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GOVERNANCE OF BULGARIAN FARMING

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ABSTRACT

This paper employs New Institutional and Transaction Costs Economics to analyze Bulgarian agriculture. It evaluates the efficiency of dominant governing forms on the eve of EU accession, and assesses the likely impact of CAP implementation on farming structures. Firstly, assessment is made on the comparative efficiency, complementarily, and sustainability of major farm structures such as agro-firms, cooperatives, unregistered and subsistence farms. Next, principal modes of land, labor, service, inputs and financial supplies, in addition to marketing in different types of commercial farms, are identified and evaluated. Finally, a feasible pace for CAP implementation in the Bulgarian condition is projected, and the likely impact on farm structures is estimated.

Keywords: farm structures, efficiency, sustainability, impact of CAP, Bulgaria.

1 INTRODUCTION

Since the beginning of transition, a specific governing structure has evolved and dominates Bulgarian farming: it consists of a huge number of subsistence and small farms, the widespread use of (over) integrated and cooperative modes, a big reliance on large scale "personal relations", the domination of "grey" structures, and poorly functioning formal institutions, etc. (BACHEV 2005).

The broadly applied "traditional approach" for assessing farm efficiency and sustainability focuses on productivity, financial independence, and correspondence to the EU farming model (KANEVA et al., 2005). However, this "institution-neutral" and "transaction costs-free" framework fails to explain the high efficiency and sustainability of dominant, low-productive subsistence and part-time farming, over-integrated forms and production cooperatives. Moreover, it entirely ignores some of the typical forms of governing agrarian and rural activity such as integral modes, interlinked arrangements, and the great variety of informal forms. Finally, it contributes little towards understanding the feasible pace and impact of CAP implementation in the Bulgarian condition.

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This paper employs New Institutional and Transaction Costs Economics to analyze Bulgarian agriculture, evaluates the efficiency of dominant governing forms on the eve of EU accession, and assesses the likely impact of CAP implementation on farming structures.

2 THE NEW INSTITUTIONAL ECONOMICS APPROACH

We adapt the *New Institutional (Transaction Costs) Economics* framework (FURUBOTH and RICHTER 1998; NORTH 1990; WILLIAMSON 1996) to assess the efficiency and sustainability of governing structures in Bulgarian farming (BACHEV 2004; BACHEV 2005). Following this "new" logic, the *institutional framework* and *transactions costs* are considered as crucial factors that affect agent behavior, and organizational and contractual choice. An individual agrarian transaction is turned into a *basic unit* of analysis. Various *market* (spotlight/classical contract), *special contractual* (private ordering, alliances), *internal* (one person farm/firm, cooperation, partnerships), and *hybrid* forms, are all considered as *alternative modes* of governing resources and carrying out activities is regarded as a (transaction) *costs minimizing* undertaking.

We analyze the *specific factors* of transaction costs - *institutional* (structure of formal and informal rights/restrictions, and systems for their enforcement); *be-havioral* (agents' bounded rationality, tendency for opportunism, risk aversion, trust, experiences, preferences); *dimensional* (frequency of transactions between partners, uncertainty surrounding transactions, assets specificity/dependency, and appropriability); and *technological* (modernization of production, storage, transportation, communication, and enforcement technologies).

We apply *theDiscrete structural analysis* and assess the *comparative* advantages and disadvantages of available/feasible forms in terms of *capacity to:* increase transaction benefits; comply with and take advantage of various institutional restrictions/opportunities; decrease bounded rationality and uncertainty; improve coordination and incentives; control transactions; protect dependent investments and (absolute/contracted) rights from possible opportunism; resolve disputes; overcome risk; and save current and long-term transacting costs.

In this paper we take a particular look at two issues. Firstly, we evaluate the efficiency of the dominant forms of farm organization – agro-firms, cooperatives and unregistered and subsistence farms. Major modes for governing *land* supply, *labor* supply, *service* supply, *inputs* supply and *finance* supply, and *marketing* of farm products and services in different type farms are identified and assessed. Effective horizontal and vertical farm boundaries are determined by assessing their potential to explore technological possibilities (economies of size/scale on specific and specialized capital) *and* maximize benefits of/economize costs on transacting. Next, we assess farm *sustainability¹* though analyzing their *potential* (incentives, ability) *for adaptation* to an evolving market, institutional, and natural environment. A feasible pace and extent of CAP implementation in Bulgarian conditions, overall development of the "rules of the game", and likely prospects for organizational modernization are all taken into account.

This study is based on official and original data collected from the managers of 2.8 % of all cooperatives, 1.2 % of agro-firms, and 0.3% of unregistered commercial farms, respectively. All farms were selected as representative of the main regions of the country.

3 MODES OF FARM ORGANIZATION

3.1 Business organizations (Agro-firms)

According to official data, there are 665,548 farms in Bulgaria, mostly (98.4%) designated as Utilized Agricultural Area (UAA) (MFA 2004). Agro-firms are registered as Sole traders, Companies, or Partnerships and account for a tiny portion of all farms, but concentrate a significant part of total UAA (Table 1). These organizations govern a good part of cereals, industrial crops, orchards, chickens and pigs and are also a major employer of hired labor in the sector.

major agrarian resources and productions in Durgaria					
Indicators	Physical persons	Coop- eratives	Sole traders		Partner- ships
Number of holdings with UAA (%)	99.0	0.3	0.4	0.2	0.05
Utilized agricultural area (%)	30.3	40.3	11.7	16.1	1.6
Average size (ha)	1.4	592.6	118.8	352.5	126.2
Number of breeders without UAA (%)	96.1	0.2	1.9	1.7	0.1
Workforce (%)	95.5	1.2	0.8	1.4	0.3
Labor input (%)	91.1	4.1	1.4	2.8	0.6
Cereals (%)	26.6	41.8	13.0	17.3	1.3
Industrial crops (%)	20.5	45.1	14.2	18.6	1.6
Fresh vegetables (%)	86.4	4.4	4.2	4.6	0.4
Orchards and vineyards (%)	52.3	29.5	2.9	10.7	4.6
Cattle (%)	90.2	5.1	1.5	2.5	0.7
Sheep (%)	96.0	1.4	0.8	1.0	0.8
Pigs (%)	60.3	1.4	7.0	30.5	0.8
Poultry (%)	56.5	0.2	13.3	29.3	0.7

Table 1:Share of different type of farms in total number of holdings,
major agrarian resources and productions in Bulgaria

Source: MAF, Agricultural Holdings Census in Bulgaria'2003.

¹ Sustainability of a farm characterizes its *ability to maintain (continue) over time*.

Agro-firms are commonly large, specialized enterprises averaging 187.6 ha, breeding more than 100,000 poultry or 1,000 pigs. Most of these firms were set up as family/partnership businesses during the first years of transition by younger generation entrepreneurs. Specific management skills and "social" status, and a combination of partnership assets (technological knowledge, business and other ties, available resources) led to the rapid extension of farms through an enormous concentration of (management, ownership) of resources, exploration of economy of scale/size, and modernization of enterprises (BACHEV 2000). Institutional uncertainty, unsettled rights on assets, personal relations and "quasi"/entirely integrated modes were extensively used to overcome transaction difficulties. Some state companies were taken over by managers and registered as shareholdings. Joint ventures with non-agrarian and foreign capital started to appear as well. The number of agro-firms has doubled since 2000, and the share of UAA has been augmented; they increasingly have incorporate new types of activities and organizational schemes, including integration into processing, marketing, etc.

Business farms are profit-oriented organizations, and farmer(s) have great incentives to invest in farm-specific (human, material, intangible) capital because they are the sole owners of residual rights (benefits) of the farm. Owners are family members or close partners, and internal transaction costs for coordination, decision-making, and motivation are not high. The organizational style of a firm is preferred since it provides the opportunity to overcome coalition difficulties (e.g. forming joint ventures with outside capital, disputed ownership rights through the court system); to diversify into farm related/independent businesses (trade, agro-tourism, processing); to develop firm-specific intangible capital (advertisement, brand names, public confidence) and its extension into a daughter company, trade (sell, licensing), and transfer through generations (inheriting); to overcome existing institutional restrictions (e.g. for direct foreign investments in farmland and engaging in trade with cereals/vine/dairy); to provide explicit rights for taking part in particular types of transactions (export licensing, privatization deals, assistance programs).

Their large size and reputation make business farms preferable partners in inputs supply and marketing deals. The recurrence of transactions with "the same partners" is high, which restricts information asymmetry and opportunistic behavior, and develops mutual trust and other mechanisms for facilitating (lowing costs of) relationships – planning, adjustment and payment modes, guarantee schemes, dispute resolution devices, etc. Besides, agro-firms have giant negotiating power and effective economic and political mechanisms to enforce contracts. They also possess great potential to collect market information, search for the best partners, use experts and innovation, meet special (collateral) requirements and bear the risk and costs of failures. In addition, they could explore economy of scale/scope on production and management (e.g. "package" ar-

rangement of credits for many projects and interlinking inputs supply with know-how supply/crediting/marketing). They are also able to invest considerable relation-specific capital (information, expertise, reputation, lobbying, bribing) for dealing with funding institutions, agrarian bureaucracy, and market agents at national or even international scale.

Under the conditions of non-working court and contract enforcement systems, all critical farm transactions are governed (controlled/protected) through internal modes. Farm-specific assets such as critical machinery, vineyards, orchards, animals, processing facilities, and adjoining land, are all safeguarded by ownership. Low cost standard (one-season, share rent) lease-in contracts are widely used to govern land supply from tens/hundreds of proprietors (Figure 1). Critical transactions are integrated through extensive labor employment (Figure 2). Besides, core labor (specialists, mechanists) is hired on a permanent basis and special forms such as output-based compensation, interlinking (housing, services), social disbursements, paid holidays, etc., are further used to enhance motivation.

100 ■ Farms with owned 80 lands Owned land in total 60 land % □ Farms with leased 40 lands 20 Leased land in total land 0 Unregistered Cooperatives Agro-firms

Figure 1: Governing land supply in Bulgarian farms

Source: personal interviews with farm managers

Own supply (making) rather than outside procurement is typical for essential services and inputs (Table 2, Table 3) which prevents risk from unilateral dependency (opportunism of supplier) or missing market situation. In the case of high asset interdependency (product specificity; quality/quantity dependency) with a downstream partner's reciprocal supply of inputs against, marketing is applied.

Funding is secured through an effective combination of equity, debt, public and hybrid modes (Table 4). Standard activities/assets are financed by bank credit since it is easy to arrange a loan. Alternatively, farm-specific investments are financed through private modes - own sources, "personal" loans and co-

investment. Also, special contract modes are used to mitigate funding difficulties (e.g. shortage of working capital) or to facilitate mutually-dependent relations with buyers/suppliers, such as delayed payments for inputs supply (zero interest, "loans in kind"), interlinking credit with inputs supply and marketing, leasing or accepting outside investment ("hostage taking", joint ownership) of long-term assets.

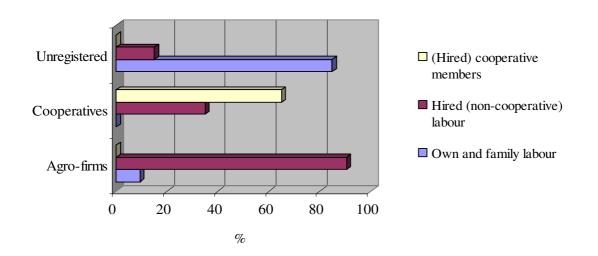


Figure 2: Modes of labor supply in Bulgarian farms

Source: personal interviews with farm managers.

Table 2:	Governing of so	ervice supply in Bu	lgarian farms	(% of farms)
Service type	Modes	Unregistered	Cooperatives	Agro-firms

Service type	Modes	Unregistered	Cooperatives	Agro-firms
Technological	Own supply	24	49	65
knowledge and	Own cooperative	5	7	15
advises	Market supplier	13	10	25
Mechanization	Own supply	18	85	60
services	Own cooperative	22	0	18
	Market supplier	15	15	28
Spreading	Own supply	40	65	60
chemicals and	Own cooperative	15	7	12
pesticides	Market supplier	12	25	28
Veterinary ser-	Own supply	20	60	40
vices	Own cooperative	5	0	0
	Market supplier	40	40	60

Source: personal interviews with farm managers.

In recent years, new opportunities have appeared which stem from preferential public programs for agriculture (SAPARD, STA). Agro-firms are especially quite successful in developing good proposals, meeting formal requirements, dealing with complicated paper work, "arranging" the selection of projects for

purchasing machinery, building orchards/vineyards/processing facilities, improving ecological performance, etc. As much as 64% of the projects funded by the SAPARD Measure "Investments in agricultural holdings", were won by agro-firms (MAF, 2004).

In marketing farm output and services, classical trade across the market (wholesale market; business with market agents) dominates (Table 5). Since the main part of a farm's product has a standardized (commodity) character, market prices/competition effectively govern relations with partners. However, when specificity of output to a particular buyer (processor, retailer) is high (technology, quality, packaging, time of delivery, origin, site-specificity) then delivery contracts with a respective partner are employed to tailor or protect transactions.

Inputs type	Supplier	Unregistered	Cooperatives	Agro-firms
Chemicals	Own production	17	0	0
	Own cooperative	10	5	15
	Market supplier	55	95	90
	Buyer of farm output	24	13	33
Seeds and	Own production	47	53	33
seedlings	Own cooperative	3	15	23
(crop farms)	Market supplier	50	32	45
-	Buyer of farm output	4	41	44
Forage	Own production	55	65	50
(livestock	Own cooperative	0	0	35
farms)	Market supplier	45	35	15
	Buyer of farm output	9	6	53
Machinery	Own production	12	13	0
	Own cooperative	20	17	46
	Market supplier	68	70	54
	Buyer of farm output	15	0	19
Livestock	Own production	37	50	28
	Own cooperative	21	31	33
	Market supplier	42	19	39
	Buyer of farm output	40	17	13

 Table 3:
 Governing of inputs supply in Bulgarian farms (% of farms)

Source: personal interviews with farm managers.

Intra-firm processing and retailing is practiced by some farms. Larger operational size and frequency of transacting provide an economic opportunity for the internal exploration of interdependent assets (farming-processing-retailing). Vertical integration helps protect dependent investments and payoffs from marketing processed/retail products, i.e., getting full profit (final products), brand name trade, lessened market dependency (easy storage/transportation), etc.

Type of funding	Unregistered	Cooperatives	Agro-firms
Short-term	91	81	79
Long-term	49	48	55
Short-term	31	7	10
Long-term	20	0	23
Short-term	22	27	28
Long-term	31	23	34
Short-term	0	11	13
Long-term	0	0	17
Short-term	13	16	7
Long-term	14	4	14
Short-term	6	18	38
Long-term	3	11	23
Short-term	11	56	62
Long-term	7	19	22
	Long-term Short-term Long-term Short-term Short-term Long-term Short-term Long-term Short-term Long-term Short-term Long-term	Long-term49Short-term31Long-term20Short-term22Long-term31Short-term0Long-term0Short-term13Long-term14Short-term6Long-term3Short-term11	Long-term 49 48 Short-term 31 7 Long-term 20 0 Short-term 22 27 Long-term 31 23 Short-term 0 11 Long-term 0 0 Short-term 13 16 Long-term 14 4 Short-term 6 18 Long-term 3 11 Short-term 11 56

 Table 4: Governing of finance supply in Bulgarian farms (% of farms)

Source: personal interviews with farm managers.

Table 5:	Governing of marketing in Bulgarian farms (% of farms)
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Output	Modes	Unregistered	Cooperatives	Agro-firms
Grain	Own cooperative	9	7	9
	Another farm/firm	50	85	75
	Processor	25	39	37
	Retail	6	7	16
Vegetables	Own processing	0	0	15
	Another farm/firm	24	24	35
	Wholesale market	6	5	15
	Processor	38	66	30
	Retail	12	0	6
Fruits and	Own processing	15	7	19
grape	Own cooperative	24	7	9
	Another farm/firm	48	39	32
	Wholesale market	0	22	22
	Processor	15	36	25
	Retail	6	0	0
Meat	Own processing	0	10	15
	Another farm/firm	65	71	80
	Processor	29	43	30
	Retail	15	36	20
Milk	Own processing	0	10	15
	Another farm/firm	42	43	40
	Processor	51	64	45
	Retail	19	0	15

Source: personal interviews with farm managers.

3.2 Agricultural Cooperatives

Cooperatives are the biggest farms in terms of land and labor management (Table 1). They concentrate a major part of cereals, oil and forage crops, orchards and vineyards, and they are key service providers for their members and for rural agents.

More than 3,000 new-type production cooperatives emerged during and after the liquidation of old "cooperative" structures between 1992 and 95. BACHEV (2000) has demonstrated that the cooperative was the single most effective form of organization in the absence of settled rights for main agrarian resources and/or inherited high interdependence of available assets (restituted farmland, acquired individual shares in the actives of old cooperatives, narrow specialization of labor). Moreover, most cooperatives developed along with small-scale and subsistent farming. Namely, the "not-for-profit" character and strong membership (rather than market) orientation attracted many households. As for production, the co-op was perceived as an effective (cheap, stable) form of supplying highly specific individual farm inputs and services (feed for animals; mechanization; storage, processing, and marketing of output) and food for households. The cooperative, rather than other formal collective (firm) forms, has been mostly preferred. Co-ops were initiated by older generation entrepreneurs and tradition has played a role. Besides, this mode allows individuals an easy, low cost entrance and exit, thus keeping control over a major resource (land), and "democratic" participation in/control over management. In addition, the cooperative form provides some important tax advantages (exemption from sale transactions with members, and received rent in kind) and possibilities for organizing transactions that are not legitimate for other modes (e.g. credit supply, marketing, and lobbying nation-wide).

A larger operational size gives cooperatives a great opportunity for the efficient use of labor (teamwork, division and specialization of work), farmland (cultivation in big consolidated plots, effective crop rotation), and material assets (exploration of economy of scale/scope of large machinery). In addition, they have superior potential to minimize market uncertainty ("risk pooling", advertisement, storing, integration into processing and marketing), to organize critical transactions (accessing credit; negotiating positions in input supply/marketing; facilitating land consolidation through lease-in and lease-out deals; technological innovations), and to invest in intangible capital (reputation, labels, brand names).

Cooperative activities are not difficult to manage since internal (members) demand for output/services is known and "marketing" secured. In addition, co-ops concentrate on a few highly standardized (mass) products with a stable market and profitability; all this assists financing, as advance funding of activities commissioned by members is commonly practiced, while producing universal commodities is more easily financed by public programs or commercial credit (Table 4). Furthermore, co-ops offer low-cost, long-term leasing of land (Figure 1). That is often coupled with simultaneous lease-out deals as a specific mode for cashing co-ops output or facilitating relations between landlord-private farms. The integral organization of critical "services" and inputs supply is broadly practiced (Table 2, Table 3). Output-based payment of labor is common, which restricts opportunism and minimizes internal transaction costs. Besides, cooperatives provide employment for members who otherwise would have no other job opportunities - housewives, pre- and retired persons. They are prefered employers since they offer higher job security, social payments, paid holidays, etc. Marketing risky output is governed by effective delivery contracts or integrated into own processing (Table 5). In a situation of "missing markets" in rural areas, the cooperative mode is also the single form for organizing certain transactions such as bakeries, retail trade, etc. Given the considerable transacting benefits, most of the coop members accept lower than market returns on their resources - lower wages, inferior or no rent for land and dividends for shares.

There have been some adjustments in the size of co-ops, memberships, and production structure. A number of them have moved toward corporate ("new generation") type governance, applying profit-making goals, closed-membership policies and joint-ventures with other organizations. At the same time, cooperatives show certain disadvantages as a form for farm organization. A large coalition makes individual/collective management control very difficult (costly), thus providing the possibility of mismanagement (on-the-job consumption, unprofitable members' deals). Besides, there are differences in investment preferences of the diverse members (old-younger; working-non-working; large-small shareholders) due to the non-tradable character of cooperative shares ("horizon problem"). Given the fact that most members are older, small shareholders, and nonpermanent employees, the incentives for long-term investment have been very low. Finally, many co-ops fall short when adapting to diversified (service) needs of members and exploring potential of inter-cooperative modes. Accordingly, co-operatives' long-term efficiency diminishes considerably in relation to the market, contract and partnership modes, and almost 40% of existing co-ops have gone bankrupt/ceased to exist in the last 5 years.

3.3 Small-scale and subsistent farming

According to various data, subsistent farms comprise 0.64-1.5 million farms, accounting for 15% of farmland. More than 97% of livestock holdings are also miniature "unprofessional farms" breeding 96% of the country's goats, 86% of its sheep, 78% of the cattle, and 60% of its pigs (MAF 2004). Consequently, a significant portion of the entire output of vegetables, fruits, vine and livestock is for "self consumption". According to the Agricultural Holdings Census, less than 39% of unregistered farms reportedly sold products, and in more than 50%

of the cases, those were surplus, not to be consumed by households (AGRICULTURAL HOLDINGS CENSUS 2003). Almost 1 million Bulgarians are involved in part-time farming, and use it as a "supplementary" income source (MAF, 2004).

Post-communist agrarian reform has turned most households into owners of farmland, livestock, equipment, etc. The internal organization of available family resources in one's own farm was an effective way to overcome great institutional, market, and economic uncertainty and insecurity, and minimize transaction costs (BACHEV 2000). During transition, market/contract trade of household capital (land, labor) was either impossible or very expensive due to "missing" markets, high uncertainty, risk, asymmetry of information, opportunism in time of hardship, little job opportunities and security. Low payoff from outside trade (high inflation; non- or delayed payment of pensions, wages, rents) was combined with an increased share of households' food costs. Therefore, internal organization was the most effective way of protecting and getting a return on resources and securing a stable income. The long-term tradition of "personal plots" and insignificant costs for acquiring specific knowledge (information, learning by doing experience) has made developmental costs for one's own farm accessible to everybody. In addition, there has been great uncertainty associated with the market supply of basic foods and for many consumers, own production has been an effective mode of guaranteeing cheap, stable, safe, and high quality products. Internal organization (own farm) is also a preferred/secure mode for providing full- or part-time employment for family members. Also, for many, farming happened to be a favorable full-time or free-time occupation.

Unregistered farms are not a unified group and there are highly-commercialized small/middle-size enterprises. The latter are mainly specialized in labor-intensive productions (vegetables, tobacco, vineyards, berries, melons, flowers, livestock).

Unregistered farms are predominately individual or family holdings, and farm size is exclusively determined by the available household resources – farmland, labor and finance. Internal governing costs are insignificant because transactions are between family members (common goals, high confidence, and no cheating behavior dominates) or non-existent (one-person farm). A small collective or-ganization for some activities is also practiced, which allows the partial exploration of economies of scale or makes part-time farming possible (e.g. group pasture of animals, common guarding of yields). This form is cost-effective since transactions are not complicated, easily controlled, and between close friends and relatives (here mutual trust and self-restriction of opportunism govern relations).

Farmers have strong incentives to adapt to market demand and increase productivity (intensification of work, investments in human/material assets) since they own whole residuals (income). The extension of farms through outside supply of labor/services is restricted since directing, monitoring, and disputing costs are extremely high in labor-intensive and spatially-dispersed productions. External financing of farming via debt, equity sell-off, or public programs have been out of reach because of the high costs for preparing project proposals; meeting formal (paper, ownership, co-financing) requirements; arranging funding. Thus, the possibility of effective farm enlargement and growth in productivity through mechanization, application of chemicals and innovation is limited by small internal investment capacities (savings, profit). In general, primitive technologies and poor environmental and animal welfare standards prevail. As much as 40% of surveyed farms report not using essential services at all. Low cost, outside land supply (leasing) is practiced by commercial farms to explore economies of scale on existing assets. The outside supply of indispensable inputs/services (seeds, chemicals, veterinary) is not connected with significant costs since they have an occasional and standardized character (low specificity, many suppliers). In contrast, highly-specific feed supplies for animals and mechanization services are effectively secured through joint ownership modes such as cooperative/group farming.

"Marketing" of output is not associated with considerable costs for commodity and locally-demanded produces - short distance, low volume, high frequency, and personal character of transactions. When symmetrical capacity, quality, time of delivery, etc. dependency with a buyer (middlemen, processors, retailer, exporters) is in place. then tight marketing or an interlinked arrangement are applied (marketing against credit/inputs/extension supply). However, a great number of small farms face marketing difficulties - they are not preferable partners for big buyers because of their small volume and less-standardized character of output, as well as the impossibility (unaffordable costs) of verifying the quality of products though tests, certificates, etc. On the other hand, official wholesale markets are inaccessible due to great distances, high fees, requirements for volume, special preparation, certification. Besides, small farms frequently experience problems with meeting contractual terms (none or delayed payment), huge market price fluctuation, (quasi-) monopolistic situations, missing markets, etc. The development of effective collective organizations for risk sharing, price negotiation, marketing, or lobbying for public support have been difficult because of high transaction costs (the free-riding problem), diversified interests of individual farmers (old/young; larger or smaller size; specialized/diversified), and the mismanagement of emerging organizations. Only tobacco producers, which have significant political representation, are an exception. The majority of small commercial farms are vulnerable and have poor mechanisms to protect from outside institutional, market and natural disturbances. Most of them have little ability to meet institutional and market restrictions, bear risks, and safeguard against natural/market hazard (buying insurance, diversifying, or cooperating).

All these result in significant income variation for individual farms, (sub)sectors, and different years.

4 LIKELY IMPACT OF EU ACCESSION AND CAP IMPLEMENTATION

Almost two-thirds of surveyed farms indicate they "intend to enlarge their farm in future" (91% of firms, 59% of unregistered farms, 46% of cooperatives). According to managers, the highest transaction costs are associated with credit supply, marketing, and contract enforcement. Thus, problems with governing later transactions are major factors that restrict farm enlargement. For most managers, the "main factors for farm development" relate to improving the institutional environment - guaranteed marketing, enforcement of laws and private contracts, macro-economic stability, legislation framework, and access to free markets.

EU accession will introduce and enforce a "new order" (regulations, quality and safety standards, protection against market instability, export support) which will eventually intensify and increase the efficiency of agrarian transactions. Market access will enhance competition and let local farms explore their comparative advantages (low costs, high quality, specific produces). Furthermore, EU funding, which agriculture will receive from 2007 on, will be 5.1 times higher than the overall level of present support for farming. Hence, CAP implementation would improve funding opportunities, and facilitate farm extension and modernization.

The impact of implementing a "common" policy in Bulgaria would not be like other countries because of the specific local priorities (weights), asymmetric implementation and enforcement, the additional support of CAP aspects, and dissimilar farmers' involvement and compliance. There will also be "practical" difficulties in introducing CAP in the public and private sector – information and technical deficiencies, lack of administrative staff experience, enormous initial costs (registrations, formalizing relations with landlords, preparing projects), widespread corruption, etc. Thus, there will be some time lag until "full" CAP implementation, with great regional variation that will depend on the pace of building effective capacity, and also training administrative staff, farmers, and other rural agents.

A significant portion of Bulgarian farms will start receiving direct payments². Based on the currently low state of support, the direct payments will augment

² Farms will get a single payment according to the amount of UAA: 69-74.20 €/ha in 2007, 82.8-89.10 €/ha in 2008, and 96.80-104.10 €/ha in 2009. Exact figures will depend on the governmental decision on the minimum size of farm eligible for support (between 0.3-1 ha). National top-ups could be also added. Thus, 153,640 up to 668,000 farms would benefit from support.

the level of farm efficiency (increasing/preventing reduction of income). They could even induce usage of abandoned lands (eco-conditionality) and provide new income in less-favorable regions. However, public support will unevenly benefit different farm types, as 3% of farms will touch more than 85% of the subsidies. Many effective small-scale operators will receive no or only a tiny fraction of the direct payments. Besides, livestock farms will not be eligible for support under that scheme. That will foster disparity in income and efficiency among different farms and sub-sectors. On the other hand, this mode will support less productive structures (small-scale, part-time, cooperative farms) and non-market forms (subsistence, cooperative farming). As a result, sustainability of these farms will increase - small-scale operations will become viable; cooperatives will be able to pay rent; subsistence farming will be more profitable. Direct payments will increase farmland price/rent, and thus enlarge costs for land supply in the largest farms. Small-scale operators will retain entire subsidies and see their income increased. Subsequently, the transformation of land management to the most effective forms and restructuring of farms will be delayed. Moreover, EU funds will be used effectively to subsidize food self-supply of a large part of the population.

Significant EU funds for rural development will be also available, and will exceed 4.7 times the current level. These funds will allow more and smaller farms to gain access to public support. New measures will finance essential activities such as commercialization/diversification of farming, organic farming, maintaining productivity/biodiversity on abandoned farmland, revitalizing mountainous agriculture, etc. That will provide new opportunities to extend farms though more labor, inputs/service supply, and marketing of new products/services. Some cooperatives, group farms, and firms would specialize in new functions (environmental preservation, maintenance of farmland) and see their size expanded.

The CAP will modernize farms structures through widening the variety of contractual and organizational innovations - specific sort of contracts, new types of producers associations, spreading vertically-integrated modes, etc. Special forms will also emerge, allowing agents to take advantage of large public programs that will specialize in project preparation, management, and execution; investing in "relations capital" or "negative" entrepreneurship; modes for lobbying and representation; coalitions for complying with formal criteria (e.g. minimum size of UAA for direct payments, membership requirements for producers' organizations), etc.

The actual system of governance (management, control, assessment) for public programs is not likely to change overnight. Therefore, funds will continue to benefit the largest structures, more abuses will take place, and CAP support will not contribute to diminishing divergence between farms and regions.

Some of the terms of specific contracts for the environment and biodiversity preservation, respecting animal welfare, keeping tradition, etc., are very difficult/expensive to enforce and dispute. In Bulgaria, the rate of compliance with these standards will be even lower because of the lack of readiness/awareness, insufficient control, ineffective court system, domination of "personal" relations and bribes. Correspondingly, more farms than otherwise would enroll will participate in such schemes (including the biggest polluters and offenders). Besides, costs for respecting requirements of agri-environmental programs (expenses/lost income) will vary considerably between farms. Keeping in mind the voluntary character of most CAP instruments, the biggest polluters and those noncompliant with quality, agronomic, biodiversity and animal welfare standards will simply not participate in them. Moreover, government is less likely to set up high performance standards because of the strong internal political pressure and possible outside problems with EU control (and sanctions) on compliance. Therefore, outcomes from the implementation of such instruments would be less than in other countries.

The CAP will foster the restructuring of commercial farms according to modern market, technological, and institutional standards. A large part of agrarian inputs, technologies, and outputs will have a "mass" (standardized) character, and market transacting will dominate at the farm gates. There will also be a parallel tendency toward specialization into productions for "niche markets" and products with special quality (specific origins, special technologies). All that will require investments with higher specificity to a particular buyer(s), and "integrated" management of transactions in farming, processing, retailing and exporting. Besides, some diversification of enterprises into related activities (trade with origins, agro-tourism) for dealing with market risk should be expected. All this would bring new, special modes for private governance such as long-term contracts, collective agreements (codes of professional behavior), trilateral modes (independent third-party certification/control), "quasi" or complete integration.

Farming will be increasingly characterized by the domination of larger and highly competitive business enterprises, which will concentrate activities in all sub-sectors. Large agro-firms will maintain comparative advantages in terms of adaptability, governance, and productivity by having greater access to EU markets and opportunities to benefit from public support and rural development programs.

Most cooperatives will keep/extend their advantages to a large number of petite landowners, rural labor, and smaller farms. Besides, they will have greater potential to explore economies of scale/scope on institutionally-determined investment, adapt to formal requirements for support and use expertise/finance to execute projects. That will extend/intensify transactions governed by co-ops. EU support will also provide an opportunity to mitigate the cooperative funding problem. Direct payments will allow the extension of activities and offer attractive rent, while access to investment subsidies will modernize farms. Besides, some environmental and rural development projects requiring large collective actions would be effectively initiated, coordinated, and carried out by cooperatives or mixed modes.

New institutional restrictions and competition will be connected with decreasing the number of small commercial farms (joint ventures, failures, non-market orientation). Most livestock farms will hardly meet the EU (hygiene, quality, veterinary, phito-sanitary, environmental, animal welfare) standards and will have to cease commercial activity. At the same time, restructuring a large portion of smaller-scale and subsistent farms will not have a positive effect. Changing the sustainability of these farms is mostly determined by the overall development of the economy, but it is less likely to have immediate progress in non-farm employment/income. Most subsistent farms have no intention of increasing their size because of other major occupations, limits of household demands/resources or the advanced age of farmers. Transaction costs to enlarge farms through the outside supply of additional land, labor, finance and marketing would be extremely high (no entrepreneurial capital). Vast costs for studying and respecting new institutional restrictions and establishing "relations" with agrarian bureaucracy (registrations, certifications, paper works) will also be restrictive. Besides, more than 40% of farm managers are older than 65 and more than half of those employed are in pre-retirement or retirement age. That puts serious restrictions on effective farm adjustment and enlargement (low investment activity and entrepreneurship, limited training capacities, no alternative employment opportunities). For the government, it will be practically impossible to enforce official standards in such a huge informal sector of the economy. Moreover, there will be strong political pressure to relax the application of EU rules for non-market farm transactions (respect voters interests). Thus, massive (semi-)subsistence farming will continue to exist in years to come.

5 CONCLUSION

The comparative institutional and transaction costs analysis provides insights on the evolution, efficiency, and complementarities of farming structures in Bulgaria. Responding to the specific market, economic, and institutional conditions, agrarian agents develop a great variety of effective governing modes – formal, informal; market, private, hybrid; simple, complex; uni-, bi-, multilateral; subsistent, member-oriented, commercial, business, etc. Specific boundaries (size) of farms cannot be understood with technological determinants but necessitate analyses of governance features. Furthermore, the actual efficiency of a particular mode for land, labor and input supply, financing, marketing, etc., can be properly estimated only by taking into account the total costs for governing a farm and household economy. This approach requires giving up traditional "production costs" models, uni-sectorality, and uni-diciplinarity; analyzing structure and enforcement of de-facto rights; identifying the spectrum of agrarian and rural transacting, and modes for their organization. It also calls for new types of microeconomic data and a system of direct/quasi indicators for costs, critical attributes, and specific modes of transaction. Finally, this approach lets us make more realistic assessments about the prospects of farming development and the likely impact of CAP implementation in Bulgarian conditions. Not least important is that the Bulgarian model of governance (market-driven, unsupported, over-integrated) could even provide insight on the future of European agriculture in the course of the global orientation toward liberalization, specification, and diversification.

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