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Agroholdings in the East German Länder: an Adaptation to Complex Organisational Environments

Abstract

In recent decades, new forms of agricultural organisation have received increasing attention, in which individual agricultural enterprises are vertically or horizontally integrated into larger business networks (holdings). This paper addresses 'agroholdings' as an organisational pattern that is gaining importance in the East German Länder. To explain the phenomenon, we adopted the approach of new sociological institutionalism, which considers the emergence of new organisational forms as a cultural change. The theoretical assumptions of this approach are largely confirmed in regional case studies conducted in East Germany. This approach is a promising way to analyse the current structural change in agriculture.

Keywords: Agroholding, new (sociological) institutionalism, organisational fields, agrarian structural change

1. Introduction

For long, the academic debate on the development of agricultural structures has focused on two issues. One is the growing average size of agricultural companies, mostly in the cultivated areas, and the other is the organisational

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form, wherein family farms are still globally considered the dominant organisational model. While in most contexts in the world, the findings confirm consistent growth in the size of cultivated areas, the question of agricultural organisational forms is more complex.

First, it is observed that, at least in advanced economies, family farms are under high pressure to shift their farming styles from a 'peasant' mode of production, characterised by a diversified production portfolio and the reliance on on-farm reproducible resources (seeds, fertilisers, labour, etc.), to an industrial/entrepreneurial mode, characterised by specialised production and dependence on off-farm inputs provided by the market (van der Ploeg, 2014).

Second, internationally, there is growing attention towards new forms of agricultural organisation beyond this dichotomy, where individual agricultural companies are integrated vertically or horizontally into larger structures (holdings). The post-socialist transformation has brought about large-scale farming structures in Central and Eastern Europe that are often integrated into holdings (Hagedorn & Beckmann, 2007; Maurel, 2012). In developing and emerging economies, agricultural mega-corporations are on the rise, often promoted by international investment (Hermans et al., 2017). Current research is particularly interested in agroholdings defined as 'mega-farms' typical of Russia, Ukraine, Brazil, and a few other countries (Gagalyuk et al., 2021).

Recently, a group of French agricultural scientists published a multi-disciplinary account 'to explore the complexity, diversity and richness pathways and organisational forms of agricultural production' (Jeanneaux et al., 2020). They highlighted an apparent paradox: as the number of farms decreases, the same farms become more diverse in terms of size, contour, specialisations, income, and interests (ibid., 12). The scientists concluded that in Western societies, there is a pluralisation of farm models, regarding both the still-dominant family farms and the emergence of new hybrid organisational forms of agricultural production. Families remain owners of the individual companies but adopt elements of industrial organisation based on the division of labour. In France, the latter has been conceptualised as a 'firm farm' (*l'agriculture de firme*) (Purseigle et al., 2017).

Despite this growing evidence on the emergence of entirely new organisational models in agriculture, research and theoretical reflection on these dynamics of the reorganisation are still nascent. The dichotomous

conceptual framing of family farms vs industrialised agriculture seems to be so entrenched that variations of industrial forms of organisation of agricultural production, ranging from micro-enterprises to mega-farms, stay underexposed.

Against this background, we examine the emergence of so-called agroholdings – a recent organisational pattern in the East German Länder that has acquired increasing importance. In Section 2, we outline the academic debate on industrial forms of agricultural organisation. We argue for a change of perspective in the agronomic debate and introduce the approach of new institutionalism in its sociological manifestation (Powell & DiMaggio, 1991).

For empirical evidence, we draw on research conducted in three study regions in East Germany. The methodological principles of the research are outlined in Section 3. We also introduce the concept of a holding and justify our specific understanding of agroholdings.

In Section 4, we present the results of our analysis. Therefore, we initially examine and describe aspects of the genesis and organisational design of agroholdings. In defining their emergence, regional orientation and property relations, we determine three types of agroholdings. Further, we address the question of how the actors in this organisational field justify the retention of holding structures.

In the final section, we summarise the findings and draw a theoretical conclusion.

2. Change of Organisational Forms

The question of organisational forms in agriculture has shaped agronomic and agrarian policy debates since industrialisation in the nineteenth century. While the purported strengths and weaknesses of family farms have been discussed in agricultural science, the perceptions of large farms have remained rather uncertain. In retrospect, the industrially organised farm appears to be an image, rather than a real, rationalised and efficient organisation of agricultural production processes. In the nineteenth and early twentieth-century debates, the 'Agrarian question' addressed the issue of how and when the agricultural sector would eventually be industrialised (Kautsky, 2007 (1902)). There was little doubt that large-scale industrialised organisational forms would facilitate more effective agricultural production.

This idea of a more rational and efficient organisation of production through industrialisation has shaped the public, as well as the academic discourse, with a focus on the presumed greater or lesser farm production efficiency. The most prominent counter positions, subsumed under the name of Chayanov (Čajanov, 1966), confirm the conviction of many agricultural economists that family farms have economic advantages in agricultural production (Allen and Lueck, 1998; Schmitt, 1991).

Thus, *both* types of reasoning are grounded in a similar view of organisations and organising, which, according to a famous distinction made by the organisation researcher Walter R. Scott, can be described as a rational system perspective.

'From the concept of rational system perspective, organisations are instruments designed to attain specified goals. How blunt or fine an instrument is depends on many factors that are summarized rationality of structure. The term rationality in this context is used in the narrow sense of technical or functional rationality and refers to the extent to which a series of actions is organized in such a way as to lead to predetermined goals with maximum efficiency. Thus, rationality refers not to the selection of goals but to their implementation' (Scott and Davies, 2016)

Large industrial farms are rarely the subject of empirical research by agricultural scientists, for which the research on post-socialist transformation is a major exception. The findings in this field are very insightful. In post-socialist countries where cooperatives and state-owned enterprises were not immediately dissolved, many stable large-scale enterprise structures can be observed (Maurel, 2012). In academic analysis, this persistence of large structures does not result from higher competitiveness (Mathijs and Swinnen, 1997). Instead, factors such as information asymmetry in the processes, power inequalities between the stakeholders in access and control of central resources (land, machines, etc.), unequal distribution of social and human capital, historical property relations before collectivisation as well as mental models, individual motives and dispositions were brought into play. In sum, these factors facilitated the continuation of large farming structures (see the contributions in Hagedorn & Beckmann; Hagedorn and Beckmann, 2007; Hann, 2003; Köster, 2005; Maurel, 2012).

Thus, the survival of agricultural structures may be due less to the production-related comparative advantages of organisational structures and more to path dependencies. In modelling analysis, Balmann (1997), for example, illustrated that the interdependencies of stakeholders on the land market and the existence of extensive sunken costs in capital goods and human capital on the level of the individual farm can explain the persistence of different farm sizes in different regions. However, this analysis does not yield any conclusions about organisational forms. Still, the implicit presumption is that the issue of missing efficiency in the agricultural sector (Balmann's 'unutilised economies of scale') could be solved by other, more efficient, yet unknown organisational structures.

In light of similar evidence, a new paradigm emerged in organisation theory, which Scott labelled the 'open system perspective', in which 'the interdependence of the organisation and its environment receives primary attention' (Scott and Davies, 2016). In this study, we choose one school of thought in this broader paradigm: the new (sociological) institutionalism.

Meyer and Rowan's (1991) article addressed the question of why formal organisations successfully spread in modern societies and why the idea of their efficiency is so prevalent. Organisational research has diagnosed a large gap between the idea of formal organisations as rational and efficient – the rationality myth of organisations – and the reality inside them:

... structural elements are only loosely linked to each other and activities, rules are often violated, decisions are often unimplemented; if implemented they have uncertain consequences, technologies are of problematic efficiency, and evaluation and inspection systems are often subverted or rendered so vague as to provide little coordination (Meyer and Rowan, 1991).

The agrarian discourse sought to ascertain why family farms do not (or only very slowly) turn into presumably rational and efficient formal organisations or industrial enterprises. Meyer and Rowan turned the question around by asking why bureaucratic organisations have become such a common feature in modern societies, despite their numerous inefficiencies as identified by organisational research.

They concluded that it is necessary to explain the genesis of formal organisational structures detached from the assumption that they 'actually

coordinate and control work (ibid.). Yet, the rationality of formal structures (organisations, programmes, services, etc.) is such a mighty myth that is necessary to legitimise its existence (ibid.). The emergence of formal organisations is, therefore, not a consequence of the rational design of work processes but is rooted in the change in their organisational environment. This provides increasingly diverse and complex institutional elements (rules, programmes, policies, organisations, etc.) during the modernisation processes.

In this article, the authors developed a new research perspective (not only in organisational research), termed 'new institutionalism' (Powell and DiMaggio, 1991);¹ they have also thrown open the doors for further development of theoretical concepts such as evolutionary organisational research (Aldrich and Ruef, 2006), the institutional logics approach (Thornton et al., 2012), and the theory of organisational and social fields (Fligstein and McAdam, 2012; Scott, 2014).

The organisational field is one of the key concepts of new sociological institutionalism introduced by DiMaggio and Powell (1991), concerning Bourdieu's field concept. An organisational field is an (analytical) entity that encompasses all the perceived actors of a field, resources, regulating authorities, collective organisations, etc. (ibid: 64). In organisational fields, permanent structural patterns emerge when the actor base does not change significantly and access to relevant resources (from other fields) can be ensured (Fligstein and McAdam, 2012). Boundary demarcations are decisive for the dynamics of entries and exits. These are commonly institutional arrangements. For instance, the agricultural field is usually restricted by public rules that determine who is a farmer and who is not, and what are agricultural and non-agricultural activities. In Germany, laws on the selling and leasing of land restrict non-agricultural actors' access to the agricultural land market. Tied to these regulations are certain farmers' privileges (e.g. special tax regulations, subsidies and building in outer zones).

¹ The term new institutionalism is not unique. In agricultural sciences, it is occasionally used to refer to the various institutional economic theory approaches, which, however, differ in fundamental assumptions from the approach presented here. Following Hall and Taylor (1996), we, therefore, refer to the new sociological institutionalism in the following pages and distinguish it from the new (economic) rational choice institutionalism.

Organisational fields tend towards *homogenisation*, the more established and structured they are. Single deviations are sooner or later confronted with resistance and counter-reactions within the field. One consequence of these interactions is an *isomorphism*. Due to similar environmental conditions, the organisational patterns in a field resemble each other. Thus, they reflect the relevant environmental conditions. DiMaggio and Powell (1991) did not consider the economic factors to be as relevant as the institutional mechanisms. Hence, organisations compete not only for resources and customers but also to strengthen their position of power and fight for recognition (legitimation).

Organisations adapt to the general principles and patterns perceived as rational in an organisational field and are therefore considered legitimate. DiMaggio and Powell (1991) distinguished three institutional isomorphism mechanisms: coercion, mimetic and normative processes. Coercion results from strong actors (e.g. a public authority) who can demand a certain behaviour. Mimetic processes occur when organisations do not (yet) have a clear idea, goals are ambiguous or environments create symbolic uncertainty. In such situations, an inexpensive viable solution may result from the copying of existing institutional patterns. Normative pressure results mainly from professional expectations (e.g. good professional practice). DiMaggio and Powell (1991) highlighted two aspects of professional systems: 'the resting of formal education and legitimation in a cognitive base', and the 'growth and elaboration of professional networks that span organisations with new models that diffuse rapidly (ibid, 71)'.

Building on the findings of DiMaggio and Powell (1991), which focus on relatively simple, homologising powers, subsequent research has identified contradictions and tensions within the fields, added further mechanisms, and addressed additional types of relationships (e.g. intra-organisational, inter-organisational, field-overarching, resource dependency, etc.) (Fligstein & McAdam, 2012; Scott, 2014). On this point, we concentrate on the original question, emphasised by new institutionalism: Which institutional structural elements and mental patterns promote the emergence of agroholdings? To what extent do homologising powers unfold in the agricultural field and what consequences result from this for the persistence of these new organisational forms?

3. Methodology and Concepts

3.1. Research Design and Methods

This article is part of the result of two bigger research projects that examine the economic and social consequences of large farm acquisitions by cross-regional, non-agricultural investors in East Germany on land markets and rural communities. This is a nested case study, according to which case studies on farm businesses of different kinds are nested in case studies on selected regions.

The study regions were purposely selected based on a former study, which identified cross-regional non-agricultural investors and assessed the quantitative significance of such enterprises (Tietz, 2017). In this paper, the evidence from three study regions was used. We investigated two regions in a first exploratory research project in 2018 and one more as a part of an ongoing follow-up research project in 2020.

The case study design enabled us to not only analyse the current organisational structures of these enterprises but also reconstruct the whole process of buying and re-organising existing businesses. One part of the research approach was to reconstruct the processes and motives of the sellers, to analyse the ideas and behaviour of the buyers and to examine possible changes concerning economic and social effects through a pre-post comparison. This reconstruction of the selling-buying process also enabled us to identify entry points for this new group of actors into the organisational field of agricultural production.

The nested design also permits comparison among other types of agricultural businesses in the study regions. Thus, we can investigate how far the organisational patterns and production portfolios of investor-driven and local agricultural enterprises differ. One key observation derived from this comparison is that the organisational pattern of agroholdings is not exclusive to external investors but appears to be a general new pattern of business growth.

Several data resources are available. For the reconstruction of the individual business cases and the takeover processes used, we have used data from the commercial and business registers (e.g. lists of shareholders, register statements, annual accounts, etc.) as well as qualitative interviews with stakeholders (local farmers, buyers and vendors of corporations) and

external observers (e.g. consultants, bankers, representatives of farmers' unions, etc.).

3.2. Agroholdings

In agronomy, the term agroholding is commonly used for large-scale concerns comprised of numerous farm units (Graubner et al., 2020). Internationally, the term is also used for agricultural corporations vertically integrated in the food processing industry (Uzun et al., 2021). Other definitions might include the origin of capital – whether agroholdings are financed with non-agricultural capital only (ibid.). The underlying organisational structures may vary greatly but would not be expected to link with family businesses, as is the case in our research.

Here, we consider much smaller organisational structures of 2 to 15 farm businesses that have one or several owners. In field research, the real nature of such small holdings is difficult to investigate unless a researcher has direct access to critical business information, which is rarely the case; so, researchers may use publicly accessible business information. In Germany, the most reliable source is the commercial register, to which all legal entities must submit standard information (ownership structures, changes in ownership, annual balances, etc.). However, there are holding structures that are less ideal-typical and that feature legal relationships that are not always obvious to external observers. For instance, a dormant partnership or a profit transfer agreement outside the formal company agreement is commonly not reported to the commercial register.

Therefore, we applied a pragmatic definition of a holding primarily by targeting the criterion of personal identity of the business owners. In this sense, we treat agroholdings as a group of companies bonded together by individual proprietors and (to a lesser extent) by shared management.² Due to our focus on land markets, we look only at agricultural businesses cultivating land. With a few exceptions, we do not expand to industrial livestock farming where there is no land cultivation, although commercial

² As we learned in our interviews, banks use a similar procedure by treating multiple companies attributable to a single person or group of persons as a 'fictitious' holding. 'Fictitious' holding companies can, however, be established in other ways also, e.g. through close interdependence in service relationships.

animal husbandry, especially poultry farming, is largely concentrated and only a few corporations run hundreds of concentrated animal feeding operations (CAFOs) through shareholdings or directly. These corporations are also partly land cultivators in the study (mostly to produce their own feed or feed for the franchise partners).

4. Findings

In Section 4.1, we briefly reconsider German unification, where the idea of agricultural corporations germinated. We interpret this process as a cultural change in the agricultural sector, where the idea of organising farm businesses as legal entities became legitimised. Agroholdings have existed from the very beginning of post-socialist restructuring. Since then, other pathways to create holding structures have opened up and new types of agroholdings have emerged.

In Section 4.2, we investigated the organisational structures of the agroholdings. We identified commonalities and differences between the businesses; we are particularly interested in how closely work processes and formal organisational structures are coupled.

Finally, in Section 4.3 we reported from our qualitative interviews, where we sought to ascertain why the individual companies are maintained as they are and not merged into large units. We were particularly interested in how intensively production efficiency-related arguments are addressed.

4.1. Genesis of Agroholdings, Pathways and Types

In retrospect, the reunification of Germany constitutes a key moment of cultural change in East German agriculture. With the fundamental political decision to privatise state-owned enterprises but not to dissolve by law the collective farms (*Landwirtschaftliche Produktionsgenossenschaften* (LPGs) of the GDR, there were legal consequences that can be seen today as unintended side effects of the political decision. Legal entities and specific partnerships that had hitherto been organisational forms reserved for trade and industry thereby received their social recognition in German agriculture.

According to DiMaggio and Powell (1991), West German corporate law was introduced with coercion. The law for the adjustment of agriculture

(*Landwirtschaftsanpassungsgesetz* (LwAnpG) was clear on this point: agricultural cooperatives (LPGs) had to choose a new legal form. This seems paradoxical because agricultural cooperatives were forced to adopt a format that had so far been uncommon in West German agriculture. Legal questions that had been rarely reflected on initially became apparent in the first edition of the law for the adjustment of agriculture in 1990. It was noted that collective farms could be converted into corporations only in the legal form of a registered cooperative (*eingetragene Genossenschaft*), a unique German legal form. This reproduced the dichotomy of a large (socialist cooperative) and a small (family) farm.

However, at that time, the cooperative as a legal form was considered slightly outdated, and in the professional community of legal and management consultants, the rational myth prevailed. In the words of Meyer and Rowan, the cooperative legal form was not suitable for the production sector. Hence, it was argued that collective farms should be allowed to choose their legal form freely. Subsequently, this was implemented in the amendment of the law for the adjustment of agriculture in 1991.

This created the basis for the diversity of legal forms of farm structures in East Germany today. When it came to choosing a legal form in the adjustment process, the East German farm managers lacked a clear understanding of West German corporate law. Therefore, not surprisingly, the empirical findings from that time reveal two basic patterns of mimetic adaptation. In most cases, the collective farms chose the supposedly familiar option of a registered cooperative. In other cases, cooperative associates followed the suggestions of management consultants (consultant-effect, Laschewski, 2000). In this process, the agricultural field in East Germany was opened up to a new group of corporate law experts (lawyers, tax accountants and auditors), who imported their views on the design of legal constructs into agriculture.

The issue of holdings was also introduced during this restructuring process. The standard model of agricultural production in the GDR since the 1970s was not a single cooperative, but the so-called cooperation of LPGs, alliances of a crop production LPG with one (or more) livestock production LPG. In many places, the LPG successors decided to maintain the cooperation and formed the first holding structures under the new legislation. In addition, holdings of agricultural and non-agricultural

businesses emerged when the versatile, non-agricultural branches of the LPGs were transformed into commercial associated companies.

Since the asset situation as well as the debt burdens in the individual agricultural companies could be very different, the holding structure made it possible to create a large group in economic terms. At the same time, it was possible to leave the division of assets in the individual companies. Thus, the main driver for maintaining a holding structure was the complex process of distribution of property and claims of existing and former members and third parties. From a managerial perspective, these holdings were often run as a single company.

The experiences with such legal constructs quickly paid off for reasons beyond the division of assets. In the 1990s, the 'suckler cow husbandry company' emerged as a new organisational template that was quickly adopted elsewhere. This was designed as a specialised subsidiary company used to optimise subsidy payments. Today, such a company is considered a template for diverse formations and divisions of companies, which allow access to specific, partly contrary funding measures (investments in livestock facilities, setting up of young farmers, organic farming) in individual companies. A subsidiary can also be a temporary structure that is activated for a certain period. Thus, some of these 'suckler cow companies' might be temporarily deactivated and then be reactivated with a new objective. This sometimes leads to the remarkable phenomenon of a stockless, arable farm bearing a name indicating animal husbandry.

In our research, the group of successor companies of former collective farms presents a first type of agroholdings that we call a 'local holding of LPG successor (companies)'.³ These holdings, often created from several former LPGs or even whole cooperations, are spatially concentrated in one municipality and possibly neighbouring municipalities.

From the foundation phase to the present, former collective farms (individual companies or holdings as a whole) have been on sale due to economic difficulties or generational changes in management. However, agricultural companies (corporate bodies, as well as family farms) have also

³ For pragmatic reasons, we do not consider smaller enterprises in a family network, which are far below a total size of 1,000 ha, as holding companies. Such alliances based on family connections (e.g. father-son partnerships) are, nevertheless, also relevant in the East German study regions.

appeared as buyers, which then turned the companies into agroholdings. According to the interviews, many of these takeovers had been cooperations beforehand, meaning that the sale of the farm was the consequence of a foreseeable lack of internal successors, a gradual process. We name these new agroholdings, which have emerged from local acquisitions of neighbouring agricultural companies, new local holdings when they are not linked to the structures of the foundation phase.

The conglomeration of different legal forms of family farms and legal bodies is the sole characteristic of this group. There is, for example, a new holding, jointly owned by a couple, consisting of two farms individually owned by the spouses, and two jointly owned limited liability companies. The four companies are managed by a private partnership of the couple.

If stakeholders acquire several farms not spatially concentrated in one region, we speak of cross-regional holdings. In our study, such holdings mostly develop from the involvement of external actors not originating from the agricultural sector. However, in one case, it resulted from the strong expansion of a new local holding.

Table 1 provides an overview of the distribution of holding types found in our case study regions. While all regions are approximately the same size (30.000–40.000 ha in utilised agricultural areas (UAA),) 100–120 farms eligible for EU single-area payments), the numbers of holdings and distribution of holding types differ notably between the regions. The number of business entities refers only to farms eligible for EU single-area payments, which means that up to one-third of all farms (Regions 1, 3) are linked to holding structures. The share in regional UAA is even higher – up to 60 per cent. Concerning the share of owned UAA, land owned by the companies and the shareholders is added. In some of the holdings in Region 1, substantial tracts are owned by the shareholders/investors personally.

Table 1. Types of Holdings per Region

	Holding Type	Local Holding of LPG Successor	New Local Holding	Cross-Regional Holding	Total
Region 1	Number of holdings	4	2	3	9

Table 1. Types of Holdings per Region

	Holding Type	Local Holding of LPG Successor	New Local Holding	Cross-Regional Holding	Total
	Number of business entities	15	5	13	33
	Share of UAA (utilised)	35.5%	7.4%	17.9%	60.8%
	Share of UAA (owned)	22.1%	5.4%	11.7%	39.2%
Region 2	Number of holdings	-	-	3	3
	Number of business entities	-	-	8	8
	Share of UAA (utilised)	-	-	19.3%	19.3%
	Share of UAA (owned)	-	-	11.3%	11.3%
Region 3	Number of holdings	4	3	3	10
	Number of business entities	11	6	13	30
	Share of UAA (utilised)	15.7%	9.1%	32.6%	57.4%
	Share of UAA (owned)	6.7%	3.8%	10.5%	21.0%

Source: Authors' data.

4.2. Inner Organisation

The new sociological institutionalism suggests only a loose coupling of formal organisational structures and work processes. This is clearly

confirmed in our agroholding case studies. Management and work processes in agroholdings are generally highly concentrated, even if the legal units remain independent agricultural companies. For instance, applications for agricultural subsidies are filed for each company, but the applications are written by the same management personnel, often identifiable by a single business address. Based on data on EU single-area payments, it can be determined that individual agroholdings circulate their fields over the years among their subsidiary companies when applying for subsidies. This can significantly change the size of the individual companies (Laschewski et al., 2020).

There is also a strong tendency to centralise work processes in arable production either by pooling the machinery and labour force at one subsidiary company or by outsourcing it to an owner or an external agricultural servicing company. A combination of both methods may also be applied. Anyway, this observation contradicts the assumption that the subsidiaries of agroholdings are ‘farms that are individually responsible for operational, mainly production tasks, while strategic decisions, such as investments in (new) production activities, financial planning, acquisition of capital and land lease contracting, including rental rates and legal service, are made centrally at the level of the parent company (Graubner et al., 2020)’. Even for cross-regional holdings, two organisational models of work coordination could be identified. In one case, all staff was pooled in a single servicing company, and machinery and people were transported to the farm places. This is often organised in the form of local campaigns, where all the machines are brought together, working day and night until the task (e.g. harvesting, tilling) is completed, before moving on to the next location. However, in most cases, a regionally decentralised management structure is applied, where machinery and people are regionally pooled and coordinated by regional managers.

The analysis of annual accounts has shown that in some holdings, capital assets, especially land, are also concentrated in single companies. Thus, within a holding, not all subsidiary companies buy land, only the main company holds the assets (Laschewski et al., 2020). In several cases, the land assets (or part of them) are held by a subsidiary real estate company. This is particularly true in cases involving non-agricultural investors. This organisational pattern thus seems to pursue the acquisition of agricultural land as a financial investment with stable value over time. A somewhat

peculiar side effect of this resource pooling is the rise of agricultural companies, including specialised arable farms, that do not report any tangible assets at all in their annual financial statements because they own neither land nor premises or machinery (Laschewski et al., 2020).

The observations confirm the findings of Meyer and Rowan (1991) that organisational structures and actual labour processes are only loosely connected. The formal structures of these agroholdings appear like the facade of a building, encompassing several other buildings, the walls of which can arbitrarily be knocked down, rebuilt or reassembled.

4.3. Justifications for Retaining and Differentiating the Holding Structure

The new (sociological) institutionalism postulates that formal structures are shaped by the organisational field and the structured corporate environment and are only loosely coupled with work processes. However, maintaining a subsidiary company entails significant administrative costs and, therefore, requires a justification. We explored this question through interviews and the analysis of corporate documents. We were particularly interested in how durable the structures of the agroholdings were.

One justification is related to the possible loss of business-related privileges.

So, first (...) almost all companies had BVVG⁴ land. Because the leases (...) therefore simply had restrictions. Secondly, almost all companies had old debts. (...) The moment they merged, the [debts] would all be there – it wouldn't work anymore (Interview 50: 112–115).

The lease and purchase agreements with public institutions, such as the BVVG or the Land Agencies⁵ in the federal states, are often tied to management requirements (e.g. animal stocking), which may no longer be

⁴ The BVVG (Bodenverwertungs- und verwaltungsgesellschaft mbh) is a federally owned company and fulfils the legal mandate of privatising the formerly state-owned agricultural and forestry areas by 2030.

⁵ The state-owned Land Agencies are special institutions which implement agricultural structural policy and rural development measures. In most federal states, they also manage

guaranteed by a merger. In the case of privileged acquisition of land, the BVVG requires a commitment period of 15 years, which restricts buyers.

By 'old debts', the interviewee refers to debts that date back to socialist times. In the process of the German unification, the East German currency 'Mark' was exchanged at the rate of 2:1 for the West German 'D-Mark', which was estimated to be an overvaluation by multiple times. Subsequently, all loans were included in the DM balance sheet at the ratio of 2:1. At the time of the German unification, many former LPGs were burdened with 'old debts' of approximately 7.6 billion D-Mark, which were not matched by a corresponding value in assets and machines. In the 1990s, a couple of debt relief measures were implemented by the German government, of which a key element was a qualified subordination agreement, according to which the remaining 'old debts' ranked as equity capital, and the post-socialist agricultural firms had to pay only a small sum and to pay off the debts only in situations of positive results. In our perception, the LPG old debt scheme is a perpetuity guarantee for the preservation of holding structures, as there is little incentive for the companies to pay off the debts. In one case, the entire equity of the company consisted solely of old debts. In this case, the 'function' of the subsidiary, at least from the perspective of the external observer, was that of a container for the debt.

A second justification refers to the further costs of merging.

Then it was also tax reasons. One must also say quite clearly, we all had loss carry forwards in the companies. And if you then merge, it can be that the loss carry forwards are lost (Interview 50: 117).

From a tax perspective, loss carry forwards are used to offset the profits of future years against losses from previous years, to reduce the tax burden. During a majority takeover, the law provides for a 'loss of loss carry forwards' in principle, but there are various special regulations that allow loss carry forwards to be retained (hidden reserves clause⁶, restructuring

the state-owned agricultural land. Their history can be traced back to Reichsiedlungsgesetz (German Reich Settlement Act) from 1919.

⁶ This clause is particularly important in this context. 'Loss carry forwards' do not necessarily imply losses but may become relevant when the buying price is higher than

clause, continuation clause)⁷. The above interview quote suggests that all the businesses acquired by the investor reported losses at the time of the acquisition.

According to statements in several interviews, one further reason for maintaining the farms as legal entities is the existence of ongoing lease agreements with many private owners. Since the leases were concluded with the individual companies, if two or more farms were to be merged, new lease contracts would have to be signed with all landowners. This is gladly avoided, as a supra-regionally active investor says:

Because the structure was like that, and because at the end of the day the leases are in the individual companies, and you basically (...) shy away from going to the lessor and saying, yes, go ahead, make a new leasing contract with us in another company; that just involves unnecessary discussions, unnecessary questions (Interview 51: 162).

This issue also points to risk perception and risk aversion as further justifications. Making new leases entails effort, (unspoken) in an environment of rising lease prices. There is a risk of landowners demanding better terms or taking the opportunity to terminate the lease. According to these arguments, it makes temporary sense to maintain the *status quo* with several individual companies.

One consultant points to the sanction risks associated with greening requirements as another motive for retaining holding structures.⁸

If (...) you have a cross-compliance violation in any way, for example, the sanctions are much more painful for a large company than for several small ones. (...) If a giant farm gets a three percent reduction in the single farm payment

the value of total assets in the balance sheet. This usually points to hidden reserves. In farm businesses, the most important source of hidden reserves is the rising value of land.

⁷ Cf. Corporation Tax Act (KStG) §8c Loss Deduction for Corporations as well as KStG §8d Continuation-linked loss carryforward.

⁸ Depending on the severity, duration, frequency and extent of the non-compliance, the amount of the sanctions is between 1 and 5% of direct payments as well as payments for area- or animal-related support measures of the farm. In the case of repeated violations, the reductions can increase up to 20%.

that has a completely different consequence than if there are several small ones and only a part of the large one is controlled. (...) And you also don't have quite so many problems presenting everything accordingly in the record keeping and in the documents (Interview 53: 36).

In this sense, the diversification to agroholding acts as a risk-mitigation strategy.

The argument of political uncertainty given the recurring discussion about capping direct payments for large farms is trotted out as a justification for keeping separate farms, especially considering very large enterprises.

Because the model of the premium rights exists, now, the capping limit is again on everyone's lips. And there, one will fall back then also on existing enterprises. So, you can then restructure the areas under certain circumstances and push them into existing farms and there will be a cut-off date. And farms that are newly founded will not be affected (Interview 68: 95–103).

A further element of reasoning is management-related. In general, separation into several smaller companies provides flexibility, especially in dealing with funding regulations. This creates room to manoeuvre in what is considered an uncertain environment for agroholdings.

And then there are perhaps also things like that, that you are in certain subsidy programs with certain farms, where you then also exchange certain areas sometimes, sometimes move them back and forth, where they simply have more effect from a purely subsidy-technical point of view. Of course, it is also one of those things where if you have several individual cases, you have other options there (Interview 53: 40 ff).

Related to this is the observation that the legal shell of a subsidiary is not dissolved even when the purpose of the company has become obsolete. Such companies can often remain inactive for years and can be quickly reactivated with a new corporate purpose if needed.

In one case, the investor described the purchase of an agricultural business as 'family motivated.' He said he had several children who would run their own agricultural businesses in the future. Indeed, displaced farmers or the 'second sons' from West Germany and Western Europe

often appear as buyers in the study regions. This can also lead to enterprise splitting:

And we also have it quite often that (...) the property is then split up in the family, i.e., the father buys all the farms, and one farm is for the son, the other farm is for the daughter; so they grow into it bit by bit (Interview 68: 173).

We found only one work-related justification. Some large holdings that operate over greater physical distances emphasise that although they form one business group, the regional sub-groups may act autonomously in their production-related decisions. Decisions were made by the plant managers responsible for the site. However, as we described earlier, we have also found highly centralised work processes in the organisations.

5. Summary and Discussion

The number of agroholdings is increasing, with the sale of individual companies and their takeover by other local or cross-regional companies. In most cases, the holding structures created appear to be more than just a short-lived transitional phenomenon. While the total number of business units seems to remain relatively stable in recent years, the number of entrepreneurial decision-making units in East Germany is decreasing. Agroholdings appear to be a new organisational pattern in agricultural restructuring.

In Section 2, we described new (sociological) institutionalism as a theoretical approach. According to the theory, the change in organisational forms is not related to the efficient organisation of work processes, as is usually the case in agricultural economics and sociology. Rather, the appearance of new organisational forms is to be understood as an interaction between enterprises and their organisational environments. A key thesis of the new sociological institutionalism is that the permanent establishment of new organisational forms can be attributed to the 'increasing availability of institutional elements considered rational' as well as the 'growing complexity of firms' external relations' (Meyer and Rowan, 1991) Our findings largely confirm these theses.

The retention of organisational patterns can be attributed mainly to the institutional environment (local population, lease markets, leases tied to conditions and land acquisition, taxes and subsidy programmes). There is also clear evidence to assume a loose coupling of organisational structures and work processes. Holding structures enable the separation of capital, assets and land from the production process. While the individual companies remain in existence externally, corporate processes and resources are often centralised internally. Alone in alliances operating over large distances, agriculture seems to come up against spatial limits that require a partially decentralised organisational structure.

Following the argument of new sociological institutionalism, one rationale for the success of such holding structures is that not only do these organisational practices enjoy public legitimacy, but the environments of agricultural enterprises are also becoming increasingly complex. The emergence of agroholdings thus finds its roots in the process of German unification. It appears to be an irony that as an unintended side effect, the rather restrictive policies against post-socialist farm businesses initiated a 'cultural change' in German agriculture, in which the legal entities became legitimised as organisational forms in agricultural production and new actors, experts and expertise entered the organisational fields.

Our analysis suggests a kind of 'subsidy paradox', an almost paradoxical interdependence of subsidy policy and organisational form. It is precisely the support programmes whose goal is (also) to promote family farming that motivate large agricultural enterprises to maintain and increase the complexity of their organisational structures.

In contrast to economic theories of institutions, which consider institutions to be the objects of conscious functional design and rational solutions to problems of collective action, sociological institutionalism points out that new institutions usually emerge in contexts saturated with existing institutional solutions and can be rationally designed only to a limited extent, if at all. Nevertheless, actors behave strategically and rationally in these contexts. In this respect, a broader debate on the relationship between these approaches vis-a-vis the question of agrarian structures would still be needed in agricultural sciences.

The new sociological institutionalism and the organisational field theories based thereon open up promising avenues for the analysis of current agrarian structural developments that are worth further exploration. It is

important to empirically question the dichotomy of family and industrial agriculture. Recognising the diversity of emerging organisational forms where the family and industrial agriculture intersect, as well as within industrial agriculture itself, is also crucial. It is also worth questioning it in the alternative sector.

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