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IMPERFECT COMPETITION IN THE PRIMARY AGRICULTURAL COMMODITY MARKET IN SERBIA**

ABSTRACT: *Development of the primary agricultural production sector in the Republic of Serbia is predominantly restricted by a disorganised and inefficient market of purchase of primary agricultural products. The government should be held responsible for this, because its existing legislation and law-implementing instruments and institutions are failing to secure a healthy market economy. In the future the country will have to demonstrate systematic activity towards regulating and developing the agricultural commodity market, and provide an input for agricultural production. This only represents the first step, yet nevertheless it is the essential prerequisite for developing a competitive agricultural sector in Serbia.*

KEY WORDS: *agricultural commodity market, competitiveness, oligopsony, institutions, 'grey' market.*

JEL CLASSIFICATION: D 43, L 13, Q 13

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INTRODUCTION

Numerous focus groups and survey studies of agricultural producers by the *Institute of Agricultural Economics* in Belgrade during the period 2007-2008, as well as survey studies of participants in the primary agricultural commodity market conducted by researchers in 2009 for the purpose of this study, have indicated that one of the main and most significant obstacles to the growth of agricultural production in Serbia is the inefficient agricultural commodity market, i.e. a lack of healthy and strong domestic and foreign competition. Consequently, farmers can never achieve full economic evaluation and are therefore prevented from expansion and modernisation investments, while consumers pay considerably higher prices, due to high operating costs (i.e. dealer shares). The final consequences are reflected in uncompetitive agricultural production, particularly in international markets. This is due to the inability to ensure continuity and quality/quantity of agricultural exports, as well as frequently unfavourable prices.

This paper is structured in five sections:

1. *Market distortions in world agricultural commodity markets.* This section analyses market distortions from the following aspects: (1) imperfect competition, i.e. existence of oligopsony; (2) state intervention in the market, resulting in limited competition.
2. *The main characteristics of imperfect competition in the primary agricultural commodity market in Serbia***.** This section analyses the following: (1) olygopsony and abuse of a dominant position by certain companies; (2) disorganised market participants, a high level of 'grey economy' and disorganised purchase flows; (3) results of a survey study of primary agricultural producers, which, in combination with the research of demand-side market participants and secondary sources data, was the basis for the competitiveness analysis.
3. *Consequences of imperfect competition in the primary agricultural commodity market.*
4. *Competition analysis of the primary agricultural commodity markets in the former Yugoslav republics* (Slovenia, Croatia, Bosnia & Herzegovina); this section gives a short summary of buying operations, the degree of competition and the negotiating power of agricultural producers in the neighbouring countries.
5. *Development and strengthening of institutional capacity as the main prerequisite or road to promoting competition in the agricultural commodity market.* This section contains an analysis of institutional capacity to strengthen and

protect competition. The authors consider institutional capacity as the main prerequisite for developing, protecting and promoting competition.

The authors will attempt to explain why the terms *free market* and *market economy* in Serbia are merely synonyms for legally unregulated markets, or markets where institutions do not guarantee implementation of existing laws. Furthermore, the authors will pay particular attention to different ways of improving the efficiency of agricultural commodity markets, since we expect more liberal agricultural commodity trade with the EU and more competitive agricultural production in the future.

1. IMPERFECT COMPETITION IN WORLD AGRICULTURAL COMMODITY MARKETS

An economy's degree of competitiveness is dependant on its productivity[1]. Productivity, which results in higher wages, a strong national currency and an attractive active rate of return on investment, primarily depends on production efficiency. On the other hand, production efficiency is directly linked to a free (open) market, characterised by a strong competition policy. Markets that are not hampered by excessive government regulations and disloyal domestic and foreign competition, and are characterised by entirely informed and sophisticated consumers and absence of externalities, manage to ensure allocation efficiency and maximise production levels as well as consumers' satisfaction with given resources and technology. In other words, they succeed in bringing the economy to the limit of its productive capacities.

However, economic reality suggests that, as a rule, markets do not follow perfect competition[2]. The authors of this paper analyse two types of market distortion in the primary agricultural commodity markets that limit the access to lucrative markets and hinder attempts to secure agricultural producers a greater share in the final product price.

1 Porter and Schwab (2008:44).

2 The following types of market deviation from perfect competition (situations where market fails to make an efficient resource allocation) are recognised in economic literature: (1) market structures with varying degrees of imperfect competition; (2) side effects or externalities; (3) market participants that are insufficiently informed about goods and services they buy or sell. Samuelson and Nordhaus (2000:31-32, 272); Burda and Wyplosz (2004:414).

(1) *The appearance of market structures featuring varying degrees of imperfect competition*. The nature of competitive struggle means that markets create imperfections and distortions on both the supply and demand sides. Likewise, markets are constantly being 'targeted' by special interest groups and large companies, whose operations include lobbying for subsidies and tax relief and seeking ways to disable competition. Market distortions on the supply side (a small number of suppliers, producers or distributors of products that are similar or identical) imply oligopoly, duopoly or monopoly structures. These result in reduction of supply levels and higher prices, and generally represent a threat to consumers. On the other hand, market distortions on the demand side (a small number of buyers as compared to a large number of sellers) lead to oligopsony, duopsony or monopsony structures, which can result in reduced demand levels, reduced prices and reduced production, and consequently cause producers to suffer losses. There are several models of oligopoly/oligopsony in economic theory, starting from the theories where each oligopoly member acts independently, and ending with those where rivalry is overcome through co-operation and collusion. Although oligopolies/oligopsonies can maximise their profits by forming cartels and acting as monopolists, their behaviour towards competitors is limited by anti-monopoly laws, as well as by the personal interests of each oligopoly member.

(2) *State interventions* that limit competition. In reality, no economy is entirely consistent with an ideal world characterised by the smooth functioning of an 'invisible hand'. Consequently no country, regardless of how conservative, keeps its hands out of the economy[3]. Advocates of the demand economy believe that market distortions always represent a basis for state intervention, with the goal of engaging resources and increasing production and productivity (the measures of aggregate supply policy). Although state intervention should actually remove or reduce the above market distortions, governments frequently use their policies, measures and institutions to restrict domestic and foreign competition. By doing so, they reduce the efficiency of commodity markets by influencing the following: prices and subsidies, legislation regulating the extent of market dominance, effectiveness of anti-monopoly policy, tax rates, the extent and effect of taxation, the prevalence of trade barriers and tariff barriers, the prevalence of foreign ownership, etc.

3 Samuelson and Nordhaus (2000:30).

1.1. Oligopsony as a form of imperfect competition

In practice, nearly all industries have a certain degree of imperfect competition, which does not automatically imply there is no competition at all. Global agricultural commodity markets, particularly those of high-value crops and processed products, are increasingly dominated by large transnational trading, processing and distribution companies, which wield direct and increasing influence on *what is produced and how*[4]. Control over commodity value chains by a small number of powerful and large transnational corporations can be observed at three levels[5]:

- *A few large companies dominate the export trade in developing countries.* In developing countries large export companies with warehousing and shipping facilities have been able to exploit their financial and logistic advantages. Many now buy produce directly from farmers, specifying their requirements and prices.
- *Concentration in international trade.* At the international level, a few vertically integrated companies have increasingly gained control over agricultural trade. A handful of vertically integrated companies now dominate the production, distribution and international trade of both oilseeds and oils. Three global companies control 80 percent of the soybean crushing market in Europe, and more than 70 percent in the United States. Grain trading, storage, processing and milling are also dominated by a few large companies.
- *Supermarkets dominate retail.* At the retail level, supermarkets have grown rapidly in both developed and developing countries. Worldwide, the top 30 supermarket chains now control almost one-third of grocery sales. At the national level, the five biggest retailers control between 30 and 96 percent of food retailing in the EU and the United States. Market domination by supermarkets gives them significant leverage over production, distribution and trade.

In terms of market structure, some authors describe the vertically related nature of the food chain as a multi-stage or successive oligopoly[6]:

- In recent years, industry consolidation in the food sector, which has been reflected in an increasing number of domestic and cross-border mergers and

4 On its way from farmer to consumer, for example, nearly 40 percent of the world's coffee is traded by just four companies and 45 percent is processed by just three coffee-roasting firms. FAO (2004:30).
5 Ibidem, page 30-31.
6 Steve Mc Corriston (2006: 139-141).

acquisitions, supported vertical co-ordination between the stages in the food chain;
- Successive stages in the food sector may be imperfectly competitive (originally the oligopolistic food manufacturing sector was dominated by a small number of companies);
- The oligopolistic food manufacturing sector sells its output to a retailing sector which is also (across many countries) highly concentrated or oligopolistic;
- The characterisation of vertically linked markets implicitly assumes arms length pricing (the downstream stage takes the upstream selling prices as given).

Olygopolists can maximise their profit by creating cartels and demonstrating monopoly-type behaviour, where rivalry is overcome through co-operation and collusion. Processors and retailers may reap most of the benefits, leaving little or nothing for farmers, particularly in developing and transition countries with underdeveloped institutions (enforcing contracts, protecting ownership rights, etc.). When markets bring together large numbers of competing suppliers against a handful of large-scale buyers, the buyers are likely to have most leverage in setting prices. Equally, when buyers are also linked to processors and retailers in vertically integrated commodity chains, they are in a strong position to capture a greater share of the final product value for traders, processors and retailers.[7] Also, studies have shown that when commodity prices rise, the higher price is quickly passed along to consumers; but when commodity prices fall, retail prices rarely follow suit[8].

Despite all that, olygopoly/olygopsony is not easy to avoid. The three main causes of imperfect competition in the primary agricultural commodity market are:

(1) *The vertically related nature of the food chain and increased concentration of capital.* The numerous and dynamic requirements of the environment and of the organisation itself (introduction of standards, improved efficiency and competitiveness) have, for a second decade, resulted in an increased number of partnerships (alliances) among different organisations, as well as mergers, acquisitions and takeovers: although traditionally it is considered that increased concentration of capital results in a less competitive market, this has made

7 Growers' prices typically represent a small fraction of the retail price for finished products. Even with bananas, which require almost no processing, international trading companies, distributors and retailers claim 88 percent of the retail price. Less than 12 percent goes to the producing countries and barely 2 percent to the plantation workers. FAO (2004: 31).

8 Ibidem, page 34.

many industries stronger, and each economic branch has ended with a few dominant giants.

(2) *Effects of the economy of scope, i.e. decreasing average costs.*

(3) *Barriers to market entry*; high technology or high standards often result in high entrance fees, especially in the sector of processed products.

Although olygopoly/olygopsony can damage competition and enable large companies to create high profits at the consumers' and producers' expense and at the expense of economic advancement in general, their behaviour, directed against competitors, is limited *by anti-monopoly laws*, as well as by the *personal interests of each oligopoly member*. However, it is obvious that states, or governments, do not demonstrate genuine interest (political will) in passing and particularly in implementing anti-monopoly laws in order to eliminate, or at least bring to moderation, the existing market failures. This can be achieved by controlling and restricting the process of concentration of capital that limits competition, by controlling the abuse of a dominant position by individual market participants, etc. This problem is especially prominent in developing and transition countries, which are characterised by undeveloped institutions and physical infrastructure, high corruption rates, high and inefficient public spending, etc. Therefore, it seems that adjusting production levels and purchase prices to the interests of trading companies, distributors and retailers has a much more negative impact on the income and profitability of primary agricultural producers in these countries than in developed countries.

Finally, it is important to emphasise that *olygopolies/olygopsonies are not always undesirable*. They enable organisations to offer better products at lower prices, due to better production organisation. They also introduce technological standards and innovation by investing in research and development, marketing etc.[9] Furthermore, empirical studies have shown that efficiency losses due to imperfect competition are insignificant in terms of the national product[10].

Transnational companies have developed relationships with suppliers in order to ensure reliable quantities and consistent quality, which are key to their business operations. This includes collaboration in product development, technology transfer and training, contract farming, financial assistance (support), and sharing information. Therefore for some producers and exporters these changes are creating unprecedented opportunities, and also bring significant advantages

9 Vaknin (2006).

10 Mankiw (2004:178).

to small farmers. As an example, contracts that are often used in concentrated markets with a few buyers govern 36 percent of the value of US agricultural production. A group of authors[11] have shown that certain contract terms may, under the right market conditions, allow buyers to impose lower prices on producers. On the other hand, contracts can lead to enhanced productivity and responsiveness to consumer demand. In general, the authors have little evidence of the extent to which rival firms use pricing clauses that create incentives to limit competition among themselves in the spot or contract markets.

1.2. Role of the government in market distortions

By and large, in most countries the agricultural sector has been more or less regulated by specific policies for centuries. Some authors (Ulrich Koester and Ali El Agraa) analysed six reasons for this special approach (or government interference in agricultural markets)[12]: food security concerns, market stability (stable price fluctuations), agricultural income, efficiency concerns, food safety concerns, and environmental concerns. Although all governments use these and various other arguments to justify their presence in agricultural commodity markets, the question remains as to how justifiable and necessary the role of the government is in agricultural commodity markets, and how much it contributes to efficient resource allocation. In other words, when and to what degree does the role of the government become protectionist, therefore causing various market distortions?

Special emphasis has been given to the *EU Common Agricultural Policy (CAP),* which is the most integrated of all EU policies, consequently taking a large share of the EU budget. This policy considerably affects the world agricultural commodity market, export opportunities, and opportunities for achieving price competitiveness in the international market for a large number of countries (especially the transition and developing countries in the Cairns group).

In the past, distortive pricing policies were, in practice, present in nearly all countries, but especially the EU countries. For example, up until 1992, most of the CAP budget was spent on price support and export subsidies while at the same time a high level of domestic market protection ensured that prices increased considerably over and above the world market price levels. The consequence of such extremely protectionist policies was that a high growth of agricultural

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11 Agricultural Economic Report No.837 (2004:81).

12 Ulrich and Ali El Agraa (2004:355-362).

production was achieved, the food self-sufficiency problem resolved and secure and relatively high income levels were secured for agricultural producers. However, such support caused excessive production and huge surpluses, creating additional costs of financing the surplus sale (via high export subsidy). The need to resolve these problems, as well as to adapt to the Doha Declaration (World Trade Organization, 2001)[13] has resulted in numerous CAP reforms from the late 1960's until today. In other words, support of the agricultural sector through distortive market measures (Amber Box) shifted towards measures with less or no impact on the market (Green Box). Namely, all CAP reforms aim to increase measures that result in less market distortion: (1) dismantling the price support system and (2) 'decoupling' subsidies from production levels.

However, although direct payments to EU farmers are increasingly related to the concepts of rural development, food safety, animal welfare, and environmental standards, it is important to stress that there is a disproportionate presence of EU agriculture in GDP, as well as of agrarian budget share in the total budget[14]. Furthermore, it should be emphasised that in a large number of developed and developing countries it is considered that even when a single measure is not distortive, in reality, the entire volume of the green box support should be expected to have distortive effects[15]. Therefore, these countries are advocates of the idea of limiting the total amount of this type of support, re-examining conditions for assessing a minimum impact on production and trade, and therefore limiting/withdrawing certain programmes from the green box definition[16]. This is especially true if we take into account the fact that domestic agriculture in developing and transition countries receives considerably less support.

Despite the CAP reforms, distortive effects in the world agricultural market originating from high agricultural tariffs and *producer subsidies* in developed countries are reflected in the following:

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13 WT/MIN(01)/DEC/1, Ministerial Declaration, adopted on 14. November 2001

14 Gross value added: Agriculture, hunting and fishing (% of all branches)–1.8% in 2008. (http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/data/main_tables); The share or the agricultural and environmental sectors in the total EU budget in 2008 was 43% (http://europa.eu/pol/financ/index_en.htm)

15 Since even the green box support, especially of a large volume, can lead to reduced production costs and risks, green box measures can also somewhat disturb production and trade channels in the agricultural commodity market. Popović, Katić (2007: 104).

16 Ibidem, page 104.

- Distorted cost structures in several producer countries, giving less efficient producers the incentive to expand production. In many cases, domestic support insulates farmers in developed countries from market forces, encouraging them to expand production even when prices are low and allowing them to export at prices substantially below their costs of production.
- Depressed commodity prices in world markets and limited market access. With world market prices defined at low levels, farmers in developing countries suffer from lost market share and unfair competition, even though they are able to produce at lower costs.
- Distribution of direct payments between large and small companies in the EU as a significant social issue.[17] Most of the CAP money goes to the biggest farmers (large agribusinesses and hereditary landowners), whilst direct payments have gradually lost their 'informative' character and have gained a significant role as an instrument of income increase, i.e. income support.

Presently, in most countries (STO member countries) protectionist measures in both the trade and investment sectors restrict the STO rules, which are primarily directed towards liberalisation of the world agricultural commodity market and reduction of trade distorting domestic support in agriculture. The Doha round of negotiations within the STO (negotiations started in 2001, conclusion expected in 2010) assumes "establishing a fair and market-oriented trading system, in order to correct and prevent restrictions and distortions in the world agricultural markets"[18]. *The Doha Declaration* in the agricultural sector led to the agreement within the STO member countries that negotiations should aim towards "substantial improvements in market access; reductions of all forms of export subsidies, with a view to phasing out; substantial reductions in trade-distorting domestic support"[19]. It is certain that completion of the Doha round of STO negotiations will result in considerable reduction of domestic support of agriculture that results in trade distortion.

Finally it should be stressed that in the short run liberalisation could have a negative impact on food imports in developing and transition countries (many developing countries are net food importers), as the removal of tariffs and subsidies leads to higher food prices and import bills. Gradual liberalisation of foreign trade, special and differential treatment in trade negotiations, with *intensive processes of strengthening domestic productivity and competitiveness,* can be the only road

17 Božić, Bogdanov (2007:35).

18 WT/MIN(01)/DEC/1, Ministerial Declaration, adopted on 14 November 2001, page 3

19 Ibidem, page 3.

to conservation and survival of agriculture, i.e. of the numerous agricultural producers in these countries.

2. MAIN CHARACTERISTICS OF IMPERFECT COMPETITION IN THE PRIMARY AGRICULTURAL COMMODITY MARKET IN SERBIA

The primary agricultural commodity market is an integral part of Serbia's entire commodity market. The commodity market in Serbia has been insufficiently integrated into world developments[20] and has many features of imperfect competition, which is reflected in the following:

- *Olygopoly/olygopsony* in numerous commodity and services markets and many branches of the economy, including primary agricultural production;
- *Monopoly* of state-owned public companies (state-owned assets), mainly infrastructure and utility companies, which are characterised by an excessive numbers of employees, low investment, absence of innovative power and inability to satisfy consumer needs.

According to the opinion of many international institutions, the commodity and services markets in Serbia are extremely inefficient, mainly due to insufficiently strong competition (both domestic and foreign) and their underdeveloped competition policy. For example:

- According to the *Global Competitiveness Index (GCI)* in the *Global Competitiveness Report 2009-2010*[21], Serbia ranks 93th out of 133 world economies. Serbia is ranked 112th in the 6th pillar, for *Good Market Efficiency,* of the *GCI*. In fact according to this pillar of competitiveness, out of a total of 12 pillars of *GCI*, Serbia was rated the worst. Serbia's position as the lowest in this pillar is for the following three indicators: (1) extent of market dominance, rated 131; (2) effectiveness of anti-monopoly policy, rated 130; (3) intensity of local competition, rated 120.

20 Serbia is not a member of the EU, or the World Trade Organisation (negotiations on the WTO membership, which began in 2005, are at an advanced stage). An insufficiently integrated market leads to higher transportation costs, higher duties, and higher commodity prices in the domestic market, while at the same time slowing down or aggravating the flow of information, knowledge and technologies.

21 Schwab (2009: 274-275).

- The latest transition report by the EBRD[22], like the previous ones, indicated Serbia's unfavourable position with regards to transition indicator *Competition Policy*. Among 9 analysed indicators, *Competition Policy* and *Reform in Non-Bank Financial Institutions* received the lowest development rating (-2.0, as compared to the maximum rating of 4).

The authors' analysis of competitiveness in the primary agricultural market was based on wide research, encompassing:

- Analysis of primary sources data. During 2009, the authors conducted a survey study of a sample of 215 primary agricultural producers (family holdings) in Serbia. The assessment was made based on the most serious problems experienced in organising the current and planning the future agricultural production (see the methodology, point 3.3). Special emphasis in the analysis and research was given to this sector because family holdings are highly represented in agricultural funds and purchasing channels.[23]. Furthermore, due to their small properties and lack of unions, this sector demonstrated the most serious problems in marketing their products. Also, family holdings have minimal negotiating power as compared to buyers. Apart from this research, survey questionnaires were used and relevant data obtained from a large number of food companies, agricultural co-operatives, bulk traders, cold-storage plants, hypermarkets, and green markets.
- *Analysis of secondary sources data.* The research included relevant available data from international institutions, Statistical Office of the Republic of Serbia, Serbian Ministry of Agriculture, Forestry and Water Management, Provincial Secretariat for Agriculture, Serbian Chamber of Commerce, Vojvodina Chamber of Commerce, Co-operative Association of Serbia and Vojvodina, Stock Exchange Novi Sad, Commission for Protection of Competition, Farmers Associations, etc.

Special emphasis in the conducted research was given to the fact that the domestic agricultural commodity market is predominantly characterised by a low degree of competitiveness. This problem is particularly prominent in the *family holdings* sector, which is highly vulnerable to price volatility and exploitation by trading and processing companies. For a large number of listed (778,891, Census 2002), i.e. registered family holdings (440,650 in 2009, *Treasury Board* data), their small

22 Transition Report 2009, EBRD.

23 According to the statistical data, in 2008 the share of family holdings in the total number of livestock units was 92.1%, in the total agriculture area 81.6%, while the percentage share in sales and purchase totalled 52%. Statistical Yearbook of Serbia (2009: 203).

size[24], high degree of disorganisation, lack of financial and storage capacities, and small and uncertain surpluses[25], lead to the absence of negotiating power (primarily with buyers), and especially with regards to pricing of agricultural products. This sector does not have a sufficiently large production capacity for the needs of 'large buyers'. It also highlights significant problems related to marketing products, i.e. the high risk of sale in the domestic market, where market channels and purchase prices are frequently unknown up until the moment of purchase. These producers are in a subordinate position to the processing industry and distribution agents, who set up strict conditions, attempting to limit their exposure to risks related to seasonal fluctuations in demand and price. At the same time they prevent the smallholders from gaining critically important knowledge, particularly knowledge about consumers, prices and market.

On the other hand, large agricultural producers (*business companies and agricultural cooperatives*) have, to a certain degree, more reliable or 'safer' buyers and contracted production (especially with regards to the sale of milk, cattle, oil crops, etc). However, their negotiating power in relation to the food industry or hypermarkets is not significant. In addition, a large number of agricultural companies and co-operatives are burdened by numerous systemic problems, which considerably limit their efficiency and productivity. For example, the privatisation process of agricultural companies has not yet been completed (5 public agricultural companies in the Belgrade area are awaiting privatisation). Furthermore, agricultural co-operatives do not have a clearly defined land ownership status and a large number of the employed are redundant, while investment opportunities are limited by a lack of own and favourable crediting sources.

When analysing the competitiveness of the primary agricultural commodity market, the following should be considered:

- The food production chain has been broken through the privatisation process (privatised processing sectors have been separated from large public conglomerates);
- There is no proprietary participation by primary agricultural producers in processing and storage capacity (grain elevators, cold-storage plants);

24 According to the 2002 Statistical Inventory, the average size of arable land was 2.46 hectares, while around 77% of listed holdings were smaller than 5 hectares. Population Census 2002, Agriculture, Book 1 (2003:20).

25 Only 20% of farmers were producing for the market, according to the Register 2002. Bogdanov (2007:97-98).

- There is no vertical integration of agricultural producers in intermediary operations (i.e. distributive system);
- From the previous points it follows that all economic relations in a commodity value chain end up in *primary distribution through prices*, while competitiveness, for the most part, is actually at risk due to the producers' inability to influence the purchase price of their products.

In short, imperfect competition in the purchase of primary agricultural products is characterised by:

1. *Presence of olygopsony* in a number of agricultural commodity markets and abuse of a dominant position by certain companies.
2. *Absence of contracted production and a high percentage of purchase of agricultural products in the so-called 'grey' economy zone* (the grey economy, among other things, leads to discriminative competition rules between law-abiding and non-compliant companies).

Points 2.1. and 2.2. deal in more detail with each of these market scenarios. However, it is important to stress that, although the government is the biggest 'scapegoat' for imperfect market competition (see point 5), it does not seem to be a factor (cause) of market distortions through its agrarian policies, foreign trade exchange policy or through commodity reserve. Namely, the state does not have any influence on formation of supply, demand and price of agricultural products. Therefore, the market operates entirely free from that aspect:

- *Internal support of agriculture* is very small: funds earmarked for subsidising agriculture in 2009 represented only 2.4% of the total budgetary allocation[26], while support measures were directed at a very small number of users. Dominant users of budgetary funds are physical persons, owners of farms of up to 100 hectares, while the number of farmers entitled to subsidies has been significantly reduced by the Ministry's policy in 2009[27]. Agrarian policy measures (primarily related to investment support) correspond to the green box measures and do not emphasize income-related transfers to farmers[28]. Profits or losses suffered by agricultural producers are primarily reflected in the market as a result of achieved prices not influenced by the state.

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26 *Republic of Serbia 2009 Budget Law*. Offical Gazette No. 120/08 and 31/09.

27 Since 2009, only farmers insured with the Serbian Pension Fund have been entitled to subsidies.

28 Popović, Katić (2007: 105).

- Serbia's duty protection is extremely high, particularly as compared to the EU (average rate of import duty for agricultural products is 16.92%, unweighted average)[29]. Serbian law makes provisions for increasing or reducing the duty rate by Government decree. Furthermore, the state can prohibit the export of specific agricultural products if it threatens the level of domestic spending. However, the state does not use or rarely uses these measures (the time frame is restricted), and therefore they have no distortive effects. In addition, *processes of customs liberalisation have been initiated in foreign trade policy,* and are reflected in numerous free trade contracts. These represent regional integration schemes with trading agreements. For example, Serbia has unilaterally begun to implement an *Interim Trade Agreement* with the European Union, which implies phasing out and/or abolishing customs barriers in a transitional implementation period of six years for goods imported from the EU. There is also the *CEFTA Agreement* and *Agreement on Free Trade* between Serbia and Russia. Although liberalisation of trade essentially means facing foreign competition (this competition should develop and increase domestic competitiveness through abolishing monopolies and more investment in quality and productivity) and access to cheaper importing inputs and agricultural products in the domestic market, it is important to highlight the question of how and whether domestic producers will deal with foreign competition. This is especially the case if we consider low internal support, as well as too few opportunities for using pre-admission EU funds.
- The possibility of influencing the supply, demand and price of agricultural products through the Commodity Reserve Bureau is almost non-existent. The government does not purchase or purchases very small quantities of agricultural products for the purposes of market stabilisation (under circumstances where prices drop considerably during the purchase).

2.1. Olygopsony and abuse of a dominant position by certain companies

In the majority of primary agricultural commodity markets, mainly sunflower, soya, sugar-beet and raw milk markets sales relationships are defined by long-term (standard) sales contracts on business-technical co-operation in manufacturing and purchase, between buyers and primary producers. These markets are dominated by several large and financially strong processors and buyers of agricultural commodities (olygopsony). They significantly participate in the market and have considerable market power to influence purchase terms and

29 *Law on Customs Tariff*, The Official Gazette of the Republic of Serbia, number 62/05 and 61/07 and *Regulation on Harmonisation of the Customs Tariff Nomenclature for 2008* (Official Gazette of the RS, numbers 112/2007 and 9/2008).

conditions and agricultural product prices. Consequently, they are in a position to influence the production levels of these products[30].

Specific solutions created by the *Commission for Protection of Competition*, as well as constant requests sent to the Commission by various Ministries to examine whether there is distorted competition in the market (purchase markets of raw milk, wheat, raspberries, edible oil trade, etc.), clearly indicate that these markets are to a large degree exposed to distortions or risk of competition distortion. The following are some examples of olygopolist market structures:

- According to the 2008 Decision by the *Commission for Protection of Competition of the Republic of Serbia*, dominant participation in the purchasing and processing of raw milk in the domestic market is held by one competitor (47.4% in 2006), and this position was abused by imposing unfair business terms and conditions.[31] The *Commission* found a series of irregularities, including the procedure for establishing raw milk quality, establishing milk purchase price, primary producers' obligations, dairy-plant rights, etc. It is interesting to note that the total number of buyers (dairy-plants) in the Republic of Serbia in 2006 was 211. Among these 211, and apart from the one dairy plant with a 47.4% market share and three dairy-plants with individual shares of 3.9-5.8%, all other dairy-plants had an individual share of milk purchase of only 2%. There are over 280,000 raw milk producers on the supply side, where around 80% of these producers have 1 to 3 heads of dairy cattle[32].
- As far as the edible sunflower oil market is concerned, in 2009, after conducting research and by request of the *Ministry of Trade and Services of the Republic of Serbia*, the Commission announced that "there is a likelihood that individual provisions of reported contracts between oil refineries and commercial chains do not comply with the *Law on Protection of Competition*. Therefore, conditions were met to initiate proceedings against the contracting parties (edible oil producers)[33]". Although the Commission was not able to find concrete evidence

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30 For example, four factories can be singled out in the production of oil crops. Two of these four factories belong to the same business system. In milk production, one business system (consisting of five large dairies) has dominant market participation, while eight privatised sugar factories are shared among three owners. In flour and bread production there is one predominant company.

31 Decision by the *Commission for Protection of Competition* of the Republic of Serbia, dated 25 January 2008.

32 *The National Programme of Agriculture of Serbia 2009-2011*, March 2009, Serbian Ministry of Agriculture, Forestry and Water Management.

33 Announcement by the *Commission for Protection of Competition*, dated 26 October 2009.

of distorted competition (according to current law), it stressed that there was a likelihood of the existence of not only prohibited so-called horizontal agreements among oil refineries themselves, but also prohibited so-called vertical agreements between oil refineries and commercial chains.

- During the second half of 2009 the *Ministry of Agriculture of the Republic of Serbia* asked the Commission to investigate the existence of cartels in the raspberry market, i.e. to establish whether there was an agreement among buyers about the raspberry price. Despite the fact that the Commission found irregularities in raspberry purchase, as well as in specific articles in long-term contracts on business co-operation, the Commission announced that there was no violation of the *Law on Competition* in the process of raspberry purchase in 2009. Furthermore, the Commission stressed that the potential existence of a cartel was not a crucial problem in that market. More specifically, "even if a cartel existed and its existence was sanctioned, the same problem was likely to arise the following year. The only difference would be that buyers would be more careful when reaching agreements in order to ensure that they are not detected"[34]. It is very important to emphasise that research conducted by independent institutions into individual shares in cold-storage plants and the analysis of commodity value chains have not yet been completed, the aim of which is to establish the cost structure of storing, packing, marketing and distribution in the raspberry export price. Without such research it is difficult to evaluate the 'adequate' farmer share within the export price of raspberries, as well as whether there is a satisfactory level of competition in raspberry purchase.
- Since 2006 *the Ministry of Agriculture of the Republic of Serbia* has been sending an annual request to the *Commission* to establish whether or not olygopsony, a cartel, or some other form of association aimed at distorting competition exists in the wheat market. The Ministry's requests have been based on information that the wheat price always drops immediately before the wheat harvest-time, i.e. agreement on the purchase price is made between the large purchasers in the wheat-milling industry. Large purchasers defend themselves by claiming that there are around 356 registered mills in Serbia, and that it is impossible to achieve co-operation among them. The Commission considered the request in 2006 and failed to establish a violation of competition in the wheat market; since then it has failed to reply to the Ministry's requests.

34 Material of the *Commission for Protection of Competition* of the Republic of Serbia. Internal documentation.

Olygopsony and a certain degree of competition distortion are present even in the agricultural commodity retail market. Research on olygopsony in the retail market has indicated that there is a concentration of retail in Serbia and domination of large trade companies over manufacturing companies. This restricts competition to a certain degree - consumers benefit from low prices in the short-term, while small commercial chains, shops and manufacturing companies lose[35]. Furthermore, the *Commission for Protection of Competition* announced in 2007 that a single company has a dominant position in Belgrade's retail market (this company's market share was 63.4% in 2006). Clearly in nearly all countries commercial chains wield enormous negotiating power over their suppliers (more specifically, over primary agricultural producers)[36], Serbia being no exception. Distorted competition is visible through different types of conditioning (or blackmailing) by commercial chains, and is reflected in pricing, defining of product quality, setting of payment terms and conditions, imposing of packaging standards, etc. Primary agricultural producers do not have any influence over these demands or conditions set by hypermarkets. Furthermore, the domination of hypermarkets is obvious even in their relationship with food industry suppliers, which has negative implications in the primary agricultural sector. More specifically, the long payment terms in the food industry set by hypermarkets result in long payment terms for primary agricultural producers, who are also suppliers in the food sector. At the same time, there is a reduction in the financial capacity of the food industry to aid the primary sector by investing in higher technology levels in raw materials production.

Somewhat more favourable market circumstances and a higher degree of competition in retail marketing of agricultural products are present in large consumer centres (Beograd, Novi Sad, Niš). More specifically, the number and proximity of green and wholesale markets in these cities offer considerably more opportunities to suburban farmers to market their produce, as compared to farmers in rural areas. Agricultural producers of relatively low economic power, those who did not manage to conclude contracts with hypermarkets, processors and importing companies, particularly benefit from the advantages of proximity and high potential of these markets. According to the data from the *Development Strategy of Market Operations in Serbia*, green and wholesale markets have

35 Drašković and Domazet (2008:45, 77-78).

36 Marketing of primary agricultural products (primarily fruits and vegetables) for the hypermarket sector can be achieved only by the small number of family holdings and companies that can maintain large production and quality standards. An interesting fact is that the domestic retail channel that has a dominant share of retail in Belgrade belongs to the business system that owns several large domestic agricultural firms.

approximately a 35% share of the total turnover of agricultural products in the Republic of Serbia (excluding Kosovo and Metohia). The growth of market turnover is weaker than turnover growth of agricultural products in wholesale and retail.[37]

Olygopsony in the agricultural commodity market is ***impossible to avoid***, because of the presence and inevitability of various factors that contribute to such a market structure: (1) the inefficient activity of the *Commission for Protection of Competition*; (2) the obvious concentration processes of companies in processing and trading sectors; (3) the large number of small disunited agricultural producers on the supply side who do not have storage capacity, financial resources, or an ownership share in companies-purchasers; (4) the small domestic market characterised by low purchasing power; (5) aggravated marketing opportunities, particularly for export; (6) high technological demands for manufacturing and mandatory introduction of standards in food safety and quality systems as factors aggravating entrance to the sector. Similarly, it is impossible to avoid olygopsony in the retail market, due to the small domestic market, the globalised retail market, and a more prominent concentration and consolidation of retail in all countries, with strong competition of retail companies in international markets. However, taking into consideration that the personal interest of each olygopsony member brings such a market structure closer to competition[38] and with strong institutions which control and sanction monopolist behaviours, *olygopsony can be very useful*. The numerous advantages of such a market structure can outweigh its flaws in the form of weaker competition or the constant risk that competition can be significantly distorted by prohibited agreements, concentration, or abuse of a dominant position.

The *main advantages of the existence of several strong multinational companies* (processors, cold-storage plants, hypermarkets) whose operations involve the purchase of agricultural products are as follows:

- Long-term contractual relationship (co-operation) is established between buyers and agricultural producers, whereby farmers reduce their market risk.

37 *Strategy Market Activities in Serbia* (2007: 1, 28-29).

38 This is a special feature of the Serbian cold-storage plants that purchase raspberries. According to data from the *Serbian Association for Fruit and Vegetables*, around 300 cold-storage plants have been registered in Serbia. There is a minimal probability of these cold-storage plants operating conjointly, primarily due to their prevailing personal interests. For example, during the 2009 raspberry purchase, there were as many as 17 different raspberry purchase prices on the market. Survey Questionnaire.

The research by the *Commission for Protection of Competition* as well as the authors' survey of farmers in 2009 indicate that producers are inclined to commit to secure buyers with whom they have long-term contracts, even if purchase price is lower than market price (price offered by other buyers).

- High demands by buyers in terms of adhering to agreed quantities and quality of products and delivery terms contribute to developing modern and reliable suppliers (family holdings) and strengthening their competitiveness. This will be of crucial significance in the process of trade liberalisation and when facing foreign competition.
- Partnership between buyers and producers frequently does not end at the sale. Instead, through their contractual relationship it contributes to: (a) production modernisation (through transfer of technology, information, new knowledge and training); (b) promoting product quality by introducing and certifying food safety and quality management systems (HACCP, Global Gap); (c) stronger financial opportunities for agricultural producers, whose resources are frequently insufficient to start production (support usually consists of providing manufacturing input).
- The numerous positive effects of large and modern companies in the food industry, primarily from the consumer aspect, i.e. promotion of product quality, introduction of standards, increased product range. This is directly linked to these companies' large investment in marketing and research and development.
- In the case of hypermarkets the advantages of trade modernisation are obvious (arranged buildings, introduction of e-commerce, lower retail prices, etc.) In addition, hypermarkets develop their own purchase and distribution centres for conducting legal purchasing, sorting and packing of agricultural products.

2.2. Absence of organised purchase (contracted production) and a large share of 'grey' economy in the purchase of agricultural products

In the market of a large number of agricultural products, especially in the *live cattle, fruit and vegetable markets,* absence of ownership and contracting relationships between producers and processors, and vertical integration between producers and traders, as well as the large influence of the 'grey' economy on the purchase process, all create huge problems for organising and planning agricultural production. Even though we cannot explicitly speak about distortion or absence of competition because there are a large number of slaughterhouses, co-operatives, cold-storage plants, and wholesalers in the purchase market, the following suggests the existence of distorted competition:

- The high percentage of purchases in the *'grey' economy,* i.e. in irregular purchase and payment channels. On the demand side this market is characterised by: (1) improvised purchasing stations without a purchasing licence, i.e. without the minimum technical and sanitary conditions; (2) slaughterhouses not officially registered and in need of quality systems; (3) numerous intermediaries in wholesale and green markets. Cash payments are also common. The consequences of such markets are: (a) unfair conditions for competition between compliant and non-compliant companies; (b) exposure of small agricultural producers to buyers' despotism, arrogance and unfairness, further enhancing an unstimulating environment for investing in increased production.
- Buyers (slaughterhouses, dairy plants, cold-storage plants) of low financial power, with few marketing opportunities and low quality standards, represent a special problem. These buyers do not have long-term business policies (most frequently their goal is to make fast and easy profits), their demand is highly oscillatory, as are their purchase prices. This issue is further enhanced by undeveloped institutions and associations of agricultural producers that cannot provide protection of ownership rights or efficient enforcement of court decisions. In practice, this most frequently relates to insecure and uncertain contracts, i.e. the provisions of contracts are frequently not complied with, especially provisions that define payment terms, while there is no adequate grading of products being purchased, etc.

Undeveloped logistics (deficient transportation and storage systems) *and undeveloped physical infrastructure* (poor road and railroad systems) increase high transaction costs, risk of spoilage, and the risks of producing and selling outputs, whereby imperfect competition is additionally increased in these markets. Also, high transaction costs make it difficult for domestic producers to compete with food imports. In a large number of cases, if transaction costs were added to production costs, the total cost would make the goods uncompetitive in the world market or with imports.

The strength of the negative impact of undeveloped logistics and physical infrastructure is particularly prominent in highland areas, characterised by producers of low economic power (smallholdings) that are unconsolidated and geographically scattered. A typical example is the raspberry market (raspberries are Serbia's leading export product). Raspberry producers are located in highland areas and own smallholdings, 90% of which are smaller than 1 hectare. Furthermore, farmers often have to travel up to 40 km on very bad roads in inadequate lorries in order to transport their produce from farm to raspberry cold-storage plant. Agricultural producers have almost no negotiating power with buyers, and are frequently in need of support in order to finance their production, transfer technological knowledge, introduce new standards, etc.[39]

2.3. Survey study of primary agricultural producers

Apart from secondary sources data, significant input for the analysis of competition in agricultural commodity markets given in the previous two sections of this paper was obtained from survey research conducted in 2009 into a sample of 160 primary agricultural producers. On the basis of the database of primary agricultural producers of the *Institute of Agricultural Economics* in Belgrade, and in order to obtain the most realistic information about purchase market operations, producers with higher production power were sampled, i.e. with larger agricultural funds (land, cattle funds) than stated in the official statistics. The following sampling criteria were used: (1) holding registered with the Ministry of Agriculture; (2) producers owning more than 10 hectares of agricultural land; (3) cattle fund of more than 10 cows or cattle, or more than 50 fattened pigs; (4) holding owner younger than 60 years of age; (5) holdings ratio between the samples from Central Serbia and Vojvodina corresponding to the ratio from the 2002 statistical list.

Based on empirical experience, the authors set five main problems in the survey questionnaire, related to production organisation and turnover of agricultural products. The subjects expressed their opinions by evaluating the problems by giving *scores/marks*: from mark 1 (the least negative impact) to mark 5 (the most limiting power). The scores were analysed and factors limiting production were *ranked using the mean value* by authors (rating 1 – factor with the most negative effect on production and trade, rating 5 - factor with the least negative impact). The sampled farmers did not suggest any additional production-related problems (i.e. any problems other than factors set by researchers), even though the survey questionnaire allowed for it, suggesting that the factors limiting production were well defined.

The factor rated as the most limiting in the prevention of successful agricultural production was 'undeveloped and inefficient agricultural commodity market' (Table 1). As much as 52.5% of the sample believed that this factor had the most negative impact on production. The farmers defined this problem as: (1) lack of competition in the domestic market; (2) disorganised purchase: random purchasing processes, insecurity and unfamiliar marketing conditions; (3) long

39 Data by the 'Vilamet' raspberry growers association, Arilje. Submitted Survey Questionnaire.

periods of payment collection; (4) large share of ‘grey economy’, particularly in cattle breeding, vegetable and fruit growing (emergence of so-called ‘dealers’ in the holding itself, and in markets and other purchasing stations); (5) huge oscillations of agricultural product prices.

Table No 1. Rating of the 5 main problems of organising and planning agricultural production in Serbia in 2009

Rating	Factors limiting agricultural production	Average rating by surveyed producers
1.	Undeveloped and inefficient agricultural commodity market	4.28
2.	Inefficient institutions	3.17
3.	Insufficient support by agrarian budget	3.15
4.	Undeveloped agricultural co-operatives and associations	2.54
5.	Absence of favourable external sources of funding	1.85

Legend: Rating 1 – Factor with the most negative effect on production and trade. Rating 5 - Factor with the least negative impact;

Source: Survey Questionnaire, Institute for Agricultural Economics, Belgrade, 2009

According to the surveyed producers, the second factor limiting agricultural development is ‘inefficient institutions’. Farmers defined this problem as: (1) inefficient judiciary, i.e. weak protection of ownership rights and inefficient enforcement of court decisions (legal contracts are not executed or are executed too late - a particular problem in the cattle breeding sector); (2) inefficient operations of the *Commission for Protection of Competition*; (3) inefficient *Ministry of Agriculture of the Republic of Serbia* (unnecessary bureaucratic procedures for submitting subsidy documentation, lengthy administrative processing of applications, unsatisfactory cooperation with public servants, inaccessibility of information about farmers’ rights, inefficient advisory and inspection agencies, etc). The third rated limiting factor was ‘insufficient agrarian budget support’. According to the rating of this factor, not only are the subsidies small but they are also directed at a small number of farmers. A particular problem seems to be delays in subsidy payments. The fourth rated factor was ‘undeveloped agricultural co-operatives and associations’. The surveyed farmers stressed that agricultural co-operatives were not operating according to established principles. They also emphasised that there is a small number of existing agricultural cooperatives and their economic power is very small. ‘Absence of positive external sources of funding' received the lowest rating. This problem was explained by the following arguments: high costs of bank loans (high interest rates, high costs of processing loan applications), unfavourable loan terms (most frequently a mortgage), lending terms and conditions not harmonised with the specifics of agricultural production processes, difficulties in obtaining long-term loans, etc.

Apart from this study the competition analysis in points 2.1. and 2.2. was also based on relevant data collected by the authors using a survey questionnaire completed by a number of agricultural associations, food companies, agricultural co-operatives, cold-storage plants, etc.

3. CONSEQUENCES OF IMPERFECT COMPETITION IN THE PRIMARY AGRICULTURAL COMMODITY MARKET

The inefficiency of the agricultural commodity market, caused by the lack of competition or by distorted competition amongst market participants, has a series of negative implications:

- *Decline in agricultural production* as a result of reduced demand and/or unattractive purchase prices. According to Statistical Office data, during the five-year period (2004-2008), a decline in agricultural production was recorded for three consecutive years (2005, 2006, and 2007).[40]
- *Lack of competitiveness in the international market*, resulting in low foreign currency profits generated from export of agricultural products, compared to supply potential (capacity), and despite favourable access to the major export markets (EU, USA, Russian Federation). Although the *Food and Live Animals Sector* has for years been Serbia's only sector with a trade balance surplus[41] the commodity structure of agricultural exports is extremely adverse. The export of products of higher stages of processing and knowledge and innovation-related products are superseded by the export of crude materials. Therefore, the biggest foreign currency income is generated from cereal crops, fruit, and sugar exports, all of which are exported unprocessed. For example, although cattle breeding should be the 'engine' of domestic agricultural development, only 20% of the preferential quota of 8,700 tons for the export of live cattle and baby beef to the EU is utilised.

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40 Statistical Office Communications No 355, 2008.

41 In Serbia's total commodity exchange deficit in 2008, totalling 11.9 billion US dollars, the only surplus was achieved in the area of food and beverages exchange (total value of 578 million US dollars). Statistical Office Communications No 23, 2009.

- *High disparity between input and output price.* Agreements between buyers and processors about the purchase price result in a low price for agricultural products and a high price disparity between output (agricultural products) and input (energy and fertilizer).
- *High prices consumers pay for food and low price achieved by direct agricultural producers at purchase.* The milk purchase price is the lowest in the region and in Europe, while the retail price is among the highest. This is particularly true for sterilised milk, where a single company has a market share of 87%[42]. Furthermore, the trend of raising the retail milk price is significantly stronger than the trend of raising the purchase price.
- *High market risk and consequent low investment rates.* Taking into consideration the problems related to marketing, and unknown, uncertain or insecure purchase flows, a relatively small number of farmers venture into a credit arrangement that is clearly defined, certain and protected by law, e.g. mortgage, credit insurance, etc.
- *High market risk and consequent lack of any kind of production planning opportunities* particularly for the purpose of increased production or modernisation.
- *Low profitability of production,* resulting from the lack of modernisation and investment opportunities aimed at increasing productivity.
- Preference for a *wide business/production range rather than specialised agricultural production.*
- Processing basic commodities into value-added forms is a way in which agricultural producers can diversify and increase their share of the final product value. However, opportunities for such *vertical diversification* into more profitable and less fluctuating sectors are often blocked by barriers to entry arising from concentrated market structures.
- *High poverty rates among the rural population.* According to the data from the *Standard of Living Study in Serbia 2002-2007*: (1) within the total structure of the poor in Serbia, 61% of the poor live in rural areas and 39% in urban areas; (2) nearly half of the total rural workforce in the agricultural sector live below the poverty line; (3) despite the high employment rate the generated income in agriculture has very little impact on the standard of living of the rural population; on the other hand, income from wages has a critical importance for consumption growth.[43]
- *Reduced opportunities for efficient agrarian policies.*
- Inability to *include agricultural production in statistical, tax and balance terms.*

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42 The National Programme of Agriculture of Serbia 2009-2011, March 2009.

43 *Standard of Living Study* (2008: 141-143).

4. ANALYSIS OF COMPETITION ON THE PRIMARY AGRICULTURAL COMMODITY MARKET IN THE FORMER YUGOSLAV REPUBLICS (SLOVENIA, CROATIA, BOSNIA & HERZEGOVINA)

Competition analysis of the markets of the selected countries is given based on secondary sources data (statistical data, official data by state agencies, agricultural development strategy), as well as on the basis of survey studies that were directed at a number of institutions (*Croatian Agricultural Co-operative Association*, *Croatian Chamber of Economy*, *Chamber of Commerce and Industry of Slovenia*, *Co-operative Association of Slovenia*, *Co-operative Association of the Federation of Bosnia & Herzegovina*, *Cantonal Chamber of Commerce in Bosnia & Herzegovina*).

Based on this research, it should be noted that the agricultural sectors in these countries are taking on the attributes of dominant food processors and retailers in developed countries. However it is important to differentiate between Croatia and Bosnia & Herzegovina on the one hand, and the Republic of Slovenia on the other. Compared to the markets of Croatia and B&H, which have not been adequately integrated into the world markets, the Slovenian market has been entirely integrated, and is characterised by a high degree of organisation and efficient institutions. This significantly strengthens and protects domestic competition.

In the Republic of Croatia and B&H domestic competition in the agricultural commodity market is weak. This is due to various factors. In these countries there are many fragmented and disorganised agricultural producers on the supply side, who are geographically dislocated and lacking storage capacity. Purchase of agricultural products is predominantly organised by large processing capacity and traders who considerably influence purchase terms and conditions and agricultural product prices. Greater participation of agricultural co-operatives in the purchase of agricultural products is limited by the small number of profitable, successful co-operatives that are able to organise marketing the products of their colleagues and subcontractors. In general, there are no specialised co-operatives, particularly in the cattle-breeding sector (co-operative slaughterhouses, dairy plants). The winemaking co-operatives in Dalmatia have proven to be the most successful. Although there are no official statistical data on the presence of an underground economy, it is present in the purchase of some agricultural products, leading to the existence of dealers' influence (more precisely, blackmail). There is no commodity exchange of agricultural products in the modern sense. Also, the implementation of *Legislation on Warehouse Receipts* is only at the initial stage (and only in Croatia).

Competition in these markets (B&H, Croatia) is limited by the undeveloped *physical and market infrastructure,* which causes high transaction costs, high input prices (energy and fertilizer), risk of selling output and reduced competitiveness of domestic producers in the international market, as well as against foreign competition in the domestic market. Although storage capacity is inadequate (causing high risk of spoilage), the main weakness is transportation, particularly poor road and rail systems. In particular agricultural producers lack a developed market infrastructure which includes: (1) commercial law that can protect property, enforce contracts and resolve disputes; (2) developed market channels (co-operatives, associations) for access to affordable inputs (seeds and fertilizers) and for selling, storing, or processing output; (3) systems of agricultural banking and finance (a system that allows fast, affordable access to capital, credit); (4) a system for rapid and inexpensive dissemination of market information (where can one buy and sell, at what price?); (5) a system of easy and fast access to new technology and production techniques, etc.

The *FAO Report* from 2009 suggests that an undeveloped physical and market infrastructure is the reason why high product prices in international markets did not prove to be an opportunity for farmers in developing countries (simply, high prices did not filter through to smallholders)[44]. Although these observations by the FAO refer to developing countries, they entirely correspond to the markets in Serbia, Croatia and B&H. At the same time, an endemic problem that raises transaction costs in transition economies is extortion and bribery, largely a consequence of dysfunctional legal systems. This problem is particularly serious for sellers of agricultural products, who are vulnerable to vandalism by extortionists or corrupt officials[45]. This problem was recognised by Liefert and Swinnen in the 1990s, and still exists in Serbia, Croatia, and Bosnia & Herzegovina.

The Republic of Slovenia, which has been a EU member state since 2004, has a significantly better organised market, characterised by stronger competition and greater negotiating power for agricultural producers. In Slovenia co-operatives have succeeded in retaining the greatest or at least a significant portion of agricultural production in the market, especially with regards to the purchase of milk and meat - the main Slovenian agricultural products. On the basis of the

44 FAO (2009:30).

45 Liefert and Swinnen (2002:13).

Law on Ownership, which defines ownership transformation in the food industry, co-operatives legally obtained the share of the maximum of up to 45% of public capital in 46 food companies, thus becoming co-owners of these companies. By and large, the co-operatives in the Republic of Slovenia still operate independently in the market (procurement and sale markets), and their negotiating power is not great and is insufficient to influence purchase prices and other purchase terms and conditions. What is positive is that there are informal associations for procuring input, as well as aspirations and attempts to unite their activities, especially with regards to sale and dealing with retailers. Currently, the only successful example of united operations by co-operatives in the sale segment is the 40 dairy co-operatives that have established a co-operative society, through which they act in unison vis-à-vis a Ljubljana dairy plant in which they own shares.

5. DEVELOPING AND STRENGTHENING INSTITUTIONAL CAPACITY AS A PATH TO PROMOTING COMPETITIVENESS IN THE AGRICULTURAL COMMODITY MARKET

In the *Agricultural Development Strategy* of the Republic of Serbia, adopted by the Serbian Government in 2005, clear emphasis was placed on the indisputable role of the state in creating and developing new legislation which should ensure the prerequisites for free and honest trade and competition, simultaneously preventing monopolist market behaviour and correcting market errors'[46]. Although some years have passed since the adoption of the *Strategy*, the primary agricultural production sector is still predominantly limited by a legally unregulated, undeveloped and inefficient agricultural commodity market, mainly characterised by low intensity local and foreign competition.

It has been observed in economic literature that in a market economy one of the main tasks of the state is to correct errors, i.e. increase market efficiency. The main economic policy measures aimed at the achievement of this goal are: (1) efficient protection of competition policies; (2) encouraging competition (encouraging small companies, strengthening foreign competition, low tax rates, efficient public services); (3) regulations (state supervision over private companies)[47].

46 *Strategy for Agricultural Development of Serbia*, the Official Gazette, number 78/2005, p. 4, 9.

47 Samuelson and Nordhaus (2000:176).

In the Republic of Serbia, the role of the state in correcting market errors is minimal and limited by undeveloped institutional capacity[48]. Market structures of undeveloped or imperfect competition are actually supported and enhanced, by not being sanctioned by undeveloped public institutions, mainly legislative and judiciary, which should provide and ensure the rule of law (protect ownership, enforce contracts, and resolve disputes). One of the main reasons for having undeveloped institutions in Serbia is the absence of political will to pass adequate laws and, even more, to ensure law implementation by creating an independent and efficient judiciary.

The state has an enormous responsibility and duty to promote, strengthen and protect domestic competition through its laws and judiciary, mainly for the following reasons:

- Despite little internal support for agriculture and highly extensive agricultural production, Serbia creates surpluses of many agricultural products that could be exported;
- Customs liberalisation processes initiated with the EU will assume strong international competition; only producers who have strengthened their capacity in the market with strong domestic competition will be able to survive;
- The need to attract foreign investment. One of the strongest recommendations to the Serbian Government by foreign investors is "Creation of conditions for market competition in a regulated market, by providing equal rights for all competitors, and proper regulation of monopolies' [49].

The following section gives some examples of influences that undeveloped institutions can have on development and strengthening of domestic competition. It also recommends steps that should be taken in order to strengthen institutional capacity. However, it is important to remember that recommended solutions are in the political will domain, and the degree to which institutions, especially the judiciary, will favour protection and strengthening of competition in the domestic market will depend on that political will.

5.1. Institutional pre-requisites for strengthening market competition

There are numerous activities that a state can undertake in order to encourage and strengthen competition and create an environment for a free and honest

48 According to the 1st pillar of *Global Competitiveness Index* (Institutions) in the *Global Competitiveness Report 2009-2010*, Serbia ranks 110th out of 133 world economies.

49 Crnobrnja et al. (2008:14).

market. A state's main policies or activities should be directed at strengthening competition, i.e. ensuring full protection of ownership rights and reduction of investment risks by creating efficient legislation and an efficient judiciary, successful management of macroeconomic politics, political stability, etc. In the following sections of this paper special emphasis will be placed on the *need to build lacking institutional capacity in the areas of*: (1) warehouse receipts development; (2) development of a forward market for agricultural products; (3) development of agricultural co-operation.

The existing problems and recommendations aimed at strengthening institutional capacity in the above areas have been based on the following: (1) analysis of the existing relevant legal regulations (laws); (2) opinions about implementation of existing laws, expressed by businessmen through activities and announcements of the Serbian Chamber of Commerce; (3) a survey study that the researchers obtained from the Produkt Stock Market Novi Sad; (4) numerous previous studies conducted by the authors in the area of co-operatives and associations of agricultural workers in the Republic of Serbia.

*Building institutional capacity in order to implement new legislation on warehouse receipts***.** In Serbia, the financial system that allows access to capital is institutionally undeveloped, particularly the system of agricultural banking and finance. The abolition of primary emission as the source of financing agricultural production and the failure to find an adequate substitute have opened various opportunities for a number of speculative operations and stronger monopolies, leading to reduced production. Goods records (warehouse receipts) were only accepted as securities valid for bank loans in 2009, i.e. securities for commodity derivatives (futures, options). The *Law on the Public Storage Facilities for Agricultural Products* was passed in 2009 (*The Official Gazette of the Republic of* Serbia, number 41/09) and introduced goods records (warehouse receipt) in the market, as standardised and highly reliable securities. Warehouse receipt has three security/protection circles, and it guarantees quality and quantity of delivered products to the producer. Warehouse receipt significantly strengthens competition in the domestic market because it places agricultural producers in a situation where they can choose the selling time and price, thus strengthening the agricultural producers' negotiating power vis-à-vis the buyers.

A particular problem here is the *implementation of the Law,* or absence of corresponding decrees. More specifically, the conditions that a warehouse has to fulfil in order to obtain a public warehouse license and in order to be able to issue farmers with a warehouse receipt have not been defined. An additional problem is related to the poor state of the warehousing and grain sector, which is the result of uncertainties surrounding the legal status of partially privatised companies. There is an insufficient number of warehouses that have been adequately technically equipped and are able to control the quality of products on receipt, to sort products by class and keep them sorted, etc. There are also further problems such as the undeveloped body of collateral law, the policy of high interest rates and the bankers' inability to value collateral, lack of uniform contracts, and codified national grain standards. These economic disincentives include high interest rates that cannot be covered by increased grain prices over the storage period and high storage costs associated with the older, large facilities.

It is essential that adequate bylaws should be passed relating to the development of a functionally licensed warehouse receipts system. A larger number of smaller and more widely dispersed warehouses should be considered, which would offer greater market efficiency to agricultural trade, and should be easier to finance individually due to the lower level of required capital investment. In addition, it is necessary to ensure that the state's financial support is available to both agricultural producers (the state should reduce storage costs in public warehouses) and warehousemen (in order to enable them to modernise and improve technical conditions and apply for the public warehouse license).

Building institutional capacity for developing a forward market for agricultural products. Efficient operations of the *futures commodity stock market* significantly strengthen domestic competitiveness and contribute to efficient resource allocation, allowing market participants to reduce price risks while creating opportunities for production planning. However an undeveloped institutional basis is also present in this area. For example, there is no *Law on Commodity Exchange*. According to the existing *Law on Securities Market*, neither goods nor goods-based securities can be a subject of trade (this Law allows futures and options trade, which basically do not have goods). Accordingly, the Product Exchange in Novi Sad has a low standardisation level of trade and only organises prompt (spot) commodity trade of the stock exchange type.

For the development of forward trade using the high standard commodity financial instruments (futures and options contracts) it is essential to pass new laws, or adjust the existing legal regulations (pass a *Law on Commodity Exchange*, amendments to the *Law on Securities and other Financial Instruments*, etc.), as well as establish a clearing house as a payment and delivery guarantee, which would connect all buyers and suppliers. It is also essential to raise general solvency levels in the economy, educate all market participants about methods and benefits of forward trade, etc.

Development of institutional assumptions in the area of co-operatives and other types of agricultural association. During the 1980s and 1990s many developing countries including Serbia dismantled the state marketing boards that had previously exerted monopoly control over domestic trade and the price of agricultural commodities. The abolition of marketing boards has left an institutional vacuum. This vacuum, or the problem of absence of supply and marketing channels, is largely the result of undeveloped legislative and judiciary institutions in this domain:

- For the most part agricultural co-operatives do not operate in line with co-operative principles. In the so-called 'old' co-operatives, the employees have won over the co-operators in the management sense, while ownership of land funds has not yet been defined. At the same time, the majority of the 'new' private co-operatives are essentially private companies owned by one or several individuals. *It is essential to have a new Law on Co-operatives in place*. This Law should primarily define land ownership of the so-called old co-operatives. It should then set a new basis for changing the status of co-operatives, management, and cooperative audit. A special problem of the existing *Law on Cooperatives,* adopted in 1996, which might also continue to be a problem of the new Law, is inconsistency or absence of implementation, especially in the area of efficient functioning of cooperative audit. Therefore, the need for legislative and executive bodies to ensure full implementation of laws must be emphasised[50].
- There has been no stimulating legislative basis with regards to the formation of agricultural associations and clusters. The *Law on Associations* was only passed in the middle of 2009 (*The Official Gazette*, No 51/09), which (in contrast to the former law) made provisions for associations of physical and legal entities. It also defined the opportunities for status changes of associations, had provisions for having a fewer number of individuals forming an association, etc.

In the sphere of *joint activities* and initiatives by governmental, public, and private sectors, there is institutional support by the state directed at *strengthening vertical integration* of agricultural producers in intermediary operations (activities involving storage, transportation, processing, and distribution), as well as *construction of modern purchase and distribution centres.* These centres,

50 Paraušić, Cvijanović, Subić (2007: 49-97).

with developed infrastructure and modern equipment for purchase, selection, packing, storing and transportation of agricultural products, significantly enhance stronger competition and 'phasing out' of the grey economy, and promote long-term contracts on business and technical co-operation with agricultural producers.

5.2. Strengthening institutional prerequisites for protection of market competition

This primarily refers to ensuring efficient implementation of the *Law on Protection of Competition*, and the need to sanction the 'grey economy', which is significantly represented in the purchase of certain agricultural products.

Commission for the Protection of Competition. Competition Policy in the Republic of Serbia has been defined within a legal framework since 2005, when the *Commission for Protection of Competition* was established. The aim of establishing the Commission was to improve economic efficiency and accomplish economic welfare for the society as a whole, particularly for the consumers' benefit[51]. Although the previous *Law on Protection of Competition* of the Republic of Serbia adopted a doctrine identical to that in EU regulations, the main flaws of the Law were an insufficient number of material-legal norms, and almost equal absence of practical implementation of existing norms. The Commission was not able to obtain evidence about distortion of competition. Furthermore, in cases where abuse of a dominant position was established, the Commission was not able to penalise market participants, but only to file misdemeanour charges, while only the court was able to impose a sentence. As the result of an inefficient judiciary, what remained of misdemeanour charges was a moral sentence of a market participant distorting competition. Since 1 November 2009, implementation of the new *Law on Protection of Competition* has been initiated. The Law differs from the previous one primarily because the *Commission for Protection of Competition* was granted significantly more power, and even a possibility to impose fines. In addition, a new *Law on Control of State Aid*, in line with EU Law, has been adopted (effective

51 *Law on Protection of Competition* (Official Gazette of the Republic of Serbia, No. 79/05 and 51/09). The *Law* defines the following key areas: prohibited agreements; abuse of a dominant position; control of concentrations. According to the provisions of the current *Law on Protection of Competition*, the market participant is assumed to have a dominant position if his/her market share of the relevant market is 40%. This percentage is 50% or more in the case of two or more market participants. The following particularly represents abuse of a dominant position: imposing unfair prices or other unfair business terms on other market participants; limiting production, market, and technological development; applying unequal business terms to the same business operations with different market participants.

from January 2010) under which any state aid that distorts competition is ruled out except under certain restricted conditions. The key factor for both Laws will be to ensure implementation through an efficient judiciary. For example, without an efficient judiciary system it will not be possible to ensure the efficiency and credibility of activities of the *Commission for Protection of Competition*, and it will be difficult to investigate and demonstrate even the most obvious abuses of a dominant market position, particularly more complex cases such as blackmail or influencing suppliers, transferring profits to other business entities, etc.

Shifting from the grey economy into legal flows. The grey economy is a consequence of an inefficient inspection authority and judiciary system. In future it will be essential to raise the efficiency levels of all responsible inspection authorities within the *General Inspectorate of the Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia* (agricultural, veterinary, phytosanitary inspections), as well as other inspection agencies (labour, market, tax, customs), with more efficient judiciary and executive powers. Efficient inspection authorities and sanctioning of all non-compliant market participants should prohibit the operations to all unregistered tradesmen and processors, and abolish cash payments of purchases, corruption, despotism, and other types of non-competitive behaviours.

CONCLUDING REMARKS

One of the main problems of Serbian agriculture is an institutionally underdeveloped and inefficient agricultural commodity market in terms of allocation, which does not ensure strong and healthy competition, and does not provide maximum benefit for producers, consumers, the economy and society at large. Market structures of imperfect competition (or olygopsony domination) are also present in the world agricultural commodity market. In particular high-value crops and processed products are increasingly dominated by transnational trading, food processing, and distribution companies and retailers, which wield direct and increasing influence *on what is produced and how in the primary agricultural commodity market*. At the same time, governments of the developed countries and especially of the developing and transition countries do not demonstrate a sufficient level of interest in correcting, or at lease partially reducing, these market failures by implementing anti-monopoly laws and policies aimed at strengthening competition. In transition countries, as a result of undeveloped institutions, adjusting the production levels and purchase price to the interests of market participants on the demand side has a much greater negative effect on the income and profitability of primary agricultural producers than in developed countries.

This study particularly emphasised the fact that state intervention significantly contributes to market distortions in global agricultural commodity markets. The CAP EU had, and still has, a particularly distortive effect which significantly restricts the competitive power of countries outside the EU, especially developing and transition economies. Other than from the aspect of undeveloped institutional capacity, the role of the state in developing and transition economies is not a factor in market distortion, because these countries allocate small budgetary funds to agriculture. Furthermore, most of these countries are still in the process of 'opening' their markets through price liberalisation processes, in accordance with the WTO.

The absence of healthy and strong domestic competition in the agricultural commodity market in the Republic of Serbia is characterised by the following:

- Market structures of olygopsony and abuse of dominant position by certain or specific companies. Most agricultural commodity markets (mainly sunflower, soya, sugar-beet and milk markets) are dominated by several processors, i.e. buyers of agricultural commodities who have considerable market participation and power compared to a large number of small and disunited farmers, with respect to influencing purchase conditions and purchase price of the agricultural commodity. Such markets can be characterised by lower production, caused by unfavourable purchase price or/and processors' demands.
- Disorganised market participants, a high degree of grey economy and random purchasing processes. A certain number of agricultural commodity markets, such as cattle, fruit, and vegetable markets, could represent markets of high competition. However, lack of efficiency is reflected in a high degree of *grey* economy, as well as absence of organised purchase and contracting relationships between primary agricultural producers and buyers. These markets are characterised by high market risk and total lack of planning capacity.
- Oligopsony is present even in the retail market, i.e. marketing farmers' products in hypermarkets. It is obvious that in spite of all the advantages of hypermarkets to farmers, their dominance (market power) over primary agricultural producers is characterised by certain dimensions that limit competition.

Although oligopsony is inevitable and sometimes even useful for the majority of agricultural commodity markets, the crucial thing is that the government, due to its *undeveloped institutions,* especially the judicial system, is unable to penalise market participants who abuse their market position and jeopardise competition by breaking contracts, operating in the grey economy, etc. On the assumption that the rule of Law will be established (efficient legislative, judicial and executive branches of government, highly efficient inspection and customs agencies), *the main role of economic policies in correcting errors in the agricultural commodity market* can be boiled down to the following: (1) efficient and consistent implementation of the *Competition and Consumer Protection Laws*; (2) a shift from grey economy to legal flows; (3) institutional regulations of warehouse receipts and development of a futures agricultural commodity market; (4) institutional regulation of operations of agricultural co-operatives. All of these activities share a common goal of developing and promoting domestic competition, which will in future be one of the most significant ways of successfully facing foreign competition.

The big question is whether and to what degree the state will act with determination in ensuring protection and strengthening competition, thus contributing to long-term relationships based on trust and partnership among all market participants. It is a question that Serbia, like all other transition countries, will inevitably have to face in the future.

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