Structural change in the post-socialist transformation of Central European agriculture: Studies from the Czech and Slovak Republics

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Chapter 2

Organisation of Agricultural Production in Economic Theory:
The Shorter History of a Debate

The advantage, however, of small properties in land
is one of the most disputed questions in the range of
political economy.

*John Stuart Mill, 1848*

2.1. Introduction

This book is devoted to the question of the organisation of agricultural production, analysed in a
particular geographical area and for a particular time period. As the motto indicates, in
economics the issue has long been discussed, and in contexts very different from the post-
socialist one. The purpose of this chapter is to show that the analytical ideas about alternative
forms of agricultural production relevant to Central Europe in our time have an important place
in the history of economic ideas. Identifying the intellectual ancestry of a particular idea is
helpful in understanding the form in, and occasions on which, contemporary varieties appear.
Specifically, the idea that a particular farming mode is superior to its alternatives has been
discussed by many eminent economists since Adam Smith.

The distinction that defines the alternative farming modes in that historical debate, as in
this study, is *the employment or absence of wage labour*. This simple fact - the use of wage
labour - has many implications. It necessitates the employment of management; it defines the
scope for farm expansion, given technology; and it requires consideration of ownership relations
and incentive structures. Central European farms that use wage labour on some scale are usually
relatively large and have a corporate governance structure, i.e. one that is defined by a functional
- though not always personal- separation between ownership, management, and implementation.
In contrast, farms that do not use wage labour are usually quite small and have a family-farm
type governance structure. More precisely, governance relations, as usually defined, are absent
within such a farm, since ownership, management and implementation are united in one person
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or in one household. Obviously there are exceptions to this characterisation of Central European farms, but they are rare, as will be shown in chapter 3.

The reason for choosing this research angle is practical: the debate and policy on farm reforms in Central Europe have been carried out, generally, on the assumption that a change in governance structures would be necessary for the improvement of technical efficiency and international competitiveness of the agricultural sector. This book is not, primarily, about the truth of that proposition. What is of interest here is, first, the degree to which the reforms influenced actual (rather than legal) governance structures, and, second, the implications of governance structures for farm behaviour in a broad sense – including product selection strategies, incentive structures, scope for market operations, and access to financial resources. As a prelude to these empirical questions, in this chapter the origins and contemporary variety of the idea that governance structures and related ownership patterns are important for farm performance will be studied.

What were the actual alternative governance structures considered in the historical debate, and how do they relate to contemporary Central European farms? Agricultural production can be organised in many ways, and the varieties have greatly differed over times and places. The range of governance structures includes peasant production, family farming, farm companies, co-operative farming, estates, and plantations. The important distinction, for the present purpose, is that peasant and family farms use wage labour on a very limited scale (e.g. relative to output levels) if at all. Estates, plantations, co-operative farms, and farming companies (of the Central European, not the American variety) typically do use wage labour, often extensively.

In the Central European context, the non wage-labour farm can be a family or a peasant farm. In this book these modes will be referred to as the individual farm, since its defining feature is that it is owned, managed, and operated by one individual or a limited number of people, usually united in one household. The dominant Central European wage-labour farming modes are the corporate and (nominally) co-operative farms. These farm types will be referred to as the traditional farm, since it typically inherited its governance structure from the pre-reform era. Its defining feature is that of the corporate firm, i.e. the separation between ownership, control over the production process and implementation of production tasks.

This chapter presents an overview and analysis of the economic arguments relating to these two governance structures and their predecessors in other times and places. Its aim is to show that the discussion of the economics of post-socialist farm organisation is a recent, and selective, reinvigoration of a debate in the profession that was started by its founders.
2.2. The Classical Economists

Discussion of farming modes can be found at what is customarily considered the very beginning of economics as a separate field of scientific inquiry. Adam Smith, writing in *The Wealth of Nations* (1776) on systems of agricultural production, discoursed on the impact of farm ownership structures and farm size on farm performance. Then as now, these two features were in practice strongly related. He compared tenancy of some form to peasant agriculture, and specifically argued against large estates and in favour of small-scale, owner-operated farms for the sake of productivity:

"To improve land with profit, like all other commercial projects, requires an exact attention to small savings and small gains, of which a man born to a great fortune... is very seldom capable. ... Compare the present conditions of... large estates with the possessions of small proprietors in their neighbourhood, and you will require no other argument to convince you how unfavourable such extensive property is to improvement." (386-7)

"A person who can acquire no property, can have no other interest but to eat as much, and to labour as little as possible. Whatever work he does beyond what is sufficient to purchase his own maintenance, can be squeezed out of him by violence only, and not by any interest of his own." (388-389)

Smith here appears to identify a wealth effect related to farm size, referring to the larger marginal benefit that smaller land holders experience from investment in land quality. He also recognises the incentive structures implied in ownership patterns. Both considerations would remain central to the debate.

John Stuart Mill devoted 5 chapters of his *Principles of Political Economy* (Book II, chapters 6 to 10) to the discussion of different options in organising agricultural production. In the two chapters explicitly dealing with 'peasant proprietors', he provides an extensive survey of peasant farming throughout Europe in order to support his argument that peasant proprietorships are the superior mode of production, from an efficiency point of view. Independent peasants with (communal or individual) ownership titles to their land had become relatively rare in England after the enclosure of the common lands in the 18th century. Mill therefore has to go to considerable length to explain the advantages of that institution to his compatriots. Like Smith,
he ascribes the greater productivity of land worked in peasant holdings to two factors: their property rights structure, and their size:

"Give a man the secure possession of a bleak rock, and he will turn it into a garden; give him a nine years’ lease of a garden, and he will convert it into a desert.... [There is a] far larger gross produce obtained ... on small farms...." (283).

This higher productivity he attributed to "untiring industry" on the part of the proprietor. Mill is thus more specific about the productivity advantage than is Smith. It is the productivity of land, not labour, which Mill, along with the other classical economists, sees as the main economic advantage of peasant holdings:

"The peasant cultivation produces crops with an amount of labour which, if paid for by an employer, would make the cost to him more than equivalent to the benefit; but to the peasant it is not cost, it is the devotion of time which he can spare, to a favourite pursuit, if we should not rather say a ruling passion." (284)

Mill also introduced a third argument for peasant holdings, apart from the incentive to work hard on own land and the productivity of small plots. He also argued that peasant land ownership fosters technical progress: it places peasants "earlier in possession of an amount of agricultural knowledge, not attained until much later in countries where agriculture was carried on solely by hired labour" (284). He goes on to ascribe "popular education", "mental activity", "thrift", and the "moral virtues of prudence, temperance and self-control" to the institution of peasant proprietorship (286-287), as factors accounting for peasants’ larger labour input and more advanced methods of farming. Mill also argues, in painstaking empirical detail, that two supposed vices of peasant countries particularly worrisome to political economists of his day - overpopulation and extreme subdivision of land plots - cannot be attributed to the ownership system as such (287-301). His conclusion on peasant proprietors:

"Compared with ... cultivation by hired labour, it must be regarded as eminently beneficial...." (300)

The superiority of owner-managed farms was propagated along the same lines by continental economists, such as Sismondi in France. "The peasant proprietor is of all cultivators the one who gets most from the soil, for he is the one who thinks most of the future, and who has been most instructed by experience" (quoted in Mill, 259-260).
Alfred Marshall (1930 ed.), in many respects a transition figure between the Classical and Neo-Classical periods in the British economics profession, made the same point that farms should be owner-operated in his *Principles of Economics* (1890). His contribution was to discuss farm size in relation to governance and technological progress:

“It is obvious that the metayer system [which is sharecropping with physical revenues equally split between tenant and landlord, DJB] ... is not suitable for holdings large enough to give scope to the enterprise of an able and responsible tenant... The position of a peasant proprietor has great attractions... His feeling of ownership gives him self-respect, and stability of character, and makes him provident and temperate in his habits. He is scarcely ever idle, and seldom regards his work as mere drudgery; it is all for the land that he loves so well.” (645-646)

Marshall, as his predecessors, notes the beneficial effect of ownership on labour input. In addition however, he states that the advantages of tenants’ “enterprise and ability” materialise only fully on farms that are not too small. With these rather vague terms he seems to have had in mind the ability to profit from technological innovations, as a later section from his argument suggests. It is worth quoting him at some length on this point:

“[A farmer] able to follow the movements of agricultural science and practice ... could find time to direct the general course of the management of several hundred, or even several thousand acres; and the mere superintendence of his men's work in matters of detail is not a task fitting for him. [He] would not spend his own strengths on minute supervision which he can easily hire subordinates to do. A farmer, who can do this higher work, must be wasting his strength on work that is beneath him, unless he employs many gangs of workmen each of them under a responsible foreman. But there are not many farms which give scope for this...it should be best for the economy of production that farms should be as large as is practicable under the existing conditions of land tenure so as to give room for the use of highly specialised machines for the exercise of great ability on the part of the farmer. But if a farm is not very large, and if, as is often the case, the farmer has no greater ability and activity of mind than is commonly to be found...; then it would be best...that he should return to the old plan of [manually] working...Very large farms left out of view, it is with rather small farms worked on these principles that the future of English agriculture seems to lie.” (652-653)

Observing the large potential for increases of productivity and of farm size, brought about by technical progress in his time, Marshall acknowledges that this implies questions of governance structure. He considers and rejects wage-labour farming. Entrepreneurial and technically knowledgeable farmers, who can appreciate the advantages of farm size expansion, should not be
wasting their time on supervision of labour, but neither can they efficiently employ management to do it for them. *Ergo*; such farmers – a minority - should expand their business on the basis of mechanisation rather than labour increases. For the rest – and bulk - of agriculture, the labour-intensive and small family farm is the optimal mode.

Marshall argues that the future for agriculture is in a dual system of a few large, capital-intensive farms, and many labour-intensive, small-scale family farms. For the optimisation of farming, he recommends a change in size in relation to the application of novel techniques, but not a change in governance structure.

Recapitulating, the economists discussed here pointed out the advantages of owner-worked farms for the productivity of land and the incentives to work and to innovate. They also asserted the inefficiency of using non-owner, wage labour. This inefficiency resulted both from a lack of appropriate incentives for hired labour and a waste of the farm owner’s skills in supervision. Such arguments for a particular farm structure (peasant, smallholder or individual holdings) were combined with arguing for a particular size (small farms). This was so, not only because most individual holdings simply happened to be small, but also because small holdings have the theoretical advantages of higher investment (mainly in labour time) per unit of land and higher marginal benefits to the owner. In consequence, any increases in size should be based on technological progress, not expansion of the labour force. It should occur within the governance framework of the individual farm.

2.3. Marxists and Socialists

Karl Marx, the ‘last of the Classical economists’, introduced a new approach to the analysis of agricultural production modes. His aim was not merely to study the comparative merits of the various systems of food production. He also tried to systematically relate changes in them to changes in the economic system at large, and, extending that type of analysis, to formulate generalisations about the development of modes of production, based on his analysis of the current economic system, i.e. capitalism.

In *Capital* (1961 ed., first published in 1867) he describes the disappearance of the ‘yeomanry’, or ‘peasant proprietors’, in England during the time of the enclosure of the commons in the late 18th century. This process entailed the definition of individual and private property rights to commonly used agricultural land, or, in Marx’ less neutral terms, “common land stolen from the agricultural population and by parliamentary devices presented to the
landlords by the landlords”, or succinctly, “embezzled lands” (681). Peasants who depended on
the use of those lands for their livelihoods now found themselves unable to survive except as
workers for others.

Marx’s moral and political evaluation was so negative mainly because the enclosures
implied a redistribution of land from many poor peasant to a few rich aristocrats – a
redistribution that he obviously perceived as thoroughly unjust. Apart from this moral aspect, his
evaluation might seem to contradict the other Classical positions reviewed above, since the
enclosures implied the replacement of communal by individual property, and individual property
rights for the farmer were associated with superior efficiency by the (other) Classical
economists. That interpretation would, however, overlook the change in effective – as opposed
to formal – property rights that the enclosures brought about.

Those working the land under the old communal system – the peasants – used to have
ownership titles to the land, even though these were informally and communally, not
individually defined. There also existed a link, though not a direct one, between effort and
reward. Consequentially, both the ownership and the incentive advantages of peasant farming
were present in communal farming, although in a weakened form compared to individual peasant
holdings. After the enclosures, those who owned the land – the gentry – did not work it. Those
who worked it – the labourers – did not own it, nor were they rewarded in proportion to their
exertion or investments.

Observing this, Marx saw the enclosures as nothing less than “the most shameless
violation of the sacred rights of property, ... gross acts of violence ... necessary to lay the
foundations of the capitalist mode of production” (680). He lamented the loss of independence
and fall in standard of living for former peasants (now “day labourers and hirelings”) to the point
of actual poverty (405). By replacing the peasant, “that bulwark of the old society, by the wage-
labourer, ...class antagonisms are brought to the same level in the country as in the towns”
(474).

Marx appeared not primarily interested in the efficiency of production but much more in
the distribution of the gains from it. He related peasants’ property rights to their standard of
living rather than to their productivity, as the other Classicals had done. Moreover, whereas
earlier analysts saw the independent peasant as promoting technical innovation, Marx saw
innovation as the peasant’s doom. In line with the “general law of capitalist accumulation” that
he postulated, technical progress brings about, in his view, a relative surplus-population in the
countryside “constantly on the point of passing over into an urban or manufacturing proletariat”. This “reduces the agricultural labourer to the minimum of wages, always standing with one foot
in the swamp of pauperism" (601-602). Marx dwells in length and great detail on the dramatic worsening of the economic position of the agricultural labourers in the various parts of England, Scotland and Ireland in the century between the 1770’s (the era of the enclosures) and his own time (630-666).

While, as shown, Marx’ analysis is not incompatible with the observations made by Smith, Mill, and Marshall, his focus is altogether different. Marx’ analysis is one of groups and their relative power and wealth positions, rather than an analysis of the farm-level production process. Also, instead of comparing farming modes and arguing in favour of one of them, as the other Classical did, he presents structural change in agriculture as a necessary development. Industrial agriculture based on wage labour and taking advantage of technical economies of scale was bound to out-compete traditional family farming (which was mostly peasant production in his day). In line with this determinist analysis, the Marxists foresaw “the inevitable ruin of the small peasant” resulting from the development of capitalism. Prominent expositions of this position include Friedrich Engels’ (1973 ed.) pamphlet on the agrarian question in Germany and France – from which the above phrase is taken - and Vladimir Lenin’s (1974 ed.) study of American agriculture.

In and after Marx’ days, the study of farming modes was thus given a decisive political flavour. The topic also largely left mainstream economics. The proponents of the Marginalist Revolution (Jevons, Walras and others) and their intellectual heirs were not specifically interested in either particular industries or the actual organisation of production, and consequently their seminal works do not contain explicit consideration of the present topic. Subsequent authors who did study the alternatives of wage-labour and peasant/family farms, a subject matter that became known as the “agrarian question”, usually had a different methodological outlook from the increasingly orthodox neo-classical one. They either followed the classical tradition, reiterating the points made by Smith, Mill, and Marshall (see e.g. Taussig, 1911:54). Or they were of socialist persuasion, either Marxists proper or ‘revisionists’ (social-democrats) of some sort.

The ‘revisionist’ analysts, while asserting the Marxist tendency towards large-scale, wage-labour production in capitalist systems, suggested countervailing factors peculiar to agriculture, which might preserve peasant or family farm businesses even in mature capitalist economies. Such factors might include the ability to provide surplus labour for capitalist enterprises, or the inability to expand farm size. This position is exemplified by the German social-democrat Eduard Bernstein’s book *Die Voraussetzungen des Sozialismus und die Aufgaben der Sozialdemokratie* (originally published in 1899 and translated into English in 1909
as *Evolutionary Socialism*). The revisionist view was subject of heated debate among German Marxists and social democrats in the 1890’s and 1910’s. Bernstein’s contemporary Karl Kautsky repudiated Bernstein’s analysis in his books *Bernstein und das sozialdemokratisches Programme. Eine Antikritik*. (‘Bernstein and the social-democratic program. An Anti-Critique’), and, best-known, in *Die Agrarfrage* (published in 1899), published as *The Agrarian Question* in a 1988 edition.

The revisionists tried to account for what they observed: that family farming was transformed rather than ruined by the advance of capitalism. They investigated the mechanisms that rendered family or peasant farms so tenacious in capitalism. They did not accept the Marxist theoretical predictions of the opposite, although some of them were motivated by a mostly Marxist view on economics and politics. But neither did they share the Classicals’ exclusive concern with efficiency and growth, nor the neo-classical focus on marginal adjustments on fully competitive markets by firms that remained black boxes as far as their internal organisation was concerned. Instead, these theorists initiated the microeconomic analysis of farm features, considered explicitly in relation to the economic environment. It would prove to be a fruitful, and eventually generally accepted approach to understanding farm modes and farm behaviour.

### 2.4 Chayanov and the Beginnings of Farm Household Theory

In the subsequent decades, analyses in the same vein, but of a more technical nature and with no explicit political connotation appeared. These prominently include the principal work, published in 1925, of the Russian agricultural economist Alexander V. Chayanov (1888-1939), *Organizatsiya krest’yan skogo khozyai stva* (in 1966 published as *Peasant Farm Organisation* in English). This new approach can also be found in Aereboe and others’ *Handbook of Agricultural Economics* (1929), influential at the time. Chayanov’s book laid the groundwork for much of the later analyses, and its main insights are still accepted as relevant to peasant and family farms today. It merits separate attention.

The book can be located in the Russian/Soviet academic debate, which developed in the 1880-1930 period, on transforming agriculture in what was then the largest peasant nation in the world. This question was decided in practice by the collectivisation drive of 1929-1931, which, incidentally, was carried out with little reference to the results of that debate. Chayanov himself was arrested in 1930 and accused of counterrevolutionary conspiracy and silenced till his death in 1939. The influence of his ideas in economics was limited initially, as *Peasant Farm
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Organisation was originally published in Russian only\(^4\). With the rise of development economics in the 1960’s, the problems typical to peasant household behaviour attracted more interest from economists and economic anthropologists. Following the translation into English in 1966, several of Chayanov’s insights were applied to family farming in developed market economies as well. Since then, this work has been widely regarded as a classic.

Chayanov’s suggestions were based on extensive analyses of field surveys, inquiring into what would now be labelled the microeconomic behaviour of peasant households. In addition to supplying a wealth of detailed statistics on the pre-collectivisation Soviet peasantry, Chayanov’s main theoretical contribution was to point out the difference between farmers and peasants - and more generally, between market-oriented producers, who can be regarded as business units to which conventional methods of economic analysis apply, and households as producers (often for subsistence rather than marketing), whose behaviour is not amenable to such approaches. In this distinction he differed from both Marxist and (neo)classical economists of his day, for whom ‘producer’ and ‘entrepreneur’ were interchangeable terms.

Chayanov, on the contrary, argued that peasants engage in their economic activities (mainly food and fibre growing and cattle-raising, but also crafts and local trade) because they have to satisfy household needs. Farmers, on the other hand, produce food or fibres because they aim to sell it on the market at a profit – i.e. they are entrepreneurs. Chayanov noted that the concept of profit does not apply to peasants, since the value of profit must be computed by subtracting from the value of gross output the various cost categories: wages, rents, and inputs. This is not possible in the peasant case for two reasons. First, peasants do not receive wages or pay rents. Hence, the residue concept of profit does not apply. Second, even if all cost categories could be identified, attributing money values to gross output would be impossible in a non-market environment. The common way out of this problem, adopting hypothetical (e.g. world market) prices for a good for which no price can be observed, is only sensible if the good can be exchanged. This is not the case for subsistence food quantities, which make up a large part, often the bulk, of peasant production. Consequently, as profit is not a meaningful concept in a peasant setting, peasants cannot be assumed to be subject to the profit motive.

An important implication is that the usual abstraction of the capitalist businessman as just a producer (disregarding his own consumption behaviour) is not valid for peasants. Peasant production behaviour must be analysed as household behaviour, because consumption and production are interwoven. Indeed, Chayanov explicitly aimed to design a theory of ‘family economics’, of which peasant household behaviour would be an application – a fascinating predecessor of Becker’s (e.g. 1974) work.
Chayanov captured this insight by suggesting that production levels are not determined by market supply and demand, but by what he called the labour-consumption balance between the satisfaction of family needs and the ‘drudgery of labour.’ He focused on the peculiar supply of labour that subsistence production induces, and the implications for product supply responses. With increasing production, satisfaction decreases while drudgery increases. On the intersection of both curves is the peasant’s labour supply, which determines peasant food production.

The bulk of Chayanov’s book is then devoted to factors that may change the shape or position of these curves, thus shifting labour and product supply. Although, as Chayanov himself admitted, the notion of a balance between ‘need’ and ‘labour’ itself was not novel, a detailed quantitative analysis of factors controlling the trade-off was. Among the factors influencing ‘satisfaction’ were the ratio of consumers to workers in the family, debt, capital accumulation, and the desire for urban goods. Controlling shape and position of the drudgery curve were climate, soil fertility, production techniques, and distance to markets.

One important generalisation that Chayanov made was that technological progress was often not an interesting option from the peasant point of view due to the joint impact of scheduling problems and a rigid labour (over)supply. Peasant may not select products or use techniques with a view to maximising per capita labour productivity (which is often implied by profit maximisation), but rather in order to provide work to all able members of the household throughout the year. Thus a product or production technique which would be labelled inefficient in a market environment may still be selected because it provides more gross annual produce, or requires less peak labour than the market-optimal product or technique.

A related, and important implication was the phenomenon of peasants’ ‘self-exploitation’, already noted by Mill as the ‘superior exertion’ of peasant proprietors, as well as by Marx as an example of the tendency to self-exploit, typical for capitalist enterprise in general. The notion was further developed by Max Weber (1972 ed.), who located the major reason for the persistence of family farms in farmers’ desire for freedom and autonomy in the workplace, even if at the cost of longer working hours.

2.5. Contemporary Economics

From the 1960’s onwards, these issues came to be both more widely and more specifically studied in the economics profession. The subject-matter of the organisation of production, originally posed in the context of agriculture, has since branched out into new fields within the
area of general economics. The arguments discussed above were taken up and developed, in contemporary methodological form and with no particular reference to the agricultural sector, in seminal papers on the theory of the firm. In this field, the implications of property rights and governance modes for incentive structures, and via them for investment, growth, and efficiency, have become widely studied, both theoretically and empirically.

In another vein, Becker (e.g. 1974) cast intra-household decision making in the constrained-optimisation form, showing what Chayanov had shown earlier with different methods. Seemingly irrational (non-optimising) household behaviour may be shown to be rational given the distribution of gains and losses within a household and given the constraints and alternatives that a household faces. This opened up the field of household economics, a novelty within the neo-classical paradigm.

Meanwhile, with the appearance of the development problem as a widely recognised challenge to Western economics and policy, development economics had greatly expanded as a separate field, and there was a need for the study of different production modes in farming, and of their possible evolution. As in economics in general, the main work was now done in the United States. A seminal work was Theodore Schultz’ *Transforming Traditional Agriculture*, published in 1964. It served as a founding classic in development economics, which was initially largely about rural and agricultural change in what was then referred to as the ‘backward’ countries. Particularly in the 1980’s, mainstream development economics has become more microeconomic and has connected to the various strands of literature on the economics of the organisation of production and marketing\(^8\).

This contemporary literature is specifically concerned with three themes: governance, contracting and risk. First, following Chayanov’s approach, it is recognised that the *internal relations* of the farm (its governance structure) control the farm objective function as well as constraints on its realisation. These internal relations are defined by ownership over the various farm resources; by the allocation of tasks; and by the claims on revenues. Second, farm behaviour is modified by the form of *contracts* on purchase of inputs and sale of outputs. This range of contract options includes spot market transactions, futures market transactions, lease, rent, vertical integration, and variants of them. These contracts are the outcomes of make/buy (and consume/sell) decisions. They both reflect farm governance structure and are dictated by the existence (or absence) and sophistication of markets for input, outputs, information, and credit. A third element is that the distributions of *information and risk* decisively influence both farming modes and farmers’ decisions. This literature thus unifies the study of both commercial and peasant farming\(^9\).
Against this background, the study of collective socialist farming, as compared to individual farms, started with Domar's (1966) paper "The Soviet Collective Farm as a Producer Cooperative", which built directly on Ward's (1958) seminal article on self-managed production in Yugoslavia. This line of research expanded during the 1970's and 1980's; especially in the latter decade in the spirit of the governance/contracts/risk tradition described above (e.g. Carter, 1984, 1987; Kimball, 1988). This was the intellectual background against which agricultural economists approached the problem of reforming post-socialist agriculture in the late 1980’s and early 1990’s.

2.6. Economics of Agricultural Transition

In the agricultural economics literature, agriculture in the socialist countries had long been identified as cost-inefficient due to incentive problems inherent in the governance structure of the collective or state farm. The (economic) goal of agricultural reforms was commonly defined as raising productivity. In view of the above arguments, it is understandable that a change from wage-labour to individual farm structures was considered a condition for such improved productivity.

Crucially, de-collectivisation was commonly defined as the formation of individually operated (for short: 'individual') farms from the land and property of formerly collective and state farms ('traditional' farms). In line with the classical tradition, de-collectivisation in this sense was considered to be implied by property rights reform. In a nutshell, the theory was that property rights reform would bring about the optimal governance structures; which in turn would embody the correct incentives for efficient production. Let us take a closer look at the case as made in the early reform years.

Arguments for the view that privatisation of ownership would lead to de-collectivisation (in the restrictive sense of the replacement of traditional farms by individual farms) are mostly found in an applied transaction costs based theory, as promoted by Schmitt (1993) and others. Here it is argued that the raison d'être for collective, large scale production is the existence of economics of scale or scope. However, in most of the socialist economies, farms had a number of workers far exceeding the size of farms on which generalisations about scale and scope economies are based (Pryor, 1992:147). In addition, in much of agriculture, technical economies of scale and scope are argued to be soon outweighed by diseconomies in the organisation of production, and particularly of labour (Ferenczi, 1994:403).
The source of these diseconomies is thought to be primarily the rapid increase in transaction costs with number of employees. The reason is an information asymmetry problem. Because of the specificity of agricultural work, the workers actually carrying out operations have considerably better information than the supervisors about such vital aspects of farm operation as the state of the land, crop, and animals and the amount of labour input required and actually applied. This information is costly to transmit, and communicating it is often against worker interests. Without it, it is difficult and costly for management to set up an incentive scheme that would induce the right amount of labour at the right time.

The alternative for correct incentives would be adequate supervision; but this is also costly given the nature of food production processes. Jobs in the production of a given product are sequential and the final result depends on the quality of any of the jobs. Attention to details that are hard to monitor at the time of implementation is often essential for the final product. Work is seasonal and there are large peaks in the labour needed over the year, which either necessitates the use of temporary labour (generating experience, co-ordination and supervision problems) or implies underemployment of the permanent labour force. Finally, production is often dispersed spatially, which rules out efficient team supervision.

For these reasons, the farm size (in number of employees) that is regarded as optimal with regard to the production process is not expected to exceed family-farm size. In this mode of farming (here referred to as the individual farm), organisational diseconomies are argued to be largely excluded. Wage labour is not used and shirking or free-riding is supposedly difficult because of the small size, the hierarchical structure and the externally enforced continuation of relations within the household ‘labour force’ (Deininger, 1995).

Based on these considerations and observations, the common perception of socialist-style farm structures in the early transformation years was that "the evident weakness of this organisational form provides the argument for full scale privatisation" (IMF et al., 1991:157-158). The expectation was that “the private sector will be more productive than the collective” (Petit and Brooks, 1994:483). Significantly, ‘private’ was then equated to ‘individually owned’ and contrasted to ‘collective’. This led to the generally accepted view that “privatization in agriculture mainly concerns the breaking up of large units...” (World Bank, 1995:2).

The expected structural change in agriculture resulting from reform policies was de-collectivisation in its narrow sense: the formation of family farms as successors of collective and state farms (Machness and Schnytzer, 1993:162; Mathijs, 1998:33). Such individualisation was not seen as optional, but as fundamental since “restructuring of large-scale farms (is) in line with the new ownership patterns and the principles of a market-based economy”. Analysts claimed
that “large-scale socialised farms are not suited for efficient operation under market conditions” (Csaki and Lerman, 1994:560,564). The conviction that individualisation was the main goal of reforms was by no means limited to the early transformation years, although the reasons given for it changed. Lerman (2000:10) regards ‘individualization of former socialist agriculture as a valid goal, ... since individual farms are the dominant organizational forms in market economies.”

In sum, the view was that given its inherent inefficiency, collective farming had needed constant socialist government support to survive. Once this assistance was removed - as it was in Central and Eastern Europe - individual farming could be expected to replace collective farming more or less spontaneously. New, or newly effective owners would search for the most efficient and profitable use of their assets, and use them in (or rent them to) individual farms. It was this expectation that motivated the farm reform programmes implemented throughout Central and Eastern Europe in the early 1990’s, described in more detail in chapter 3.

2.7. Conclusions

One chapter cannot possibly do justice to the variety in research approaches to the comparative study of farm structures over the last two and a quarter centuries. Still, on the basis of this selective literature survey it appears a defendable generalisation to state that it has been conducted in three frameworks. First, the Classical view, where the efficiency of different ownership patterns was the central criterion for viability. Second, the Marxist approach, where the focus was to explain structural changes by consideration of power structures implied by ownership patterns. Third, the less clearly delineated tradition that originated with the revisionist socialists and empiricists like Bernstein and Chayanov. This approach developed via German agricultural economics in the 1920’s, the mainly American study of peasant economics in the field of traditional development economics in the 1960’s and onwards, and neo-classical models of farm/peasant household behaviour developed since the 1980’s in the new development economics. Although very varied methodologically, the unifying aspect of these research modes is the attention to the incentives implied by economic relations between the agents in agricultural production, both within households and in the economic environment (i.e. markets or other exchange systems).

In conclusion of this overview of the intellectual history of the ‘farming mode debate’ in economics, two observations can be made. First, the premises of the reform programmes for
agriculture in the transformation can be traced back to the Classical views on property rights and productivity, while its aims reflected the (neo)classical focus on efficiency through property (and, interestingly, also the Marxist concern for justice through property – see e.g. Tracy, 1993:268). But the programmes largely ignored the interaction between farm structure and economic environment. the study of which was pioneered by Chayanov, and which had come to be well-researched in mainstream development economics. Only later in the transformation did attention shift to the mutual influence of farm structure and the institutional set-up (including the institutional heritage) of the new market environment that structured economic relations. It appears correct to note that the initial, and crucial reform choices did not take these factors into account. The suggestion here – a suggestion that will be specified and substantiated in the rest of the book – is that this observation provides a basis for explaining the gap between initial reform expectations and subsequent reality.

Second, there is the odd similarity between the Marxist position at the end of the 19th century and the (predominantly) neo-classical position at the end of the 20th. Both groups of analysts made firm predictions, though with opposite contents. Whereas Engels in 1894 “foresaw the inevitable ruin of the small peasant”, Western economists representing the international economic institutions in 1991 stated that “the only choice that is foreclosed is maintenance of the status quo with state and collective farms…” (IMF et al., 1991:157).

Both types of theorist could be so confident only because the expected development was seen as innate in the development of the economic system – i.e. capitalism, in both cases. Marxists believed that technological progress and class antagonism would combine to cause small, independent peasants to degenerate into a rural proletariat of dependent workers. The English enclosure of the commons a century earlier was only the first step in that process, and rural populations in France and Germany would be next to experience the dire consequences of capitalist development.

Neo-classical analysts in the early 1990’s, expecting de-collectivisation in the sense of individualisation that would be actual (not just legal), spontaneous, and rather speedy, based their view on the same notion of innate tendencies. Wage-labour farming was supposedly technically less efficient than family farming. Given a (soon to appear) genuine market environment, inefficiency could be equated with non-profitability and lack of competitiveness. Inevitably therefore, wage-labour farming would pass out as ‘the market economy’ (a term then more popular than ‘capitalism’), advanced. In the context of the neo-liberal view of economic development of the day, the ‘inefficiency’ of collectivism was thought to have at least as damaging and inevitable results as Engels’ ‘ruin’. 

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So both neo-classical and Marxist theorists argued, each in their own time, that a change in the governance of production relations was implied by the development of the market system. And both got it wrong, although the Marxists more dramatically so than the neo-classicals. The institution of family farming was not ‘ruined’ – except in those countries that adopted the socialist economic system theoretically promoted by Engels and pioneered by the Soviet Union. In the mature capitalist nations of Europe and elsewhere, independent peasant farms have evolved into independent family farms. Although the latter are much less numerous than the former were, the remaining family farms are the backbone of agriculture to the virtual exclusion of other governance modes.

As for the neo-classical predictions: in the newly capitalist countries of Central and Eastern Europe, state and collective farming indeed largely and speedily disappeared – but only formally, not practically; as legal structures, but not as governance structures. In those countries where individual farming was largely absent in the socialist system, varieties of it are still only co-existing with traditional structures. In the three most advanced relevant Central European countries, they are still in a minority position, e.g. in terms of the share of agricultural land worked, compared to co-operative and corporate farms. To develop explanations for that observation is the object of this book. The focus of attention in these explanations will be on the actual incentives, embodied in the post-socialist economic system, for both individual farmers and operators of traditional farming structures.

Obviously, the transformation period considered is short, perhaps too short as yet. We cannot yet make the sort of definite statements about the transformation in Central European agriculture that the century of evidence after Marx’ and Engels’ predictions about farming modes under capitalism allows for. Family farming may well come to be dominant only after a longer time span (although de-collectivisation in the sense of individualisation of farming already seems an abortive rather than an ongoing development in the data studied here- see chapter 6). Also, family farming is not that unimportant in all of the post-socialist countries (although it is least important exactly in those countries generally seen as advanced in their transition to the market – Hungary, Slovakia and the Czech Republic12). But at the very least, it must be noted that from the theoretical perspective that underpinned the reform policies, it is odd that after a decade of transition, family farming is not dominant, nor is wage-labour farming near to extinction in post-socialist Central Europe. Why?
Chapter 2

Notes to Chapter 2

1 See on this Brada and King (1993), Hughes (1999), Mathijs et al (1999), Mathijs and Vranken (1999), Lin (1993) and Sarris et al. (1999), among others.

2 Use of the term 'peasant farms' here is not meant to connote backwardness and primitive societies. The distinction in economics between peasant and other farms is the consumption or barter of a large share of own production, as opposed to production for the market. This is actually a feature of many individual farms in Central Europe, especially those that are smaller or are worked part-time.

3 In the same decades that this approach developed, the late 19th and early 20th century, a number of theories of agrarian development were developed. These are not reviewed here, since they have no explicit economic foundation or are confined to particular national settings. An interesting example is the case of the Russian Narodniki ("populists") around the turn of the last century. They romanticised rural life (particularly the mir, or Russian peasant commune), abhorred capitalism, and believed in the unique historical destiny of Russia. This led them to expect an economic development path for Russia that was neither capitalist nor socialist – an idea that infuriated Lenin and led him to write his most famous work on the agrarian question as a refutation of it (The Development of Capitalism in Russia, published 1899). In general, most other industrialised countries have and have had their version of what the Germans call a Bauernideologie or 'peasant/farmer ideology', embedded in a conservative, nationalist view of economic development and the glorification of rural life, while asserting the harmful implications of the capitalist system for the economy and for the national culture at large.

4 A German translation of a preliminary version of it (Die Lehre von der bäuerlichen Wirtschaft) had appeared in 1923, and was subsequently translated into Japanese.

5 For example, Jevons had discussed it in his Theory of Political Economy, chapter 5.

6 This, incidentally, was to be one of the mechanisms that impeded peasants' adoption of new techniques recommended by Western advisors in 'Third World' development projects decades later.

7 There is an extensive body of literature on the sociology - as distinct from the economics - of farming modes and of peasant behaviour. It is not included in this survey, but see Archer-Mann (1990) and Shanin (1971) for overviews.

8 In contrast, the explanation of peasant behaviour by reference to the specificity of their motives, as opposed to their being subject to utility maximisation, is a marginal one in economics – see Vergopoulos (1978) for an example.

9 See e.g. De Janvry et al. (1991); Finkelshtain and Chalfant (1991); and Barrett (1996). A combined treatment of the above factors can be found in the article by Binswanger and Rosenzweig (1986) and in the volume edited by Hoff, Braverman, and Stiglitz (1993).

10 Schmitt's paper, originally written in 1990, represented the dominant approach in the early transformation years. It was an application to post-communist farming of theoretical work on household production by Pollak (1985). For contemporary expositions of it, see Sarris et al. (1999: 315-317) or Mathijs et al. (1999:4-8).

11 Transaction costs are here defined as 'costs of defining, protecting and enforcing the property rights to goods' (as in North, 1996:28), notably including costs arising from asymmetrically distributed information (such as monitoring employees) as in Alchian & Demsetz (1972).

12 Note again that Poland and Slovenia, also advanced in their transition to the market, are not relevant in the comparison. Family farms were dominant in those countries throughout the communist era, and de-collectivisation in the sense of individualisation does not apply.