

IMPACTS OF THE GLOBAL FINANCIAL AND ECONOMIC CRISIS UPON THE AGRO-FOOD SECTOR OF UKRAINE'S ECONOMY

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This paper presents the results of a survey conducted in 2009 on the impacts of the world financial and economic crisis upon the agro-food sector of Ukraine. To identify how the crisis affected the situation and conditions of certain agro-food subsectors, two supply chains were studied: a grain chain that includes supply of material and technical resources to agricultural producers, production of grain (primarily wheat), processing of grain, and trader and retailer activities, and a pig-breeding chain that includes supply of material and technical resources to pig producers (fodder and veterinary products), pork production, pork processing, sale of meat in large lots and in retail trade. The agro-food sector showed some increase in production output and sales even in the critical year of 2009, but the different actors in the supply chain experienced contrasting fortunes. The crisis affected the availability of bank loans, and there was a general trend towards cost-cutting and reduced quality, particularly amongst retail products. We reject the view that protectionist measures could be a solution and put forward a series of recommendations for overcoming the effects of the crisis in Ukraine and for preventing or mitigating the effects of future crises².

Keywords: *financial and economic crisis, agro-food sector, wheat, pigs, Ukraine*

JEL classification: Q13

Introduction

The recent global financial and economic crisis and its scale were rather unexpected to many Ukrainian entrepreneurial structures, their nongovernmental associations, and even the Ukrainian Government. Many of them were unprepared for the crisis and did not know how to respond. Taking adequate anti-crisis measures was also hindered by a political crisis in Ukraine caused by the upcoming presidential election. As a result, Ukraine's economy had one of the Eastern Europe's highest figures of decline over the first six months of the 2009: It was projected to shrink by nearly 16% in 2009 with only a weak recovery expected in 2010 (EC, 2009).

Ukrainian banks and other financial institutions became hostages of a credit boom in foreign currency (USD, EUR) in 2006-2008. UAH devaluation caused failure to repay loans by many bank clients. Aggravation in the national economy intensified deposit outflow processes. Banks in many cases could not return deposits because borrowers had problems with repayment of loans. As a result, the National Bank of Ukraine, as the banking system regulator, introduced for many banks in late 2008 a moratorium on performance of their obligations concerning refund of deposits. That measure helped to allevi-

ate the hard situation of banks but undermined people's confidence in the banking system and adversely affected the population's consuming capacity. A number of banks (including two systemic ones) were declared bankrupt or entered bankruptcy proceedings.

Ukraine's agro-food sector was the only branch whose performance did not worsen during the crisis. According to the State Statistics Committee of Ukraine, aggregate output of agricultural products in Ukraine in all entity categories grew by 3.3% during January-September 2009 as compared to the same period of 2008, including by 6.1% at agricultural enterprises and by 1.4% in private farms. Output of plant-growing products increased by 3.4% over the first nine months of 2009 as compared to the same period of the previous year (including by 4.1% at agrarian enterprises and by 2.9% in private farms), mainly due to accelerated rates of harvesting of sunflower and sugar beet as well as to greater output of vegetable, fruit and berry products. The total output of animal breeding products during this period increased by 3.2% as compared to the same period of 2008, including 9.8% rise at agrarian enterprises and 0.9% decrease in private farms (UKRSTAT, 2009).

However, whereas Ukraine's agro-food sector looked rather successful against the background of the Ukrainian economy in general, agrarian nongovernmental organisations, some politicians, and agrarian scientific institutions point to considerable problems in the sector that have been aggravated under the crisis. These concern financing and lending for all the actors of the agro-food production and sales chain, their operating performance, assets renovation and engagement of investments, expansion of sales

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markets, etc. Thus this research aimed to assess the impacts of the crisis on the agro-food sector of Ukraine and to formulate recommendations for overcoming its effects and for reforming the sector in order to prevent or mitigate the effects of future crises.

Methodology

This study is part of an FAO-sponsored research project in four countries across Europe and Central Asia. In order to get a representative view of the agro-food sector, each looked at least two major supply chains, one crop and one livestock. Given its importance, wheat was part of every country study. In Ukraine, pigmeat was the chosen livestock sector.

Grain crops provide more than 20% of Ukraine's annual gross agricultural production output. Grain crops also comprise a major item of agrarian product exports, having 38.6% in the export of agro-food commodities (groups 1-24) in 2009 with a positive balance of foreign trade operations equal to EUR 1.7 billion. As of 13 October 2009, grain exports from Ukraine in the new marketing year totalled 7.549 million tonnes whereas the same date in 2008 saw the export equal to 7.308 million tonnes including 4.088 million tonnes of wheat (MINAGRO, 2009). The share of grain crops in agro-food commodity exports (groups 1-24) equalled to 35-38% in 2008-2009 (ME, 2009).

Pig breeding in Ukraine remained a leading animal production sector for many years, making about a quarter of gross animal-breeding product output annually. Although considerable changes have occurred in the last five years and poultry operation has become a dominant area in animal breeding, a share of pig breeding was still just under 20% in 2008. Besides, pig breeding is a traditional branch for Ukraine and pork consumption is regarded as a Ukrainian tradition. Grain production and pig breeding are interrelated branches because grain is a fodder for pigs.

Because the time available to complete this report was relatively short, and there were still very limited data available to assess the impacts of the financial and eco-

nomical crisis on the agro-food sector in Ukraine, interviews were conducted with 41 stakeholders on their views and experiences. The interview questions were formulated in consultation with the FAO Regional Office for Europe and Central Asia. Interviews in the grain supply chain covered suppliers of fertilisers, plant-protecting agents and agricultural machinery, grain producers – agricultural enterprises of various sizes and farmers, processors, grain traders and retailers. In the pork supply chain, interviewees included suppliers of mixed fodders and veterinary preparations, pork producers with various volumes of annual output, processors, traders and retailers. Besides, interviews were conducted with bank officials, civil servants and representatives of nongovernmental professional organisations.

Results

The findings of the research were as follows.

Grain supply chain

Input suppliers

The poor financial state of Ukrainian agricultural enterprises and farmers adversely affected demand for mineral fertilisers, plant protection agents, machinery, etc. Throughout 2009, a low demand for products made by Ukrainian chemical enterprises was also observed in world markets. Under such conditions, the capacities of Ukraine's major chemical enterprises were only half-utilised, and the Rivneazot company did not even start working in 2009. All enterprises terminated their investment activities; and some introduced a four-day working week, sent some workers and short-term leave, and cut wages by 15-20% on average (APK-Inform, 2009). Given the low demand, domestic fertiliser prices remained rather high and even grew by 5-10% by September 2009 (Table 1). Enterprises, traders and other fertiliser vendors sought to secure their revenue by increasing prices during the sowing period to avoid a loss or even achieve some profitability.

Table 1. Agricultural input price indices in Ukraine

	2005	2006	2007	2008	2009
	previous year = 100				
Total index of expenditures	120.9	124.4	124.3	143.6	105.9
materials and technical resources of industrial origin	114.5	114.0	119.5	144.1	101.0
	December to December of previous year				
Total index of expenditures	123.0	121.2	134.7	120.0	113.6
materials and technical resources of industrial origin	111.9	113.2	137.4	111.3	116.8
of which:					
tractors, agricultural machinery	111.2	110.9	112.3	127.7	108.5
cars	90.0	102.4	109.5	123.8	114.9
compound fodder	98.5	114.8	163.7	103.6	109.9
chemical fertilisers and chemical means of plant protection	109.0	114.4	141.7	144.2	114.5
oil products	119.9	109.9	149.0	78.3	147.3

	2005	2006	2007	2008	2009
<i>electric power</i>	116.9	112.5	120.0	143.6	100.7
<i>fuel</i>	126.3	117.1	128.4	107.7	110.6
<i>building materials</i>	115.3	128.1	131.4	125.4	103.4
<i>timber and saw timber</i>	108.8	112.1	108.2	113.9	109.8
<i>tires and rubber-technical goods</i>	112.9	119.1	110.2	128.3	108.5
<i>other resources</i>	91.4	124.9	126.5	110.5	107.5
<i>material resources of agric. origin</i>	104.0	106.2	111.8	104.1	105.7
tariffs and surcharges for services	100.0	100.5	100.7	107.4	98.9
labour payment	144.7	133.2	134.8	130.7	111.8

To reduce production costs, enterprises resorted to procurement of ammonia from their Russian competitors to make end products such as ammonia nitrate and carbamide, saving more than EUR 20.6 per tonne of ammonia. An important factor in the increase of efficiency of production consists in the reduction in prices of imported gas – a raw material for the Ukrainian chemical industry. A start of a price decrease was observed in the summer period and this trend was expected to continue throughout the year. No significant demand growth was foreseen for 2010, and demand on the part of agriculture was expected to be skewed towards the cheapest fertilisers (ammonium nitrate).

Producers

The 2008 grain harvest (53.3 million tonnes) was a record for Ukraine's independence era due to favourable weather conditions (Figure 1). Sale by producers of the grain grown in 2008 allowed them to carry out a successful sowing campaign but a crisis in 2009 had a downward impact upon demand. As a result, grain prices dropped, first of all on the part of domestic consumers. A new harvest also did not promote an increase in grain prices (Figure 2). Because of delays and problems with payment for purchased products, agricultural producers had difficulties with harvesting of newly grown crops and sowing operations.

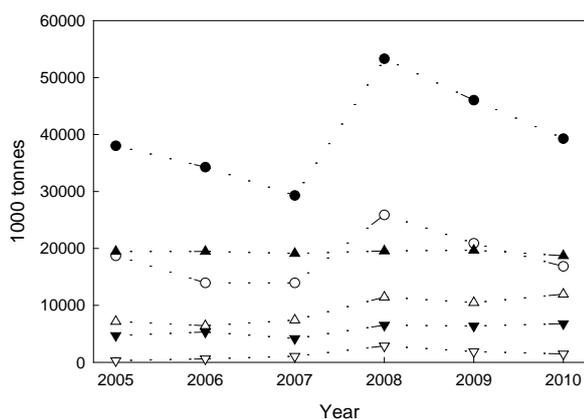


Figure 1. Production of major crops in Ukraine, 2005-2010, 1000 tonnes. Filled circles: grain total; open circles: wheat; filled triangles up: potatoes; filled triangles down: sunflower seed; open triangles up: maize; open triangles down: rapeseed

Under rather good weather conditions, about 43 million tonnes of grain crops (including 22 million tonnes of wheat) were harvested in 2009, i.e. considerably less than in 2008.

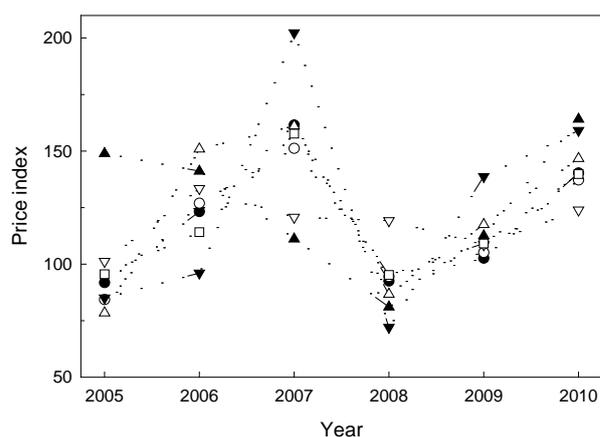


Figure 2. Producer price indices of crops in Ukraine, 2005-2010, previous year = 100. Open squares: crop products; filled circles: grain total; open circles: wheat; filled triangles up: potatoes; filled triangles down: sunflower seed; open triangles up: maize; open triangles down: rapeseed

Hence, the conditions of agricultural producers considerably worsened in 2009, which showed itself especially sharply during the harvesting period when they needed to procure fuel for harvesters and tractors as well as during autumn sowing. It affected results of autumn sowing for the 2010 harvest (in 2009, an expected autumn sowing area in Ukraine, according to preliminary data, would be 1.5 million hectares less than in 2008) (MINAGRO, 2009). The principal factors were firstly a decline of grain demand on the part of Ukrainian and foreign consumers, and of grain prices, and secondly the difficult financial conditions of banks and other organisations that had credited agriculture in previous years. In many cases they were unable to provide loans to agricultural producers.

The situations of all grain producers deteriorated. For vertically-integrated agrarian structures (agro-holdings, which were almost unaffected by the crisis), the worsening had much weaker implications than for traditional agricultural enterprises (having 3-5 thousand hectares of land) and farm units. Most exposed to financial risks were companies having the largest credit borrowings, especially in foreign currency or taken from foreign lenders. Ukrainian agro-holdings were expected to come back to international capital markets in 2010. Good management allowed them to manoeuvre in difficult settings: when they lost sales in external markets they compensated by domestic sales, and vice versa. All had plans of further development, except

those that had to sell some part of their shares and assets (LigaBusinessInform, 2009). For example, the NIBULON agro-holding not only managed to increase its gross receipts over 2008 but also launched a EUR 100 million project to build its own river fleet for grain deliveries, ports, and port elevators (ProAgro, 2009).

All grain production in Ukraine is operated on leased areas. To minimise costs, many producers (including agro-holdings) reduced their areas by surrendering lease of, first of all, low-yielding land (Ukrainian Agrarian Confederation, 2009). It resulted in a revenue decrease for lower-income owners of land plots as well as an increase of the area of uncultivated land. Rural areas have always had problems with employment, and 2009 saw a rise in the number of self-employed persons only on their own land plots because agricultural enterprises and farmers reduced their labour demand.

Traders

The main buyers of grain are traders via which grain is exported. The record-breaking harvest in 2008 and a rather high one in 2009 had a favourable-for-traders impact upon grain supply. A price decrease was seen on the domestic market and many of the interviewees stated that traders in Ukraine had benefited from the crisis. Meanwhile, by virtue of declining world demand for grain crops, Ukrainian grain traders earned, according to various estimates, 10% less in 2009 than in the previous year because they operated at a minimum margin (Ukrainian Grain Association, 2009).

Under limited availability of loans, the traders' situation turned out better than that of other actors in the supply chain. Large traders felt changes in availability of loans to a lesser extent because grain trade traditionally is a rather liquid business. Besides, a large share of trading houses operating in Ukraine are subsidiaries of big international companies and obtain loans via their parent structures under more preferential conditions. However, loans for long-term projects, e.g. construction of terminals, became more problematic for such companies. Development of the situation shows that traders are gradually returning to long-term projects as well.

Major problems indicated by traders and directly decreasing grain prices in Ukraine include problems with value added tax refund in grain exportation, and high rail transport (they increased by almost 70% in 2008) and grain transshipment tariffs in port elevators. However, according to the president of the Ukrainian Grain Association, the railway tariffs are suitable to traders provided that they are not increased during a marketing year. The volume of grain exports from Ukraine in the 2009-2010 marketing year was estimated at 16-18 million tonnes, but could reach 20 million tonnes without detriment to formation of carryover grain stocks as of the marketing year's end.

Bakeries

Bread-baking complexes and bakeries found themselves in a difficult financial situation. Ukraine's baking industry has about a thousand bread-baking plants (400 of them being large ones) and the same number of mini-bakeries. Large and medium-sized baking complexes produce about 2-2.5 million tonnes of breadstuffs on average per year. Another 20-30% of production is provided by small private enterprises and mini-bakeries, including in supermarkets and hypermarkets. Ukraine's bakery market is highly concentrated. Seven producer companies control about 40% of it and share the market on a territorial basis (UKRANEWS, 2009).

For the purpose of providing them with raw materials at low prices in 2008 (while increasing grain demand and prices), bread producers were advised to procure necessary amounts of grain for loan funds at an acceptable interest. Under sharp UAH devaluation, these enterprises then had repayment problems. In addition, energy utility prices went up. These factors determined growth of costs and low production profitability. The debt burden was 30-40% of capital in terms of the entire sector. In most large holdings, amount of indebtedness was not critical, being at most 20-30% of capital. In fact every enterprise reached a compromise with banks on debt restructuring (UFS, 2009).

Taking the social significance of bread into account, baking complexes had no possibility to adequately increase prices of their products. As far back as in 1996, the Cabinet of Ministers of Ukraine issued a resolution entitling local authorities to set limits of profitability for production of lean-formula bread (flour, yeast, salt, water) weighing over 500 g as well as limits of trade mark-ups to the wholesale price of that bread's producer. About 50% of bread made in Ukraine is subject to such regulation. However, enterprises of various regions are in unequal conditions (in some regions, local budgets subsidise social types of bread whereas other regions have no such provision). Prices of bread with fillers are not limited, but the demand for these products has dropped considerably. Meanwhile, retail prices of bread made of first grade flour, mixed rye-wheat bread, and bread made of top-grade flour grew by 9-11% during 2009 (ME, 2009).

According to the State Statistics Committee of Ukraine, bread consumption has been steadily declining during the last eight years, influenced by at least two factors. Firstly, the improvement of living standards results in decreasing consumption of bread and macaroni (while consumption of meat products grows). Secondly, as incomes grew, the population shifted to more expensive sorts of bread some part of production of which is not accounted for by official statistics.

Overall, there was an 8-9% reduction of bread consumption during the first half of 2009. Demand for high priced products (confectionary, pies, etc.) especially suffered. To cut expenses and accumulate funds to pay back

loans, baking complexes established extra days off for their personnel, cut costs, particularly wages, used cheaper but lower-quality flour, and reduced their stocks. Accordingly, milling enterprises reduced their consumption of valuable and strong wheat while increasing consumption of forage grain and flour additives. Thus, quality of bread products in the low price segment significantly declined. Inspections conducted by the Chief Directorate for the Protection of Consumer Rights of Ukraine showed that, over nine months of 2009 on average, about 18% of the products checked failed to meet required standards (DSSU, 2009). However, baking complexes dismissed only a small number of office staff and tried to keep production personnel.

The baking complexes which were members of vertical integration associations (holdings) were in a better financial position. Their integration allows expenses and financial flows to be optimised, and funds redistributed timely. Some continued investments which had been started and innovative programmes. For example, the Khlibprom concern continued the corporate expense and process optimisation project commenced in 2008. In September 2009, heat economisers were installed at the concern's Kalush Bread-Baking Complex: this equipment was expected to secure energy saving equal to 3.5% of annual energy demand (UNIAN, 2009).

Small independent baking complexes were in a more difficult situation. A debt burden of some such enterprises reached 60% of their capital. On the one hand, such complexes can hardly find a compromise with banks but, on the other hand, they are rather attractive to investors due to their raw materials base, regional sales market, and warehouses (elevators). Experts believed that some investors were interested in buying such entities while some owners were willing to sell them.

Retailers

Another trend is that consumers increasingly prefer domestic-made goods because imports became much more expensive due to UAH devaluation. Products of brands with a good reputation enjoy greater demand. The trend encouraged the most successful companies to implement investment projects even during the crisis. For example, Chumak, a well-known manufacturer of ketchups and canned products, launched a plant in Kherson oblast in October 2009 to produce premium-class macaroni products from rare hard sorts of Ukrainian wheat (Interfax, 2009).

Retail trade's accounts payable, and increasing energy and utility prices, substantially reduced the profitability of trade, and every distribution network faced problems. Twenty percent of retailers, including such giants as Velyka Kyshenya, had to close their unprofitable stores whereas Okay hypermarket chain shut all of its sales outlets. On the other hand, 18 of 50 Ukrainian distribution networks expanded their representation in re-

gions as compared to the similar period of the previous year. 42% of networks remained stable by directing efforts to maintaining operation of existing sales outlets (Interfax, 2009). Many retailers promoted products under their own trademarks (so-called private labels) in their stores.

Demand and purchasing power restricted price increases by the retail sector. Therefore, discounter companies – where prices were 15-20% lower on average than in usual supermarkets – were more successful. Among such companies, Ukrainian Retail and ATB-Market chains opened new stores and expanded their business. A classic discounter is Auchan, a transnational company, which entered the Ukrainian market with five new hypermarkets despite the crisis (UNIAN, 2009). Retail representatives expected better consumer attitudes and higher demand already in early 2010.

Pork supply chain

An annual growth of meat consumption has been observed in Ukraine in recent years (Figure 3). Whereas annual per capita consumption of meat and meat products in 2005 was 39.1 kg on average, the figure for 2008 was already 50.6 kg, but it still remained lower than the 1990 indicator (68.2 kg). Yearly growth over that period was 3.8 kg per year. Per capita pork consumption increased from 12.6 to 17.7 kg during 2005-2008 (UKRSTAT, 2009). However, due to the decline in people's income and aggravation of the economic situation, meat demand and consumption in 2009 declined by about 5-10%. An even sharper shift towards less expensive poultry meat has occurred.

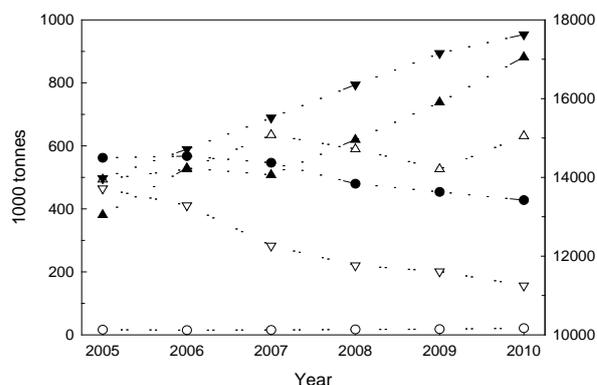


Figure 3. Production of animal products in Ukraine, 2005-2010, 1000 tonnes (meat in slaughter weight). Filled circles: cattle for slaughter; open circles: sheep for slaughter; filled triangles down: poultry for slaughter; open triangles up: pigs for slaughter; filled triangles up: eggs, mln. pcs; open triangles down: milk

An especially acute decline in demand for meat caused a decrease in pork output during January-April 2009 of 41.4% as compared to the same period of 2008, down to 29.2 thousand tonnes whereas the figure in 2008 was 49.9 thousand tonnes. At the same time, output of meat and by-products of food poultry increased by 10.6% (UKRSTAT, 2009). By the middle of the year, people had adapted them-

selves to the new financial conditions, and demand for pork slightly rose. It was expected that pork production output in 2009 would remain at the previous year's level decline slightly, by 3-5% (down to 480-470 thousand tonnes in slaughter weight against 496 thousand tonnes in 2008). Experts also forecast a slight increase in pork output by agricultural enterprises, which is mainly owing to pigs of bacon and meat breeds reared by specialised pig-breeding complexes. Factors promoting growth of pork output include:

- a decrease of forage prices due to a record-breaking grain harvest in 2008;
- reduced imports;
- rather stable demand for pork meat;
- increased pig population.

Producers

According to the State Statistics Committee of Ukraine, the pig population as of 1 October 2009 increased by 8.0% as compared to the previous year, to 7.462 million (UKRSTAT, 2009). Growth of pork output by Ukrainian producers was promoted by a considerable decrease of meat imports due to the devaluation of the UAH. Besides, controls to prevent meat smuggling are rather tough. According to estimates, port imports declined in 2009 by 30% (UAAN, 2009). Despite the decline in people's purchasing power, pork prices in Ukraine stayed at a rather high level (Figure 4). As of 1 October 2009, purchasing prices of pigs in live weight were 1.48 – 1.55 EUR/kg on average (2nd category), that being 10-15% higher than as of the same date in 2008 (UKRSTAT, 2009).

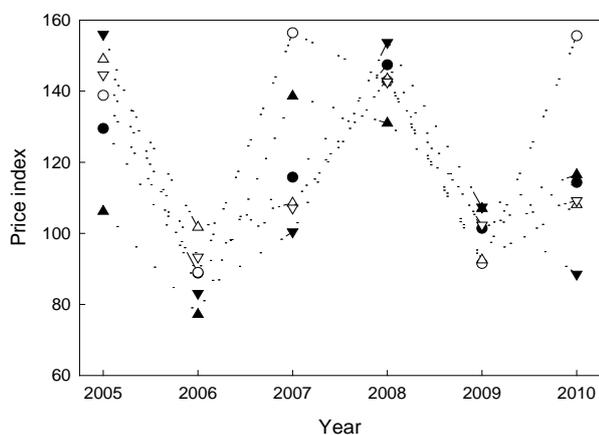


Figure 4. Producer price indices of animal products in Ukraine, 2005-2010, previous year = 100. Filled circles: animal products; open circles: milk; filled triangles up: eggs; filled triangles down: pigmeat; open triangles up: beef and veal; open triangles down: poultry

A demand-drop in early 2009 was rather easily sustained by large pig-breeding complexes, first of all those being part of agro-holdings. These complexes have a closed production cycle and can afford rearing highly-productive breeds and introducing modern pig breeding and processing technologies. Profitability of pig breeding

in such entities reaches 40-65%. For other agricultural enterprises, the beginning of 2009 was a serious trial that they have not yet overcome despite stabilisation of demand for pork and cheap fodder. Profitability of pig breeding in the branch overall was negative in 2007-2008, minus 27-20%. In 2009, positive profitability (around 2-4%) was forecast for the entire branch. In all agricultural enterprises, the pig population has increased by 17.4% as of 1 October 2009 as compared to the same date a year before (UKRFOOD, 2009).

Rural households proved to be more flexible. Cheap fodder encouraged pig population growth in household backyards. In the year to 1 September 2009, pig population in households increased by 1.6%. A factor deterring pig population increase in households is the Law of Ukraine on Safety and Quality of Foodstuffs (in the wording of the Law of Ukraine No. 2809-IV of 6 September 2005). According to this Law, rural residents are prohibited to sell meat of pigs slaughtered by them directly to consumers beginning from 1 January 2010 (i.e. pigs must be slaughtered at specialised slaughter enterprises). It should be noted that the Parliament passed a law in October 2009 to postpone implementation of that provision until 2015 (Verkhovna Rada, 2009).

Large pig-breeding complexes participating in big agro-food structures (agro-holdings) have found themselves in the best position. Those that have no big financial borrowings are implementing their development plans. For example, Kalyta, one of Ukraine's largest pig-breeding complexes (Kyiv oblast), signed a contract with the British company JSR Genetics for delivery of pig breeding stock in October 2009 amounting to more than 1 million UAHs. The total pig population in Kalyta pig-breeding complex is about 70 thousand including 9,400 at a breeding farm (UKRANEWS, 2009).

Processors

Processing enterprises found themselves in a somewhat worse position relative to pork producers. Owing to the decrease in demand for meat products, production of sausage products declined in the first four months of 2009 by 18.4%, down to 83.3 thousand tonnes against 102.1 thousand tonnes in January-March 2008. First of all, demand for products in more expensive segments has dropped. On the other hand, meat products in a low-price segment and, to a much lesser extent, in a medium-price segment, became highly sought after. Consumption and output of meat and sausage products were expected to decline by 20-25% in 2009, and their quality has declined substantially, too.

The total amount of cattle and poultry in live weight received by processing enterprises during January-September 2009 was 816.0 thousand tonnes, 11.1% less than over the same period of the previous year. Of this, processing enterprises bought 316.6 thousand tonnes of

cattle and poultry in live weight from all categories of producers (29% less than in January-September 2008). Also, processing enterprises used for processing 496.7 thousand tonnes of cattle and poultry reared by themselves (6% more than in January-September 2008) (UKRSTAT, 2009).

The devaluation of the UAH, together with growing energy prices, resulted in a considerable increase of costs of meat product output (almost a half of raw meat and all ingredients like spices, additives, casing, etc. for sausage production are imported). However, processing enterprises could not adequately increase product prices: demand for products of high-price categories dropped whereas prices of most cheap products (e.g. cooked sausage) are subject to state regulation: any price changes are subject to endorsement by the State Price Inspectorate. As a result, the profitability of processing enterprises has fallen to a minimum. Most pork producers agree to supply pigs for processing only against prepayment, according to managers of processing enterprises.

In response to the challenges of the crisis, processing enterprises have cheapened the structure of sausage raw materials, reduced supporting personnel considerably, and changed specialists over to part-time work. Their product range has also changed. For example, output of pre-prepared meat products has decreased by 30% (because people cook much more foodstuffs at home with their own hands). Some processing enterprises have changed over to a shorter working schedule thereby reducing utilisation of production capacities to 50-60%.

The situation of processing enterprises has also been aggravated by the fact that retailers delay payments for meat products sold. Those that had the largest credit borrowings now find themselves in a considerably worse position. An example is the GULLINBURS meat-processing complex (Poltava oblast) built in February 2008. Investments in the complex amounted to EUR 24.2 million. The funds were invested in its construction and its equipment by the Austrian company Norbert Schaeffer Gesmbh. The main product of GULLINBURS is high-quality chilled pork and beef to be sold through retail chains directly to consumers. Although GULLINBURS is an enterprise using Euro-4 level technologies, certified for HACCP and ISO 22000 (production quality and safety), and making highest-quality products, the complex has suspended its operation (UAAN, 2009). According to estimates by Ukrmyaso National Association of Meat and Meat Product Makers, up to 50% of meat-processing enterprises were expected to close in 2009 because of finance shortage. Small and medium-sized enterprises facing a lack of floating assets may be especially damaged.

Meat-processing enterprises participating in agro-holdings which have no substantial financial borrowings are progressing their development plans. For example, APK Invest joint-stock company has completed the first

stage of a project for establishment of a vertically integrated structure having a closed pork-production cycle. In late September 2009, a meat-processing plant was opened in Chervonoarmiysk district, Donetsk oblast. The project includes a stock-raising complex for pig complete-growing and fattening (600 thousand pigs per year), a breeding sow farm for 30 thousand sows, a mixed fodder plant to produce 200 thousand tonnes of fodders annually, and a meat-processing plant with planned daily capacity of 160 tonnes of finished products. It was planned to invest more than EUR 0.3 billion in the project, using solely Ukrainian capital (UNIAN, 2009). Meanwhile, to cheapen raw material, the Kremenchuhmyaso JSC meat-processing enterprise intends to build a pig-breeding complex for 15,000 pigs. The company's managers believe that pigs raised in the complex will be able to meet the plant's raw demand (APK-Inform, 2009).

Suppliers

Suppliers of mixed fodder and veterinary preparations have found themselves in a difficult position. Before the crisis, their services were used mainly by small pork producers and households. Large pig-breeding complexes had their own veterinary units and fodder plants. However, the sudden devaluation of the UAH already "knocked down" demand on the part of small pork producers in early 2009. This fully concerns both veterinary preparations, which are almost completely imported ones, and mixed fodder that includes valuable imported components and additives (mineral and vitamin additives, proteins, amino acids). Small entities' shift from mixed fodder to simple grain in pig raising made fodder plants simplify the structure of mixed fodder towards less costs and poorer quality. However, even those products did not secure much increase in demand. As a result, fodder plants curtailed production, shut down, reduced personnel or changed workers over to part-time work, and reoriented on production of mixed fodder for poultry.

Retailers

The decrease in people's income has had a negative impact upon the trade turnover of retailing enterprises. According to the State Statistics Committee of Ukraine, the retail trade turnover of retailing and restaurant enterprises was EUR 13.7 billion in January-August 2009, which is 79.5% of the figure for January-August 2008 in comparable prices (UKRSTAT, 2009). Demand for meat products has shifted towards the cheap category and a large part of unsold products in the expensive price segment was returned to producers. Since retailers had credit borrowings (mainly in foreign currency) and sold considerable amounts of imported products, UAH devaluation proved quite painful to them. All retailers had to renegotiate credit agreements to allow their stores to keep working. Many experts point out that credit restructuring con-

ditions are not more beneficial. The retailers' second problem concerns leasing of premises. Previously, rental rates were generally linked to the exchange rate of the USD or EUR. However, to avoid losing lessees under the crisis, owners reduced rent rates or recalculated them into UAH. Retailers negotiated rent rate decreases and suggested paying a percentage of trade turnover as an alternative (Business newspaper, 2009).

Another factor that had an unfavourable impact upon trade was the increasing energy, transport and public utility prices. However, retailers could not increase product prices in response because demand dropped substantially. Besides, major meat sales to people moved from distribution networks to urban markets. Retailers therefore had to optimise their networks and product range. They closed down outlets failing to bring any revenue, moved to premises with more beneficial rent rates, and targeted their sales on goods of well-known and popular brands. Professional operators using popular brands that won consumer loyalty are major players in the Ukrainian retail market; they adjusted themselves to crisis conditions and are ready to keep developing. They provide a high level of service and brand support, flexible marketing and pricing policies, and are able to offer their customers an optimal mix of product price and quality. According to forecasts, large market players having their own floating assets for growth will retain their distribution networks.

Banks

As deposits outflow and natural and legal persons had problems with repayment of loans, banks had a short-term resource that is extremely hard to use for lending. Therefore, under the crisis conditions they focused on minimisation of risks and support for liquidity. It means that banks provided loans in 2009 only within the limits of refund on previously granted loans. All that affected crediting of agriculture. According to the Ministry of Agrarian Policy, banks provided EUR 0.3 billion worth of new loans to agro-food enterprises in 2009 (NBU, 2009). Interest rates on bank loans grew and now amount to 16.5-30 percent (including for agricultural enterprises). Loans are granted only to the most reliable clients taking their economic conditions, reputation, credit history and liquid pledge availability into consideration. Such conditions are rather difficult even for agro-holdings. The number of banks willing to grant loans to the agro-food sector has decreased. The largest creditor is Raiffeisen Bank Aval in which about 20% of the entire credit portfolio for legal persons accounts for agro-food complex enterprises (UFS, 2009).

Under the crisis, many agro-food sector borrowers have faced debt servicing problems. According to the Ministry of Agrarian Policy of Ukraine, more than 3.4

thousand applications on loan restructuring, amounting to almost EUR 1.0 billion in total, arrived from agro-food sector enterprises as of late summer. Banks satisfied 2.1 thousand applications for EUR 0.8 billion (MINAGRO, 2009). Loan prolongation was generally effected for the period until 1 January 2010. Studies show that agro-food sector enterprises had no problems with loan restructuring. Many interviewees said that they pay only loan interest to banks so far. No case is known of banks demanding premature repayment of loans (Business newspaper, 2009). Public authorities provided assistance in improvement of crediting for the agro-food sector. For example, some part of state financial support for agro-food enterprises provided through a credit easing mechanism was used to repay enterprises' accounts payable for 2008. About EUR 16.7 million was sent to regions to accomplish such financial support for agro-food enterprises (MINFIN, 2009).

Some interviewees felt that banks had benefitted from the crisis since they were permitted to fail to satisfy creditors' claims for some time (not to refund deposits, even those for which a repayment period has already expired). That is, banks actually use their clients' money free of charge. At the same time, banks require their borrowers to pay on loans in time. A striking example is Cargill Investments that has been at law with a few Ukrainian banks (UKRANEWS, 2009). It is hard to agree unambiguously that banks benefitted from the crisis for they have found themselves in a rather difficult financial position. Although the banks' revenue during January-August 2009 grew by 41.9% compared to the same period of 2008, to EUR 9.3 billion, their expenditure increased by 88.9% against the previous year and totalled EUR 11.2 billion. As of 1 September 2009, loss of Ukrainian banks amounted to EUR 1.9 billion whereas the same date in 2008 saw EUR 0.9 billion of profit. Of Ukraine's 15 largest banks, only seven showed a profit in the 3rd quarter. In aggregate, they earned EUR 62.7 million (NBU, 2009). Generally, a collapse of confidence in the banking system can be seen.

The Government sector

Ukraine's agriculture, like many other branches, found itself without any productive support in early 2009. The Law on Amending Some Laws of Ukraine to Prevent Negative Consequences of the World Financial Crisis for the Development of the Agro-Industrial Complex (No. 922-VI of 4 February 2009), passed by the Parliament of Ukraine, came into force only in March 2009. This, *inter alia*, encourages banks to roll over loans to agricultural producers because this provides a basis to grant banks appropriate refunding from the National Bank of Ukraine. The law also extends a preferential mode of taxation for agricultural producers and a special mode of value added tax administration.

To increase demand for grain, during harvesting in 2009 the Government formed a financial pool used by the Agrarian Fund (a state organisation supervised by the Ministry of Agrarian Policy) to accomplish pledge purchases of grain, and established a Stabilising Anti-crisis Fund at the state budget expense. All the measures are mainly short-term: producers obtain a financial resource at the Agrarian Fund's expense to secure current agricultural works, money from the Stabilising Fund goes to subsidise compensation of bank loans for agricultural producers, cattle-breeding, agricultural machinery leasing, implementation of some investment projects, and partial reimbursement of expenses incurred for sowing of spring crops.

Discussion

During this survey, interviewees made recommendations for overcoming the negative consequences of the crisis and preventing the crisis situation from reoccurring in the future. Generally, each of the respondents proceeded from his/her own vision of the situation and his/her perception of possible political solutions. It is no surprise that there were many proposals concerning implementation of protectionist measures. For example, since fertilisers and other products of Ukrainian chemical plants turned out less competitive even in the domestic market, representatives of chemical enterprises called for measures to prevent import of mineral fertilisers to Ukraine. In their opinion, it is necessary to establish import quotas and raise duties. Thus, they believe that a protection-oriented policy would allow chemical enterprise to retain their positions at least inside Ukraine.

Measures of protectionism are seen as a means to overcome the crisis by meat producers as well. In the middle of June 2009, the All-Ukrainian Union of Agricultural Enterprises sent a letter to the Prime Minister of Ukraine on behalf of agrarian public organisations. It stated that intense meat importation put domestic commodity producers into unequal market conditions and led to a slump in cattle-breeding production output in Ukraine. In response, the Minister of Agrarian Policy of Ukraine pointed out that it was reasonable to introduce an additional 13% duty on meat importation. In his opinion, meat production is a rather promising area in the country so the additional import duty might help increase profitability and even develop export potential (UNIAN, 2009).

Of course, the above-mentioned protectionist measures are not a way out of the crisis situation and are not able to avert occurrence of crises in the future. Proposals to restrict importation of products (be it mineral fertilisers or meat) were not accepted by the Ukrainian Government. In the third quarter of 2009, protectionist proposals had not actually arrived.

In the opinion of leaders of the Association of Farmers and Private Landowners of Ukraine (an organisation uniting small Ukrainian farmers), to overcome crisis occurrences and prevent any crisis in the future, it is necessary to overcome monopolisation of the grain market by mediator companies and organise efficient work of the Agrarian Fund and the state operator – Khib Ukrainy State Joint-Stock Company. It is suggested to overcome monopoly of mediators in the grain market by means of creating grain procurement cooperatives. Using such cooperatives, producers could sell grain to external markets at acceptable prices. However, creation of such grain procurement cooperatives is hindered by lack of the necessary legislative framework (AFPLU, 2009).

In the opinion of leaders of the Association of Farmers and Private Landowners of Ukraine, there are many organisational issues that prevent the Agrarian Fund from working efficiently and to full extent on pledge-based grain procurement from producers. This also concerns insufficient amounts of state means allocated to the Agrarian Fund to procure grain harvested in 2009. It is suggested to augment financing for the Agrarian Fund to intensify its activities in the grain market, especially during large-scale harvesting. Experts also highlighted a need to create an efficient national state grain trader, e.g. on the basis of Khib Ukrainy SJSC. Such a proposal is rather debatable because the activity of a trader owned by the state would hardly be efficient (the state failed to show itself as an efficient manager) and the current financial condition of Khib Ukrainy would not allow large grain procurements to be conducted.

Some agrarian public organisations sent the Verkhovna Rada of Ukraine and the Cabinet of Ministers of Ukraine a list of legislative acts that should be passed to improve the Ukrainian agrarians' situation. Most urgent draft laws include the draft Law on Wholesale Markets of Agricultural Products, the draft Law on Agricultural Cooperation, and the draft Law on Amending the Law on Credit Unions (ACU, 2009). Agrarian public organisations believe that the Government of Ukraine should:

- increase financing for social services in rural areas and for support to producers;
- take appropriate measures to perform the State Programme for development of agricultural servicing cooperation;
- develop conditions and mechanisms of practical implementation of the State Programme for development of wholesale agrarian markets;
- develop models of investment partnership, public-private and commercial partnership in agro-food business;
- involve agrarian public organisations in performance of targeted programmes.

All of the experts pointed out the need for financial support for commodity producers on the part of the state. Various forms and mechanisms of such support are recommended: introduction of direct subsidies to commodity producer, preferential taxation, reimbursement of credit interest rates, preferential state loans. Some elements of the support have already been implemented, others not being relevant in the current situation.

The most topical political recommendations arose from the fact that the most important problem consists of the state's constant indirect or direct intervention in the routine economic activities of entrepreneurial entities as well as of being unwilling to make radical political decisions concerning the agro-food sector. Such decisions concern the lifting of the moratorium on sale of agricultural land, introduction of a system of progressive taxation common for all sectors of economy, and securing free movement of capital and other resources depending on production performance results. The state must therefore give and secure distinct guarantees to entrepreneurs and investors that they bear no political risks, that there be no price restrictions, no prohibitions of product export, no restriction on profitability, or other restriction. The state must undertake to avoid taking any measures that restrict prices, prohibit exports, limit profitability, or introduce other restrictions.

The system of state support for agriculture should be made simpler and more understandable, accessible for all producers. An approach to the branch support policy must be changed – from price support for agricultural products to support for production resources. It is more reasonable to support production not by setting supporting prices for agricultural products but rather by making production resources cheaper (it decreases costs and has no direct impact upon price conjuncture) or by making direct payments linked to the current production output and product prices.

The state must provide support for certification and standardisation of producers according to the EU and global requirements/standards (for enterprises exporting products). The state must undertake to support products – first of all refund VAT – and really secure this undertaking. Ukraine's loss of markets in Russia and other CIS countries calls for more lobbyism in promotion of Ukrainian-made products in those markets.

Implementation of the policy of Ukraine's European integration requires taking specific measures in the agrarian sphere that can be grouped into the following subjects:

- strengthening the national system of food safety;
- improving efficiency of product supply channels;
- forming a knowledge base and information dissemination;
- expanding investments aimed to increase exports.

The state policy of promoting the creation of a system of provision of logistical and financial resources to all entities in supply chains must assume:

- developing a system of servicing cooperation in rural areas;
- drafting and adopting a law of Ukraine that would create preconditions for the formation and functioning of cooperative banks to finance agriculture.

The most significant objective is to complete land reform and lift the moratorium on sale of agricultural land. Achieving this objective envisages:

- securing maintenance of a uniform state land cadastre and creating a uniform state system of registration of titles for immovable property including for land plots;
- creating conditions for development of mortgage lending on the security of land;
- providing conditions for free purchase and sale of agricultural land plots.

Conclusions

The agro-food sector is one of the most important branches in Ukraine's economy, and its significance has grown under the crisis. It is the only branch of the economy that demonstrated some increase in production output and sales even in the critical year of 2009. According to the State Statistics Committee of Ukraine, output of agricultural products in all entity categories increased by 3.3% in January-September 2009 compared to the same period of 2008, including by 1.4% in private household farms and by 6.1% at agricultural enterprises (UKR-STAT, 2009).

Under the crisis, demand for expensive sorts of bakery products has decreased considerably. Another trend of the crisis is that Ukrainian consumers increasingly prefer domestic-made goods because imports became much more expensive due to UAH devaluation. Many retailers promoted products under their own trademarks (so-called private labels) in their stores.

Experts cannot name those participants of the pork supply chain who benefitted from the crisis and under the crisis conditions. Producers engaged in pig breeding found themselves in a relatively better position. However, even their financial situation is rather complicated. The crisis allowed most financially stable actors in all links of the chain to enforce their positions owing to bankruptcy of other actors or due to acquisition thereof. Everyone expects that the future will bring a better financial position of consumers and higher demand, allowing production output and sales to be increased.

Rural residents are in a much worse situation because their incomes have dropped compared to 2008. Villagers have always had employment problems. For many, a household land plot of 0.25-0.5 ha (in some cases 1-2 ha) was the only place of employment and income genera-

tion. Under the crisis, agricultural enterprises reduced personnel and the decreased wages of the remaining workers. Meanwhile, decrease of the entire population's incomes and demand drop resulted in a situation where rural residents' receipts from their private land plots and households have shrunk.

he crisis has undoubtedly affected both the availability of bank loans for producers or trade companies and availability of credits for the banking institutions themselves. Many big companies, which earlier regarded granting of credits to Ukrainian banks as interesting from the profitability perspective, have cut back their credit lines because of growing insolvency risks (indicators whereof include estimates by leading rating agencies, rates of hedging against sovereign and corporate default risks, etc.). Some companies that once provided credits to Ukrainian banks now cannot get their money back.

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