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Exploring multiple drivers of cooperative governance: a paired case comparison of vegetable growing cooperatives in the UK and China

RESEARCH ARTICLE

Qiao Liang^a, Han Dong^b, Adrian R. Bailey^c, Weibin Hu^d and Fu Jia^{®e}

^aProfessor, ^bPhD student, ^dAssistant Professor, China Academy for Rural Development, School of Public Affairs, Zhejiang University, Hangzhou, China P.R.

^cSenior Lecturer, University of Exeter Business School, Exeter, United Kingdom

^eProfessor, The York Management School, University of York, Heslington, York YO10 5DD, United Kingdom

Abstract

Farmers' collective action via cooperatives is critical to achieving a wide range of economic and social benefits that lead to sustainable development and enhance the welfare of rural communities. Adopting a qualitative case study method, the paper compares the development and governance attributes of two cooperatives and seeks to identify how non-economic conditions explain their differences. The cases are selected from the United Kingdom and China, representing different cultural and legislation contexts, to explore the role of culture and legislation in formulating the governance of farmer cooperatives. The results demonstrate that: (1) the formation of member groups due to considerable member heterogeneity may lead to the skewed allocation of control rights and income rights; (2) legislation play an important role in formulating the governance of cooperatives; and (3) national culture potentially has influence on cooperative governance, but direct evidence is insufficient.

Keywords: farmer cooperative, governance attribute, member heterogeneity, legislation, culture

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[®]Corresponding author: jeff_fujia@hotmail.com

1. Introduction

Worldwide, farmer cooperatives are currently one of the dominant players in agriculture and rural development (Liang and Hendrikse, 2016; Wossen *et al.*, 2017). Agricultural production in rural areas is constrained by weak infrastructure, low levels of education, limited access to capital, limited access to markets and low levels of managerial capital. To overcome these challenges and achieve the sustainable development of rural areas, farmers take collective action and/or organise themselves into cooperatives (Bernard *et al.*, 2008; Staatz, 1987). Farmer cooperatives have a wide range of benefits in terms of the economic, social, and cultural welfare of rural communities, which differs from that of investor-owned firms and determines the unique governance attributes (i.e. allocation of control rights and income rights) of these cooperative organisations (Tregear and Cooper, 2016).

The governance attributes of farmer cooperatives vary across different nations and regions (Chaddad, 2012; Chaddad and Cook, 2004; Liang *et al.*, 2015). Cooperatives in China have different governance attributes and adopt practices reflecting different values from those in Western countries such as the United Kingdom (UK) (Liang and Hendrikse, 2013; Wu and Xu, 2013; Yu, 2017). Cooperatives in the UK typically featured by democratic control and collective benefits which are among the principles of the International Co-operative Alliance (ICA).¹ In contrast, the majority of the cooperatives in China are characterised by dominant control by one or a few core members. Common members typically have little ability to engage in financial capital investment or wider decision-making processes (Liang *et al.*, 2015; Luo *et al.*, 2017). Therefore, we believe there are significant and meaningful differences that can help us understand the phenomenon at a deeper level.

The factors associated with the governance of organisations have multiple facets. Institutional economic theory explains that the allocation of control and income rights are determined primarily by ownership rights and are under the influence of rational actors (Hart and Moore, 1996; Nilsson and Lind, 2015). Transaction cost theory is typically invoked to explain the choice among various cooperative governance structures (Hendrikse and Veerman, 2001). Member heterogeneity is one of the main sources of intra-organisation transaction costs due to the characteristics of collective decision making in cooperatives (Hansmann, 1988). The association between member heterogeneity and the governance of cooperatives is widely recognised (Höhler and Kühl, 2018). The extent of member heterogeneity may affect the allocation of ownership and income rights. As the number of members and member heterogeneity increase, cooperatives tend to adopt more strategies to reduce transaction costs in decision making; e.g. new generation cooperatives in the US and shareholder cooperatives in China have emerged that attach more importance to transactions and/or capital in decision making (Xu, 2014).

Beyond the aforementioned market structure and member heterogeneity factors, Williamson (2000) emphasises that social embeddedness and institutional environments, among others, are considered to be important factors when formulating the governance of economic activities and organisations. However, questions relating to how non-market or non-economic environmental conditions influence organisational governance are typically overlooked in the literature (Wu and Pullman, 2015). The emergence of cooperativism, regardless of whether it involves consumer (Purvis, 1998) or worker cooperatives (Molina and Miguez, 2008) or the more recent economic-oriented farmer cooperatives in China (Huang *et al.*, 2016; Liang and Hendrikse, 2013), is contingent upon historical, geographical, legislative, and cultural differences.

Research pertaining to the connection between legislation and cooperative governance is rare. Liang *et al.* (2015) describe the governance structure features of farmer cooperatives in China and provide a comprehensive discussion on the gap between the National Cooperative Law and actual governance attributes. Brussels *et al.* (2012) emphasise that clear cooperative law with detailed specification of governance attributes is

¹ The seven cooperative principles of the ICA are: (1) voluntary and open membership; (2) democratic member control; (3) member economic participation; (4) autonomy and independence; (5) education, training and information; (6) cooperation among cooperatives; (7) concern for community. For the details and explanations for each principle, please refer to <https://www.ica.coop/en/cooperatives/cooperative-identity>. Guanxi refers to relationships or social connections based on mutual benefits (Yang, 1994).

needed at the early stage of development, while more flexible legislation is expected in later stages. The association between legislation and the governance structure of cooperatives has not yet been discussed and deserves attention.

Fukuyama (1995) has argued that national cultural tendencies will influence behaviour at the level of the firm, finding clear distinctions between Western and Eastern contexts. It is surprising that the role of national culture is seldom included in economic-oriented research on farmer cooperatives, especially when cultural factors have been demonstrated to affect the governance or performance of capital-oriented firms and/or supply chain relationships (Jia and Rutherford, 2010; Steyaert and Katz, 2004; Williamson, 1985; Wu and Pullman, 2015). Therefore, this paper responds to recent research that has called for a greater consideration of the roles of national culture and legislation in social networks and economic behaviour (Batjargal *et al.*, 2013; Kraft and Bausch, 2018).

The paper contributes to the literature by exploring how member heterogeneity and legislation formulate the governance of farmer cooperatives based on two very different contexts, the UK and China. The potential role of national culture is also discussed. Specifically, our research addresses three interconnected research questions. First, what are the governance attributes in relation to member heterogeneity of the two cooperatives with similar business models? Second, to what extent can the observed differences in governance between two farmer cooperatives be explained in relation to institutional contexts? Third, is the governance dynamics of farmer cooperatives explained more adequately by considering the role of national culture, given that cooperatives in different institutional contexts appear to have different characteristics?

To address these questions, we compare the governance attributes of two farmer cooperatives, one each in the UK and China, and explore the roles of member heterogeneity, cooperative legislation, and culture in shaping the configuration of cooperative governance attributes.

2. Theoretical framework

In the following section, we introduce theories pertaining to the governance of cooperatives and its influencing factors.

2.1 Cooperative governance and member heterogeneity

A governance structure specifies the allocation of ownership rights, control rights and income rights (Hansmann, 1996). A cooperative is featured by being user-owned, user-controlled, and user-benefitting (Dunn, 1988). Unlike for-profit firms, which are primarily oriented to create economic benefits, cooperatives have hybrid identities pursuing both economic and non-economic objectives, such as improving the members' education, establishing networks for members via cooperation with other cooperatives, and developing the local community (Franken and Cook, 2015; Xu *et al.*, 2018; Yang *et al.*, 2013). In all cases, the ownership, decision making, and income rights of a cooperative lie with the membership.

The governance arrangement of a cooperative, i.e. the allocation of control and income rights, is to a large extent dependent on transaction-specific costs due to member heterogeneity (Hansmann, 1988). Generally, there are three dimensions of member heterogeneity in cooperatives: farm-level (e.g. farm size and location), product (e.g. category and quality), and member-level (e.g. technology and financial capital) characteristics (Höhler and Kühl, 2018). The member heterogeneity of farmer cooperatives in Western countries mostly refers to the degree of difference in farm size and product quality (Höhler and Kühl, 2018). Chinese scholars typically mention differences in member endowment of financial capital, marketing capabilities, and social networks. For example, both Lin and Huang (2007) and Xu and Shao (2014) analyse differences among members in resource endowment. They point out the heterogeneity in resource endowment is usually reflected in natural resources such as land, financial and/or physical capital, human resources such as education level, marketing and/or management capabilities, as well as social networks. Liang *et al.* (2015) analyse member

heterogeneity in farmer cooperatives in China, categorising core and common members. Core members are those who have a dominant position in financial capital investment, decision-making, and income rights, while common members usually focus on farming. This feature of member heterogeneity in terms of the member groups in cooperatives in China leads to the dominant control of ownership, decision making, and benefits rights by core members (Xu, 2014). However, there has been little comparative research into the association of member heterogeneity with cooperative governance.

2.2 Formal legislation and national culture

Institutional theory emphasises the role of both formal and informal institutions in formulating the economic governance and performance of firms (North, 1990; Williamson, 2000). Formal institutions employ formal rules such as constitutions, laws, and property rights, which mainly involve the legislative, judicial, and bureaucratic functions of government. Formally establishing the rules of the game helps to achieve the effective governance of economic activities and sequentially enhance the economic efficiency of firms. There is a rich body of literature pertaining to the influence of the institutional environment on firms' governance and performance. We focus on the legislation dimension in the current paper to indicate the formal institutional environment of cooperatives.

Informal institutions refer to social and cultural embeddedness involving norms, customs, traditions, etc. (Smelser and Swedberg, 2010; Williamson, 2000). The existence of informal institutions is usually taken as given by most researchers. The dynamic role of the sociocultural environment in formulating the governance and behaviour of organisations is stressed by many scholars (e.g. Dequech, 2003; Hollingsworth and Boyer, 1997; Kraft and Bausch, 2018; Morgan *et al.*, 2010). We focus on the role of national culture, among other informal institution dimensions, in the current paper.

Jia and Rutherford (2010) identify three dimensions defining cultural differences between China and Western countries (e.g. US and UK). The first difference is individualism vs collectivism. The predominance of individualism as an ideology in Western cultures arises from a strong emphasis on human rights and the freedom of the individual as an economic and political agent. In contrast, people in Eastern cultures attach more value to collectivism.

The second aspect of culture is the importance attributed to multiple institutions in the West vs guanxi culture in China.² Western culture relies more on formal institutions such as laws, bylaws, and norms, while Chinese culture regulates collective action using guanxi mechanisms (Xin and Pearce, 1996). Despite the declining significance hypothesis presented by Guthrie (1998), a substantial body of research demonstrates the enduring significance of guanxi within the centrally managed capitalist economy in China (Barbalet, 2017; Bian, 2017, 2018). The enduring significance of guanxi to economic relations is understood as a cultural phenomenon in the social sciences field (Bian and Ikeda, 2014; Chen *et al.*, 2013; Qi, 2013).

The third cultural difference lies in the Western relationship building process vs the guanxi building process. The process of building a relationship in the UK, for example, is through formal legal and institutional ties and is primarily mediated by market relationships. The relationship building process of guanxi networks is based on the interplay of mianzi (i.e. face) and renqing. Face is an intangible form of social currency, and personal status is affected by one's social position and material wealth (Park and Luo, 2001). Hwang (1987) explains that renqing is, first, a set of social norms that one has to follow to have good relationships with others in Chinese society and, second, a resource that a person can present to another as a gift in the course of social exchange. Guanxi networks have a long-term orientation (Hofstede, 1991).

² Interviewees, except for the chair, were chosen based on both accessibility and random. Riverford Organic Vegetables (1986-2010), then Riverford Organic Farms (2011- date of publication).

3. Methods

3.1 Multiple case study method

Given the lack of comparative research on the association between member heterogeneity and the governance structures of cooperatives and the difficulty of measuring and obtaining data on member heterogeneity and governance structure, we adopt a qualitative multiple case study method by choosing two dissimilar cases in terms of governance features and institutional factors (Voss *et al.*, 2002). Adopting a paired case comparison (Eisenhardt, 1989; Tarrow, 2010), we aim to formulate a typology of the governance attributes of farmer cooperatives and investigate the roles of various non-economic factors in the dynamics of the governance attributes of cooperatives.

3.2 Case selection

Our field study focuses on two vegetable producing cooperatives, one each from the UK and China, the South Devon Organic Producers (SDOP) Co-op and the Beizhijiang vegetable (BZJ) Co-op, respectively. These two cooperatives are chosen for three reasons. First, the two cooperatives have different governance attributes, which makes the analysis of social networks feasible. The UK has a long tradition of farmer cooperatives, while China represents a transitional country where farmer cooperatives are developing rapidly with different governance features. These differences in historical development and national culture provide an appropriate context for the comparison of various aspects of cooperative governance. Second, both cooperatives are located in traditional agricultural areas and are engaged in vegetable production, which will allow us to control for the difference in governance features associated with product characteristics. Third, the focus on the production and marketing of fresh vegetables is relevant for the current study because of the relatively simple supply chains involved. All the other food sectors where cooperatives are pervasive, e.g. cereal, dairy, and meat, are characterised by the processing of products, which makes the supply chain relatively more complicated.

3.3 Data collection

Data were collected through semi-structured interviews with the chairmen, managers, and members of the cooperative's downstream companies and village chiefs (China) by two teams of researchers, one each in the UK and China between 2015 and 2018. Each interview lasted for 30-180 minutes. Some interviewees, e.g. the key people in the cooperatives, were interviewed more than once.

We employed a three-part interview protocol to understand certain aspects of the cases, i.e. (1) the evolution and overall profile of the cooperative; (2) the governance attributes reflecting the values of the cooperative; and (3) member heterogeneity and the relationships between the management and the membership and among the membership.

In particular, for the SDOP Co-op in the UK, we conducted interviews with the chair, member farmers, workers and managers, as well as its stakeholders such as ex-members.³ These interviews took place at offices or farms. All the interviews were recorded and transcribed. The list of all the interviewees is displayed in Table 1.

For the BZJ Co-op in China, we interviewed the chair, manager, large and small members, and the chief and deputy chief of the village. The interviews were conducted at the offices of the chair and the village chief and on the farms of members.

³ Interviewees, except for the chair, were chosen based on both accessibility and at random.

Table 1. List of interviewees.¹

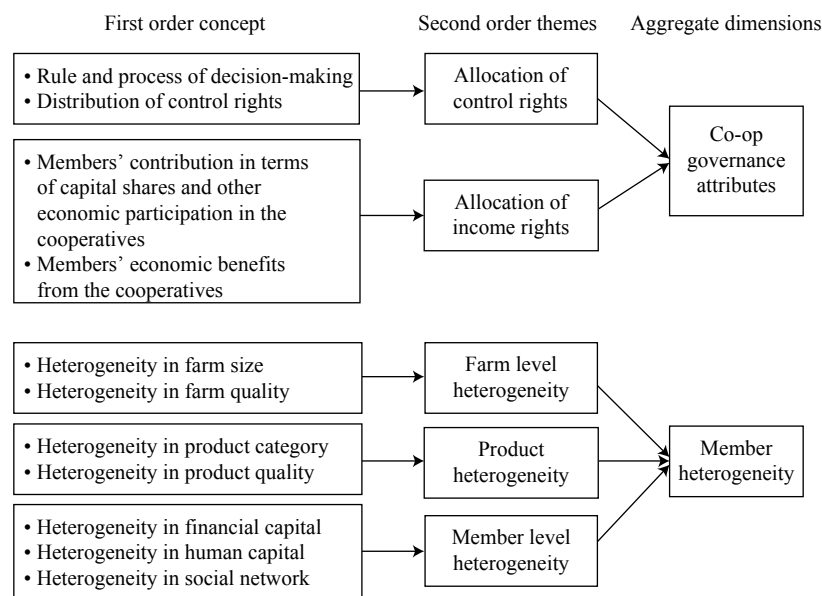
Co-ops	Interviewees	Interview time	Location
SDOP Co-op	1 co-op chair	3 hours	farm
	1 manager	1.5 hours	farm
	1 resigned-member	2 hours	farm
	2 former members	2 hours	farms
	4 members	>1 hour each	farms
	1 employee	1 hour	SDOP office
	1 consultant/former manager	>1 hour	home
BZJ Co-op	1 co-op chair	3 hours	the chair's office
	1 manager of the marketing dept.	1 hour	the manager's office
	1 small member	1 hour	farm
	1 large member	1 hour	farm
	2 village chiefs	30 minutes	the village chief's office

¹ BZJ Co-op = Beizhijiang vegetable Co-op; SDOP Co-op = South Devon Organic Producers Co-op.

3.4 Data coding and analysis

We follow the grounded theory approach to data coding (Strauss and Corbin, 1990). There are three types of coding based on grounded theory, i.e. open, selective, and axial. We used the former two in our data coding. First, during the open coding process, the researchers conducted coding processes individually using the constant comparative method and generated different forms of concepts relating to a similar phenomenon. Then, these concepts were grouped together to form categories for governance, member heterogeneity, and national legislation. We then checked the conceptualisation of the various themes and dimensions based on a comprehensive review of the literature, such as Dequech (2003), Liang *et al.* (2015), and Moran (2005). Finally, we formulated the data structure after data categorisation based on the interviews and observations, as well as the literature. The data structure is delineated in Figure 1.

We conduct multiple-step analyses including both within-case and cross-case analyses. In the first round of data analysis, the features with regard to the governance attributes of the two cooperatives are identified

**Figure 1.** Data structure.

by different groups of authors. All the authors compare the coded data of the two cooperatives to ensure consistency. Discussions are conducted to compare the governance attributes of the two cooperatives. In the second round of analysis, we attempt to identify member heterogeneity and how it is associated with the governance of cooperatives by referring to the literature. In the third round of analysis, we discuss the role of institutional environment and other potential factors formulating the governance attributes of cooperatives. The paired case design allows us to investigate the role of high-level formal and informal institutions in formulating the alternative governance attributes of cooperatives in the UK and China.

4. Within-case analysis

4.1 South Devon Organic Producers, UK

■ *Foundation and development of the Co-op*

The SDOP Co-op was pioneered by Guy Watson, who graduated from Oxford University with a first-class degree in agriculture. Recognising the popularity of the organic market in the United States, Guy started his own organic business in 1987, Riverford Organic Vegetables (hereafter Riverford)⁴. As the business grew rapidly, Riverford was unable to meet the increasing demand through its own farm. Anticipating demand, Guy launched SDOP in 1997 to involve more farmers in growing organic vegetables. The main motive for the foundation of the cooperative was to obtain a stable supply of organic vegetables for Riverford. The main facilitating factor was ready access to European Union (EU) funds. Guy started a three-year process of withdrawing his capital to sustain SDOP from 2013 and formally resigned his membership with SDOP in 2016. In 2017, SDOP had 12 farmer members, cultivating 1,129 hectares with over 40 types of vegetables and livestock.

Members of SDOP sell most of their products to a single downstream customer, Riverford. SDOP receives an order each week specifying the delivery that Riverford requires on specific days and then organises their labour to deliver on that day. The price is set during annual negotiations between SDOP and Riverford and contracts are signed to guarantee prices a year in advance. SDOP is obligated to abide by these contracts. In a good year, SDOP members can sell excess produce to Riverford. Generally, Riverford has much stronger bargaining power than SDOP, but there are exceptions, for example, when Riverford encounters a shortage from other suppliers without other ways to obtain the resource.

■ *Governance attributes of the SDOP Co-op*

Democratic member control is upheld in decision making on a one-member-one-vote basis. The cooperative elects three directors and a fourth member as chair to its board on a three-year cycle and holds regular board meetings. Final decision-making rights reside with the members, but consultation within a small pool of members is relatively simple. An annual open day, designed to introduce potential members to SDOP, is combined with the annual general meeting (AGM), which is held between July and September.

Members' economic participation is respected as members contribute equitably to the capital of their cooperative. The pooled capital is the common property of the cooperative, although the amount remains small, because the aim of SDOP is to generate profits for individual members rather than accumulate capital in the cooperative. Members participate in terms of capital investment, decision-making, patronage, and benefits distribution. Surpluses, if there are any, are allocated among the members based on their patronage and capital. These rules are strictly followed by SDOP. All members contribute an initial share of capital in proportion to the size of land holding they will cultivate for the Co-op. Member share capital is a one-off investment and is returned in three instalments over three years subsequent to members leaving SDOP. The governance of the SDOP Co-op is described in Figure 2.

⁴ Riverford Organic Vegetables (1986-2010), then Riverford Organic Farms (2011 – date of publication).

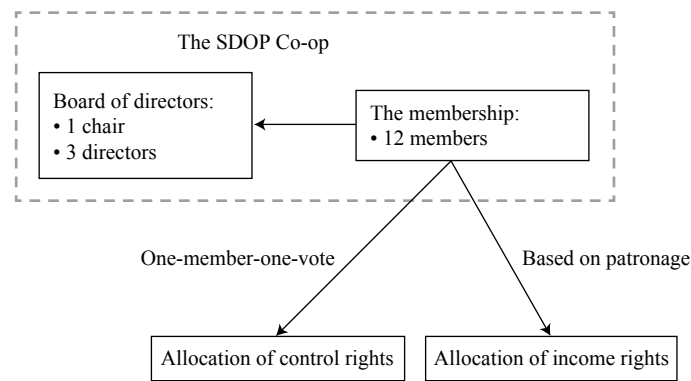


Figure 2. The governance of the South Devon Organic Producers (SDOP) Co-op.

■ *Member heterogeneity in the SDOP Co-op*

The members share a collective belief in organic farming, although some members are more ideologically driven than others in their adoption of organic methods. The annual open day is held at different organic farm locations where SDOP members, staff and potential members can learn from best practices (e.g. weed control). The SDOP members also host knowledge transfer events at their farms to educate members about successful cultivation practices and to share the challenges they are facing. By and large, the members are homogeneous in that their farmland is in the same geographical area, they specialise in vegetable production and have the same access to technology, and there is a single buyer.

The members are heterogeneous in various ways. First, the farmers have different visions for organic farming. Some members insist that environmental protection is the most important, while others question the benefits of organic production due to the relatively higher cultivation costs and the opportunity costs of applying for funding schemes. Second, the farmers operate in different ways, which is a potential source of tension. For example, the different practices and professionalism of the farmers leads to variability in terms of inputs and outputs, which makes it challenging to coordinate the supply of services to the SDOP members by its staff and thus the resulting supply of vegetables to Riverford. Third, farm size and product quality vary among member farms. The heterogeneity related to product quality is due to not only farmer ability and experience, but also weather conditions and soil type. Finally, it is noted that the members of SDOP are not connected through kinship relations, with the one exception being a sibling connection between the spouses of a former SDOP manager and an SDOP farmer member.

4.2 *The Beizhijiang vegetable Co-op, China*

■ *Foundation and development of the Co-op*

The BZJ cooperative was established by eight farmers, including the chair Zhang, Zhang's father and younger brother, and five other farmers in 2009. The main initial functions of the cooperative were land circulation and reorganisation. Zhang and the other founders visited the householders in the village individually to persuade them to rent their farmland to the cooperative. Each farmer who rented land to the cooperative was paid a rental fee of approximately US\$ 600 per ha per year and automatically became a member of the cooperative. All the rented land was grouped together into plots and subcontracted either to farmers from the local village or professional vegetable growers, and these farmers automatically became cooperative members as well. The purpose of land circulation and reorganisation is to eliminate the negative effects of land fragmentation and to achieve economies of scale.

After the first round of land circulation, the cooperative had 120 members. In addition to engaging in land circulation and reorganisation activities, the cooperative provides services such as training related to vegetable production technology and market information. The members farm under the guidance and supervision of the cooperative, which means that training is needed to help members standardise and improve product quality, although farmers have the final decision-making rights over such issues as the varieties and production scale of vegetables.

Vegetables of relatively high quality, which represent approximately 30–40% of the members' total output, are sold to Pangu, while the remaining lower quality vegetables are mainly sold in a local wholesale market and at wet markets. Pangu was established in 2011 by Zhang and his family (his father and a younger brother). Specifically, Zhang, who is president of the corporation, holds 55% of the shares, while his father and brother hold 25 and 20%, respectively. Zhang and his family founded the corporation to control the decision making and economic benefits of the cooperative. The purchase price is flexible and follows the local market price.

■ Governance attributes of the BZJ Co-op

In the BZJ Co-op, the control rights are dominantly held by Zhang and his family, which means they exercise exclusive control. The cooperative never holds general membership meetings to conduct voting, and common members rarely have a say in decision making. Members may make complaints or offer advice, but the final decision-making rights reside with Zhang and his family.

Common members of the BZJ Co-op rarely make any economic contribution to the cooperative. Initially, nearly 40% of the financial capital was contributed by the common members. However, Zhang gradually limited common members' capital shares to an extremely low level, i.e. 5.5%; meanwhile, he transferred the remaining shares to the Fuyang Supply and Marketing Cooperative (SM Co-op hereafter), which is an external investor with a government background and does not participate in voting of the BZJ Co-op, and the Pangu Corporation, which is controlled by Zhang and his family. The specific distribution of capital shares is delineated in Figure 3.

The relationship between Zhang (together with his family) and the other members is that of a leader-follower. First, Zhang and his family supervise the member farmers' production. Second, general meetings are seldom held, as important affairs are decided among Zhang family members, while the farmers focus on production. Third, Zhang adopts incentives to increase members' commitment to the cooperative, such

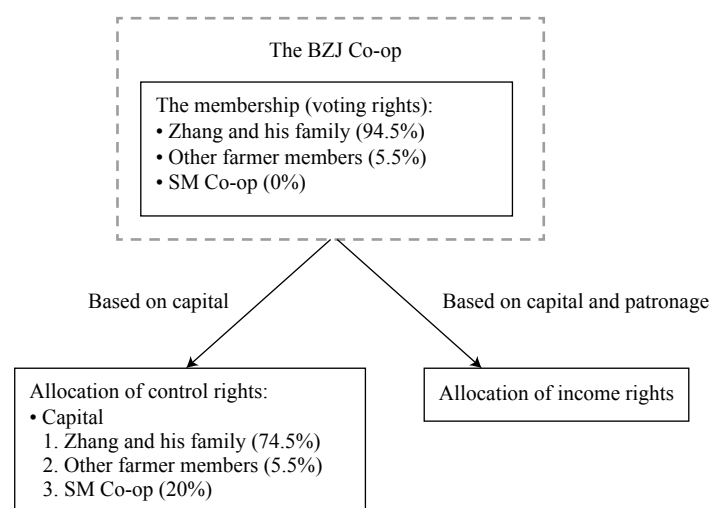


Figure 3. The governance of the Beizhijiang vegetable (BZJ) Co-op.

as an annual tourist excursion paid by the Co-op. A few members complain about the dominant control of prices by Zhang, but they accept what they are given. Members are reluctant to fight for more control and benefits because they are afraid of being kicked out of the cooperative, and they do not want to damage their relationship with Zhang.

■ *Member heterogeneity of the BZJ Co-op*

The heterogeneity of the membership in the Co-op is reflected in three aspects. The first aspect refers to the heterogeneity of farm size and experiences. There are four farmers who rent large areas of farmland from local households, and others are smallholder farmers who are operating their own farmland. Some farmers have more experience and better technology than others. There is not a high level of member heterogeneity in terms of the location of farms, because all the farms are located in the same county. Second, product quality is heterogeneous among members. To promote the standardisation and quality of the vegetables, the Co-op regularly invites experts from governmental organisations and universities to provide members with various trainings. A third and more important aspect of the member heterogeneity of the BZJ cooperative is indicated by the distinction between the core members and common members. The core members include Zhang and his family members, who are endowed with more financial capital and social networks. The importance of social networks can be demonstrated by considering the connection that Zhang has with the government. Zhang has close relationships with people from the local Agricultural Bureau at the county level. In addition to this direct relationship, Zhang has indirect connections with the provincial- and city-level governments, established through provincial university networks that receive government funding to research agricultural cooperatives. The Co-op is assisted by recommendations from university researchers when applying for financial support from the government. Zhang frequently uses funding from various levels of government to invite technology experts to provide training for the farmer members of the Co-op. The BZJ Co-op qualified as a city-level (one level higher than the county) demonstration cooperative in 2014 and became a provincial-level demonstration cooperative in 2015. Acting as a demonstration Co-op is believed to assist the Co-op when applying for government funding (Yang and Tang, 2019). The cooperative had received more than US\$ 22,000 from the government up to 2017. These differences in terms of financial capital and social networks between core and common members is a key dimension of heterogeneity.

5. Cross-case analysis and discussion

5.1 Comparison of the governance attributes of the two Co-ops

The governance attributes adopted by the two cooperatives are compared in Table 2. Significant differences are observed between the two cases in terms of the two governance features, i.e. the allocation of control rights and income rights. The SDOP Co-op has strong democratic control, i.e. control rights are equitably distributed among the membership, and income rights are allocation based upon patronage. In contrast, the BZJ Co-op's control rights are dominated by the chair Zhang and his family, and income rights mainly reside with them as well.

Table 2. Comparison of the governance between the two cooperatives.¹

Governance attributes	SDOP Co-op in the UK	BZJ Co-op in China
Allocation of control rights.	Voting via general member meeting and final decision-making rights held by all the members.	No general meeting and decision-rights held mainly by a few core members.
Allocation of income rights.	Profits are allocated based on patronage.	Profits are allocated based on capital investment and residual income rights are allocated mainly to a few core members.

¹ BZJ Co-op = Beizhijiang vegetable Co-op; SDOP Co-op = South Devon Organic Producers Co-op.

Table 3. Comparison of member heterogeneity in the two cooperatives.¹

Member heterogeneity	SDOP Co-op in the UK	BZJ Co-op in China	Comparison
Farm level	Local farms; both large and small farms	Local farms; both large and small farms	Similar
Product level	Organic vegetables; heterogeneity in quality	Vegetables; heterogeneity in quality	Similar
Personal endowment of members	No significant distinction of member groups; different visions for organic farming; different levels of professionalism	Core members, compared with common members, are endowed with a significantly higher level of financial capital and marketing capability	Member heterogeneity of the BZJ Co-op is greater than that of SDOP Co-op

¹ BZJ Co-op = Beizhijiang vegetable Co-op; SDOP Co-op = South Devon Organic Producers Co-op.

5.2 Member heterogeneity and cooperative governance attributes

The member heterogeneity of the SDOP and BZJ Co-ops are compared in Table 3. The two cooperatives have similar member heterogeneity in terms of farm level and product features. Specifically, there is heterogeneity in both farm size and product quality in each cooperative, and low heterogeneity in the location of farms due to the locality of the farms and product category. However, these two Co-ops differ in heterogeneity with respect to the personal endowment of members. The core members of the BZJ Co-op, mainly Zhang and his family, are endowed with entrepreneurship capabilities, marketing capabilities, and relationships with the government. They therefore highly invest in the business, exploit various markets, and establish connections with the governments to obtain diversified support from them.

The feature of member heterogeneity is associated with transaction costs of a cooperative, and sequentially the allocation of control rights and income rights (Hansmann, 1988). This is reflected in the two Co-op cases. In the SDOP Co-op where there is relatively low level of member heterogeneity, decision rights are democratically owned by all the members and income is distributed among the membership based on patronage. In contrast, member heterogeneity featured by the distinction of different member groups leads to dominant control and income rights by a small number of members in BZJ Co-op.

5.3 The role of cooperative legislation in formulating the governance of cooperatives

It has been suggested that the role of legislation in shaping cooperative governance varies according to national historical development and the lifecycle of farmer cooperatives (Brusselaers *et al.*, 2012). More specific and detailed legislation may be more impactful at early stages of cooperative development, but as cooperatives move up the value chain more general legislation affecting all types of enterprises will have greater impact (e.g. competition law). This change is well reflected by the two cases of cooperatives.

There is no mandatory legal form for cooperatives in the UK, providing freedom for cooperatives to develop through a variety of legal frameworks (Spear *et al.*, 2012). Typically, when an organisation identifies itself as a 'cooperative' in its governing documents (i.e. rules), it agrees to abide by the International Co-operative Alliance (ICA) identity statement, values and principles⁵. For a cooperative society to be registered by the Financial Conduct Authority (FCA) regulator under the cooperative and Community Benefit Societies Act 2014, the society must demonstrate that it is a bona fide co-operative. Although the 2014 Act does not

⁵ In 1995, the ICA adopted seven revised cooperative principles, which are guidelines for cooperatives to put their values into practice. These principles are: (1) voluntary and open membership; (2) democratic member control; (3) member economic participation; (4) autonomy and independence; (5) education, training and information; (6) cooperation among cooperatives; (7) concern for community. Please also see Liang *et al.* (2015) for details regarding the governance features of farmer cooperatives in China.

provide a definition of a bona fide cooperative is, the FCA in its guidance notes takes into consideration the ICA Identity Statement, values and principles (FCA, 2015). It is notable that compliance with the ICA principles is one of the important factors used internationally to evaluate the performance of cooperatives (Rathbone and Wissman, 1993).

SDOP is legally registered as a cooperative society and complies in practice with the ICA principles, with the exception of the sixth principle, because up to the present time there are few cooperatives for SDOP to form a meaningful relationship with. In the SDOP case, formal institutions that require cooperatives to be democratically owned and controlled by members hold a profound influence over its governance. This influence took time to develop in practice and was influenced by personnel introduced to the SDOP who understood how to achieve effective democratic institutional participation. The first managing director was introduced to SDOP by the founder in 1999 to help organise the competing interests of the members, described as a 'political' activity with the aim of 'getting everybody to agree what is fair' (Interview with Manager 1, 2015). While member farmers challenged each other's views, in the start-up phase SDOP members lacked the experience to challenge the founder's views with any conviction:

I don't think we knew enough about the vegetables and what we were doing you know really, so, it wasn't the case that we didn't challenge him with some of the ideas, we probably did, but probably thought he knew best...

(Interview with Farmer 4, 2015)

The subsequent introduction by the founder of a Dutch field manager, with considerable cooperative experience, considerably strengthened democratic participation in SDOP. The field manager was 'a very strong character and he was the one perhaps who spoke for the members and he was the strongest voice for the members' (Interview with Manager 1, 2015). It is notable that the founder member of the cooperative fostered democratic participation within SDOP through these early appointments. Nevertheless, the conflict of commercial interests between Riverford and SDOP frequently left the founder member at 'loggerheads' with SDOP, especially over 'how to decide price' (Interview with Manager 1, 2015). Given these structural conflicts of interest, it was decided by mutual consent to sever the relationship between SDOP and Riverford, which demonstrates the efforts that members have made to achieve cooperative governance, i.e. democratic member control and collective benefits. There is clear evidence that SDOP enforces the requirement of its legal status to the extent that members understand these in practice. For example, in recent years the cooperative has become more aware of laws governing the rights of retiring members and the limits to their claims for compensation.

China has a National Farmer Cooperative Law (hereafter Co-op Law), which was promulgated in 2007 and revised for the first time at the beginning of 2018. Governance attributes regarding control and members' economic participation are specified in detail in the Co-op Law. According to the Co-op Law, cooperatives are collectively owned and democratically controlled by members based on the 'one member, one vote' decision-making rule. However, large members may have extra votes that cannot exceed 20% of the total number of votes. For the distribution of income, the Co-op Law in China requires that most of the profits should be allocated to members based on patronage. Specifically, at least 60% of the distributable profits are returned on the basis of patronage, whereas at most 40% are allocated based on equity capital. Cooperatives may seem to be hampered by having the control and income rights allocated collectively to members, but there are possibilities for structuring the governance attributes to meet the economic-seeking objective of an entrepreneurial initiator, e.g. Zhang from the BZJ Co-op. Co-ops in China are therefore usually referred to as cooperatives with Chinese characteristics.⁶

It is possible to distinguish de jure and de facto control rights. De jure (i.e. legal) control rights reside with the members, whereas de facto (i.e. in practice) control rights can be centralised (Liang *et al.*, 2015). The

⁶ Please also see Liang *et al.* (2015) for details regarding the governance features of farmer cooperatives in China.

ownership rights in terms of capital shares and control rights are held mostly by five large members, i.e. Zhang, his brother and father, and two outsider investors. Each of these parties holds no more than 20% of the capital shares, in compliance with the law. The decision-making process abides by the law because two of the large members (Zhang's brother and father) are willing to informally delegate their control rights to Zhang, while outside investors have no voting rights.

With regard to the profit distribution specified in the Law, the BZJ Co-op responds by having the farmers deliver products directly to buyers, e.g. Pangu and wholesale markets, while the BZJ Co-op basically provides services to members rather than supplying inputs or marketing products. Hence, the Co-op has only minimal distributable profit. That is, although the common members have either limited capital shares or economic participation in the Co-op, the Co-op does not violate the law. However, the main reason BZJ does not violate the law is because the core group excludes members from decision making and effectively nullifies the provision in the law for the distribution of voting rights to members (Table 4). In summary, the governance attributes of the BZJ Co-op, e.g. dominant ownership and income rights owned by a few members, do not violate the Co-op Law, although they appear to deviate from the Law. We therefore verify that the governance attributes of the two cooperatives are influenced by the law, but to understand the specific governance in these cases requires an in-depth understanding of the operating context.

5.4 The potential role of culture in formulating cooperative governance: a discussion for future research

Social structural characteristics (individualism versus collectivism; formal institution versus guanxi) may also have influence on the governance of the two cooperatives, based on multiple rounds of discussions by the authors of the paper. The different behaviours exhibited in the two cases can be explained, to some extent, by culture in the absence of an economic explanation; for example, the members of SDOP are vocal and active participants in governance, while members of the BZJ tend to be passive followers of Zhang. Chinese culture is the importance of maintaining internal harmony, which can be achieved by compromising individual interests for group interests and choosing social conformity, non-offensive strategies and submission to social expectations (Hwang, 1987). Chinese people therefore tend to show great respect for authority, which is operationalised through centralised decision-making structures and processes (Child, 1994). Though

Table 4. Comparison of legislation between the UK and China.

UK legislation	China legislation	Comparison
ICA ¹ principles: <ul style="list-style-type: none"> • Voluntary and open membership. • Democratic member control. • Member economic participation. • Autonomy and independence. • Education, training and information. • Cooperation among cooperatives. • Concern for community. 	Co-op Law: <ul style="list-style-type: none"> • Election and voting are based on the 'one member, one vote' system. Members with a large amount of capital contribution or volume (amount) of transaction with the cooperative can have extra votes which cannot exceed 20% of the total number of votes. • No less than 60% of the distributable profits should be returned to members in proportion to the transaction volume (amount) between members and the cooperative and the remaining can be allocated based on equity capital. 	The UK 2014 Act is general in scope, yet runs to 131 pages and makes provision for the ICA principles within its guidance notes of 117 pages. The rules of UK Co-ops are informed by the ICA principles. The law in China is less extensive and does not reflect the ICA principles. The Law in China runs to only 9 pages and provides specific and detailed guidance on a narrow range of issues.

¹ ICA = International Co-operative Alliance.

a few members complain about the dominant control of prices by Zhang, they accept what they are given. Members are reluctant to fight for more control and benefits rights because they do not want to damage their relationships with Zhang. Explaining why this is the case we come up against a data ceiling, because it is very difficult, if not impossible, to methodologically and ethically obtain the authentic viewpoint of members who are in a weak power relation to the core members. Therefore, we do not have direct and sufficient documental evidence to support the role of culture in formulating the governance of the two cooperatives. Resorting to theoretical explanations, however, we argue that the reluctance of farmer members to challenge could be because of 'preference falsification' as a facet of a collective social structure (Kuran, 1995). In other words, the farmers misrepresent their wants under perceived social pressure.

The UK and China display different social structural characteristics, yet it is too simplistic to argue that collectivism is a stronger influence in China. Through the founder's individual agency in recruiting managers to SDOP, democratic participation developed over time, enabling the members to act collectively to assert their interests against those of the founder. In the more collectivist culture of China, the lead entrepreneur imposed his individual preferences on the coop. How are we to theorise these apparently counter cultural actions? Schwartz (1990: 151) argues that instead of understanding individualism and collectivism as a dichotomy, certain values: (a) 'serve both individual and collective interests (e.g. maturity values); and (b) 'foster the goals of collectives other than the ingroup (e.g. universal prosocial values)'. Furthermore, (c) 'the dichotomy promotes the mistaken assumption that individualist and collectivist values each form coherent syndromes that are opposed to one another' (ibid).

Applying the Schwartzian understanding to our cases, we find that common members of the BZJ cooperative place a high value upon in-group harmony, reflecting prosocial values and restrictive conformity typical of collectivism. However, we interpret that BZJ members do not want to lead a fight for control rights, because they calculate that conformity serves their individual interests. We consider this situation as a type of collective action problem for democratic member control, exacerbated by unequal voting rights, in which members are assessing how others will act in any given situation (Cechin *et al.*, 2013). When cooperative members are not exercising their democratic legal rights, individuals will conclude that it makes little sense for them fight for those rights. Considering the role of the lead entrepreneur, Zhang, we observe the striving for social power (i.e. status, prestige, control, dominance, wealth and public image) as another aspect of individualism that is situated in the collective aspiration to promote the family in-group. As Schwartz (1990: 155) argues, '[p]ower may be valued most highly in societies undergoing rapid change from communal to contractual societies (e.g. China). There, individuals recently released from the fetters of ascribed statuses strive enthusiastically to increase their power and prestige'.

In the UK case, the actions of the lead entrepreneur in establishing Riverford can be explained by Schwartz's (1990) individual types of motivation: hedonism, achievement, self-direction, stimulation, and social power. However, when explaining the development of Riverford it was clear that maturity values and universal pro-social values had played a significant role. Guy Watson explained that an unwritten goal at Riverford was to support 'small to medium scale family farms' and to 'maintain' a 'kind of humanity in business' and to 'share and be fair, but at the same time be sort of independent', because 'those are definitely our values' (interview conducted 15th September 2015). The complex interplay of individual and collective values is evident in the conversion of Riverford into an employee owned enterprise in 2018, which provided Guy Watson with a return free from capital gains tax and an ongoing 26% stake in the business. Maturity values are also evident in SDOP as individual members seek to maximise their own individual economic interests while simultaneously recognising that the collective strength of the coop is the key to achieving this goal. Moreover, many farmers are ideologically committed to organic methods because of the negative externalities associated with conventional farming. One farmer described the high cost to society of 'cleaning up the rivers from agricultural fertiliser going into the rivers' as a motivation to farm organically (interview with SDOP member 7th October 2015). The above discussions are summarised in Table 5.

Table 5. Comparison of culture embedded by the UK and the China Co-ops.¹

Culture (individualism/collectivism)	SDOP Co-op in the UK	BZJ Co-op in China	Comparison
Individualism	Emphasising individual benefits and being vocal and active participants in governance.	Hesitating to be the leader of collective actions.	Members of SDOP Co-op emphasise benefits of each individual and members of BZJ Co-op do not want to take the lead of collective actions.
Collectivism (in-group interests)	Acting collectively through active debate and discussion in pursuit of individual benefits.	Members tend to be passive followers and maintain internal harmony.	Members of SDOP Co-op take collective actions and members of BZJ Co-op compromise individual benefits for in-group harmony.
Collectivism (out-group interests)	Adopting environmental methods of farming and sustaining rural incomes and a way of life for farmers.	Fostering rural development and incomes for smallholder farmers.	Both coops improve the income of their members and benefit society.

¹ BZJ Co-op = Beizhijiang vegetable Co-op; SDOP Co-op = South Devon Organic Producers Co-op.

Finally, kinship is clearly a very important factor in cooperative governance. For example, Zhang's father and brother who used to be significant members of the BZJ Co-op, have delegated their control rights completely to Zhang; while kinship in the SDOP Co-op plays a minor role. We do not have sufficient empirical evidence to fully establish this point. Therefore, we hope to address the problem in the future research.

6. Conclusions

This paper examines the governance of farmer cooperatives in Eastern (i.e. China) and Western (i.e. UK) contexts and identifies institutional conditions that contribute to governance differences. It is critical to understand the governance of farmer cooperatives to facilitate the sustainable development of rural areas. Both theoretical and policy implications are discussed in this section.

6.1 Theoretical implications

This study contributes to research on the governance of cooperatives in three ways. First, it addresses the current gap in the literature on the diversity of governance attributes, i.e. the distribution of control rights and income rights, in different countries by conducting empirical analyses. Despite the wealth of research on cooperative governance, the variance in governance attributes between different countries has yet to be sufficiently addressed. This research provides a map of the cooperative governance features of farmer cooperatives in two very different contexts, the UK and China.

Second, this study investigates the associations between member heterogeneity and cooperative governance in alternative legislative contexts. Many studies mention the relationship between member heterogeneity and governance attributes in cooperatives, and a few empirical analyses have been conducted (Höhler and Kühl, 2018; Liang *et al.*, 2015). This paper may be the first to show how the effect of member heterogeneity on cooperative governance varies in alternative legislative contexts.

Third, this study goes a step further to identify the role of formal institutions in formulating the different governance attributes adopted by cooperatives. By being aware of the debates on the variations of farmer

cooperative governance employed in different countries and regions, researchers can explain the effect of development history, human capital endowment, social capital, and other economic factors (Chaddad, 2012). However, research examining the role of legislation in formulating farmer cooperative governance in different countries is limited. This paper recognises the general and flexible nature of cooperative law in the UK and the specific and rigid nature of national cooperative law in China and discusses the effect, as well as its mechanism, of cooperative legislation on the governance attributes of cooperatives.

Fourth, the dynamics of the governance attributes adopted by cooperatives are discussed in different cultural contexts. The potential influence of culture, a key but rarely studied antecedent, on governance of cooperatives, is discussed. Specifically, members in the cooperative in China tend to value internal harmony of the cooperative and hesitate to fight for benefits, while members in the cooperative in the UK are more likely to fight for uneven rights.

6.2 Policy implications

A higher level of member heterogeneity may lower the levels of democratic control and patronage based income distribution. A higher level of endowment, e.g. financial capital, marketing capabilities, and rich social networks, of a few core members has to be limited so that all the members actively participate in the cooperation. As the capability gap between the entrepreneurial farmers and common farmers, i.e. farmer heterogeneity, is reduced, we could expect to see more democratic control, economic participation by members, and autonomy and independence in Chinese cooperatives. In contrast, there is limited space for cooperatives in the West to adjust the governance attributes of cooperatives, which are codified in legal frameworks. This does not imply that cooperative governance in Western countries is static, but it changes slowly along the life cycle of organisations (Chaddad and Cook, 2004).

Cooperative members in China are less aware of formal institutions than those in the UK. Education pertaining to the knowledge of cooperative laws and bylaws should be provided to farmers in China, on the one hand, to increase their awareness of formal institutions and ability to speak for themselves, and on the other hand, to reduce the heterogeneity of members.

6.3 Future research

There are possibilities for future research that are linked to and address the limitations of this study. A quantitative analysis can be conducted to test the propositions derived from the case study, for example, to estimate the parameters of the associations of member heterogeneity and legislation with various governance attributes and to calculate the effects of culture on the relationship parameter. In addition, there are other factors beyond the focus of the current study, such as kinship among stakeholders, that are neglected because of the limitations of the case study method, but these could be included in a quantitative analysis.

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Conflict of interests

The authors declare that they have no conflict of interest.

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