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Phases to the transformation of agriculture in Central Europe – Selected processes and their results

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Abstract: The fall of the communist system in Central Europe was followed by dynamic social and economic change that also had its clear impact on the food sector. One of the key factors shaping the contemporary condition of the agricultural sector in region has been change of ownership, with the collapse of the nationalised sector and restitution of property to former owners. The work presented here considers the main directions of changes and assessment of selected economic processes ongoing in the farming sector over the last quarter-century throughout the region under consideration. This analysis may be further broken down in relation to the three suggested phases of change, i.e. transformation, integration and polarisation. The work took in five countries of the former Eastern Bloc, i.e. the Czech Republic, Hungary, Poland, Romania and Slovakia.

Keywords: agriculture, Central Europe, land management, privatisation, transformation

Twenty-five years have now passed since the fall of the Eastern Bloc, and the adoption of a new socio-economic and political system by successive Central European countries. The result of that has been a transformation in all sectors of the economy, and also in the public and cultural life, of the countries in question. Dynamic change has also characterised the food sector, first and foremost in respect of privatisation, and the return of assets seized in the communist era, as well as raised efficiency of output on farms and modernisation in general, and the incorporation of domestic agriculture into the European Union's (EU) Common Agricultural Policy and indeed the global competitive system (Csaki and Lerman 2000; Rusu and Florian 2003; Bański 2004; Petrick and Weingarten 2004).

As has already been alluded to, a particularly profound transformation characterised the system of ownership, with the general principle being for state and cooperative assets to be reduced in favour of private ownership (Lipton and Sachs 1990; Smith and Pechota 1994; Mejstrik 1997; Cox and Mason 1999). Naturally, the fall of both the state and co-operative sectors in farming gave rise to changes in land-ownership structure, and new trends where output was concerned, with these factors, in turn, driving on-farm diversification (Burger 2001; Doucha et al. 2005; Bański and Bednarek 2008).

The first period of change in Central Europe's food sector reflected the systemic transformation, given that this took in all parts of the economy. The privatisation that entailed was necessarily followed by a period of adjustment to new economic conditions. The accession of Central European countries to the EU combined with the possibilities for the financial support it made available to increase the dynamic of change in the farming sector (European Union 2008). This proceeded via various different scenarios, with different principles and assumptions to the fore – and it is fair to say that these remain inadequately understood and evaluated. The key overall direction to the changes of recent years is thus

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greater economic diversification of farms. However, this is associated with an ongoing increase in the relevance of large, commercial, specialised farms, at the expense of small ones.

The issue of the transformation of agriculture in the countries of Central Europe that has been outlined above has been much-researched, if largely in respect of selected regions only (Ilieva and Iliev 1995; Spisiak 1997; Burger 2001; Kovacs 2003; Csaki and Kray 2005), or else to limited subject matter (Ilieva and Iliev 1995; Dumitru et al. 2004; Doucha at al. 2005; Bański 2014). What remain relative rarities are synthetic conceptualisations considering the transformation of agriculture across Central Europe as a whole. Such analyses have only been attempted rather sporadically, and where they do exist they are typically collections of separate texts whose subject matter thus varies quite markedly.

This, therefore, signals the aim of the work described here, which has been to identify, compare and assess selected economic processes ongoing in the farming sector over the last quarter-century throughout the region under consideration. This analysis may be further broken down in relation to the three suggested phases of change, i.e. transformation, integration and polarisation. Each of these phases has entailed defined processes capable of shaping specific features of the food sector.

MATERIALS AND METHODS

As was suggested above, the period of transformation in Central Europe's agriculture was associated with a series of processes and phenomena of a political, social, economic and cultural nature. However, in this study, the author's attention is confined to selected examples seen as best portraying agriculture in the above region today. The analysis and evaluation thus focus on processes characteristic of the three phases to the transformation that are proposed here. In the so-called ”transformation phase”, it is ownership change that is emphasised, while research associated with the ”integration phase” focuses on change relating to the market for land. Finally the “polarisation phase” is exemplified by reference to the phenomena by which the economic structure of farms has taken shape, along with the main trends for farm production.

The work has taken in the five states (Czech Republic, Hungary, Poland, Slovakia and Romania). These together form a contiguous area of Central Europe in which conditions in terms of physical geography and recent history are reasonably comparable. While the first four countries have been the EU Member States since 2004, Romania only joined in 2007.

The work carried out has mainly entailed analysis of materials arising, most especially in the academic literature, but also in countries' strategic documents programming the development of the food sector, European Commission (notably DG AGRI) documents of relevance, reports of research projects and materials from websites. The second source of information constituted national Statistical Offices, as well as Eurostat (2018). In this, it needs to be recalled that statistical data in different Central European states have been gathered by Offices in line with differing principles and methodologies. Availability also varies quite markedly, with some categories of information fully available in respect of certain countries, while not occurring at all in others (Swinnen and Mathijs 1997; Hartvigsen 2013).

THREE PHASES OF TRANSFORMATION – SELECTED PROCESSES

Systemic transformation phase – changes of ownership

The key process underpinning the systemic transformation in Central Europe was privatisation, not least in the food sector. Through to the early 1990s, the agriculture across the so-called Eastern Bloc could be assigned to three main forms of ownership, i.e. cooperative or state (together comprising the “nationalised” category), or else private. Needless to say, the latter form was of limited significance, as collectivisation was pursued relentlessly in almost every country required to adopt the communist-style economic model (van Dijk 2003; Iordachi and Bauerkamper 2011). However, means of introduction and forms of operation did differ somewhat from state to state (Pryor 1992; Meurs 1999). In the case of today's Czech Republic and Slovakia (i.e. the then Czechoslovakia), as well as Romania, almost (more than 90% of) all farmland came under state management one way or the other. In contrast, in Poland, individual-level agriculture never stopped playing a key role at any time during the communist era. Thus, as of 1989, there were 3.8 million farms in operation in Poland,

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accounting for almost 76% of all land in the country managed agriculturally.

For these and other reasons, each of the states under study took its own specific approach to the privatisation of agriculture. The course of the process and its results also therefore varied. In Czechoslovakia (which divided into the sovereign states of the Czech Republic and Slovakia on January 1, 1993), it was accepted that the 1948–1989 period had witnessed a suspension of private ownership, which might now, therefore, be reinstated. The right to seek restoration of assets was enjoyed by permanent residents of Czechoslovakia who had been owners of land in 1948, or who were the recognised inheritors of such rights to assets.

This privatisation process pursued in the Czech Republic resulted in around 90% of the land put to agricultural use being transferred into private hands. The other 10% remained at the disposal of the state but was again utilised by private farmers, companies or cooperatives. However, the transformation taking place in the farming sectors of Czechia and Slovakia did not much alter the farm size-structure that had taken shape previously. Thus farms only tended to change their form of activity from the legal and administrative point of view. For example, the old farming cooperatives mostly tended to convert into commercial-law companies, with the result that large-scale farming was entirely retained.

The process of privatisation in Slovakia was a slower one, albeit based around similar assumptions. Through to the start of the new millennium, around 50% of all agricultural land in the country had been returned. The remainder continued to be administered by the Slovakian Land Fund, with restoration to former owners proceeding in a stepwise fashion. The process as manifested in Czechia and Slovakia thus led to a measure of fragmentation of land holdings, though not to the extent that the farming sector became dysfunctional. While the threat of more far-reaching fragmentation remained present, it emerged that large agribusinesses were going to be the optimal, most rational, way in which farm production might be organised.

In Hungary, the communist-era peak had seen around 86% of all farmland managed by 1 500 cooperatives and 124 State Farms. Reprivatisation thus in part entailed the restoration of lost land assets, as well as compensation (assuming the form of coupons) where the loss was irrevocable, or for other reasons. The privatisation of the State Farms took place, while the cooperatives transformed into market entities in various different categories. The meeting of reprivatisation claims had about 2.7 million ha of agricultural land assigned to it. The remaining land was in part transferred to members of the former cooperatives, or else sold on to private individuals, as well as former employees of the State Farms. An estimated 2.5 million people participated in Hungary's process of land reprivatisation. Among these were 1.5 million who obtained land that had hitherto been in joint ownership, while 500 000 regained land due to them as regards ownership (Kovacs 2005). As of 2011, around 80% of all farmland was in private hands (Toth-Naar et al. 2014).

Privatisation and restitution transformed ownership structure in Hungarian agriculture, with a kind of bipolarity of farms arising. On the one hand, there are farms of just a couple of hectares, on the other large commercial holdings. The farms of the first category only occupy a small proportion of all farmland and thus play a limited role where the commercial output is concerned. They nevertheless constitute a key element from the point of view of the communities in rural areas, helping to stabilise the labour market and secure minimum incomes. A similar role is played by the small farms present in Poland and Romania, a large part of which serve mainly to supply the own needs of farmers and their families. As of the mid 1990s, there were more than 1.4 million farms operating in Hungary (Harcsa et al. 1998). The second of the aforementioned categories of the farm are of course very limited in number, in comparison with the family farms. However, these commercial holdings account for more than 70% of all farmland, and their significance has continued to grow, given their access to funding for investment, and hence also to modern methods of production and management.

In Romania, the peak period of the communist era featured production cooperatives operating as the main form of agricultural land ownership. These, in fact, managed some 59% of all farmland. Operating alongside them were State Farms running a further 30% of Romanian farmland (Balteanu and Popovici 2010). The model for Romania's privatisations in the agricultural sector was as set out in the 1991 Land Fund Act, which provided for up to 10 ha of land to be returned to each former owner thereof. However, the Act also stipulated a permitted farm size of 100 ha.

In this country, the change of ownership was characterised by far-reaching fragmentation, to the extent that it is hard to regard the division of the holdings

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of the communist-era cooperatives into small parcels of land as a particularly positive effect. Indeed, the systemic transformation saw the numbers of owners of farmland rise to around 4 million (Benedek 2000), with a decided majority of the farms created being weak economically, self-supplying only, and lacking funds of their own for investment. The closure of Romania's cooperatives was associated with a deterioration in technical infrastructure (reflecting the cessation of maintenance measures and a lack of modernisation or organisation), and hence with a decline in capacity to produce.

Uniquely, Polish agriculture throughout the communist period was dominated by family farms remaining in private hands. Incidences of the restoration of land assets were thus more sporadic than universal in the Polish case. The prevailing policy in respect of Poland's State Farms was one of total liquidation, notwithstanding the fact that some of the Farms were in good condition economically (Bański 2011). The last State Farm went out of operation in 1994. Much of that land was taken on by companies, though some was also bought by natural persons.

Integration phase – a market for land

The period of reprivatisation in the Central European states' farm sectors ended in the second half of the 1990s. It gave way to a period of dynamic change in the structure of agricultural output, while a new model for commercially-viable farms emerged. Obviously, a very major influence on the food sector in the region was exerted by phenomena associated with preparation for EU membership – and then actual membership – in the cases of the Czech Republic, Slovakia, Poland and Hungary, and later also Romania.

Broad streams of funding flowing into countries from Brussels were disbursed to rural areas and agriculture, with the result that production experienced modernisation and ongoing specialisation, while sources of income became more diverse, multifunctional agriculture continued to take shape, levels of education and skills among those managing farms improved, and so on. These phenomena linked up with other, dynamic changes in the farming sector, including a steady decline in shares of gross domestic product (GDP) generated by agriculture. In the case of the Czech Republic, for example, agriculture, forestry and fisheries still accounted for 3.5% of GDP in 1998, while by 2012 the figure was just 0.9%. In the same period, the share of this primary sector in overall employment fell from 3.6 to 2.4%. Still-greater changes were to be noted in Poland, where farming's share of GDP declined from around 7% in 1996 to 3.7% in 2006 and just 2.4% in 2012. Likewise, by 2012, agriculture was only accounting for 2.7% of Hungary's GDP, for 4.7% of that in Romania, and for 0.8% of that in Slovakia.

In the period of integration with the EU, the region under study experienced many changes on the market for land. These included an increase in value on the one hand, and on the other trends in the direction of more-rational management. Across Central Europe, agricultural land accounts for a greater share than any other kind of utilisation. Eurostat (2018) data show that the figure is around 57% in the case of Hungary, 58% in Romania, 46% in Poland, 53% in Czechia and 39% in Slovakia. The cultivation of crops prevails in this region's agriculture, above all cereal-growing and the growing of industrial crops, and this in turn explains the dominance of farmland use by the arable fields category.

The period encompassing preparations for EU accession and the first years of membership was characterised by a particularly marked decline in the area of agricultural land. While this was a continuation of a downward trend, the process certainly gathered fresh momentum at this time. Influxes of financial assistance (including the fully-fledged Structural-Funds support following accession) dynamised economic development, with this *inter alia* entailing enhanced alternative demand for land hitherto devoted to farming. In just 10 years, the share of all land accounted for by farming declined by more than 10% in Poland, Romania, Hungary and Slovakia. In the Czech Republic, the rather stabilised land-use structure reflected the higher level of urbanisation from the outset, as well as the more fully-developed technical infrastructure.

Generalising only a little, it may be suggested that three main factors contributed to declines noted in the area of agricultural land. The first of these is dramatic development in the settlement network in areas surrounding the large agglomerations. Land previously used in agriculture was taken out of this category, with the main new designation being residential. A second factor underpinning the decline in the area of farmland has been the development of technical infrastructure, above all the road network. The land needed for this had in the main been productive prior to its purchase. A third factor reflects a more rational

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approach to production. Competition in the food sector requires greater efficiency, and this may not be achieved on poorer land. Hence some areas have been taken out of production, with the most typical fate for this land being the planting on it of new forest.

The integration period also featured changes in the market for land. While prices of farmland in Central Europe remain low by Western European standards, the period of integration was nevertheless characterised by a several-fold increase. According to Eurostat data (Eurostat 2018), the average per-hectare price of farmland in the Czech Republic rose from 1 555 to 2 249 EUR in the 2000–2009 period, while the equivalent rise in Slovakia was from 895 to 1 256 EUR. In a similar vein was the 2000–2005 increase noted in Romania – from 351 to 879 EUR per ha. Price changes were especially noticeable following countries' actual accession to the EU.

Land prices depend greatly on location, plot size and designation. In the Czech Republic, small plots of up to a hectare with designations mainly of a non-agricultural nature reached an average price of 59 000 EUR in 2007, having risen by as much as 73% in the period from 2000. In turn, plots over 5 ha that were designated for farming achieved an average price of 1 324 EUR per ha but were actually down in price by around 15% over the period in question. In Hungary, the increase in land prices mainly reflected the much-anticipated EU accession, and associated issues of land purchases by foreigners, as well as the chance for the subsidies being extended to agriculture to be made use of (Popp and Stauder 2003). In Poland, in turn, the average price of a hectare of farmland traded privately in 1992 was 298 EUR, while this compared with a far higher 9 169 EUR by 2016. Price hikes were especially visible after Poland's accession, with this very much reflecting limited supply, as well as the chance to receive direct payments.

Worthy of separate consideration is the leasing of land, which has proved an especially popular form in the Czech Republic, Slovakia and Hungary, where it gathered pace particularly once the transformation phase had passed. At the beginning of the century, as much as around 95% of farmland was, in fact, being leased. Among 3.5 million owners of farmland with just 0.44 ha of land at their disposal on average, less than 1% have actually taken up agricultural activity (Bicik and Jelecek 2009). Remaining owners are leasing out their land to companies or individuals. In turn, in Hungary, around 93% of farmland under the management of companies enjoys that status thanks to leasing. In Poland, this form of land management encompasses every fifth hectare of agricultural land, though the data on this are unreliable, given that farming at the level of the individual tends to have a rather informal character, with agreements on prices not being a matter for on-paper contracts.

Polarisation phase – diversification on farms, and as regards their output

The last few years can thus be said to have brought a marked polarisation of the farming sector, with a transformation in the direction of profitable and commercially-viable forms on the hand one, and – on the other – a large group of farms mostly only existing at all because the European Union grants them the so-called direct payments. The first group comprises farms of over 20 European Size Unit (ESU), in which the conditions for development are favourable, while the second would seem to lack the capacity to develop, or is at best only close to achieving this kind of capacity.

EU accession and the encompassing of the region under study by the Common Agricultural Policy naturally had a major positive influence on farm income. The said income tended to increase many-fold within the space of just a few years. This was above all the result of payments in support of farm production and products; while the rising income also helped raise levels of productivity in the food sector. Also of clear significance was the removal of all barriers targeted at Central Europe when it came to the accessing of Western European markets. Consecutive years have only served to confirm that the increased commercial viability and profitability of farms is not merely a transient phenomenon. This has made farmers more inclined to invest, though these kinds of responses have been very much confined to the farms capable of commercial production. An economic polarisation of farms has thus been taking place.

Mid-2000s Poland had around 99 000 farms that were achieving good financial results and were thus capable of dynamic development. That left over 1.6 million very small farms, earning incomes below the 2-ESU level and in essence not participating on the market for food at all; as well as 500 000 farms of limited incomes in the 2–8 ESU range, and with no chance of staying on the market unless the scale of their output was increased.

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Farm-size polarisation also took place in Slovakia, though there the size-structure is dominated by entities engaging in large-scale production. About 87% of the farmland there is in the hands of large joint-stock or limited companies, with mean farm size in excess of 1 200 ha as a consequence. 10% of the land is in turn managed by individual farmers nevertheless engaged in the market production of food (on farms of mean size close to 40 ha). That leaves just 3% of the agricultural land being used by non-commercial farming, with the number of entities involved at (just) 60 000+. The trends identified in the wake of Slovakia's accession to the EU thus include the shaping of a model for farms covering some 100–500 ha, with the ownership of capital concentrated.

Extreme polarisation in Romania's agriculture has also taken place, with 65% of the country's farmland shared across 4.2 million small farms, while the remaining 35% of the land is under the management of just 18 000 large entities. This ensures a massive disproportion between small and large farms fully manifested in terms of financial condition. Phenomena to be viewed as more favourable include the decline in overall numbers of farms, and an ongoing process of concentration; though both of these processes have been very slow thus far. At the end of the last decade, more than 90% of the farms making up Romanian agriculture were on income levels below 2 ESU. At the other end of the spectrum, only 0.05% of the country's farms achieved a figure in excess of 100 ESU!

CONCLUSION

It is possible to divide the 25-year period since into three phases of change. The first phase – of transformation – entailed asset restructuring and the change of ownership. Unlike in Poland (where private agriculture managed to remain dominant through the communist era), the other countries analysed witnessed a total change of ownership structure, with farm cooperatives and State Farms giving way to private agriculture of various types. While Czechia and Slovakia succeeded in retaining a favourable agrarian structure, Romania and Hungary experienced drastic fragmentation of land ownership, with very unfavourable consequences for the efficiency of production.

The second identified phase – of integration – coincided with the late 1990s and early years of the new millennium, and involved the countries of the region acting in preparation for EU membership, and then actually acceding to the Union. Assistance for the food sector via direct payments and a variety of development programmes brought about an increase in efficiency of farm production, as well as structural changes that not least entailed dynamic change on the market for land.

The phase we are dealing with today is, in turn, one of polarisation characterised by ever-growing disparities in levels of economic development of different kinds of the farm. *In extremis*, large, specialised and fully commercially-viable farms can be set against those that hardly achieve economic viability at all, and are bound to fold in the not-too-distant future. The commercially-viable farms are those which can invest thanks to their participation in EU programmes of support, with the result that they can go on modernising, increasing production, and further consolidating their viability. In contrast, the small farms are kept afloat (if at all) by direct payments that act in support of small-scale production. The next few years will be decisive for the latter kinds of farm, which may either make it through into profitability and commercial viability or simply go to the wall, with their land passing into the hands of the larger entities.

An interesting research topic is the indication of possible trends for further changes in the food sector in Central Europe in the coming years. Here, modernisation process should not entail blind adherence to the Western model leading to ever-more-intensified and ”industrial” agriculture, but should rather head in the direction of sustainable, multifunctional farming capable of supplying household income that is also augmented by other forms of economic activity. In this, it always needs to be recalled how old-style intensification leads to reduced employment opportunities, thus necessitating yet-further migration out of rural areas – already a serious problem in some parts of Central Europe.

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