19.
- Takahashi, D., Chang, T. and Shobayashi, M. (2018) 'The role of formal and informal institutions in farmland consolidation: The case of Shiga Prefecture, Japan', *International Journal of the Commons*, 12(2), pp. 80-107.
- Tamasato, E. (1995) 'Kinship and Farmland Rental Relation in a Part-time Farming Area; A Case Study of Urbanized Rural Japan [in Japanese]', *Japanese Journal of Rural Studies*, 1(2), pp. 41-52.
- Thomason, S., Moxey, A. and Butler, A. (2014) *Scottish Agricultural Tenure Evidence Review*. Edinburgh: Scottish Government. [Online]. Available at: <https://www.gov.scot/publications/scottish-agricultural-tenure-evidence-review/> (Accessed: 15/01/2019).
- Thomson, S. (2016) 'Scottish agriculture', in Skerratt, S., Atterton, J., McCracken, D., McMorran, R. and Thomson, S. (eds.) *Rural Scotland in Focus 2016*. Edinburgh: Scotland's Rural College.
- Tojo, M. (1992) 'Farmland concentration on large-scaled rice farms and the significance of informal process [in Japanese]', *Japanese Journal of Farm Management*, 30(3), pp. 1-9.
- Vennesson, P. (2008) 'Case studies and process tracing: theories and practices', in Della Porta, D. and Keating, M. (eds.) *Approaches and Methodologies in the Social Sciences* Cambridge University Press. Available at: <https://ebookcentral.proquest.com/lib/ncl/detail.action?docID=358875>.
- Warren, C. (2009) *Managing Scotland's Environment*. 2nd edn. Edinburgh: Edinburgh University Press.
- Wightman, A. (2015) *The Poor Had No Lawyers: Who Owns Scotland (And How They Got It)*. 4th edn. Edinburgh: Birlinn Ltd.
- Williams, F. and Slee, R. (2008) 'Barriers to New Entrants to Scottish Farming - A New Perspective on an Old Problem', *the 6th Rural Entrepreneurship Conference*. Crichton University Campus, Dumfries, May 2008.
- Williamson, O.E. (2013) *The transaction cost economics project : the theory and practice of the governance of contractual relations*. Cheltenham, Northampton: Edward Elgar.
- Williamson, O.E. and Masten, S.E. (1995) *Transaction cost economics*. Aldershot, Hants, England: Edward Elgar.

- Winter, M. and Lobley, M. (2009) *What is land for? : the food, fuel and climate change debate*. London, Sterling, VA: Earthscan.
- Wu, J. and Duke, J.M. (2014) 'Introduction', in Wu, J. and Duke, J.M. (eds.) *The Oxford handbook of land economics*. Oxford, New York: Oxford University Press.
- Yin, R.K. (2014) *Case study research : design and methods*. 5th edn. Los Angeles: SAGE Publications.
- Yoshida, K. (2012) 'Analysis of Transferring Farmland Rights in Terms of Social Relationships in an Intensive Agricultural Area: A Case Study of Kamihata Settlement, Minami Awaji City, Hyogo Prefecture [in Japanese]', *Japanese Journal of Human Geography*, 64, pp. 103-122.