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

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Chapter 3

The Post-Socialist Transformation of Agriculture
in Central and Eastern Europe

Already now it is clear that the process of farm restructuring ...

is taking a course which appears to be different from the
original expectations of many Western European observers.

Csaba Csaki and Zvi Lerman, 1994

In this chapter the empirical setting for the rest of the study will be provided through a
description of transformation theories, policies and outcomes in Central and Eastern Europe. The
emphasis is on a discussion of the main ideas and general trends, rather than on reproduction of
detailed institutional descriptions or time series for economic and agricultural variables. These
are readily available in other sources\(^1\). This overview is confined to the period between 1989/90
and 1997/1998, the years of transformation that will be covered in the other studies in this book.

3.1 The Pre-reform Era

Agriculture was an important sector in the socialist economies of Central and Eastern Europe.
This is evident from four key indicators. In terms of its share in employment in 1989, it was just
over 10 % in Czechoslovakia and Yugoslavia, 12-18 % in the Baltic states, 18 % in Hungary and
Bulgaria, close to 30 % in Poland and Romania, and nearly half in Albania. In comparison,
Western European figures were mostly below 5 %. The pattern of shares in GDP was similar,
ranging from 7 % in Czechoslovakia to 32 % in Albania. Also food trade generally accounted for
considerable shares of total trade, though with large differences. The share of food outlays in
household expenditures was likewise high and more equal over countries – in 1989 roughly a
third on average (but a quarter in Yugoslavia and Hungary, and half in Romania and Albania). In
sum, the agricultural sector, its efficiency and the prices of its produce were important factors for
the national economies as well as for consumer welfare in socialist Central and Eastern Europe (OECD, 1996).

Although there was considerable diversity in the features of national agrifood systems in Central and Eastern Europe during the socialist era, they (except Poland and former Yugoslavia) shared five key characteristics: the corporate organisation of production; the scale of production; the integration of the sector; the bias in product mix; and the parallel private sectors. These are sector-specific manifestations of particularities of the centrally planned economy in general².

3.1.1 Wage-Labour Production Structures

Socialist farms were either collective or state farms. Collective farms in the central planning era were formally identical to co-operative farms, which are units of primary production in which both ownership and management of all fixed inputs are in the hands of a number of people, whose co-operation may or may not be defined in a formal contract. In practice however, property rights and management discretion were firmly in the hands of the state-appointed farm management and monitoring bureaucrats, as was the case on state farms. State farms were fully state-owned and the official position of both management and workers was that of state employee. Although in practice functioning identically to collective farms, state farms were generally larger. Also they were more often used for realising specific tasks within the framework of agricultural policy, such as production in rough or newly cultivated areas, agricultural experiments, agricultural education, or production of particular crops in monoculture. In both cases, farms were corporate organisations. There was a separation between farm ownership, control over the production process and implementation of production tasks.

3.1.2 Scale of Production

Primary producers operated on a large scale, by any standard. Farms in the socialist economies were the largest of their type in the world and, indeed, in history. Nowhere else would one find mixed (crop and livestock) farms of several thousands of hectares employing hundreds of workers. The preference for large farms was ideologically determined by the socialist, and particularly Soviet, enchantment with centralisation and industrialisation of the economy. Also the convenience of administering few large farms rather than many small farms appears to have been a factor (Pryor, 1992:145).

Farm size increased shortly after the installation of socialist regimes, when peasant and family farms were amalgated into state and collective farms during the collectivisation drives in the late 1940s and 1950s. A wave of further concentration occurred in the 1960s. In the late
1970s and 1980s, farm size in many countries declined again. Within Central and Eastern Europe, average farm size (in number of hectares) in the 1980s was largest in Bulgaria (9,692 ha), followed by Hungary (4,356), Czechoslovakia (2,605), Romania (2,439), Albania (1,322) and East Germany (1,247). In Poland and Yugoslavia, where socialised farming was less important, the average size of such socialised farms as operated was much smaller (167 and 215 ha, respectively). These figures are collective farm sizes (except for Bulgaria); state farms were generally larger, but a ranking of countries would produce the same order. This is not true for a ranking of average farm sizes as measured by labour force; the land-to-labour ratio varied considerably over countries, from 0.8 and 4.5 hectares per worker in Albania and Romania to 8.2, 8.8 and 11.0 in East Germany, Hungary, and Yugoslavia, respectively.

3.1.3 Vertical Integration and Diversification

Another shared feature of socialised agricultural sectors was diversification of economic activities and the high degree of vertical integration in any sub sector of agriculture – high, again, by any standard. Vertical integration “includes all the ways of harmonising the successive vertical stages of production and marketing” (Mighell and Jones, 1962:1). The extremes in market economies are, on the one hand, spot markets, where price is the sole co-ordination mechanism, and, on the other, ownership integration, where within-firm managerial orders move products between various stages of the production-processing-distribution path. That latter extreme is of course closest to the situation in central planning, were there also was a single owner (the state) for the entire chain. Indeed, vertical integration is by definition implied in having a command economy. The need to anticipate all quantities of inputs, semi-finished products, and outputs requires intensive co-ordination between all links in the chain.

This meant two things, which are best explained by employing the metaphor of the socialist system as a series of parallel chains. First, food availability depended on the entire food chain functioning as a unit. The demands on co-ordination were thus high, and small shortcomings could have important implications. Second, chains for a particular product or in a particular region hardly interacted with chains for other products of in other regions. Both consequences rendered food chains vulnerable and caused them to malfunction, given the defective chain maintenance that the centrally planned economy could provide. The image of the chain is helpful in understanding the chronic food shortages that characterised command economies (Hobbs et al, 1997:22).

Diversification refers to both agricultural and non-agricultural activities. Within the agricultural field of activities, socialist (particularly collective) farms often produced a wide
variety of both crops and animals (in contrast, Western farms are most often either crop or animal oriented). From an economic point of view, collective farms were often over-diversified in the sense that the inclusion of so many products was one factor in sub-optimal overall technical efficiency. One reason for this feature is that socialist farms often aimed to satisfy food demands for its workers or for a region, which necessitated producing a range of products rather than specialist production.

Diversification usually went beyond the agricultural domain. Non-farm activities were often included in the set of tasks that were performed by the farm organisation, such as machinery repair, building, and processing and transport of farm produce. (In addition, the farm, as most socialist enterprises, typically performed a number of social functions also not directly connected to food production.) Diversification into non-agricultural fields in socialist agriculture is also best explained by the defective operation of enterprises that were supposed to service farms in these areas. Farm management wishing to realise their production targets, or even simply to continue farm operations, would typically find it necessary to produce supporting goods and services themselves. Non-agricultural diversification and vertical integration went furthest in the Bulgarian agro-industrial complexes and the Romanian integrator model, and was least developed in Poland and Yugoslavia.

3.1.4 Product Mix
Throughout the socialist bloc, annual caloric intake per capita was at levels similar to those in the Western capitalist countries (at around 3,500 calories in 1984-1986), even though per capita income was considerably lower. Especially meat and dairy consumption were high in comparison with market economies of similar per capita income levels. This consumption pattern was induced by the price structure. It was preferred on ideological grounds by the socialist leaderships who wished to demonstrate that socialist citizens lived in an economic system that fed them well. It was also partly a result of the belief that the way to end food shortages was to increase production. In some countries, retail prices of food had not changed for decades at the end of the socialist era, even though real income had increased.

The costs of this policy during socialism included a high level of subsidies, particularly for dairy and livestock, and – since markets did not clear at these official prices - queues at shops and the development of black markets. After the collapse of the system, another cost became apparent: socialist agriculture had invested in a production structure that bore little relation to world market prices. This aggravated the restructuring challenge (Swinnen, 1994:5).
3.1.5 Parallel Private Sectors

A fifth feature of socialised agriculture were parallel private sectors, which were the sector-specific manifestation of the shadow economies pervasive in the centrally planned systems (Lavigne. 1995:41). Private plots, or gardens, existed in symbiotic relationship with the collective system throughout Central and Eastern Europe, their sizes fluctuating with shifts in ideological preferences regarding the centralisation of production. Private production was indispensable for an adequate food supply, especially of labour intensive products. In Hungary, for instance, in 1987 more than half of the grapes, potatoes, fruit, and vegetables were produced in private farms or gardens. Private production was insignificant in Albania and most important in Poland and Yugoslavia, were it accounted for the bulk of production and occurred on genuine farms rather than small plots (Swinnen, 1994:7).

3.2 Reform Intentions: Economic Theory

Following the liberal revolutions in 1989-1991, the centrally planned systems throughout Central and Eastern Europe were abolished and the economies reformed. The theoretical ideas about post-socialist agricultural reforms are best understood in the context of the general economic theory of transition. That contemporary body of theories and policy implications known as 'the economics of transition' was, in turn, an application of the liberal variety of neo-classical, mainstream economic theory, certainly in its early and most decisive form.

3.2.1 Transition and Transformation

This theory concerned transition, not transformation. The wording implies the idea that the reform period would be limited in time and characterised by conceptually clear stages. One could argue, in this view, about the sequencing of stages and the nature of measures to be taken, but it was to be a transition from one economic system to another, not a gradual change with an uncertain outcome, as would be reflected in the term transformation. The latter term was more popular with economists that would label themselves as institutionalist, Post-Keynesian, or generally heterodox.

In recent years the differences between both views have become less pronounced. The importance of institutions, notably of the state, the analytical importance of socio-economic as distinct from 'purely' economic factors, and the viability or even necessity of more gradual change in some areas have become more broadly accepted. In the beginning of the 1990's, neo-
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liberal politics and economics still enjoyed intellectual hegemony, certainly in the economics profession. The introduction of market relations in (nearly) the entire economy and society as well as the merits of a minimalist state were prominent features of the professional economics literature. In consequence, the transition 'packages' proposed by economists to a large extent reflected the neo-liberal view on reforms - a view that had already been put into practice in deregulation operations in many economies during the 1980s.

3.2.2. Liberalisation, Privatisation, Stabilisation

Traditional transition theory posed four 'pillars of transition' – policy measures that would mark the introduction of a market economy: price and trade liberalisation; privatisation; and stabilisation. Prices should be liberalised: price controls should be (largely) removed so that prices would come to reflect relative scarcities of resources, goods and services, in line with mainstream economic theory. Also subsidies, which distort market prices, should be abolished or decreased. Trade should also be liberalised. The efficiency gains of correct prices would only be effected if there would be transacting on the basis of these prices. Trade bans and the state trade monopoly should be abolished, and trade restrictions removed or decreased so as to cause minimal market distortion.

Moreover, the theory emphasised that, even with free trade and pricing, market-compatible pricing (and trade based on it) will not occur if economic agents have no effective ownership titles to goods, to labour or to firms. Therefore most enterprises should be privatised. Also competition, the force driving 'correct' price formation, would only develop in the context of private ownership structures.

Finally, a stable monetary environment is also a precondition for economic growth in a market economy. Price instability was expected to be the result of 'freeing' the considerable imbalances accumulated under socialism (forced savings and the monetary overhang) and also of the problematic budgetary positions of the newly post-socialist governments (resulting from large spending needs, reduced revenues from state owned enterprises, and no modern system of direct and indirect taxes). The threat of inflation was a major concern, and monetary stabilisation programmes a vital part of transition packages.

3.2.3. Complementary Notes to the Orthodox View

As noted, this view of transition, while important to understand the reform plans, is now somewhat dated. Looking back, the points made by the early transition theorists – liberalisation, privatisation, and stabilisation - would seem to be correct but incomplete, in several respects. Theoretically, they took no or little account of the time dimension - it takes time for policies to
mature and have their effect, and meanwhile the conditions on the basis of which policies are formulated change. Sequencing proved to be far more important than initially assumed. Furthermore, the theories were compatible with a wide spectrum of practical applications and institutional set-ups. Yet it developed that precisely this set-up controlled success to a very large extent. In addition, they paid little attention to initial conditions, such as location and income levels. The same policies might produce quite different results if applied in Estonia, a country with seaports and helpful Nordic neighbours, which was perhaps the most advanced of the Soviet republics, and Kyrgyzstan, a land-locked and very poor country. Thus attention has shifted away from theoretical ideas and towards their actual implementation.

Moreover, the theories emphasised the destruction of the old system – central directives, price controls, subsidies, state ownership – more than the construction of new institutions. This view had harmful implications in three areas.

First and generally, it is now clear that creation of an institutional vacuum does not imply that efficient markets will spring up to fill the gaps (e.g. Schmieding, 1993). Other, inefficient economic phenomena (such as economic cronyism, criminalisation, barter, looting of state assets, kleptocracy, etc.) might equally well come to dominate such an environment.

Second, the quality of the state suffered severely from the wish to dispose of the old regime without adequate attention to building a new political-economic system. The early consensus over-emphasised the stifling effect of state intervention in the economic process and neglected the constructive role that the state must have in both the creation and the regulation of markets and their institutions. Post-socialist economies typically operated under conditions of 'state collapse' or 'state desertion' (Ellman, 1997; Abel and Bonin, 1993) Later in the transformation, it became broadly accepted that healthy economies need a state that is both strong and limited (as already noted by Ellman, 1994).

Third, also the importance of developing new enterprises, as opposed to merely disposing of state ownership, became apparent. State-owned enterprises that were formally privatised did not generally change their organisation or strategy, nor did they typically increase their efficiency and profitability. Moreover, the growth of the number of de novo enterprises was frequently more important for economic development and growth than the performance of privatised enterprises.

In consequence of their incomplete theoretical basis, the policies based on the traditional ideas led to the introduction of market economies more slowly, with many unforeseen drawbacks, and at larger economic and social costs, than anticipated.
3.3 Reform Intentions: Agricultural Transition

Agriculture promised to be a suitable field for applying theories of transition. With its collectivised production mode, high degree of concentration of production, and intensive state intervention, it was heavily shaped by the socialist system. If reforms were designed to replace that system and improve economic structures, the agricultural sector would be most in need of their application and could most clearly demonstrate their beneficial effects.

Moreover, the potential for improvement of sector performance through the market mechanism appeared large. Apart from financial markets, agriculture is the most competitive sector in the Western economies with regard to its structure. Farmers usually are the price takers of the perfect competition model, and examples given in general economic textbooks to illustrate the working of the market often relate to foodstuffs and agricultural production. If the market was to work anywhere, it stood a good chance of demonstrating its efficiency in this sector.5

3.3.1 Policy Measures

Application of the principles of the theory of economic transition led agricultural policy advisors to the following recommendations (cf. Swinnen, 1994: xvi; Tracy, 1993:264-271). Property rights over land and assets should be defined on an individual basis rather than collectively or as state ownership, as part of the privatisation process. State intervention should be changed qualitatively and quantitatively. Its nature should cease to take the form of bureaucratic directives with regard to input purchase, employment, the level and product mix of output, and quantities traded. Instead, agricultural programmes similar to those prevailing in the advanced market economies should be installed (import tariffs, export subsidies, credit programmes, and targeted support). Moreover, the extent of intervention should be drastically reduced: the level of domestic and trade subsidies as well as trade barriers should be decreased. Thus, what state intervention would remain would have to be compatible with the operation of market prices and the development of trade in line with comparative advantages.

A last component of reform concerned the agrifood sector rather than primary production only. Here monopolies should be broken – more precisely, the excessive concentration of businesses, either buyers (oligopsonies) or sellers (oligopolies), that was an inheritance from the central planning era, was not to be maintained under market conditions. The efficiency losses of imperfect competition are well-known theoretically, and post-socialist agriculture was a textbook example. Downstream industry, including businesses in food and fibre processing and wholesale
trade, typically consisted of a few large firms in the entire country which were *de facto* monopsonies regionally. Hundreds of farms would deliver to a single processing or trade enterprise, with no alternative outlet option. The market power of these firms was further strengthened by the perishability of much agricultural produce and the specific investments made by farmers in, for example, milk production. There was a clear case for introducing competition, either by breaking down or regulating these firms or through the entry of foreign businesses on the market (Hobbs et al. 1997: 79; Brooks et al., 1991:155).

### 3.3.2 Policy Goals

As a result of the above measures, i.e. individually defined property rights, freer trade, farm-based decision making, the abolition or decrease of subsidies, and the introduction of competition, two developments were expected to occur. First, *relative prices* would come to reflect the scarcity of resources, goods, and services, and thus facilitate an increase in allocative efficiency. Second, and related, *farm structures* were supposed to change, leading to an increase in production (or technical) efficiency. If agents would have the legal possibility to dispose of farm land and assets while the structure of state intervention, such as it would be, would provide a 'level playing field' between alternative farm structures, these owners of the factors of production, pursuing their individual income maximisation, could then be expected to seek the most efficient use of their resources.

Given the supposed superiority in efficiency of family farms over collective and state (i.e. wage-labour) farm structures (see chapter 2), that would be tantamount to pervasive restructuring of the sector on a family farm basis. Individualisation of farming, in the above view, would be driven by individual decisions rather than by direct administrative action. It was characterised as a market outcome rather than as part of a policy package.

And yet, it was also explicitly considered a policy goal. In many writings, the rise of individualised agriculture in a particular transition country was equated to reform progress in the agricultural sector. "Consequently, .. the new law [on land and farm structure reforms, DJB] may bring about a reversal in farm structure..." (Davidova on Bulgaria in Swinnen, 1994:42). "The present reform induces rapid structural change based on the new economic fundamentals: private property, free initiative and liberalised prices. ... The basic process of agriculture’s transition toward a market economy is the establishment of private ownership and of the family peasant farm." (Gavrilescu on Romania in Swinnen, 1994:178).

Two reasons might be suggested for policy makers' and analysts' acceptance of this criterion for success in reforms. First, the long-standing tradition in the economics profession that ascribes
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efficiency and innovation to individually owned and worked farms, as detailed in chapter 2. Second, as was the case for the transition policies in general, the Western system was the (mostly implicit) model for reforms. Perhaps it was only natural to anticipate the emergence of a Western-type structure of agricultural production (as recently advocated explicitly by Lerman, 2000:10) following the introduction of the Western-type economic system in general.

3.4 Reform Implementation

The theoretical rationales for reforms described above were identical over the Central and Eastern European countries where production had previously been centrally planned and agriculture was socialised. Naturally, the implementation, both in terms of concrete measures and timing, was not identical over countries.

3.4.1 Price Liberalisation

Off-farm prices for agricultural produce were liberalised and, although rising nominally, they dropped compared to input prices in the first reform years. Poland liberalised food prices immediately in October 1989; Hungary did the same in January 1990; Czechoslovakia, Bulgaria and Romania followed in July 1990, February 1991, and September 1992, respectively. The Czechoslovak and Romanian food prices were freed gradually over a half year period; the other prices were liberalised in full within weeks. (In practice partial price controls often remained in place for years, sometimes covering most food produced, as in Romania till 1997). Price reform, including tax increases and subsidy decreases, was such that in some countries, such as Bulgaria and the Baltics, net farm subsidisation was replaced by net taxation (Swinnen, 1994: 2.169).

3.4.2 Trade Policies

Soon after the liberal revolutions, all Central and Eastern European countries moved towards convertible currencies and away from trade monopolised by state trading agencies. Most barriers to trade dating from the CMEA era were lifted and replaced by arrangements in the frameworks of the Central European Free Trade Area, the Europe Agreements, the Czech-Slovak customs union, and a number of bilateral trade agreements that each country concluded with a number of other Central and Eastern European countries.
On the whole, the initial trade policies of particularly Central European countries were very liberal, for instance compared to those of their main new trading partner, the European Union. One indication of their dedication to freer trade as a means of economic integration is that all applied for (and in some cases, have already been given) membership of the General Agreement on Tariffs and Trade and the World Trade Organization - Albania was the last to apply in 1994 (OECD, 1996).

Starting 1993, policy reversals occurred, often in connection with the replacement of liberal by nationalist, neo-communist or social democrat political parties in power. These changes, together with the increasing influence of producer interests, throughout the region induced higher levels of domestic support and more protectionist trade policies, both though variable and fixed tariffs and through qualitative trade barriers. Policy changes were often substantial, sudden, and haphazard. While increasing protection for producers, they also appear to have contributed to producer and consumer uncertainty over prices (see e.g. Hobbs et al, 1997:227-346 for more details and analysis).

3.4.3 Land Ownership and Farm Structure Reforms

The legal reforms of organisational options for farms and of land ownership patterns were closely related, and implemented simultaneously throughout Central and Eastern Europe in 1991-1992. They included four elements in each country, which however differed substantially in details of implementation:

1) Land ownership titles were defined on an individual basis. Most often the pre-socialism property pattern was restored, with a benchmark for land ownership somewhere in the late 1940s. Land ownership by foreigners was often legally limited.

2) Collective farms in Central and Eastern Europe were most often re-defined as genuine co-operatives with real entry and exit options. (In Albania, Bulgaria, and Romania collectives were simply liquidated.) Members of the new co-operatives were the nominal socialist-era collectives members, while new owners of the land worked by it could also become members. Members owned a share of farm land and assets. Co-operatives generally could be transformed into companies on the initiative of their members.

3) State farms, other than those for educational or experimental purposes, were privatised into farming companies and sold if possible, either as units or asset by asset. The same procedure was applied to supporting organisations in primary production (mostly in construction and mechanisation, after the Soviet Machine and Tractor Station model) where these existed, as in Albania, Romania and Bulgaria.
Landowners were stimulated to start up their own, individual farm (rather than leave farm land and assets in the existing farm structures) by tax holidays, subsidised credit, and a variety of other subsidies. They were often prohibited from using their land for non-agricultural purposes for a number of years (e.g. 5 in Hungary, 7 in Czechoslovakia).

As a concrete example, consider the Czechoslovak restitution and de-collectivisation processes, the legislation for which was enacted in 1991-1992. Ownership titles to land and assets were redistributed in the restitution process. Restitution refers to the restoring to private hands of state property acquired by state coercion (either through donation or sale) in the communist era after February 1948. Heirs to Czechoslovak citizens so treated could claim the ownership of these assets until August 1993, and restitution procedures were immediately started. Of all restitution claims made, 90% was resolved by 1998, resulting in the transfer of 29% of all agricultural land.

Another 50% had always been formally (though not effectively) owned by groups of individuals (collectives) throughout the communist era and had been used in the collective farming sector (Csaki et al. 1999:27). These property rights were not restituted, but were made explicitly individual (rather than collective) again after 1992 in the formal de-collectivisation process. The newly effective owners could subsequently select their preferred use from a set of three options (OECD, 1995:78):

- to remain or become a member of the new co-operative farm (or other legal entity that was the successor of the collective), putting their land and assets at the management’s disposal on a rental basis;
- to cancel or refrain from membership, taking out any land and assets (or assets’ pecuniary value) provided the aim was to take up farming outside the co-operative, either individually or in a new form of co-operation with other starters;
- to choose neither co-operative farm membership nor any other farming status. In this case the individual had the right to take out land and assets only after a seven-year adjustment period (i.e. in 1999), and was meanwhile entitled to an annual rent from the property.

The original objective of this policy is clear. On the one hand, reallocation of resources between the traditional and individual farming mode should increase efficiency. On the other hand, the outflow of land and assets should start only after farms have had time to adjust to market conditions and increase efficiency through individualisation. These twin developments should have ensured optimal resource reallocation initially and prevent excessive outflow afterwards.
3.5 Transformation: Macroeconomic Developments

We now turn from the reform measures to their effects, both in the economy at large and in agriculture. Five general macroeconomic trends, of relevance to the developments in the agricultural sector, were observable in the reform period.

3.5.1 Contraction

First, the newly post-communist economies in Central and Eastern Europe contracted sharply in the first few reform years. This is plain even when allowing for the statistical difficulties in measuring the level of economic activities. GDP decreased in all Central and Eastern European countries in 1990, 1991 and 1992 (except the Baltic states in 1990). Contractions, as expressed in annual GDP changes, were between 3% (Slovakia) and 10% (Albania) in 1990, 10% (Slovenia) and 27% (Albania) in 1991, and between 6% (Slovenia) and 35% (Latvia) in 1993.

Thereafter growth returned to most countries outside the Baltic area. Here the slump came later and was more severe, but was also followed by sustained recovery. Central European countries also generally sustained their growth post 1993, but the Balkan countries lapsed into contraction again at later stages of the transformation – Albania because of its pyramid crisis early in 1997. Romania and Bulgaria because of postponed restructuring. Although estimating the precise extent of the decrease is problematic and the GDP data are only indicative, the contraction was certainly large by any standard. There are large differences between the countries, which reflect their different histories, location, and policies, but, except for Poland, none of them had returned to pre-reform levels by 1997 (EBRD, 1999).

3.5.2 Unemployment, Inflation, and Debt

Second, unemployment as a result increased considerably. Again, measurement of developments is problematic as unemployment did not exist under socialism, while in the transformation period, much unemployment remained hidden, showing in low labour productivity only (the Czech Republic is an example). Still, in most countries the trend in the official figures in the reform years is a strong increase in unemployment initially and a gradual decline or persistence later (here the Czech Republic is an exception).

Third, after consumer prices were 'liberalised', they typically shot up and continued to increase considerably, up till 1994 in most countries. High and volatile inflation proved particularly persistent in Romania and Bulgaria; in the latter country annual price increases ranged between 80% in 1992 and 580% in 1997. In the Baltics they peaked at around 1,000%
in 1992 and then continuously decreased to levels around 10% in 1997. In the Central European area they persisted at around 10% in the Czech Republic, around 20% in Hungary and between 10 and 20% in Poland. In Slovakia, Macedonia, Croatia and Slovenia inflation was kept at single-digit levels after 1994. Inflation has been one of the main worries of policy makers throughout the region, although double digit levels were not always connected to a weak economic performance, as the example of Poland shows.

Fourth, in these years the annual budget balance was typically negative, and Central and Eastern European governments increased their debts. Still, annual deficits were mostly under 5% of GDP in 1992-1997 (except Hungary up till 1995, and Bulgaria and Albania), while substantially lower in many countries and years (EBRD, 1998). As important for policy as actual debt and deficit figures, however, was the high value that economic advisors, the international institutions, and most liberal politicians in the region placed on a balanced budget and on restricting the growth of the public debt. This put strong pressure on policy makers to cut spending and raise the level of taxes as well as the effectiveness of the tax collection system.

3.5.3 Income Inequality

Fifth, while income decreased on a per capita basis, it typically increased considerably for a minority of the population. Particularly in the first few transformation years, inequality measures based on real money incomes increased in all countries, sometimes dramatically. Many incomes, especially public sector wages, pensions, and other social security benefits, did not catch up with inflation. Moreover, many factors controlling the standard of living other than money incomes also changed for the worse for the majority of the population. Many goods and services previously publicly provided at no or low costs rapidly became expensive. These included medical care, housing, education, transport, recreation opportunities, child care, and meals provided at the workplace.

The overall change in standard of living due to the privatisation (sometimes an euphemism for disappearance) of many of these goods and services is hard to measure. The effect was, however, certainly negative and plausibly large for the majority of the population. One crude but indicative measure is the Gini coefficient, which approaches zero as income inequality decreases. Unweighted regional averages of the coefficient increased between 1987-1988 and 1993-1995 from .21 to .24 in Central Europe; from .23 to .34 in the Baltics; and from .24 to .30 in the Balkans (Milanovic, 1998:41; figures are allegedly based on disposable incomes including in-kind consumption).
Overview of Developments

3.6 Transformation in Agriculture

An examination of the effects of these general trends in the agricultural sectors makes clear that typically, workers in the agricultural sector and their dependants were particularly hard hit by the perils of transition, compared to other sectors.

3.6.1 Agricultural Contraction

The contraction in the agricultural sectors was more than proportional to GDP changes. The level of agricultural output decreased rather dramatically in the early reform years, starting to increase again in 1993-1994. In 1997, none of the Central and Eastern European countries other than Slovenia and Romania had returned to pre-reform levels. In Slovenia this was because of political stability (compared to the rest of former Yugoslavia), high producer prices, and the historical dominance of individual farming in the sector which thereby suffered less disruption from reform. Romania stimulated agriculture extensively through various subsidy schemes.

The Baltic countries recorded the most dramatic fall over 1989-1997, of between 40 and 60 %, and experienced a turnaround only in 1996. Output recovered more in the Czech Republic and Hungary (total decrease 30 % over 1989-1997), Bulgaria and Slovakia (15 %), and Poland (10 %) (Commission, 1998a). In the histories of these countries there is no parallel for such a rapid and large contraction of food production, not even in the years of the collectivisation drives in the 1940s and ’50s (see on this e.g. Pryor, 1992:110).

In consequence, the economic importance of the agricultural sectors in Central and Eastern Europe generally decreased both in terms of employment and in share in GDP. In the Balkans the contraction of the non-agricultural economy was in many years larger than that of agriculture, and the sector typically absorbed the newly unemployed. Agriculture in Central and Eastern Europe performed this buffer function only temporarily in the early and difficult transition years, and in some countries also later during an economic dip (e.g. the Czech Republic in 1998). But in most countries and for most of the time, relatively high rural unemployment was the result.

The contraction of the sector originated in the low technical efficiency and biased output mix of socialist agriculture, which necessitated extensive restructuring. Another general factor was the inherited structural imbalances in the economies, with too much agriculture and heavy
industry relative to other consumer goods and services throughout the region. A set of more specific reasons would include the change in trade patterns, the decrease in state support, uneven market power relations in the agrifood chain, and the defective functioning of market institutions. Consider these in more detail.

3.6.2 Trade Patterns
First, trade relations in the region clearly deteriorated. In 1990 all Central and Eastern European countries except Romania were net food exporters. In 1997 all but Hungary and Bulgaria were net importers. Most imports came from the European Union, the share of which was between 40 and 55% of all food imports in 1997 in the various countries. Poland, the Czech Republic, Hungary, and Bulgaria accounted for over 80% of total Central and Eastern European exports and 75% of EU imports from the region (Commission, 1998a). Total exports decreased because of the collapse of the CMEA and the demand contraction in former export destinations (particularly the former Soviet Union). Imports, particularly from the West, increased because of the removal of many barriers to it. This occurred at a time when the European Union continued to have relatively high levels of import tariffs (and sometimes of export subsidies).

Trade liberalisation also changed the composition of especially food imports. In the pre-reform era, the rationale was to import products that were in short supply, as perceived by the central planners (e.g. proteins for livestock production). The post-reform structure became determined by a combination of consumer preferences, market power, and opportunities for re-export (OECD, 1996).

3.6.3 The Role of the State
Second, the transitional imbalance in government budgets and the pressure on governments to cut spending were acutely felt by a sector that had largely relied on subsidies to keep afloat. In addition, political support for the sector was generally weak, certainly relative to its size. Farmers were typically not well-organised in the political arena during the first phase of the transformation. Moreover agriculture, in most countries the most conspicuously socialised sector, had a communist odium that did not appeal to liberal politicians and their constituencies.

Agricultural real wages decreased faster than the average. Partly this was because wages used to be paid by the state (either directly or via subsidies), not by private companies. (Such real wage rises as occurred during the transformation were typically concentrated in the private sector.) Moreover, there was no compensation for the output contraction by a comparable increase in the prices of the output or a decrease in input prices. On the contrary, the terms of
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trade for primary production during the first transformation years worsened considerably, leading to the operation of ‘price scissors’ not unlike that of the Soviet New Economic Policy years.

3.6.4 Terms of Trade
Taking 1986 as the base year, Czech price indices for agricultural inputs and outputs remained virtually constant till 1990. But by 1995, the input price index had risen to 265, while off-farm output prices only stood at 173. The 1995 ratio of input over output price indices (1.53 for the Czech Republic) was similar in other Central and Eastern European countries (e.g. 1.55 in Slovakia, 1.47 in Hungary), while higher in South-Eastern Europe, where inflation was higher and more persistent: for instance, 2.69 in Bulgaria and 2.21 in Romania (OECD, 1996). After 1995, input and output price increases became of similar magnitude. The price scissors ceased to cut into farm profits, but the damage already done was substantial and was not compensated by later price developments.

This phenomenon was partly caused by the structural distortion in prices inherited from central planning, which had to be corrected sooner or later if liberalisation was to occur. Another part was caused by the fact that, for reasons of political economy, retail food prices typically remained under some degree of state control, rising only moderately compared to those of many other consumer goods. (Food outlays comprised between 30 and 60 % of household expenditures in Central and Eastern Europe by 1997, having risen compared to the 1989 level everywhere except in Slovenia). But a major reason for the operation of the price scissors was the still large market power of ‘upstream’ and (particularly) ‘downstream’ industry.

3.6.5 Agribusiness Relations
After the major legal changes in the economy, enterprises involved in farm input manufacturing as well as those active in food processing, transport and trade started to operate on the basis of the profit principle (even though most of them were not quickly and completely privatised). They typically remained large and few, certainly in relation to the size and number of farms that delivered to them or purchased from them. Their market power was further enhanced by features of the production process such as product perishability and specific investments made by farms (the dairy industry being the outstanding example).

This uneven market power relation can be deduced from the size and number of such firms compared to farms; it is also evidenced by the development of the distribution of value added over the product chain. Not only did input prices increase relative to off-farm product
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prices: the latter, in turn, decreased considerably relative to retail food prices. For instance, between 1991 and 1995, the Czech off-farm price of milk rose from 4.96 to 6.57 (current) Crowns per kilogram, while retail milk prices increased from 5.31 to 9.56 Crowns. In those 5 years, inflation was 52, 13, 18, 10 and 8 percent, subsequently. In short, the profit margin of farms narrowed considerably more than those of the processing and wholesale firms directly following them in the chain. (More precisely, their ‘loss margin’ widened more.) Evidently, these oligopsonist enterprises started to skim off farm profits through low farm gate prices, delayed payment, and other methods.

3.6.6 Market Institutions

There were no, or only ineffective, checks on this in the regulatory, legal-economic environment. A more general reason, therefore, for the price scissors threat was the effective absence (or defective functioning) of institutions supportive to market transactions. Examples of these would include effective legislation against trusts, cartels, tacit collusion, and other forms of monopolies and oligopolies; effective (binding) contract legislation; impartial, knowledgeable courts that can decide quickly and consistently; and (price and quality) information dissemination mechanisms that would reduce asymmetries and render contract negotiations more competitive.

Formally, contract legislation was quickly introduced during reforms. In practice, problems arose both because of a lack of experience by businesses and the commercial courts, and because of the incompatibility of market practice and legislative provisions. The third-party (state) enforcement on which most market contracts implicitly rely was thus incomplete, and transaction agreements could be bent to the advantage of the stronger transaction partner – either by forcing a particular contract on the weaker partner, or by ex-post re-negotiation of the contract, i.e. hold-up (see e.g. Gow and Swinnen, 1999, for a case study from Slovakia).

The enabling conditions for primary agricultural production, such as the availability of inputs and of financial means, had formerly been realised by the state (however incompletely). The market institutions replacing those socialist arrangements were particularly ineffective in rural areas, operating often to the disadvantage of primary producers. Hence the viability of farms was in general more threatened by the regime change than was the viability of productive units in other sectors of the economy.

Farm inputs were no longer always available at affordable prices. Producing and delivering outputs did no longer guarantee an adequate inflow of money. Losses were no longer compensated by the state through subsidies or agricultural credit. The newly commercial banks hardly extended loans to agriculture without state support or guarantees, while state support itself
decreased and became more volatile. The joint effect of the above developments was that agriculture as a sector contracted more than the economy as a whole, and that farm workers' real incomes likewise decreased more than the national average (e.g. Milanovic, 1998:57).

3.7 Efficiency and Structural Change

The main economic rationale for the reforms had been the increase in efficiency that would result from changes in both the technical side of the production process and the organisation of production, i.e. through structural change in agriculture.

3.7.1 Efficiency

Technical efficiency indeed increased considerably, mainly through a decrease of costs. Labour was shed on a large scale, farms decreased their areas and herd sizes, the product mix changed, and investment all but came to a halt. These were intended short-term effect of reforms. At the start of the reforms, farms were generally seen as overstaffed and overly large, their products as not oriented towards consumer demand, and the sector as altogether too large due to the subsidy system.

In the medium and longer term however, the increase in efficiency was different from what had been anticipated because it hardly resulted from investments in new technologies and in new forms of farm organisation. In the absence of these, efficiency gains through cost reductions, though a necessary first step, did not sufficiently increase farm viability in the medium and longer term. For the typical farm, capital investments were typically ruled out because of the losses on production, the loss of subsidy, and the credit crunch. Moreover, restructuring of the sector on an individual-farm basis also did not significantly contribute to higher productivity, for two reasons.

3.7.2 Individual Farming and Efficiency

First, the supposedly higher technical efficiency of individual as compared to wage-labour farms was not clearly observable. One illustration is the situation in the Czech Republic. Efficiency estimates for the different farm modes calculated by Hughes (1998) indicate that individual farms did not appear to be more efficient than the other structures. In contrast, in a study by Mathijs et al (1999) based on efficiency measures different from those used by Hughes, individual farming is shown to be the more efficient farming mode. The difference in outcomes may be due to the different time of observation (1996 and 1998, respectively); to differences in
the sample; and to differences in the efficiency measure applied (a Tornqvist index and an efficiency frontier analysis, respectively). However, in both studies efficiency differences seem more clearly associated with the product mix, farm size, transaction modes, or privatisation history, than with governance type as such (see also studies by Gow and Swinnen, 1999; Mathijs and Vranken, 1999; Sarris et al., 1999; and Thiele and Brodersen, 1997).

A second reason for the limited impact of individualisation of farming on the performance of the agricultural sector was that it did not, in general, occur on the scale and with the speed necessary for a significant impact on overall efficiency in the sector. Even if individual farms would have been clearly more efficient, there simply have not been enough commercial individual farms to make a clear impact during transformation up till now. As early as 1994 it could be noted that “already now it is clear that the process of farm restructuring ... is taking a course which appears to be different from the original expectations of many Western European observers. ... It is remarkable that farm enterprises ... choose to reorganise as whole entities, without dismantling the collective structure” (Csaki and Lerman, 1994: 566, 573). Typically, new farming structures emerged which were based on individual property rights, yet in majority preserved features that had allegedly foreordained collectivism to inefficiency. These features notably include the use of wage labour and the complementary governance structure.

3.7.3 Structural Change in the Region

In table 3.1 the pattern of structural change in some Central and Eastern European countries where de-collectivisation was an issue (excluding Poland and former Yugoslavia) is shown. Interestingly, the emergence of individual farming was most limited in some of the Central and Eastern European countries that have progressed most in the transition to capitalism: Hungary and the Czechoslovak successor states. But also in other countries, a considerable share of agricultural land was still worked by farming structures other than family farms.

<table>
<thead>
<tr>
<th>Country</th>
<th>year of observation</th>
<th>share in TAL worked by individual farms (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hungary</td>
<td>1996</td>
<td>28</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1998</td>
<td>24</td>
</tr>
<tr>
<td>Slovakia</td>
<td>1998</td>
<td>8</td>
</tr>
<tr>
<td>Estonia</td>
<td>1997</td>
<td>63</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1996</td>
<td>67</td>
</tr>
<tr>
<td>Latvia</td>
<td>1997</td>
<td>95</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1995/6</td>
<td>52</td>
</tr>
<tr>
<td>Romania</td>
<td>1998</td>
<td>65</td>
</tr>
<tr>
<td>Albania</td>
<td>1995</td>
<td>95</td>
</tr>
</tbody>
</table>

* TAL is an abbreviation for Total Agricultural Land. The figures include (or largely reflect, as in Albania) household plots and part-time farming. Remaining land is mostly worked by co-operative farms, state farms, and farm companies. Sources: Swinnen and Mathijs (1999:24), Cungu and Swinnen (1999:607)
This finding might, of course, be accounted for by the possibly disappointing efficiency performance of individual farms noted above. However, while equating efficiency to viability (via profitability) may be valid in analyses of longer-term trends in well-developed market economies, in the Central and Eastern European setting the observed limited individualisation seems more fruitfully investigated by considering the various dimensions of agricultural transformation.

To take just one example, the divergence between (formal) individual land ownership and (actual) individual farming is typically considerable in the post-socialist setting. In the Czech Republic, the share of agricultural land individually owned was virtually zero in 1989 (counting collectively owned land as private, but not individual ownership). It rose to 94% in 1994, and still further to 99% in 1998. In comparison, the share of agricultural land worked by individual farmers increased from virtually zero in 1989 to 22% in 1994 and to 24% in 1998 (COST, 1995; MACR, 1998). According to a 1998 European Commission Report, the newly formed co-operative farms (then working 43% of agricultural land), successor organisations to the old collectives, "showed a conservative and reluctant attitude to further restructuring and are to a large extent still run as in the pre-transition days" (Commision, 1998b:26). This was a deviation from the behaviour that the reforms were meant to induce. At the time of writing, World Bank researchers are starting to turn to this phenomenon. Lerman (2000:10) notes that "the new organizational form is nothing more than 'a change of sign on the door': the new joint stock and limited liability companies continue to be managed and operated like former collectives."

3.7.4 The Czech and Slovak Experiences in a Regional Context
The example of the Czech and Slovak Republics are the clearest, but still typical cases as regards Central Europe. Figures for other Central and Eastern European countries, except Latvia and Albania, show a similar gap between private land ownership and individual farming, though less wide than is the case in the Czech and Slovak Republics. Somehow, many farm managers have neglected the theoretical incompatibility of post-reform property rights and pre-reform organisation. They have been combining individually defined ownership and collective-era corporate governance structures. Currently, agriculture in the region is said to be structurally dual rather than homogeneous; it is often to a large extent corporate (i.e. traditional) rather than individual farming (Sarris et al., 1999:306).

It is the object of this book to contribute to an explanation of that fact, relying on survey data from the Slovak and (particularly) Czech Republics. To what extent are data from these
countries informative on factors behind structural change in the region? Two factors might be mentioned here.

When comparing countries, it should be noted that official Czecho-Slovak, later Czech "government policy is to maintain a neutral approach towards the choice of agricultural structures. There is no structural policy in place to favour any type of agricultural enterprise to be adopted following transformation and privatisation" (OECD, 1995:90; see also Ratinger and Rabinowicz, 1997:96). This contrasts to other Central and Eastern European countries, where collective and state farms never existed in appreciable numbers (as in Poland or Yugoslavia), or where old-style collective farms were liquidated rather then transformed (as in Albania, Romania or Bulgaria; see e.g. Cungu and Swinnen, 1997:6 and Davidova, 1994:42). Particularly the Czech setting, where the conditions for both farms of the individual and of the traditional type to develop were realised and maintained, seems well suited to study the emergence and persistence of farm types, and the factors behind it.

Another reason to take these countries as case studies of Central and Eastern Europe with respect to this issue is the fact that the observed gap in the Czech and Slovak Republics between private, individual land ownership and individual farming is widest, and the percentage of agricultural land used by individual farms lowest of all Central and Eastern European countries. This, in combination with the presence of (at least initial) policies that aimed to be neutral with regard to structural developments, is an analytical advantage. “Case studies are often selected not because they are believed to be representative but because they permit the issue in question to be illustrated in a particularly dramatic way” (Williamson, 1985:120).

3.8 Conclusions

“The change we observe is seldom discontinuous”, as Douglass North (1990) noted. Amidst the dramatic and sudden changes that ended the continuity of the Central and Eastern European socialist economies, this observation is true for the structure of farms in large parts of the region. This empirical overview concludes with an evaluation of the reforms, some observations on the possible reasons for observed structural change, and implications for analysis.

3.8.1 Evaluation

The post-socialist transformation of agriculture was obviously necessary and beneficial in various respects. It was unavoidable politically, given the general desire for the introduction of a market economy and the particularly important, widespread perception of justice done in the
land restitution and de-collectivisation processes. With respect to the economics of the transformation process, it clearly reformed a system that had been run on a non-sustainable basis. In addition, during the process allocational and technical efficiency in farming increased, the mix of food products available to consumers was adjusted and expanded, and the opportunity for private entrepreneurship was introduced in the sector.

But the reforms also generated (or did not address) several problems. The reform plans and (initial) implementation took little explicit account of the distribution of market power, of income inequality patterns, and of the political economy constellation that would evolve after privatisation. As one concrete result, exploitation by downstream industries became an important and unforeseen factor in the decline of farm viability. Perhaps the initial assumption was that privatisation would imply competition. Or perhaps political economy factors interfered with the implementation of reform plans that were actually designed to create or introduce competition and a level playing field. In either case, this particular development illustrates the one-sided theoretical basis of reforms in general. Mainstream economic theory did, and still does, incorporate power, inequality, and the political process only very incompletely in its analyses.

In connection with this, the wisdom of stimulating the disbanding and downsizing of traditional farms in favour of individual farms based on very small land properties must be questioned. It may still become unambiguously clear, in the future, that this policy has stimulated efficiency in the long term, as was its objective. In the short and medium term up till now, it has also served to undermine farm viability. It involved farm organisations that were in great economic difficulties in costly restitution and de-collectivisation procedures. It decreased their size and output levels and increased their number, thereby reducing their negotiation power vis-à-vis both the polity and downstream industry. And it replaced a large part of them with individual farms that suffered even more serious disadvantages in both arenas.

A final note is that the main economic objective of the reforms, an increase in efficiency, itself generates problems because it generates regionally concentrated unemployment. The post-socialist countries are experiencing a rural development problem within one decade of their reforms in a way that is similar, but compressed in time, to the one that Western Europe has been going through since the 1950s. With increasing technical efficiency, the agricultural labour force declines and rural populations decrease (or indeed dwindle to almost nothing, as currently in some parts of France). Rural physical, economic and social infrastructures may weaken to the point where the viability of rural communities and the quality of the countryside (in terms of both productive and recreational activities) are at stake. To note this is not to recommend a return to socialist-era overstaffing of farms, which was only hidden unemployment. But it does serve to
question the early reform focus on farm efficiency, often to the exclusion of other economic or social parameters.

3.8.2 Explaining Structural Change

Explaining structural change on the basis of microeconomic survey data will be done in detail in the subsequent chapters. It has also already been the subject of a number of empirical studies cited above. Here it is convenient to draw attention to some general observations that appear to follow from the above overview, which have perhaps not received due attention yet, and which also do not follow directly from the survey-based analyses.

A general reason for limited change in agriculture appears to be that the transformation occurred in very difficult economic circumstances. Given the fact that change, and especially innovative change, is usually costly, one would indeed not expect vigorous efforts towards costly restructuring by farm managers during the years covered. Three elements from the above description lend further support to this observation.

First, the scale on which the conversion of wage-labour to individual farms occurred varies roughly inversely with general economic circumstances. It was most limited in Central Europe, and more extensive in the Baltics and Balkans. Without denying the importance of other factors, it appears a defensible generalisation to note that farms were disbanded only when the entire economic system fell apart (rather than it being transformed) and/or when there was not much to lose by whatever change. In these conditions disbanding farms offered at least the option of household self-sufficiency in food. This observation invites critical consideration of the meaning of the ‘individualisation’ concept.

For instance, in Albania and Latvia individualisation was almost complete – but the term individualisation (mostly used to refer to the creation of commercial family farms from traditional farms) is misleading in these cases. Traditional farms in both countries were most often replaced by gardens worked for own consumption and local barter rather than by commercial individual farms. In other countries, such as the Czech and Slovak Republics and Hungary, there was slimming and shedding, but not disbanding in large numbers of traditional farms. But the individual farms that were created there, were more often genuine, market-oriented enterprises rather than hobby or subsistence farms.

In sum, the destruction of the old system was more successful in the poorer countries that were less advanced in the transformation towards a market system; but its replacement by viable, market-oriented farms was very limited there. On the other hand, more advanced countries kept more of their traditional farms intact, but also allowed a larger (but still minority) share of
agricultural production for the market to be produced by newly established, individual farms. Put differently, *formal* individualisation of agriculture was relatively successful in the Balkan and Baltic countries: *actual* individualisation was better accomplished – but still rather limited - in Central Europe. To capture both developments – destruction of the old, and creation of new productive structures - by the same term reflects the early belief that they would be complementary and could not exist separately. In understanding reality now, this terminology is confusing because it ignores the possibility of a third type of food production structures: subsistence farms or gardens.

A second observation is that if individual farms are relatively unimportant precisely in the countries were they were least actively promoted (the three Central European countries), this suggests that their prevalence in other countries is a result of policy and general economic conditions (intended or unintended) rather than primarily resulting from their innate superiority in terms of technical efficiency.

Third, restructuring, of which individualisation is the most far-reaching option, is costly in the short term while its benefits materialise in the medium and longer term. In view of the fact that economic hardship shortens time horizons for decision makers, it is plausible that restructuring was seen as a cost rather than a benefit by many of those directly involved. This would apply to both possible individual farmers-to-be and traditional farm management (although the latter in addition probably had several other reasons to oppose individualisation of farming).

This is supported by the observation that also in restructuring processes within existing traditional farm governance structures, the short term appears to have taken precedence over medium and longer term considerations. Such change as occurred in farming was almost entirely cost reduction rather than innovation in technical processes or organisation. As was the case in most industrial enterprises, 'deep restructuring' was avoided and 'defensive restructuring' implemented. Labour was shed, farm size decreased, loss making production (i.e. livestock) decreased. But investments and innovation have been largely absent. ‘Deep’ restructuring of firms in the post-socialist setting entails three elements: technical innovation, product reorientation, and reorganisation. In agriculture, the first and second elements have, by and large, been implemented only if it decreased costs, while the third has not occurred in large parts of the sector. This observation raises questions about the success of the reforms; or, alternatively, about the feasibility of reform objectives.
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3.8.3 Implications for Analysis

These general points suggest that the extent of structural change is more convincingly connected to agents’ actual incentives, both those resulting from the economic environment and those implied in farm structures, than to technical efficiency of the farm mode. Under the assumptions of sufficient competition, little market distortion and superiority in efficiency for family farms, there is no difference. Those incentives would then indeed lead to individualisation of farming and a tendency towards increasing efficiency. As it is, the incentives to which agents have been exposed appear to differ from such assumptions. To explore their actual nature and effects is the object of the subsequent chapters.

This means that the scope of analysis must be widened in comparison to the economic theories on farm modes reviewed in chapter 2 on which reform plans were largely based. These theories have defined alternatives mainly in term of ownership (of resources and of revenues) of farm operators, that is: in terms of farm features. The importance of the incentive structure implied in farm features is actually endorsed in this study. Analysis of its effect is part of each of the subsequent analytical chapters, while chapter 10 is largely devoted to the explicit study of internal farm features in connection to risk. But in addition, we will analyse the incentives constituted by the economic environment, including features of the restitution and de-collectivisation processes, the industrial organisation of the agrifood chain, the nature of credit markets, and features of local economic networks.
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Notes to Chapter 3

1 For general economic trends during the transformation, see the annual “Transition Reports” published by the EBRD. For trends in agricultural sectors in post-socialist countries, see the annual publication “Agricultural Policies, Markets and Trade” by the OECD. For institutional details of the reforms and structural developments in agriculture in the region, see the volumes edited by Swinnen (1994, 1997).


3 Data are for 1987, except Yugoslavia (1981), Albania (1983), and Czechoslovakia and Romania (1985). Numbers given here are indicative, not precise, for various reasons. First, the unit here classified as ‘farm’ is sometimes more than a food production enterprise, as in Bulgaria where vertical integration resulted in ‘agro-industrial complexes’. Second, it is often unclear whether the data refer to total farm area, arable area, or area actually farmed. Moreover, not all collective farm area was always actually farmed collectively. Third, also definitions of the labour force vary, with data for ‘total workers’, ‘full-time workers’, and ‘members’ (often including pensioners). Also a large part of labour (up to 40 % in East Germany) was involved in work other than crop or animal production, e.g. in repair shops, canteens, administrative units, kindergartens, or building crews. Finally, hours worked per person per year were generally lower than in the west, e.g. roughly 2,500 in East Germany as compared to 3,000 in West Germany at the time of measurement (Pryor, 1992: 141,142,145).


5 Interestingly, in another respect agriculture in the Western world is also most unlike the perfect competition model, namely with regard to state intervention. This is extensive in all developed countries except New Zealand.

6 In Tracy (1993), an introductory text on food and agriculture in a market economy, written to “take particular account of the readers in Central and Eastern Europe”, the description of the Western agricultural and food system was assumed to “be of special interest to countries seeking to transform their own systems” (Tracy, 1993:4).

7 Interestingly, selection of these dates reversed expropriations by the socialist leaderships, but did not return land to Jewish and German individual expropriated in and after the Second World War.

8 For detailed accounts of the Czech restitution process, see e.g. Lindemans (1997); Divila and Sokol (1993); Karlík (1993); Kaizrlik (1997); and Swain (1999).

9 These problems originate in a switch in definitions and measurement methods, changes in reporting behaviour, changes in economic structures, and the imprecision caused by the large changes in virtually all relevant variables.

10 See also Mathijs and Mészáros (1997); Debatissé (1999), Sarris and Gavrilescu, (1997); and Beckman and Hagedorn (1997) for country wise descriptions of dual agriculture. For a general overview of privatisation policies and outcomes, see Csaiki and Lerman (1994, 1997) or Swinnen (1994).

11 In contrast, while the Czech Republic and Slovakia obviously followed identical formal de-collectivisation procedures up till the 1993 split of Czecho-Slovakia, Slovakia’s subsequent policies were protectionist and conservative with regard to structural change. See chapter 6 for details and analysis.