

Large Farms in Central Europe: An Unchanging Spatio-Temporal Feature?

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Abstract

Two decades after de-collectivization, the hyper-concentration of land remains a structural characteristic of Central European agriculture. This paper attempts to explain the role of institutions that have favored the conversion of large farms, whether collective or State-owned, into social forms of production of comparable size. Land ownership, which is dispersed among numerous holders, and the farming of that land are separate systems. Yet this does not hinder the development of very large agricultural production units. Although land, labor, and capital, which were previously integrated in a collectivist structure, remain connected, they are now under the control of the managers of the large organizations that have succeeded in taking control of property rights over the business capital. Throughout the process of reconstructing the social forms of production, large farms have ensured that their structural heritage will be passed on.

Under changed social forms, very large farms are characteristic of agriculture in the countries of Central and Eastern Europe that experienced collective agriculture. Nowhere else in Europe have farms grown to such a huge size and farmed such large areas. Dominant in the Czech Republic, Slovakia, and Bulgaria, large farms are also found in Hungary and the Baltic states, where they coexist with other social forms of production. By contrast, in Poland and Slovenia, where the peasantry resisted collectivization, this type of farm exists only marginally.

Two decades after large-scale de-collectivization, the place occupied by these production units remains a structural peculiarity, and its persistence defies expectations. Other forms of organizing production, such as family- and non-family-managed farms, could also have developed following a path that has more in common with other types of

European agriculture (Rey 1996, 16–9). In fact, the end of the collectivist system called for a break with the dogma of the superiority of large farms and the capacity to realize economies of scale that had guided managed economies. Condemned by some for their inefficiency but defended by others for their theoretical viability, large farms succeeded in overcoming the shock of systemic transformation by adjusting their management method to the new conditions. However, the transition to the market economy severely tested their ability to adapt. Although large farms were part of the agricultural system dominated by the former State or collective farms, the large farms that replaced them were different in a number of ways, which turned them into new forms of production.¹ The first part of this paper will therefore analyze these reconstructed structures.

The second part of the paper will describe the institutional mechanisms that worked in favor of structural continuity. The important question has to do with the nature of identifiable forms of production in post-collectivist agriculture, how these are related to earlier forms, and in what way they demonstrate a type of continuity. Trajectories of transformation must be placed in the socio-historical context specific to areas in which agrarian structures, which were shaped by large landholdings, went through abortive reforms in the twentieth century before being reconstructed during the collectivist phase. Yet large farms endure beyond the turning points that alter these trajectories as the spatial matrix within which new forms of articulating land, capital, and labor play out. In one location, large farms remain, though in new forms, while in another, they break down and disappear under the effect of institutional changes. How is this structural heritage transmitted and reconstructed? What role does the spatial inclusion of the original social form play in the new social form of production? To answer these questions, the process must be re-contextualized in its socio-spatial dimension as the reconstruction of the social forms of production on the one hand and the reconfiguration of the systems of land use on the other.

¹ Social forms of production are defined by their material and technological dimensions, the way in which they combine the factors of production (land, capital, and labor), and the systems of values and representations that are linked to them (relation to the land, to capital, and to labor).

Finally, the third part of the paper will attempt to locate the restructuring dynamics at work. In the context of changes in the Common Agricultural Policy (CAP), what are the advantages offered by large corporate farms, and under what conditions can these very large farms aspire to take up the challenge of competitiveness?

The Hyper-Concentration of Land: A Structural Peculiarity of Post-Collectivism

The Role of Very Large Farms

Data collected by Eurostat, using a methodology common to the entire European Union (EU), can be used to identify the specific traits of farm structures in the new Member States and to identify what differentiates them from older Member States (the EU-15). The use of these data allows us to overcome the problem of using the categorization current in each country to designate the new legal forms that emerged after privatization. To calculate the size of farms, several indicators can be used, including the economic dimension, the labor force recruited, the output realized, and the agricultural area used. The perspective adopted requires addressing the issue of the degree of land concentration, with the emphasis on the usable agricultural area (UAA).

The threshold for defining very large farms is relative and must be assessed country by country. On the basis of the data provided by the Farm Structure Survey (FSS), a study published by Eurostat highlighted its role and characteristics (Martins and Tosstorff 2011, 1–7). In order to compare the weight of the largest units in Europe, the authors classify the farms by size, which allows them to differentiate between two groups: the smallest farms, occupying 80% of the UAA, and the largest ones, which together represent 20% of the UAA. However, the threshold for delimiting very large farms is not uniform since it takes into account the statistical distribution of farms in each country. Thus, its value varies and is greater than 2,782 hectares in Slovakia, 2,500 in the Czech Republic, 1,868 in Hungary, 1,814 in Bulgaria, 1,178 in Estonia, and 832 in Romania (see Table 1).

Table 1: Very Large Farms

Country	Number of very large farms	Minimum ¹ threshold (in ha)	Average size (in ha)	Average SGM ² per farm (in €100)	Average number of workers in AWUs	Workers as % of total	ha per AWU
Bulgaria	195	1,814	3,128	718	38	2	82
Czech Republic	199	2,500	3,531	1,973	117	17	30
Estonia	91	1,178	1,988	530	50	14	40
Hungary	267	1,868	3,164	1,467	87	6	37
Latvia	420	384	844	217	16	6	54
Lithuania	574	369	923	272	25	8	37
Poland	12,392	74	250	140	5	3	50
Romania	1,526	832	1,802	257	13	1	140
Slovakia	1,675	27	58	58	3	6	19
Slovenia	98	2,782	3,934	1,220	125	13	32

Source: Martins and Tosstorff 2011.

1. Beyond this threshold, all farms cover over 20% of the UAA of the country.
2. Standard gross margin.

The presence of giant farms (over 1,000 hectares)² characterizes agriculture in the new EU member states. These farms are small in number, in both absolute and relative terms (under 0.5%). This distinctive structural characteristic concerns only agricultural systems formerly dominated by the collectivist model, except for Poland and Slovenia.³ Data show a sizable gap between very large and average-sized farms in each of these countries (from 1 to 500 for Bulgaria, Hungary, and Romania).

These very large structures concentrate a significant portion of agricultural employment in the form of wage workers, who represent 16.9% of the workforce in the Czech Republic, 14.2% in Estonia, 13.4% in Slovakia, 7.9% in Lithuania, 6.3% in Latvia, and

² Over 3,000 hectares in area on average for large farms in the Czech Republic, Bulgaria, Hungary, and Slovakia, 1,800 in Romania, and 1,000 in the Baltic countries.

³ In Western Europe, only the United Kingdom and Portugal show comparable values at 891 and 700 hectares, respectively.

5.7% in Hungary, or slightly more than the known percentage for the entire European Union (5%). Agricultural wage workers retain a dominant position in the most concentrated agricultural systems, namely in the Czech Republic and Slovakia, and to a lesser extent in Hungary. The volume of the labor force (166.5 annual work units – or AWU – in the Czech Republic, 125 in Slovakia, and 86.6 in Hungary) is much lower than that of the former collective cooperatives and State farms, which gathered together several hundred workers.⁴ While labor productivity in large systems of mechanized agriculture (measured in hectares per AWU) is higher than that of smaller farms, it is low in the Czech Republic (30 hectares per AWU), Hungary and Lithuania (37), and Slovakia (32), but rises to 82 hectares per AWU in Bulgaria and reaches a maximum of 140 in Romania. This indicates that the gains in labor productivity that would rightly be expected because of economies of scale have not materialized.

The data concerning standard gross margins (SGM) per hectare confirm this. While the economic size, expressed in thousands of euros, is high in the Czech Republic (1,972.6), Hungary (1,467), and Slovakia (1,220), it is appreciably smaller in Bulgaria and Estonia. Relative to the UAA, the productivity per hectare of all of these agricultural systems is much less than that of most of the older member states. More surprisingly, the productivity level of these large structures turns out to be mediocre if compared to that of other types of farms. The disparity in economic size between very large and small farms is comparable to the disparity in UAA in most of these countries. Yet the levels of economic intensiveness per hectare (SGM per hectare) of these two types of farms are close in the case of Czech and Slovak agriculture, whereas large farms show a level of intensiveness lower than that of other types of farms in Hungary, Poland, and Romania.⁵ Thus it is clear that the superiority of large farms is not attested today any more than it was in the past.

⁴ The AWU measures the quantity of human labor provided on each farm. This unit is equal to the labor of one person employed full time for one year. However, the social status and labor conditions of agricultural wage workers are not comparable to those from which workers on collective farms benefited, notably in terms of social protection and material benefits.

⁵ The standard gross margin (SGM) per hectare is defined as the value of production per hectare minus production costs.

Diversity of Post-Collectivist Structural Profiles

New structural distinctions have appeared between agricultural systems based on strong concentrations of land and the use of wage labor and agricultural systems with more dual configurations that combine family and non-family labor (Bazin and Bourdeau-Lepage 2011, 15–7). This is illustrated by Czech agriculture, in which farms are mostly of large size, and Hungarian agriculture, in which farm sizes are more diverse.

In the Czech Republic, nine-tenths of the UAA is cultivated by farms of more than 100 hectares. Numbering 4,300 in 2007, these make up 16.6% of the total. These large areas (averaging 727 hectares) are mainly farmed by tenants (88.5%). Of these, half consists of large family- or non-family-managed farms, while the other half consists of corporations. Over two-thirds of these large farms employ more than three AWUs. In these systems, which tend to focus on arable crops (such as grains, oilseeds, and industrial crops) rather than on animal production, labor productivity remains low (at 29 hectare per AWU). Moreover, large farms develop complementary activities (particularly contract work) in order to make full-time use of a still numerous workforce (or 22 AWUs on average). Over half of these have an economic size greater than 100 European size units (ESU), while one quarter have an economic size of between 40 and 100 ESUs.⁶

The 2007–2010 period (which generated the first results of the study) shows some stability in the number of farms as well as in the land base even though the total number of farms decreased during the period. The data show that on these large farms, where the size of the labor force tended to fall (-18%), the substitution of capital for labor accelerated. These farms now increasingly specialize in arable crops, and their productivity rose (to 41 hectares per AWU). Structural consolidation therefore works to the benefit of very large farms.

⁶ Note that one ESU corresponds to a gross margin of a given sum in euros.

Hungarian agriculture undertook an economic and social reconfiguration characterized by a reduction in the number of farms and an increase in their land area.⁷ In 2007, of 626,300 production units enumerated by the FSS investigation, the economic size of around one-fifth of these (or 140,800) is greater than one ESU,⁸ with all sizes represented among them. Over four-fifths are small farms under two hectares farm 12.9% of the UAA. Medium-sized farms (20-100 hectares), which number 18,000 (12.9%), farm about 20% of the UAA. Meanwhile, the large and very large farms, which number 6,500 (4.6%), occupy 68.1% of the UAA and employ less than a third of the labor force. On average, their land area is 426 hectares, and they mobilize 10 AWUs. If we take into account the fact that a large majority of these (64%) focus on grain and industrial crops, we can infer that the level of labor productivity is relatively low.

⁷ In ten years (2000-2010), the number of production units fell by 40%, from 966,900 to 577,000 (Martins and Tosstorff 2011).

⁸ The great majority of the smallest units, whose size is less than one ESU, are micro-farms formed from plots from the old auxiliary economy and then enlarged with plots formerly granted to members and employees of the cooperatives. Most are not registered, and their production is mainly destined for self-consumption.

Figure 1: Farms Categorized by Size in the Czech Republic

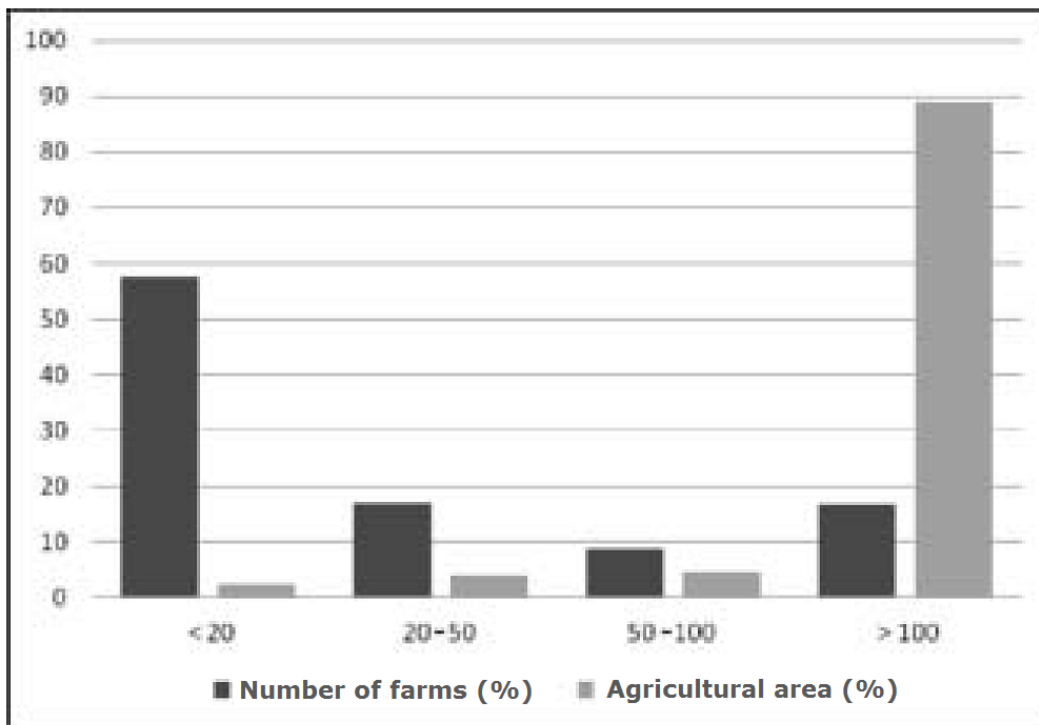
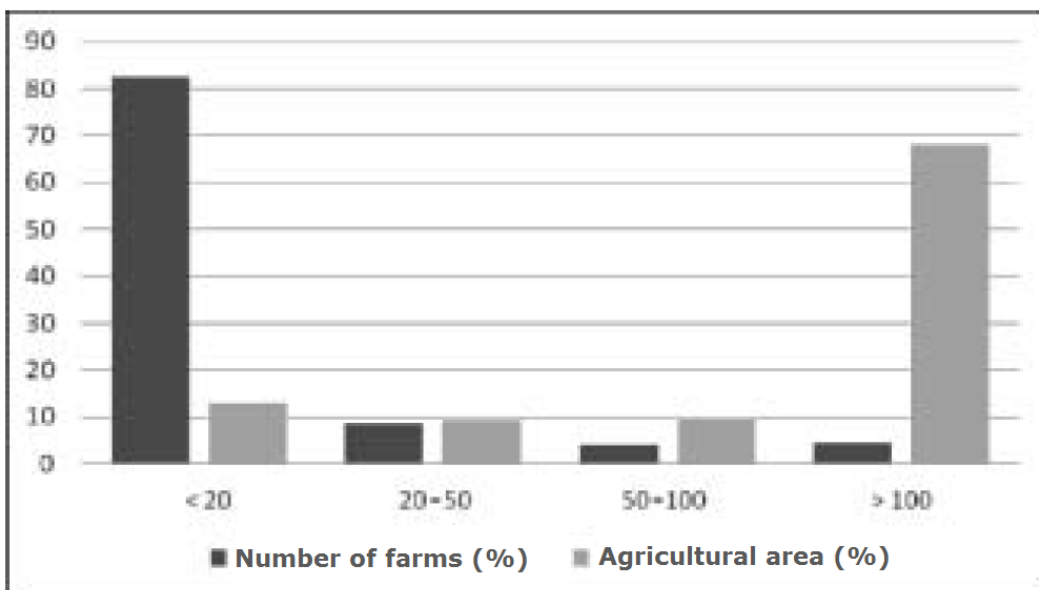


Figure 2: Farms Categorized by Size in Hungary



Source: Author, based on Eurostat data for 2007

Table 2: Comparative analysis of large farms of more than 100 hectares in 2010

Number of Farms	Czech Republic	Hungary
%	4,420	7,430
UAA (in ,000)	19	1
%	3,085.16	2,958.98
Personnel employed (in 000)	87.42	77.23
%	62.1	6.5
Number of AWUs (in ,000)	74.19	65.62
%	70.9	15.8

Source: Agricultural Census 2010, provisional results; accessed from:
http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Agricultural_census_2010_-_provisional_results

These large units have diverse profiles. A majority (58%), consisting of family- and non-family-managed farms, call either on family members (sometimes part time) or on wage labor, while the corporate farms rely mainly on wage labor. The land base for four-fifths of these farms is made up of land rented from the owners of the plots, while nine-tenths of the labor (or the number of AWUs) is provided by permanent or seasonal wage workers. The economic size of these farms varies, with two-thirds of them being over 40 ESUs. This highly heterogeneous category can take on two forms: large family- or non-family-managed farms of several hundred hectares, which tend toward a land-labor-capital unit after the West European model, and very large agro-industrial corporations, which are integrated with the food supply chain and dependent on large groups of domestic or foreign investors. Thus a process of agricultural concentration develops to the benefit of this type of farm, whose number (7,430 in 2010) and UAA (+7.1%) both increased.

Institutional Change and Continuity of the Agricultural Unit

The Filiation of Social Forms of Production

In the countryside of Central Europe, which was dominated first by large estates and then by the collectivist system, the question of the filiation of forms of production is key. How do various types of farms arise, survive, or disappear when their institutional environment changes, and in what way do the post-collectivist large farms demonstrate continuity—or conversely, discontinuity—with preceding social forms?

This often advanced structural dualism recalls an agricultural heritage older than forty years and marked by collectivism. Large estates, the State farms or cooperatives of the collectivist period, and the corporate macro-farms or non-family-managed farms of today all refer to social realities that must be placed in their respective historical contexts. Established at the beginning of the modern era (in the early fourteenth century), the estate economy has had a lasting effect on the social relations and socio-

economic situation of the peasantry east of the Elbe River⁹ (Rösener 1994, 161–90). In all areas (including Eastern Germany, Silesia, Pomerania, Bohemia, Moravia, Hungary, Romania, Poland, and Lithuania), where large landed property spread, the development and modernization of the peasant farm was blocked by the relations of domination imposed on plot-based peasants and day laborers. Although small peasant farms did exist, because they lacked an adequate land area, they were seldom self-sufficient. Beginning in the 1920s, agrarian reforms redistributed land to the peasants and led to a decline in this pattern of domination. As a result, an independent landowning peasantry developed in Czechoslovakia and Romania (Maurel 1992, 189–90), side by side with the tenacious remnants of a hierarchical and oppressive society (in the form of the large estates of the Hungarian aristocracy and the manors of the Polish nobility). By liquidating large landowners and granting land to small peasants, the immediate post-war reforms extended small farms without giving them the means to consolidate prior to the forced collectivization of the 1950s.¹⁰

A simplified approach makes State farms the successors of the large estates and attributes peasant origins to cooperatives. However, the reconstruction of local experiences reveals more complex processes (Maurel 1994a, 21–47),¹¹ as is the case with the break-up of collectivist structures after 1990.¹² The process of converting State and cooperative farms took multiple paths via transitional forms that in a way prepared a secure exit for social actors who were not prepared for discontinuity in the system.

⁹ A set of measures restricted the freedom of movement of peasants attached to the glebe while estate reserves were expanded to the detriment of peasant tenures. We refer here to the abundant literature on the question of neo-serfdom and the feudal system. Chapter 7 of Werner Rösener's work (1994) reviews this question.

¹⁰ In several regions, the first State farms were created to farm land confiscated from Germans expelled in 1945–1946.

¹¹ The social and ethnic composition of rural communities and the degree of consolidation of peasant farms were the determinant factors in the methods of transitioning to the various collectivist forms.

¹² The outline of the transition from one social form to another advanced by some authors (such as Laschewski 1998) proceeds from the same willingness to generalize.

The Institutional Context

To understand the diversity of post-collectivist social forms, we should retrace the institutional changes resulting from the introduction of market mechanisms and the re-establishment of property rights over farm assets (namely land and farm capital). The objective of the system's transformation was to change the institutional environment, that is, the economic, political, and legal institutions¹³ that define the formal rules of the game and influence the organizations and their evolution (Koester 2005, 106–12). This major change implied the adoption of legislative measures aimed at re-establishing private property as part of the means of production and managing the privatization of assets and the conversion of organizations inherited from the collectivist system. Established over a relatively short period of time, the new institutional environment fully transformed the formal institutions and in particular the relations between property and labor.

However, the same cannot be said of informal institutions, which are not subject to the same temporality.¹⁴ Since these are embedded in behaviors and norms of conduct, informal rules are slower to change, which is the case, notably, in ways of thinking and acting embedded in the social uses of collectivized agriculture. These mental models, which were shaped by collectivist ideology, influenced the attitudes of workers relative to the transformation of property rights. Studies carried out in 1991 among workers on several collective farms highlighted the values attached to collectivist social relations (Maurel 1994b, 16). Attachment to collective property, security of employment, and social protection was shared by the largest number, whether employees of State farms or members of cooperatives. By contrast, the market economy, labor efficiency, profit-sharing, private appropriation, and responsibility were not met with much enthusiasm. Supporters of the collectivist model—or at least of a revised version of the neo-

¹³ We understand here the term “institution” in the sense defined by Douglass North: “Institutions are humanly derived constraints that structure human interactions. They are made up of formal constraints (such as rules, laws, and constitutions), informal constraints (such as behavioral norms, traditions, and self-imposed codes of conduct), and the characteristics of their application” (1994, 361).

¹⁴ We adopt here the distinction established by Oliver Williamson between informal institutions (first level) and formal institutions (second level) (2000, 595–8).

collectivist type—were in a large majority on the eve of de-collectivization (Lamarche and Maurel 1995, 125–6). This state of affairs could only make it difficult for them to adjust to the formal restrictions resulting from the re-establishment of property rights, because it encouraged relative inertia on the part of workers on the de-collectivized farms.¹⁵

Moreover, the new institutional environment radically changed the formal rules of the game. From 1990, the economic inefficiency of the large collective farms and their inability to adapt were exposed by the shock of the transition to a market economy, leading to a major agricultural recession (Pouliquen 2011, 21–7). Inordinately large, with an excessive wage labor force, and often in debt, these farms were forced to adapt to the new context. By giving priority to the re-establishment of property rights, de-collectivization was presented in ideological terms by political and social forces with divergent interests (Maurel 1994a, 157–80).¹⁶

The restoration of private property as a key institution placed legislators face to face with a task of utmost importance, namely defining terms for the redistribution of land and the means of production. Two choices were available: either organize this redistribution around rights holders, that is, the original owners and their heirs, or favor those who through their labor, had contributed to the accumulation of farm capital (managers and workers). Depending on the country, the methods of granting property rights combined two principles in various ways: “to each according to his contribution,” and “to each according to his labor.” In the event, the restitution of landed property

¹⁵ When they work on the farm, the members of neo-cooperatives who hold ownership interests are also attached to their job, which they attempt to protect by preserving labor-intensive activities (such as raising livestock, for example).

¹⁶ The political determination of parliaments stemming from free elections made possible the re-establishment of property rights, which defined the use of land and other assets as well as the rules for distributing farm income. Two types of stakeholders were active on the political scene: the former landowners grouped in associations (in Czechoslovakia) or supported by political parties (such as the Independent Smallholders Party in Hungary) and the managers of cooperatives and State farms, now constituted into pressure groups (Union of Cooperatives). Debates lasted for several months (1991-1992) and were settled by laws reflecting compromises.

confiscated by the Communist regime was settled differently in each country. In Hungary, all forms of automatic re-privatization of land were ruled out by granting the former owners compensation vouchers that allowed them to bid for land, and farms were required to put up for auction. In Czechoslovakia, the preferred method was to restore land and inventory to the former owners in kind.¹⁷ Finally, laws¹⁸ ended collective appropriation by distributing the cooperatives' common goods (such as buildings, equipment, and livestock) among the rights holders.

However, the nominal allocation of property rights was not enough to restore property's role as an economic mechanism. In most cases, there was no real appropriation of goods by their holders, who were quickly confronted by economic, social, and psychological barriers that restricted their freedom of use. The initial phase, termed "primary appropriation," was followed by a secondary appropriation sequence (also known as a "second wave of privatization") in which control over management of the assets was at stake. Two main types of deliberate action prevailed: the implementation of control strategies (internal or external) within the de-collectivized farms, and the creation of new enterprises with different legal status based on the redemption and acquisition of privatized assets (Doucha and Divila 2001).

This institutional change opened up a range of opportunities for economic actors. Under various legal forms, the privatization of land and capital permitted the recomposition of the factors of production by converting pre-existing organizations or creating new organizational forms (see Table 3). The restructuring occurred through adaptation to these changes on the part of both formal and informal institutions operating at their own pace. As a result, it required transitional forms, including landowner cooperatives. This process was spread out over the entire decade of the 1990s.

¹⁷ The inventory included livestock and agricultural equipment handed over to the cooperative by peasants.

¹⁸ The December 21, 1991 law in Czechoslovakia, and the January 17, 1992 law in Hungary.

Table 3: Post-Collectivist Social Forms

Social forms of production	Legal status	Land status	Farm capital	Labor	Relation to the market
Neo-cooperative	Cooperative of landowners, agricultural association	Leased from a large number of landowners	Members' ownership stock	Wage workers (employees and members of cooperatives)	Dominant market orientation
State-owned enterprise	Dependent on State agencies	State property (lease)	State is major stockholder	Wage workers	Dominant market orientation
Corporation	Joint-stock company, public limited liability company	Majority leased, possibility of purchase (depends on country)	Stock (with a majority held by management)	Wage workers (permanent and seasonal)	Exclusive market orientation
Family or non-family-managed farm	Sole proprietorship	Owner and tenant farming	Buildings, production equipment, livestock	Mainly family	Dominant market orientation
Small subsistence farm	Not registered	Owner farming	Small equipment, few head of livestock	Exclusively family	Subsistence orientation

Paths to Reconstruction

The interaction of institutions encouraged the conversion of large collective or State farms into social forms of production of comparable size, that is, based on the large farm model.

Appropriation-Control for Managers in the Czech Republic

In the Czech Republic, the transformation involved restoring confiscated assets, restructuring the cooperatives, and privatizing the State farms. Based on a complex legislative measure, it gave rise to conflicts of interest, in particular regarding control over the capital of privatized farms. There was also limited reconstruction of family farms in Czech agriculture. Although the return of land to its former owners could have allowed the establishment of independent farmers, several factors explain why the family farm producing for the market did not become the dominant model. The social stratum likely to see such a project through was relatively small, since the collective farm workers showed little interest. Instead, the new farmers were specialists (such as engineers and agronomists) or, less often, former landowners (Nespor 2006, 1178–9).

The majority of collective farms became landowner cooperatives, and assemblies of cooperative members appointed new managers. In the second half of the 1990s, these new cooperatives underwent a second wave of transformations at the initiative of their managers, which aimed at changing their legal status in order to carry out a restructuring of capital. The number of cooperatives then continued to decrease in favor of corporate forms.

Meanwhile, the privatization of former State farms gave rise to corporate enterprises, less often to sole proprietor farms.¹⁹ In the beginning, the land and assets were leased out by the Land Fund, and the lessees were former officials. During its sale by the State, 90% of the land was acquired by farmers exercising their pre-emption rights. The large

¹⁹ Land in the regions from which Germans were expelled in 1945 was subject to restitution, an often slow and difficult process, while other assets were leased.

corporate farms formed at that time retained a large land base of the order of thousands of hectares.

Agricultural Dualism in Hungary

As in neighboring countries, de-collectivization in Hungary took place without a new agricultural model being decided upon. While some parties praised the merits of small and medium-sized farms, other political and social forces defended maintaining collectivist structures in order to preserve production potential. In reality, the ideological and social conflict between large and small farms, which runs through the entire agricultural history of the country, was revived.

De-collectivization ended the overwhelming domination of the cooperative sector (62% of the UAA in 1989) and the State sector (26%). The return of land to despoiled landowners followed the new path of compensation vouchers (Szelényi 1998, 214–44). A portion of the land belonging to former collective farms was sold to bidders and acquired by the holders of these vouchers. Furthermore, land that remained the property of cooperative members could be taken back by its owners. Finally, in an attempt at fairness, plots were granted to employees who had none. At the end of the transformation of the former cooperatives, the non-land assets were divided in the form of property stock among rights holders (such as active members, former members and their heirs, and employees).

Relatively egalitarian in intent, privatization benefitted farmers who were able to develop active strategies for acquiring assets. De-collectivization ended in significant fragmentation of land, with half a million people receiving more than two million hectares in under five years. Transformed into landowner cooperatives, the former collective farms undertook to reduce their production costs (including investments and excess workers). The bankruptcy law caused the disappearance of unprofitable cooperatives, which fell from more than 1,300 at the beginning of the 1990s to no more than 1,000 at the end of the decade. At the same time, their size was reduced because of land redemption. In 2000, 959 cooperatives farmed 17.9% of the UAA. The capital

restructuring process was strongly stimulated by encouraging the conversion of cooperatives into companies of varying legal types. This change of status was due to the search for greater stability of capital. In 2002, agricultural cooperatives farmed less than a tenth of the UAA.

The Hungarian path is distinguished therefore by the rapid decline in the cooperative to the benefit of large corporate farms using leased land and family- or non-family-managed farms of smaller size. The restructuring resulted in a reversal of the relation between small family farms and large corporate farms.

The Large Farm: The Spatial Matrix of Structural Change

To highlight the role of large farms in the transmission of social forms of production, we rely here on a monograph that traces local socio-historical paths of development (Maurel 2005, 12–3).²⁰

From Large Estates to Agribusiness Corporations: The Persistence of Large Farms

In Baranya (southern Hungary), agriculture went through an early modernization phase in the first half of the twentieth century as a result of the technological advances taking place on the aristocracy's large farms and the rich farms of the peasantry, originally from Swabia, established in the eighteenth century. The transmission of this agricultural heritage borrowed from one or the other of these social forms.

In 1949, following the agrarian reform, the Bóly State farm was created on 3,000 hectares, one-third of which came from a large estate and from the confiscated assets of prosperous Swabian farmers. Between 1949 and 1956, this State farm was reorganized at various times. Then in 1961, successive additions brought its land base to 13,800

²⁰ The initial investigation, carried out in 1990-1991, made it possible to trace the changes in social relations from the post-war agrarian reforms to the turning point of de-collectivization. Later research made it possible to follow the process of post-collectivist reconstruction.

hectares. In 1977, this farm became the Bóly industrial complex. In 1991, this complex brought together more than 2,000 wage workers in a dozen production units, including six farms, animal production units, processing plants for agricultural products, and port facilities on the Danube. The complex appeared at the top of the list of the most successful agricultural enterprises in the country.

Because of its role as a seed producer, the complex escaped privatization.²¹ Instead, it took the form of a joint-stock company known as “Bóly RT.” The majority shareholder was the State Holding Company, created in 1992, which held 90% of the capital.²² The complex redirected its activities toward seed production, liquidated some units (machine repair, meat packing), and sold most of its public housing.

A decade later, in 2003–2004, the Hungarian government privatized the last State farms. Converted into an agriculture and trading company (Bóly RT), the complex retained a little under 20,000 hectares of land, which was designated for growing wheat, corn, soya, peas, and sugar beet. The land was leased from the State (12,500 hectares in total) and from private owners, with whom leases were signed for five years. Most of the vegetable production was reserved for producing seeds, the strong point of the operation, with a quarter of the tonnage produced being exported. Investments made it possible to double processing capacity, though cattle production posed greater problems. Port facilities for storage, processing, and shipping rounded out an agro-industrial system strongly characterized by its vertical integration. The number of employees was gradually reduced to 1,540. In 2003, a new manager took over. One year later, the complex was privatized, and the agro-industrial company’s capital passed into the hands of local stockholders (managers, employees, and agricultural partners) as well as Hungarian investors. At the end of 2005, this financial arrangement was challenged by the principal investor, who took control of the capital.

²¹ The State decided to maintain a right of control over 24 of the 120 State farms,

²² Since 1991, a portion of the capital (7.5% of the book value of assets) has been distributed to employees in the form of stock as a function of the length of their employment and their salary level.

Today, the BólyZrt agro-industrial firm²³ is integrated into the Bonafarm holding corporation, the leading agri-food group in the country.²⁴ Covering 18,500 hectares and organized into 11 production units, the company specializes in grain and seed crops, raises 120,000 pigs and 4,000 dairy cows, and produces 12 to 13 million eggs for incubation and 20 million liters of milk.

By absorbing the effects of the transition-related crisis and later by adapting its production structure to the development of the market for agricultural products (such as the export of specialized seeds), this large corporation proved its resilience. The solidity of its agro-industrial base and the modernity of its farming system explain the interest in integrating it into a leading agro-industrial group.

In the long term, large farms acted as a framework for productive systems that aimed at technological modernization and vertical integration.

From Cooperatives to Corporate Farms: A Conversion in Stages

In the same region of the country, the bases for peasant agriculture were destroyed by the expulsion of the Swabian peasants in 1945, then by successive waves of collectivization that removed peasant elites. With a traditional organization and production focus (grain and fodder crops and cattle and pig breeding), in 1991, the Bóly cooperative (with 2,489 hectares of UAA) started its transformation. Its members decided in favor of maintaining the cooperative structure. After modifying the statutes, 120 active members and 250 retirees renewed their membership.²⁵ As some withdrew their land, the cultivated area fell to 1,970 hectares, leased from 700 small landowners to whom a land rent was paid.

²³ This is the new name of the Bólycorporation.

²⁴ The Bonafarm holding corporation holds the capital of four agro-industrial companies, including Bóly, and three processing plants for pork, milk, and wine.

²⁵ At the end of the property stock allocation process, 42.8% were held by 270 retired employees, 36.2% by 176 active members, and 21% of the capital was divided among 248 former members and their heirs.

In 1999, the manager of the cooperative, which had only 300 members, decided to change its legal status in order to stabilize the capital structure. When the cooperative became a joint stock company, some outside stockholders came into the company, now known as BólyTöttös RT, and 60 to 70 former members sold their stockholdings. Following this restructuring, the company had 300 shareholders. Production remained focused on seeds, corn, and rapeseed (for fattening livestock). The company continued to cooperate with the Bóly complex for the delivery of seeds and soya. Animal production specialized in pig breeding, and dairy farming and vineyards were given up, as a result of which employment declined (from 185 in 1990 to 77 in 2005). As the years passed, hope of seeing any recovery in the poor performance of the company faded.

The second example is that of a cooperative located in Southern Moravia, Czech Republic.²⁶ In the village of Blatnice, small and medium peasant property was largely dominant on the eve of the introduction of collectivization.²⁷ During collectivization in 1959, peasant landowners were forced to contribute their land and assets. At the time, there were 481 landowners, half of whom owned less than two hectares. Covering 1,176 hectares in 1960, the cooperative was subsequently enlarged by merging with that of the neighboring village of Blatnička to form one large structure of nearly 3,000 hectares. With a diversified production (grain crops, industrial production of turkeys, and vineyards) and some industrial activities, the company appeared solid and prosperous following the change.

In April 1992, during registration of property titles, 730 landowners or their descendants were officially recognized. Because of the fragmentation due to inheritance that occurred over the course of the previous three decades, over half held less than one hectare. With areas of such small size, restitution was of little interest, and most rights holders preferred to become members of the landowners' cooperative. Only a small

²⁶ The investigation concerns the two villages of Blatnice and Blatnička, which were formerly grouped within the same agricultural cooperative. The first village has 2,153 inhabitants and the second 450.

²⁷ Attached to land ownership, the plot-farming peasants resisted all attempts at collectivization throughout the 1950s.

group seized the opportunity to withdraw their land and engage in wine production. Within the cooperative, managerial staff that combined professional competence and local roots took power. Former members made up two-thirds of the new cooperative community, whereas the new members were, for the most part, absentee landowners.

However, the conversion into a new cooperative ended in failure, which led to bankruptcy in 1997. In 1993 a split had occurred with the cooperative members from the neighboring village of Blatnička. Corporations with capital held by former managers of the socialist cooperative then undertook to buy out ownership in order to take control of the transformed cooperative's capital. The former president (who had been removed in 1989), now the head of a network of public and private limited liability corporations and holder of the majority of the capital, became a major actor in the agri-food sector at the regional level.

Today, on the land of the former cooperative, two public limited liability corporations share production activities (grains, sugar beet, dairy farming, egg production, units for livestock breeding, turkey-raising, and vineyards) and processing (winemaking from both produced and purchased grapes, bottling, and marketing by the Vinoblattel corporation). The cultivated land extends over 3,300 hectares, 2,200 of which are registered land in the two villages. Far from shrinking, the perimeter of the de-collectivized farm has grown through leasing of other villages' registered land. Today, all agricultural production is controlled by agri-food capitalism.

This strategy of appropriation and control of productive capital illustrates the post-collectivist Czech experience. After three decades of collectivized agriculture that eradicated small peasant farms, the situation had become irreversible. Some paths of transformation turned out to be blocked by lack of capital and the disappearance of peasant expertise.²⁸

²⁸ One exception is wine production, which had been preserved in a setting consisting of individual plots and processing units.

Functional Dynamics of Large Farms

In the last decade, the relative importance of very large farms was not contested in the Czech Republic, Slovakia, or even Hungary. The initial results of the 2010 agricultural census indicate that 88.6% of the UAA in the Czech Republic and 64.2% in Hungary are still cultivated by farms of over 100 hectares, which, moreover, concentrate 90% and 72% of the livestock of each of these countries, respectively. Given their contribution to agricultural production, the future of these structures appears secure. However, these farms show limited competitiveness due to decapitalization. Under what conditions can consolidation therefore occur (Pouliquen 2011, 65–70)?

In response, two paths will be outlined here. One concerns access to land, the other aid granted within the framework of the CAP.

Conditions for Access to the Land Market

The concentration of land capital characteristic of large farms results from the development of a large rental market following privatization. Tenant farming generally predominates, in some cases exclusively. According to estimates published by the Farm Accountancy Data Network (FADN), over four-fifths of the agricultural land in the Czech Republic and Bulgaria is leased, as against two-thirds in Hungary and over half in Estonia. A report based on Eurostat data indicates that there is a close correlation between the relative share of land leased and that of land occupied by corporate farms (Ciaianet al. 2012b, 9). The characteristics of the land rental market are linked to policies of land privatization that resulted in fragmented ownership as land was divided among a large number of owners who had little—if any—interest in working it.²⁹

Consider the example of the Czech and Slovak countryside, where the system of large units established by collectivization and thereafter cultivated by large farms has

²⁹ Whether retired employees, former members of cooperatives, or even heirs living in cities, the majority of beneficiaries of the privatizations are passive owners who prefer to lease their plots to the farms that succeeded the production cooperatives.

remained unchanged.³⁰ The land ownership structures established on the basis of former property rights now restored to rights holders has become the foundation of the new land market. This pre-collectivist agricultural system, traces of which are preserved only in land registries, is not an inertia factor likely to be an obstacle to the requirements of modern agriculture. In fact, the old plot system is no longer functional from the perspective of the agricultural use of the land. What persists is the large collectivist unit as a spatial matrix and material trace of the moment at which the social form of production was reconstructed. Its dismemberment may result in the partial or total destruction of the production base. In reality, nothing like this happened. Because of its inclusion in the land registry system and its infrastructure (such as buildings and production equipment), the large farm model imposes its own organizational logic.³¹

In the Czech Republic, some of the land remains in State hands. Beginning in 1999, the State began privatizing the land it held. However, the sale was protracted because of slow restitution procedures. In 2007, there remained 450,000 hectares (or 13% of the UAA) that were yet to be privatized. Farmers, the landowning partners of corporate farms, and the members of cooperatives eligible for restitutions have a right of pre-emption.

Czech and Slovak agriculture present the highest percentages of leased land (83% and 89%, respectively). The development of the land market turned out to be inadequate despite the sale of land by the State and measures aimed at aiding in the purchase of land. Over nine-tenths of the cultivated land is leased from a group of private small landowners living in cities. Ultimately, this situation may become a source of vulnerability as the penetration of foreign capital, allowed since the end of 2010, can only increase competition (Ciaian et al. 2012a, 22–4).

³⁰ The old peasant land system was erased from the landscape by the land consolidations that followed the collectivization of the 1950s and 1960s.

³¹ Contrary to the spontaneous and violent de-collectivization process that affected the Albanian and Romanian countryside, the other countries of Central Europe sought to avoid the waste of resources.

The separation of land ownership from land use also derives from the restrictions that affect access to the land by some types of farmers. In Hungary, legislation sets the maximum area at 300 hectares per person. Further, the law prohibits acquisition of land by corporations, whether Hungarian or foreign. Consequently, land capital used by cooperatives and corporate farms is all leased from a large number of small landowners.³² In Hungary, 48% of the land is leased. This proportion must be related to the dual character of the production structures noted above, in which family farms play an important role. A study of the Veresegyház region, near Budapest, revealed a two-track division of land areas, with micro-plots (0.5–3 ha) transferred to medium-sized farms, while plots of 20 to 100 hectares from the former cooperatives were transferred to corporate farms (Vandenbroucke and Fehér 2011, 110).

Given the restrictions on land transactions (including, until 2011, the ban on selling to foreigners), the rental market of the new EU Member States is characterized by prices that are significantly lower than in the older Member States.³³ These prices are €12 per hectare in Estonia, €53 in the Czech Republic, and €82 in Hungary, or, in the latter case, one-tenth of those in the Netherlands (€895 per hectare) (Ciaian et al. 2012a, 14). The low cost of land capital is a considerable advantage for very large farms, which are consequently less inclined to intensify their production system. Thus, far from being detrimental to the process of land concentration, the separation of land ownership from land use has indirectly fostered the preservation of large farms. Moreover, direct aid from the European Union further increased interest in agricultural land.

The Challenge of Competitiveness

Agriculture has been one of the most sensitive issues involved in the entry of Central European countries into the European Union, given the importance of this sector in

³² Land plots can remain undivided when the owners did not have them demarcated for financial reasons.

³³ In reunified Germany, the ratio of lease prices between West and East, where the latter emerged from collectivism twenty years ago, is 2 to 1.

their economies. Negotiations related to agriculture have been difficult.³⁴The amount of direct payments and the choice of the reference period for setting quotas have been controversial questions. The CAP assists in ensuring an income to farmers through the medium of the single payment scheme (SPS), a simpler direct payment system than the single payment rights (SPR) that applied in the EU-15. Subsidies depend on the cultivable area of each farm. Further, each country is entitled to apply an additional national direct payment system. Other measures support restructuring the sector by aiding investments aiming to improve competitiveness.

Integration into the CAP resulted in a significant increase in support to agriculture. Despite unequal treatment,³⁵ agriculture in the new Member States seems to have benefitted from the CAP, with an increase in agricultural incomes that makes recapitalization possible and a boost to production and the stabilization of the market for grains, sugar beet, beef, and milk. Direct aid had a structural impact by strengthening the largest farms. Agricultural systems dominated by large corporate farms received a higher amount per beneficiary (of the order of €160,000 to €180,000 per beneficiary in Hungary, the Czech Republic, and Slovakia). In this way, several thousand farms in each country were able to receive substantial aid, thereby encouraging productive investment. This made it possible for them to compensate—at least in part—for their various handicaps, including wage costs, the precariousness of leasing, and debts inherited from the cooperatives who were required to compensate landowners (in the Czech Republic).

³⁴ Adoption of EU norms on agriculture involves a large number of binding rules that must henceforth be imposed in the new member countries. These require the setting up of a paying agency, an integrated system of management and control, the capacity to implement direct aid in agriculture, and measures aimed at rural development.

³⁵ Direct aid to the new Member States only gradually reached parity with the amount of direct aid paid to farmers in the EU-15. This aid, as well as milk and sugar quotas, was calculated on the basis of production from the end of the 1990s, which is not a favorable reference period. Therefore, it is two to three times lower than aid to the EU-15.

As a result, the prospect of a future revision of the CAP that would limit the payment of direct aid to the largest farms beginning in 2014 aroused a strong reaction from Czech agricultural organizations, where more than a third of farmers would be affected.³⁶

Conclusion

By re-establishing landownership on the basis of rights going back to the pre-collectivist period, de-collectivization opened up a long and complex reconstruction process. The forced detour through the dismantlement of collectivist structures and the gradual restructuring of capital slowed the structural adaptation process. Significant transformations affected the systems of landownership and agricultural land use, which were largely separate. Today, private property in land remains dispersed among numerous absentee owners, who often lack direct links with rural areas, without affecting the large production units managed by corporate farms.

After an initial period of decentralization, which entailed a shrinking of large farms, the restructuring process favored large farms. The institutional matrix inherited from the collectivist system weighed heavily on the structural conversion by limiting the potential for throwing off the organizational constraints of the earlier system. Only the managerial staff of the collective farms had the necessary competence to take on the challenge of the market economy, while the vast majority of wage workers had neither the qualifications nor the capital required to embark on such an adventure. Corporations seized the opportunities offered by the institutional matrix. Closely tied together in the collectivist establishment, the triad of land, labor, and capital remained interlinked on the large farms at the initiative of those who had control of the farm's capital.

Paths to transformation were thus marked by characteristics of path dependence³⁷ resulting from the complex interaction between organizations and institutions.

³⁶ Aid is capped at €300,000, with a gradual reduction from €150,000.

³⁷ "Path dependence" is a theory that explains how a set of past decisions influences future decisions. Once established, institutional rules of the game will often generate self-reinforcing dynamics.

Beyond the succession of historically determined social forms of production, continuity can be found in large farms, which can be considered to be an unchanging spatio-temporal feature that ensures the transmission of a structural heritage.

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