Financial Crisis and Ukrainian Agriculture: Impact and Response

Serhiy Kandul

Kyiv, November, 2009
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Executive Summary

Prior to the financial crisis, agriculture started with a record crop year in 2008: more than 53 mln tons of grains were harvested in Ukraine. 25 mln tons of grain were exported and export revenues should have been contributed to rising investments to maintain similarly high production in the following season. However, two major tendencies attributed to financial crisis – credit tightening and downward pressure on prices for major agricultural commodities – challenged these optimistic forecasts.

The aim of this paper is to investigate the impact of the financial crisis on agriculture and show the applied response strategies by farms, agribusiness, and the national government.

The effects imposed by financial crisis are captured with both secondary and primary data. Open sources information confirms that farmers faced a significant increase in costs of external financing and decreased availability of loans. Together with rising interest rates, prices for inputs increased (fertilizers, diesel). Prices for outputs (crops) went down and further exhausted the resources to finance the next seeding campaign. This entailed certain changes in the production of crops: shift towards less intensive commodities and decreased level of fertilizer use. At the same time, total area seeded shrank by less than 1%.

In-depth interviews with several agricultural producers and input suppliers reveal the main response of farms and agribusiness: focus on core business and cost-cutting. Very flexible labor markets have facilitated cost-cutting measures.

The government reduced direct support form the budget compared to previous years, but maintained low taxes (mainly via VAT refunds and fixed tax for agricultural producers), put efforts to resolve solvency problems through loan prolongation and tried to stabilize prices for fertilizers.

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Introduction: possible effects generated by financial crisis

The financial crisis began in the United States in mid-2007 with increasing interest rate spreads and declining house prices and quickly spread throughout the U.S. economy and the rest of the world and by the second half of 2008 resulted in recessions in numerous countries.

In Ukraine, financial crisis primarily went through banks’ failures to attract foreign credit resources and/or to pay against their foreign short-term liabilities.

Liquidity problems of Ukrainian banks evidenced by enhanced refinancing from the National Bank expectedly caused deteriorated environment for financing of the real sector.

Deteriorated external financing together with shrinking demand led to decline in investment activity, price drop and reduction of output. By June 2009, the first two sectors hit – manufacturing and construction- contracted by roughly 36% and 54%.

Similar to these industries, agriculture heavily relied on international buyers and external financing.

Prior to the financial crisis, the sector started with a record crop year in 2008: more than 53 mln tons of grains were harvested in Ukraine. 25 mln tons were exported and export revenues should have been contributed to rising investments to maintain similarly high production in the following season. However, two major tendencies attributed to financial crisis – credit tightening and downward pressure on price for major agricultural commodities – challenged these optimistic forecasts.

In this paper we study the realizations of credit tightening and downward pressure on prices for output and their impact on agricultural production (structure and intensity) and show how the national government and agricultural businesses responded to new challenges faced by the sector in the short-run (the analysis effectively cover the period from October 2008 to June 2009). We do not cover possible medium and long-run effects (changes in market structure or trade volumes). We also do not include animal husbandry in the analysis for it being affected by many other factors alongside the realizations of the two tendencies specified.

Credit tightening is considered in terms of changes in interest rates and availability of loans, measured as average interest rates by different type of loans and number of loans attracted respectively.

We look at price movements for outputs (grains, sunseeds) together with inputs (proxied by ammonium nitrate and diesel). This allows understanding weather producers’ terms of trade (relative price movement) and thus economic environment for producers changed. We also recognize the impact of hryvnia devaluation that sustained export prices and favored agricultural export. In fact, we consider exchange rate development to be the key driver of the ability to sell around 25 mln tons of grain abroad which means no significant deviation from the export scenarios concluded in the beginning of the crop year.

Changes in structure of production are viewed as shifts in the area under specific crops. Intensity fluctuation is primarily captured through the data on sales of agrochemicals (fertilizers). This provides the insight about the volume and quality of crop 2009.

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3 Monthly Economic Monitor of Ukraine, June 2009. IER
The second part of the paper describes anti-crisis strategies of agricultural firms discovered through in-depth interviews with several agricultural producers and input suppliers (See Annex for Survey Guidelines constructed based upon methodology used in Business Climate Survey developed by Institute for Economic Research and Policy Consulting). The interviews were conducted in April-May 2009 and covered financial, production and sales information from firms as well as brief outline of expectations about relevant governmental measures.

Governmental efforts are primarily discussed in terms of fiscal policy (taxation and budget expenditures on agriculture). Reduction of financing of major programs and prolongation of privileges (VAT) evidence that the government is still willing to support the farmers, however, at a lower level than in previous years.
1. Changes affecting agricultural production and trade

1.1. Interest rate fluctuations and availability of loans

Significant increase in interest rate documented from last quarter of 2008 as a result of lack of liquidity and solvency problems of Ukrainian banks against their foreign liabilities put negative pressure on terms of external financing for agricultural enterprises. According to NBU, interest rate on loans attracted by commercial entities (overdraft excluded) in hryvnia jumped almost twice between January 2008 and January 2009 (See Figure 1.1).

Figure 1.1.
*Interest rate movements in Ukraine, attracted loans, January 2008-June 2009*

![Interest rate movements in Ukraine, attracted loans, January 2008-June 2009](image)

Notes: * Overdraft excluded.
Source: National Bank of Ukraine

Starting from second half of 2008 interest rates on loans attracted by agricultural enterprises fluctuated between 18% and 35%\(^4\) thus following the general tendencies of uphold in costs of credits for the real sector of the economy as data from NBU does not support any significant difference for interest rates on loans for agriculture\(^5\). However, the sector suffered more from further increase of interest rates in the first quarter of 2009 (January-February uphold as high-time period to finance the spring seeding campaign).

These developments were entailed with reduced willingness (ability) of banks to sign new loan agreements. The volume of loans attracted by agricultural companies in the first quarter of 2009 shrank by 35.3% year-over-year as Ministry of Agricultural Policy reports\(^6\).

Shortage of loans became visible back in December as the growth of credit liabilities accumulated in agriculture halted (See figure 1.2).

\(^4\) According to Ukrainian Agribusiness Club
\(^5\) According to NBU, the average interest rate on loans attracted in January 2009 across all industries is 25.6% in local currency with 21.5% as respective estimate across agriculture, hunting, and forestry.
Figure 1.2.

Growth of credit liabilities in Agriculture, Hunting and Forestry, end of the period, July=100

Figure 1.2 shows that from December 2008 till April 2009 effectively no additional resources were channeled into agriculture from commercial banks compared to July 2008. This evidences the impact of credit tightening and no seasonal developments as credit liabilities for the same period in 2007/2008 were growing steadily from 106.7% to 132.1% as compared to July 2007. Furthermore, the volume of credit liabilities stood still in 2008/2009 partially due to prolongation of overdue loans⁷ supporting the fact of deteriorating number of new loans provided. According to NBU, the share of overdue loans in the sector increased from 2% to 7.5% from July 2008 to April 2009, however the solvency of the agricultural firms did not deviate a lot from economy-wide level.

Long-term production cycle (so gaps arise between input purchases and sales of output) and higher risk of external shocks (weather conditions) define high responsiveness to credit crunch in the form of increased interest rate fluctuations and shortage of new loans. Loosely computed, current “debt/equity” ratio in the sector⁸ as for March 2009 approximates to 0.34, which might be perceived as relatively high (compared to 0.25 for manufacturing) to consider the sector as highly responsive to shocks in external financing. Besides, Ministry of Agricultural Policy forecasted that 45% of costs of spring seeding campaign are to be covered by external financing.

The deteriorating environment, however, affected the firms differently depending on their size and credit history. The survey section proves that some companies were able to borrow

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Notes: * Including hunting and forestry
Source: National Bank of Ukraine

⁷ Prolongation campaign (monitoring bad loans and thus defining the funds needed to secure payments against liabilities) was set as one of the main objectives of the government within coping with the effects of financial crisis for agriculture (See section 4)
As reported by MAP, 2,66 UAH billion where successfully prolonged which constitutes 62% of the estimated need (per cent of loans that were not likely to be repaid at their maturity until June 1, 2009).

⁸ The ratio is computed as follows: \( \text{ratio}=L/F \), where \( L \) is amount of loans attracted (loans attracted as of January 2009 (NBU) plus loans attracted by 9.04.09 - MAP data) and \( F \) is amount of fixed capital (fixed capital of 2007 plus investment into fixed capital in 2008 and first quarter of 2009 - State Committee of Statistics data). So, \( \text{ratio}=(28.4+1.2)/(69.8+16.9+1.2)=0.34 \)
internationally. Other solutions involved loan restructuring and search for alternative sources of financing. Clearly, small farms are those who faced the most contingent requirements in terms of new loan agreements.

1.2. Dynamics of prices for inputs and outputs

Global downturn in economic activity put downward pressure on prices of tradable inputs while reducing demand for major agricultural commodities. The relative change of these parameters gives us further insight into producers’ terms of trade – relative prices of output and input - already hit by increasing costs of external financing. In this section we monitor these effects by comparison of prices dynamics for diesel, agrochemicals and agricultural produce.

Given increased supply of grain (both domestically and internationally) producers faced sharp decline of prices for their commodities starting from the beginning of 2008 crop year. The magnitude of this price decline differed across commodities verifying that high-quality grain producers face the most lenient relative price drop. Prices continued to go down until the end of the year and January 2009 brought visible recovery (See pictures 1.3-1.4)

Figure 1.3
Prices for grain in Ukraine, June 2008 – May 2009

Source: UkrAgroConsult, Agrofax, IER
Figure 1.4
Prices for oil seeds in Ukraine, September 2008 – May 2009

Source: UkrAgroConsult, Agrofax, IER

The development of prices for inputs and outputs verify the periods of the most deteriorating terms of trade as Figure 1.5 shows below.

Figure 1.5
Prices for input and output movement in Ukraine, index, Jan 2008=100

Source: Own calculation based on State Statistics Committee (output prices), Ministry of Agricultural Policy and Ministry of Economy (input prices)
Figure 1.5 expectedly shows that the greatest diversion of relative price movements is observed before the start of the seeding campaigns. Prices for fertilizers tend to be more volatile component of input price. Joint efforts to restrain the price growth for the fertilizers from domestic suppliers (mainly via agreements between suppliers (chemical plants), buyers (agri firms) and intermediaries (government)) lead to certain price stabilization, but failed to offset seasonal price increase. Given deteriorating terms of trade, the farmers could not allow buying fertilizers in the amounts they did in 2008 to secure last year soil fertility raising expectation on visible crop decline (See section 2.3 on the comparison of intensity of production between 2008 and 2009).

1.3. Exchange rate fluctuations

"Crisis" period is believed to be too short to influence drastically the export flows. However, downward pressure on prices described in preceding section questioned the possibility to sell internationally the record volumes produced in 2008/2009 crop year. Under such circumstances, depreciating hryvnia favorably affected export prices and help to maintain high export/production ratio. Figures 1.6.1-1.6.4 compare commodities prices with (actual prices) and without (constant exchange rate prices) depreciation of hryvnia.

**Figure 1.6.1**

*Prices for Barley in Ukraine, September 2008-June 2009*

Source: Own calculations based on UkrAgroconsult, Agrofax, NBU
Figure 1.6.2
Prices for Feed Wheat in Ukraine, September 2008-June 2009

Source: Own calculations based on UkrAgroconsult, Agrofax, NBU
**Figure 1.6.3**
*Prices for Sunseeds in Ukraine, September 2008 - June 2009*

Source: Own calculations based on UkrAgroconsult, Agrofax, NBU

**Figure 1.6.4**
*Prices for Rapeseeds in Ukraine, September 2008 - June 2009*

Source: Own calculations based on UkrAgroconsult, Agrofax, NBU
Figures 1.6.1 - 1.6.4 verify that hryvnia depreciation contributed much to sustain prices for major agricultural commodities with the gap between assumed (September UAH/USD ratio maintains) and actual prices at more than 50 per cent for the period of the most significant fall of hryvnia (the middle of the winter).

**Figure 1.7**
*Export to production ratio for major grains in Ukraine, 2005-2009*

![Graph showing export to production ratio for major grains in Ukraine, 2005-2009.](image)

Source: Own calculations based on data from State Statistics Committee of Ukraine

Figure 1.7 proves that export volumes measured as export-to-production ratio remained high for major grains in 2008/09 MY given no barriers faced by the traders within that period (export quotas established explain relatively low ratios in 2006/07 and 2007/08).

2. Changes due to new economic environment: aggregated approach

2.1. Changes in structure of production

A possible strategy assumed in crop cultivation maybe cost-cutting and producing less demanding crops (See Section 3 for verification of this strategy from producers’ survey).

Aggregated official data proves certain deviations in seeded area for winter seeding campaign with more than 45% uphold in barley acreage.

(See figure 2.3)
Figure 2.3 shows that farmers substituted more demanding wheat and rapeseeds for less demanding rye and barley thus indicating the changes in the structure but not in the overall volumes (thanks to increase in barley acreage total area seeded was enlarged by roughly 2%).

Lack of financial resource became more visible in the spring when farmers could not further shift between the crops but were forced to cut the total area seeded.

Figure 2.4 reveals more severe cuttings for grains compared to oilseeds.
However, winter kill further cut rapeseeds acreage (up to 30% reduction) thus resulting in decrease of total areas under oilseeds when winter and spring data are combined (See Table 2.1)

Table 2.1
Crop acreage in Ukraine (winter+spring crops) in 2007/08 and 2008/09 crop years

<table>
<thead>
<tr>
<th>Crops</th>
<th>Area seeded, tha</th>
<th>2009/2008</th>
<th>Share in total area seeded,%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains</td>
<td>15636.4</td>
<td>15885.4</td>
<td>1.6</td>
</tr>
<tr>
<td>wheat</td>
<td>7116.3</td>
<td>6859.9</td>
<td>-3.6</td>
</tr>
<tr>
<td>rye</td>
<td>466.5</td>
<td>470.3</td>
<td>0.8</td>
</tr>
<tr>
<td>barley</td>
<td>4218.8</td>
<td>5125.1</td>
<td>21.5</td>
</tr>
<tr>
<td>corn</td>
<td>2516.2</td>
<td>2186.7</td>
<td>-13.1</td>
</tr>
<tr>
<td>Oilseeds</td>
<td>6777.9</td>
<td>6486.5</td>
<td>-4.3</td>
</tr>
<tr>
<td>sunseeds</td>
<td>4305.6</td>
<td>4167.3</td>
<td>-3.2</td>
</tr>
<tr>
<td>soybeans</td>
<td>558.5</td>
<td>641.0</td>
<td>14.8</td>
</tr>
<tr>
<td>rapeseeds</td>
<td>1411.8</td>
<td>1061.9</td>
<td>-24.8</td>
</tr>
<tr>
<td>Total area</td>
<td>27133.1</td>
<td>26879.9</td>
<td>-0.9</td>
</tr>
</tbody>
</table>

Source: State Statistics Committee

Table 2.1 documents the reduction of seeding areas for certain major crops. The area decreased under corn, wheat, rapeseeds and sunseeds but enlarged for barley and soybeans. Aggregated reduction amounted to almost 1% confirming the hypothesis that farmers lacked financing to buy inputs. However, the decrease is much lower than expected by pessimistic
forecasts and rather shows that shifts between crops seeded and not overall area cutting prevailed.

2.2. Changes in intensity of production

Intensity of crop production is another indicator potentially affected by difficulties emerged with worse opportunities for external financing in the sector discussed above.

To shed some light at this issue, we focus on quality of seeds and use of fertilizers as main factors affecting the future yields.

State Seeds Inspection reports large share of high-quality seeds used in winter crops campaign with 89% of seeds sown in fall of 1-3 class by reproduction capacity and only 3,8% of less than 3rd class (the rest is grouped into elite seeds, see figure 2.4).

**Figure 2.3**
*Quality of seeds for winter crops 2009 in Ukraine*

The data has not been aggregated by the State Seeds Inspection prior to 2009, so cross-time comparisons are not possible. However, the experts recognize that less than 4% of seeds of lower than 3rd reproduction type imply that the quality of seeds remained high for seeding campaign of 2009, at least for winter crops.

At the same time, State Statistics Committee documents the reduction in usage of fertilizers primarily captured with lower percentage of area fertilized.
Figure 2.4
Share of crop area fertilized in Ukraine, 2005-2009

Although the final figures may improve in the end-of-the-year statistics, it is evident that intensity of crop production will lag behind 2008. Table 2.2 further supports lower fertilizers usage measured by level of sales of fertilizers to agricultural companies.

Table 2.2
Sales of fertilizers from domestic suppliers to agricultural companies, thousand tones of nutrition substance

<table>
<thead>
<tr>
<th>Product</th>
<th>Jan-Jun 2008</th>
<th>Jan-Jun 2009</th>
<th>Change, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>450.6</td>
<td>326.4</td>
<td>-27.6</td>
</tr>
<tr>
<td>nitrogen</td>
<td>368.8</td>
<td>310.3</td>
<td>-15.9</td>
</tr>
<tr>
<td>phosphorus</td>
<td>61.2</td>
<td>11.9</td>
<td>-80.6</td>
</tr>
<tr>
<td>potassium</td>
<td>21.2</td>
<td>4.1</td>
<td>-80.6</td>
</tr>
</tbody>
</table>

Import flows of fertilizers do not deviate much from the compared periods. According to State Statistics Committee, total import of mineral fertilizers amounted to 608 thousand tons between Jan-Jun 2008 and to only 271.8 thousand tons in Jan-June 2009. Disregarding discrepancies in the volumes of stocks, this indicates reduction of use of fertilizers and reduction of intensity of production.
Chapter 3. Key variables changed due to new economic environment: survey results

This section presents summaries of interviews conducted with representatives of agricultural producers and input suppliers in April–May 2009. While trying to organize the talks into financial, trade and production shocks we conclude that the magnitude of the effects expected as well as the response strategy differs severely among firms depending on the size and specialization of a particular firm (See Annex B and C for interview guidelines and individual summaries of selected interviews). Prior to commenting on the perceived effects of the financial crisis, it is important to recognize the presence of selection bias (listed companies and those affected less severely more often agreed to participate) though we tried to contact randomly and succeeded to secure certain level of variety. We contacted small farmers or family farms and large agriholdings, producers of grains and oilseeds, and input suppliers. The final list of participants comprises around 15 firms. In-depth expert interviews are designed to capture qualitatively the magnitude of the effects and their direction as well as response strategy on the firm level so the variety and not the number of participants was our primary goal. The representatives varied from head of the sales or development departments (big companies) to owners of the firms (small companies) able to judge upon the changes in firm’s production volumes and technologies (intensity), sales (demand side shocks), investment plans and changes in external financing (interest rates, terms of new loan agreements), and expectations from government (short-term anti-crisis measures and future agricultural policy in general).

Objectively, the financial crisis affected all agricultural companies of all sizes and at all markets. However, the perception of changes at the firm level as well as response strategies differs. The fact of deteriorated environment is supported both with primary and secondary data. Table 3.1 shows share prices of large agricultural and food companies listed at international and local stock exchanges measured in fall, spring, and summer of the marketing year 2008/2009.

Table 3.1
Equity price of selected agricultural companies, September 2008 - June 2009

<table>
<thead>
<tr>
<th>Company name</th>
<th>Stock exchange</th>
<th>Quotations, USD</th>
<th>%, change, Sep 08-Jun 09</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>31.08.08 (1)</td>
<td>31.03.09 (2)</td>
</tr>
<tr>
<td>Astarta-Kyiv</td>
<td>Warsaw Stock Exchange</td>
<td>34.4</td>
<td>11.9</td>
</tr>
<tr>
<td>DAKOR</td>
<td>PFTS</td>
<td>13.15</td>
<td>55</td>
</tr>
<tr>
<td>UKR-ROS</td>
<td>PFTS</td>
<td>6.05</td>
<td>0.3</td>
</tr>
<tr>
<td>CREATIVE</td>
<td>Frankfurt Stock Exchange</td>
<td>1241.5*</td>
<td>0.66</td>
</tr>
<tr>
<td>LANDKOM</td>
<td>Frankfurt Stock Exchange</td>
<td>0.742</td>
<td>0.12</td>
</tr>
<tr>
<td>KERNEL</td>
<td>Warsaw Stock Exchange</td>
<td>29.85</td>
<td>15.5</td>
</tr>
<tr>
<td>MYRONIVSKY HLIBOPRODUCT</td>
<td>London Stock Exchange</td>
<td>14.05</td>
<td>2.68</td>
</tr>
<tr>
<td>MRIYA</td>
<td>Frankfurt Stock Exchange</td>
<td>13.5</td>
<td>8.0</td>
</tr>
</tbody>
</table>

Source: Astrum Capital
*Note: Nearest date (29.08.08) quoted

Table 3.1 indicates that equity prices of most large agribusiness companies declined from autumn to spring and slightly recovered at the end of the marketing year. The deteriorating equity price for that period is observed for companies operating in different sectors: sugar
production, grains, oilseeds production, and poultry. The downward trend was registered at both local (PFTS) and international markets.

In our survey, we divided the talks with firms’ representatives into several parts: financial situation, changes in sales, intensity and volume of production, and expectation from the government. Below we draw several conclusions from each of these subsections as derived from firms’ judgments in the corresponding directions.

**Financial Block**

Most of the interviewed companies recognized the fact of credit tightening and the different level of deteriorated availability of external financing domestically and internationally. Those companies that relied on long-term loan agreements suffered less from increase in interest rates as loan providers have fewer opportunities to change the terms of financing contracted before the crisis began. Large companies took certain efforts to restructure their liabilities from short-term to medium and long-terms ones based upon strong credit history applying for international organizations with this purpose. However, only a few firms succeeded in loan restructuring given limited offers from loans providers.

Some companies were forced to apply for loan prolongation and used governmental support in this effort. This proves that solvency problems appeared to be relevant. Despite of increased interest rate many firms tried to attract new loans (feeling lack of resources for spring seeding campaign). Most of the surveyed companies reported that banks started to set much more stringent requirements: collateral, higher interest rate, strong financial performance over the last years. Loans taken are about twice as expensive as those attracted previously so the cost of production would increase, at least in certain subsectors.

As regards own financial resources, main changes in cash flows are reflected in rescheduling of most of investment plans. Big projects (like construction or purchases of new elevators) were postponed for around six months. Many big players confirmed that they have enough resources to start those projects but opted to wait until the demand recovers fully and market stabilizes.

**Demand block**

Respondents assured that sales were primarily affected due to price fluctuations and not to the volumes sold. The effect was thus defined by the degree at which each company faced its own price decline. Input suppliers for primary agricultural production felt demand reduction both in terms of price and volumes. Competition among input suppliers was enhanced as buyers put lower price as their main choice criterion. That led certain companies to shift from expensive imported products to cheaper domestic ones and start new cooperation in the sector. The dominant strategy to secure sales of agricultural machinery and other inputs was offering discount schemes and deferred payments for established clients.

Most of the firms faced opportunities to sell internationally as hryvnia deteriorated. This generated the sentiment of future improvement (being formed intensively in winter when the hryvnia was losing its value). However, further decline of hryvnia would no longer be perceived positively as input prices (the large share of it had been still imported) would rise.

Small companies exhausted their stocks while trying to finance autumn field works and have less commodities to offer to the market in the spring compared to larger entities even at the background of deteriorating hryvnia that supported output prices.
Production block

Common features in coping with crisis effects are focus on core businesses, cost cutting and search for synergy inside the enterprise. The activities outsourced were utilized in own production units. At the same time, the companies followed the strategy of concentration on the activities where they have the strongest expertise. Crop producers made certain adjustments in their seeding acreage to provide their main commodities with more land. The strategies in production varied between companies. Some companies switched to less demanding crops rather than saving on intensity of production. Besides, the saving included cutting salaries and personnel (or increase in requirements towards qualifications of those already employed). Dismissals were not mass to keep the human capital inside the firm to fully utilize their people’s knowledge as soon as market situation improves.

Small family farms while reducing the intensity of production tried to use high quality seeds at the expense of fertilizers usage believing that such strategy would result in lower quality of grain but would still secure higher yields. Typical survival strategy of family farms – lease parcels of their land to third parties- worked effectively in this period.

Most companies have optimistic forecasts about the future developments of agricultural markets.

Expectations from the government

Many companies see governmental undertakings lacking credibility and thus often ignore them while taking their strategic decisions. Uncertainty often reduces the effectiveness of state policy in the sector. Producers do not take into account the amount of support per hectare of specific crops while calculating prospective cash flows.

When talking about the “first best” steps in agricultural policy, respondents often emphasized agricultural policy in general. Again, it implies no specific requirements (or beliefs) towards specific anti-crisis measures. Many voted for facilitating access to loans for farms that inevitably need long-term and cheap financing enhanced in the financial crisis period. Many companies recognize the need to improve agricultural knowledge in the country and invest more into extension and advisory services.
Chapter 4. Anti-crisis efforts by national government of Ukraine

Ukrainian government recognized agriculture as one of the most severely hit sectors in the economy evidenced by separate (sector-specific) “anti-crisis” legislation issued in the first quarter of 2009. The mechanism of deteriorating economic environment was designated with sharp decline in prices for major agricultural commodities fueled with increased domestic supply and lowered demand in global markets and uphold in costs of external financing that deteriorated the producers terms of trade.

**Fiscal policy.** Lack of financing possibilities primarily realized in reduction of governmental expenditures on agriculture in 2009. Budget 2009 allocates fewer funds to agriculture and share of the sector in total GDP falls below 1 per cent (See Annex A).

Decided in December 2008, total expenditures for agriculture were estimated at the level of 6.37 UAH billion (42% decrease from 2008), with yellow box measures that suffered more compared to growth-enhancing undertakings. Production subsidies received around 1.4 UAH billion (well below of 3.04 UAH billion of AMS limit defined by WTO requirements), which is the estimate at the level of 2005. Growth enhancing measures preserved nearly 5.0 UAH billion which is still higher than the average for 2005-2008 (approximately 4.85 UAH billion) and only 26% lower than previous year figure.

In May 2009, farmers welcomed additional 2.2 UAH billion allocations for agriculture from the Stabilization Fund (the expenses category specially designed to combat with the effects of the financial crisis for national economy) as well as new provisions that make farms located in mountainous areas qualified for irrevocable support9.

Additional resources had skewed funds distribution in favor of direct support measures: 800 mln UAH went to cover partial compensation of interest rates on loans and around 526 mln UAH for financial support of livestock and crop production and only 14 mln UAH for extension and advisory service (See annex A).

Besides, new allocation proved some sort of product-targeting as all funds allocated for spring crop support (around 190 UAH ths) are split between two crops only: flax and sugar beet.

The difference between losses for particular producers produced by smaller budget of 2009, however, will depend on new subsidies distribution mechanism. According to State Treasury Reports, no funds were actually allocated from the Stabilization Fund over the eight months of 2009, thus many support programs will be relevant for the next crop year only. If existing schemes that traditionally define uneven benefits for different farmers are preserved, agents will suffer unevenly from this year budget cutting.

Diminishing funds from the budget and background of expiration of certain protectionist provisions10 for specific industries called for new form of governmental discretion.

**Taxation policy.** Protectionist sentiments that appeared to be constrained in 2009 with moderated budget expenditures realized in expansionary fiscal policy via low tax burden. General anti-crisis law11 prolonged special VAT regime for agricultural enterprises with minor modification that allowed using VAT sums to cover inputs costs. Moreover, the law revived fixed agricultural tax.

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9 Amendments to the Law of Ukraine #973 as April 16, 2009
10 In particular, the VAT privileges for milk and meat suppliers as well as fixed agricultural tax should have been expired from 2009.
Still, peculiarities of VAT imposition on milk and meat producers were left unclear until special anti-crisis law and ensued governmental decree regulated this special status in March 2009. In fact, zero VAT tax rate and redistribution of VAT tax liabilities from processing companies to suppliers of unprocessed milk and meat products were abolished by general anti-crisis law and milk and meat producers were formally fitted into general special VAT in agriculture regime.

Redistribution scheme were recovered in March but zero tax rate was left aside. Together with delayed decrees on the formal list of activities eligible to new-old VAT scheme, regulation on VAT redistribution laid certain pressure on transaction costs in the sector.

**Loans from commercial banks.** Initial efforts to increase the level of partial compensation of interest rates and to establish effective mechanism of loans prolongation were taken back in 2008. The compensation was increased from 6% to 8.5% for loans in foreign currency and loan agreements eligible for compensation were prolonged to June 2009. Highly debated controversy on the best scheme of loan prolongation was resolved in February only as anti-crisis law put loans prolongation for agricultural companies as prerequisite for refinancing from NBU.

According to Ministry of Agriculture by March 2009 the banks prolonged around 2.6 UAH billion of loan liabilities that amounted to 63% of the need (the need is estimated as total amount of liabilities doubted about timely repayments till June 1, 2009). By first half of 2009, this number amounted to around 3 UAH billion or 76% of the sums needed to be prolonged until January 1, 2010. This evidences that certain companies experienced problems with financial solvency while the banks claimed no considerable changes from the repayments rate of 2008.

Still, the level of compensation of interest rates on loans for agricultural sector did not deviated much from that of 2008 (See table 4.5)

**Table 4.5**

Partial compensation of interest rates on loans attracted by agricultural firms

<table>
<thead>
<tr>
<th></th>
<th>Short-term loans</th>
<th>Medium-term loans</th>
<th>Long-term loans</th>
<th>Total financing, M UAH*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UAH, fraction of NBU discount rate</td>
<td>Foreign Currency, %</td>
<td>UAH, fraction of NBU discount rate</td>
<td>Foreign Currency, %</td>
</tr>
<tr>
<td>2008 (1)**</td>
<td>1.0</td>
<td>6.0</td>
<td>1.0</td>
<td>6.0</td>
</tr>
<tr>
<td>2008 (2)***</td>
<td>1.0</td>
<td>8.5</td>
<td>1.0</td>
<td>8.5</td>
</tr>
<tr>
<td>2009*****</td>
<td>1.0</td>
<td>8.5</td>
<td>1.0</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Notes:
*Including funds from Stabilization Fund allocated in May 2009
** As of February 27, 2008
*** As of November 12, 2008
**** As of May 13, 2009.

In July, the government further increased the level of compensation of interest rates to 12% for loans in foreign currency and 1.5 of NBU discount rate for short-term and medium-term loans in hryvnia attracted in 2006-2009 to finance innovative projects that undergone state registration. With no additional funding it means more skewed support with lower number of firms getting the compensation.

---

12 The Law #922-17 as of February 4, 2009
13 See Cabinet of Ministers’ Decree #995 as of November 12, 2008.
Support for fertilizers purchases. After observing relative price movement of price for outputs and inputs that did not benefit agricultural producers, the authorities also applied for agreements between input suppliers and agricultural companies. The practice, started well before this year crisis, resulted in agreement on supply of certain volumes of mineral fertilizers from domestic chemical plants for pre-established price (conditional on gas price movements) secured with governmental guarantees on timely VAT repayments and other kinds of support for chemicals plants (accelerated depreciation schemes, low tariffs on energy consumption and transportation costs). Other efforts realized in this direction captured intervention into diesel market (to guarantee lower price for certain volumes of diesel supplied by domestic oil manufacturers). However, the governmental purchases (and negotiations with private suppliers of diesel) could hardly suffice to stabilize the price on inputs markets.
Conclusions

- Financial and economic downturn affected Ukrainian agricultural mainly through higher costs and deteriorated availability of external financing. Interest rate uphold for newly attracted loans given high dependency on external funds in the sector seems to contribute to increased costs of production and thus affect the profitability of operating in the sector. Deteriorated financing led to decreased intensity of production and certain shift to less demanding crops.

- Exchange rate fluctuations favored agricultural export and supported prices for agricultural commodities that were declining sharply both at local and international markets.

- The dominant strategy of agricultural firms is to cut costs and complete utilization of synergy effects within the firm’s core competence. Very flexible labor markets facilitated this strategy. The companies also explored alternative financing opportunities. The effects and the response strategies differ across firms of different size with small farms being hit the most severely. Many respondents see administrative barriers for effective business decisions and often governmental undertakings do not serve as positive signal for farms thanks to high level of uncertainty about possible changes of the measures implemented.

- Public authorities put their main efforts into resolving the issue with loans for agricultural farms (mainly through loans prolongation). Reduction of budget expenditures resulted in less funds for farms at the beginning of new seeding campaign in the spring, but additional allocations from the Stabilization Fund aimed at increasing direct support to farmers confirmed governmental commitment to protective approach to the sector.
### Annex A

#### Budget expenditures for agriculture in Ukraine, M UAH, 2005-2009

<table>
<thead>
<tr>
<th></th>
<th>2006 executed</th>
<th>2007 executed</th>
<th>2008 executed</th>
<th>2009* adopted</th>
<th>2010** draft</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MinAP</strong></td>
<td>87.9%</td>
<td>94.7%</td>
<td>92.8%</td>
<td>92.2%</td>
<td>86.8%</td>
</tr>
<tr>
<td><strong>Production subsidies (in % to TAPE):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial support of livestock and crop production:</td>
<td>31.3%</td>
<td>38.7%</td>
<td>38.0%</td>
<td>19.0%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Support to horticulture, wine grapes and hops</td>
<td>1609.9</td>
<td>2188.5</td>
<td>2368.0</td>
<td>461.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Public food reserves</td>
<td>7.7</td>
<td>12.6</td>
<td>15.2</td>
<td>13.0</td>
<td>255.0</td>
</tr>
<tr>
<td>Partial compensation of interest rates for credits</td>
<td>319.5</td>
<td>551.3</td>
<td>1021.3</td>
<td>415.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Financing of spring field works</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Financial support of rural farms</td>
<td>27.7</td>
<td>37.9</td>
<td>59.4</td>
<td>20.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Fertilizer subsidies</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Partial compensation of costs of agricultural machinery</td>
<td>20.1</td>
<td>131.6</td>
<td>97.1</td>
<td>2.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Financial leasing</td>
<td>164.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Milk processing</td>
<td>3.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Growth-Enhancing measures (in % to TAPE):</strong></td>
<td>56.6%</td>
<td>56.0%</td>
<td>54.8%</td>
<td>73.2%</td>
<td>74.3%</td>
</tr>
<tr>
<td>Rural Development</td>
<td>24.3</td>
<td>27.8</td>
<td>50.6</td>
<td>50.7</td>
<td>26.6</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>138.8</td>
<td>240.9</td>
<td>324.1</td>
<td>228.3</td>
<td>251.7</td>
</tr>
<tr>
<td>Education and training</td>
<td>1071.8</td>
<td>1352.0</td>
<td>1999.8</td>
<td>2390.9</td>
<td>2680.4</td>
</tr>
<tr>
<td>Public stockholdings</td>
<td>4.5</td>
<td>67.6</td>
<td>17.6</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Pets and disease control</td>
<td>29.7</td>
<td>44.5</td>
<td>40.0</td>
<td>20.5</td>
<td>21.0</td>
</tr>
<tr>
<td>Food safety and quality control</td>
<td>665.8</td>
<td>861.2</td>
<td>1139.8</td>
<td>1172.7</td>
<td>1329.6</td>
</tr>
<tr>
<td>Extension and Advisory Services</td>
<td>8.1</td>
<td>9.8</td>
<td>12.4</td>
<td>17.4</td>
<td>6.2</td>
</tr>
<tr>
<td>Insurance costs compensation</td>
<td>10.0</td>
<td>47.8</td>
<td>60.1</td>
<td>12.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Land Reform</td>
<td>3.6</td>
<td>5.0</td>
<td>7.7</td>
<td>35.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Biofuels</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Selection programs:</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Livestock</strong></td>
<td>109.5</td>
<td>124.6</td>
<td>124.5</td>
<td>30.0</td>
<td>80.0</td>
</tr>
<tr>
<td><strong>Crops</strong></td>
<td>101.5</td>
<td>79.9</td>
<td>65.7</td>
<td>31.7</td>
<td>42.0</td>
</tr>
<tr>
<td><strong>Fish</strong></td>
<td>5.4</td>
<td>9.5</td>
<td>13.1</td>
<td>3.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Other measures:</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Natural disaster relief</td>
<td>37.5</td>
<td>45.2</td>
<td>51.5</td>
<td>35.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Environment Protection</td>
<td>83.7</td>
<td>23.6</td>
<td>25.8</td>
<td>20.2</td>
<td>20.0</td>
</tr>
<tr>
<td>Others:</td>
<td>2007.6</td>
<td>1796.9</td>
<td>1794.2</td>
<td>1407.9</td>
<td>675.3</td>
</tr>
<tr>
<td>Compensation to Pension Fund</td>
<td>1669.9</td>
<td>1381.1</td>
<td>1167.1</td>
<td>626.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Administrative costs</td>
<td>100.5</td>
<td>237.0</td>
<td>307.6</td>
<td>254.0</td>
<td>285.2</td>
</tr>
<tr>
<td><strong>Other Ministries:</strong></td>
<td>12.1%</td>
<td>5.3%</td>
<td>7.2%</td>
<td>7.8%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Rural Development</td>
<td>604.5</td>
<td>31.5</td>
<td>39.4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Education and training</td>
<td>150.7</td>
<td>178.0</td>
<td>275.8</td>
<td>258.7</td>
<td>244.5</td>
</tr>
<tr>
<td>Selection programs</td>
<td>12.5</td>
<td>13.9</td>
<td>12.4</td>
<td>11.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Land Reform</td>
<td>52.3</td>
<td>60.1</td>
<td>82.0</td>
<td>167.3</td>
<td>558.9</td>
</tr>
<tr>
<td>Environment Protection</td>
<td>101.2</td>
<td>162.1</td>
<td>344.8</td>
<td>143.9</td>
<td>96.0</td>
</tr>
<tr>
<td><strong>Total agricultural public expenditures (TAPE):</strong></td>
<td>7,600.2</td>
<td>8,453.7</td>
<td>10,450.1</td>
<td>7,458.3</td>
<td>6,919.3</td>
</tr>
<tr>
<td><strong>Share of agricultural expenditures in total public expenditures, %</strong></td>
<td>5.5%</td>
<td>4.9%</td>
<td>4.3%</td>
<td>2.8%</td>
<td>2.1%</td>
</tr>
<tr>
<td><strong>Share of public expenditures on agriculture in total GDP, %</strong></td>
<td>1.4%</td>
<td>1.3%</td>
<td>0.8%</td>
<td>0.8%</td>
<td>0.6%</td>
</tr>
<tr>
<td><strong>Total public expenditures</strong></td>
<td>137062.9</td>
<td>174235.9</td>
<td>241454.4</td>
<td>267394.9</td>
<td>324272</td>
</tr>
<tr>
<td><strong>GDP</strong>*</td>
<td>537667.0</td>
<td>657300.0</td>
<td>1267000.0</td>
<td>930779.0</td>
<td>1178600.0</td>
</tr>
</tbody>
</table>

Source: State Treasury reports, Budget Laws.

Notes: *Without Stab Fund allocations, updated as of August 2009.*
**Draft proposed by the government published on September 17, 2009, without Stab Fund allocations***IER estimate for 2009, government estimate for 2010
## Stabilization Fund Allocations to Agriculture

**NON-REPAYABLE SUPPORT, M UAH**

<table>
<thead>
<tr>
<th>Production subsidies (% of total allocations)</th>
<th>60.4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial support of livestock and crop production:</td>
<td>526,655</td>
</tr>
<tr>
<td>- Livestock support</td>
<td>86,655</td>
</tr>
<tr>
<td>- Young cattle support</td>
<td>190,000</td>
</tr>
<tr>
<td>- Spring crops support</td>
<td>250,000</td>
</tr>
<tr>
<td>Partial compensation of interest rates for credits</td>
<td>800,000</td>
</tr>
<tr>
<td>- Innovation projects loans</td>
<td>120,000</td>
</tr>
<tr>
<td>Partial compensation of costs of agricultural machinery</td>
<td>2,642</td>
</tr>
</tbody>
</table>

**Growth-Enhancing Measures (% of total allocations):**

| Land Fertility preservation | 101,965 |
| Pest and disease control | 9,000 |
| Rural Development (child healthcare) | 10,000 |
| Extension and Advisory Services | 14,000 |
| Education and training | 5,000 |
| Natural disaster relief (Solotvyn mine) | 35,000 |
| Insurance costs compensation | 12,176 |
| Support of technical service cooperatives | 90,000 |
| NSC UKRASGOLEASING | 120,000 |

**REPAYABLE SUPPORT, M UAH**

| Financial leasing | 273,562 |
| Loans for rural farms | 200,000 |
| TOTAL ALLOCATIONS, M UAH | 2,200,000 |

Source: Cabinet of Ministers Decree #463 as of May 13, 2009. Last amended on October 14, 2009

Note: The fund established in 2009 only as special source to combat the effects of financial crisis. In Budget draft for 2010 the funds from Stab Fund for Agriculture is estimated at the level of 3.3 billion UAH (no division among expenditures categories is possible at this stage).
Annex B

Guideline used for in-depth interviews with agricultural producers and inputs suppliers

(March-April 2009)

This is an about 45 min interview aimed at defining the challenges your company experienced in times of the financial crisis and the undertakings you make to approach these challenges conducted by the German-Ukrainian Policy Dialogue in Agriculture at the Institute for Economic Research and Policy Consulting with the purpose to evaluate the effect of the financial crisis for agriculture and food industry and to develop recommendations for policy makers regarding the best response to cope with these challenges.

Financial block

1. Did you experience any changes/do you expect any changes in terms of external financing over the last six month/over the next six month?
   - level of interest rates,
   - halted/opened credit lines,
   - foreign investment flows,
   - funds from the mother company,

2. Did you experience any changes in the structure of financing of your activities over the last six month/do you expect any changes in the structure of sources of financing of your activities over the next six months?
   - share of own funds,
   - bank loans,
   - government subsidies by activity.

Sales block

3. Did you experience any changes in volumes of sales of certain products/services over the last six month?
   - volume, direction and speed of these changes by type of products/services

4. What was the main reason for these changes to your mind?
   - changes in the demand for certain commodities/services
   - changes in prices for certain commodities/services

5. What do you expect as to the sales of certain products/services over the next sixth months?
   - volume, direction and speed of these changes by types of products/services.

Production block

(For each question in this section make sure the respondents specify the timing of expected undertakings. Do not restrict the respondents with certain time intervals whenever these intervals are not specified in the question directly).
6. Did you introduce any changes in your product range/structure of area seeded over the last six month? Please specify:
- shares of products supplied,
- direction and magnitude of changes in production by products/services supplied,
- shares of certain crops in area seeded,
- shares of certain animals in farm, herd size.

7. Do you plan to introduce any changes in your product range/structure of area seeded over the next six month?
- shares of products supplied
- direction and magnitude of changes in production by products/services supplied,
- shares of certain crops in area seeded,
- shares of certain animals in farm, herd size.

Intensity block

(In case of positive changes ask about the sources of financing: own funds, leasing, loans from banks, foreign investment, other)

(Questions 8-9 are for crop cultivators only)

8. Please, compare the level of agrochemicals you used per hectare between the 2008 and 2009 seeding campaigns? Differentiate between winter and spring crops if you can:
- changes in the level of fertilizers used,
- changes in the level of pesticides used.

9. Please, evaluate the quality of seeds you used per hectare between 2008 and 2009 seeding campaigns.
- please, compare the shares of super elite, elite and commercial seeds
- origin of the seed (domestically produced, provided by international companies)

(Question 10 is for animal breeders only)

10. Did the quality of animal feed at your farm change recently? Please, discuss the following:
- quality of feed supplied,
- quality of in-house produced feed,
- changes in structure of animal nutrition.

(ask any respondent)

11. Did you buy new agricultural machinery over the last six month? What piece of machinery was it? Do you plan to buy agricultural machinery over the next six months?

12. How does it influence your production capacities?
- production capacities increase/decrease, capacity utilization level increase/decrease by activity,

13. What were the main drivers of these (if any) changes?
-Changes in prices for inputs (labor, fuel, agrochemical. etc.)
-Changes in terms of financing
  - Lack of own funds,
  - Changes in costs of external financing,
  - Lack of loans provided,
  - Withdrawal/inflow of foreign investment.
-Changes in demand for certain commodities/services you sell.

14. Could you please specify the time when these drivers came into force for your company?
  - More than six months ago,
  - Within past six months,
  - Changes are expected to occur within next six month,
  - Other, please specify.

15. Did you introduce (do you plan to introduce) any other modernization or technological, product or process improvement?
  - specific trainings for employees, farm management programs, other.

"Demographics"
(ask when it is not available from open sources)

16. Please specify the type of your firm: private farm, agricultural enterprise, processing company, agriholding.
17. Please specify your major type of activity: crop cultivation, livestock, dairies, sugar, meats, grain trade, other.
18. Please indicate the number of employees in your company.

GIVING THANKS AND END OF the INTERVIEW

Annex C

Selected summaries of the in-depth interviews with representatives of agricultural producers and input suppliers

Company A
166 th. hectares, sugar beets, grain, oil seeds

Financial Block

Most of the credit lines were opened as long-term before the crisis thus the conditions and costs of these financing sources remained stable leading to no need for unplanned prolongation. These are not the costs but rather the usage of external financing that differ before and after the credit crunch evolved. No visible differences in terms of financing are emphasized with regards to two loans from EBRD that came one after another just in a year sequence. Both credits from EBRD amounted to 20 mln USD; however the purpose of applying
for these loans has been slightly altered. While the first loan was taken to address energy saving projects (company succeeded in 15% reduction of energy consumption at its factories), the second one was mostly aimed at restructuring its short-term liabilities into long-term ones.

**Demand side shocks**

Certain halts with the demand occurred between October and November 2008 due to ambiguity about overall economic conditions and rather pessimistic expectations on the market; however the situation stabilized further to the New Year as seasonal adjustment aroused. No big challenges from the demand side are explained by a large share of manufacturing firm (and not final consumers) in the sales channels. Up to 70% of the production is delivered via B2B scheme. High quality and well-established relations with clients help to sustain reasonable prices able to generate profits. The partners appeared to be ready to pay substantially higher than market average price as they had small share of sugar costs in their value chain.

**Production side**

The firm plans to increase its production in 2009. However, the source of this increase is viewed in enhanced intensity now and the company refused aggressive enlargement used in previous years. The six sugar factories will remain the accumulating points of all the production processes. Less aggressive investment plans are designed to increase the productivity of the existing factories. More attention is now paid to synergy effects within the holding. In particular, the company is using its ability to switch from outside suppliers to its integrated resources. Thus, organic fertilizers may easily substitute mineral substances previously bought from other companies. The same technique is used when inside grown beets are used not only for sugar production but also as a good source of feed for cattle and fruitful predecessor for other crops.

Increased efficiency is a part of restructuring plan agreed on well before the talking about the credit crunch spread. Restructuring implies reduction of separate business units, which are to be united under five names only with more power given to local offices. This shall reduce transaction costs between firms inside the holding as well as increase the speed of response if local conditions change in the future.

The company recognizes that uphold in capacities of its sugar factory, as new technologies continue to arrive, would imply more skills from workers. That is why knowledge exchange and training programs are not subject to any cost cutting behaviour.

The company plans to explore export opportunities with first actual cargos being already directed to external trading partners. This may reduce the dependence on the local market which will face more pressure from imported raw cane sugar stipulated in WTO requirements. Despite low additional investment into specific equipment for raw can sugar processing, the holding does not see too much potential in developing this direction further (two out of six companies are currently capable of producing white sugar from raw cane sugar) as long as even under 2% import tariff rate its processing remains too costly.

In general, the company underlines its determination to the activities that generate relatively quicker return as their main strategic response to uncertainty about future economic conditions. In this sense, secondary directions which demand long-term investment (e.g., cattle breeding) will not likely be developed further. The same holds for biofuels discussed in investments plans earlier. It is not legal bans but the speed of return that keeps the company away from the search of alternatives of that kind.
Any types of governmental support including transfers from budget per hectare of sugar beets, VAT refunds, and provisional support for development of animal breeding are taken with caution given doubts about their implementation in practice and said to be not vital for strategic decisions of the company.

**Company B**

*90 th. hectares, crop cultivation, trading*

**Financial block**

The company faced an increase in costs of external financing both in domestic and global financial markets. Domestic borrowing became more expensive mainly due to increased interest rates, while foreign funds demonstrated less fragile surge in interest rates but were severely underpinned with devaluation of hryvnia. Given large share of liabilities denominated in foreign currency (including relatively cheap post-import financing opportunities) overall cost of external financing increased. This entailed much effort into finding new low-cost financing within international credit programs (IFC). Before new agreements are signed, the funds raised from private placement in early August 2008 (34.5 mln USD) maintain a major source of financing both of autumn and spring seeding campaigns, marketing and processing of crops in 2008/2009.

**Production and sales**

Production strategy of the company is committed to maintaining intensive crop cultivation. This implies higher costs of production as well as higher quality of grain. Given deteriorating producer's terms of trade, better quality of produce would allow selling globally that is expected to secure sufficiently high margins due to higher price of output (the company continues the negotiations on purchasing new storage facilities to be able to respond to seasonal price movements). These undertakings required to halt the expansion of the land bank initially scheduled for December 2008. Still, it did not affected long-term plans to have 160 ths hectares of land till 2012 (60 per cent more than now) as the challenges faced by land right holders would further push the rent price down.

The uncertainty evolved from the financial crisis internationally and domestically (less predictable interest rates, prices and governmental subsidies) together with increased costs of production made the company focus on its main activities at the expense of reduced attention to supplementaries. This resulted in a reduction of area under sugar beets (80% cut from the last season) given highly questioned profitability of the technical crop in the light of tougher competition fuelled with expected import of raw cane sugar and increased supply from the specialized agriholdings.

This also entailed higher level of own production capacities utilization and more stringent plans on purchases of new machinery from abroad. In the same streamline, the company continues to use large share (up to 90%) of inside produced seeds of grain.

**Expectations on positive signals from the government**

The direct support is viewed as inefficient because of highly variable level and terms of accepting the funds. Low accessibility and transparency does not provide the framework for the most efficient users to benefit from any measure introduced. Instead, the efforts put into infrastructure development (storage and trading facilities) are very much appreciated.
Company C

30 th. hectares, crop cultivation

Financial block

- The company did not experience any sizeable changes in terms of external financing as most of its liabilities (credit and leasing agreements) are long-term and will mature in more than a year from now. However, a certain fraction of credits was prolonged this autumn and the cost of this financing increased. Most of liabilities are still denominated in foreign currency and no efforts are put to increase the share of credits in hryvnia, because of the lower costs of the former and high share of external activities of the company.

- The share of own resources remains high as well as the share of small private investors from the US and EU.

Sales block

- 2008 is recognized as a bad benchmark for sales comparison as the governmental banned of export of grain and sunflower oil. The export surged this year underpinned with quite an extensive regional structure (including South Africa and Japan). Devaluation of hryvnia fostered export but also contributed to higher cost of production given large share of imported inputs. As Head of External Economic Affairs Department puts it, the current exchange rate is fully acceptable and a sharp decline of hryvnia (UAH/USD=15:1) could result in deteriorating producer terms of trade for the company (the price of inputs would increase faster than output prices).

Production block

- The company operates 100 thousand ha of land and halted to grow extensively (the last acquisitions timed back in July 2008). Instead, the efforts are now concentrated on traditional high-yield crops. Given crop rotation requirements no major changes are expected with the area under sugar beet. At the same time, 30-35% of crops are still to be seeded within the spring seeding campaign and that is considered as a major space for adjustment. The company plans to offer more “traditional” crops (maize and sunflower) at the expense of reduction of “exotic” coriander and thistle. Cost-cutting is primarily implemented through search for cheaper seeds and lower quantity of fertilizers per hectare. Still, European input suppliers dominate and the company is very cautious in choosing the partners in Ukraine, thus the adjustment could be summarized as “less expensive inputs from the west”. In short, the firm does not reject “to grow less but cheaper” strategy.

- The adjustment also means restructuring of sugar factories (several of them shut down this marketing year) aimed at increase in productivity and thus profitability of the business. Also, the goal is to introduce new budgeting, financial control and general managing techniques that require high-skilled labor. New principles of cooperation between organizational unites (sugar beet cultivator and sugar factory) are being established to optimize the cash flows and to secure reasonable profitability of each of them. This process is expected to be enhanced with merging of assets of business units (grain and sugar units).

Expectations from government

Clear and stable playing field is needed from the government side with no times of extreme border protection or delays with subsidies payments.
Company D

Input supplier (fertilizers, machinery)

Financial block and sales

Financial crisis is recognized to create a new environment for the company, which is mainly reflected in tougher competition which in most cases took the form of price-cutting behavior.

The company faced 25-35% reduction of sales of seeds, fertilizers and pesticides in winter 2009 year-over-year. Notably, the bad signals appeared only for the spring campaign as no visible changes emerged during field works in autumn 2008. The market for the product range stood still until late January – early February 2009 when the first purchases were made. The suppliers forced to sell cheap and offer favorable payments schemes to gain the loyalty of scarce customers. In fact, price damping dominated to win the tenders from large agri holdings who were the first to surge the market from more than two month- freeze.

The structure of sales altered as demand side dictates. The suppliers experienced the certain shift in demand in favor of cheaper brands which means higher yield to those companies delivering the seeds from local producers. The cost-cutting behavior of consumers (the farms) led to larger share of “essential” fertilizers in the demand.

Company responses to new challenges: no cost-cutting, but optimization of the structure and enhanced promotion.

The company followed the market trend in terms of reduction of asked price but did not aimed at taking the lead in this race. In contrast to certain suppliers, it did not go beyond the costs and ended with positive margin that appeared to be much lower compared to that from the previous marketing year estimates. Changes in structure of products demanded enhanced by higher prices from foreign suppliers make the company explore the sales from local producers (barley, rye, and sunflower seeds). Top-branded products are replaced with cheaper analogues in the firm’s offer. No cost-cutting is allowed for marketing-related undertakings. On the contrary, the company now allocates more finances to provide right informational signals and advertisement to its established and new customers. Modest distribution scheme with not many branches all over the country did not required additional injections of cash to cover operational costs. This allowed some space for accumulation of debt liability to contain the reduction of sales. Still, most contracts are signed via pre-paid scheme. The company will continue to target medium size companies with 5-10 thousands ha of land bank to promote long-term relationship as big companies are more resilient in their choice of a particular supplier and small farms stay not reliable enough to pay.

Expectations from government:

The company understands the danger of too much regulation in the sector from the government. Thus, it could not benefit from 13% increase in import duties and would not perceive the undertaking alike in the future. Instead, the major role of the state is seen in creating the favorable environment for loans. Participation of the government in the schemes of external financing of agricultural companies is believed to foster demand for high-quality inputs and thus secure sufficient profitability of the sector as a whole.

The Head of Agrotechnology Department expects the market to be back to its equilibrium as soon as this autumn when postponed investment plans are realized as an appropriate response for increasing demand for agricultural commodities in the global market.
Company E

Input supplier (seeds, machinery)

Financial crisis has influenced all businesses in Ukraine, and the company is not an exception. According to the Head of sales of agricultural produce on internal and external markets, the company decreased investment in people but not in production.

Financial block. The company underlines the following features:

- Obtaining credits now is harder than in pre-crisis times.
- The solvency problems made the company apply for credit prolongation.
- Interest rates for some credits attracted have been increased.
- The company collaborates with state authorities, thus it relies on governmental subsidies.
- Planned 50 M USD credit from IFC (for elevators building) was not obtained.

Production and Sales:

- Structure of land use is changed depending not only on profitability but also on the necessity of crop rotation. Therefore, financial crisis has minimal influence on seeding structure (about 10% of land is used for sugar beets, 20-30% - for wheat, 50% - for corn, remaining areas - for other activities).
- Demand for company output has decreased. Many buyers (especially, farmers) want to purchase via credit. But the company evaluates installment selling as very risky. However, the demand for certain machines was too high.
- Some detriments were associated with price decrease. Nevertheless, the firm benefited from grain exports. By now, the company does not use future and option contracts since correlation between Ukrainian and World prices is not perfect, and Ukraine lacks functioning commodity exchange for such purposes.

Investment in production:

- The company continues building of two largest elevators in Europe (Their planned capacity is 720 thd. t, and currently each of them keeps 90 thd. t).
- The company bought 4 out of 9 world largest dryers for corn, which is currently being set into operation.
- The company plans to increase its land areas up to 180 thd. ha.
- The company has invested a lot to improve the efficiency of fertilizers (Correct usage of fertilizers allows saving 20-30% of fertilizer costs; but the firm has not experienced it yet since it purchased fertilizers before their severe price decline).

Investment in people:

- The company saves costs by optimizing spending on personnel. A part of employees was dismissed. For the rest, wages were revised, privileges were reduced and bonuses were delayed.
(Wage redistribution was made judging by working load. Thus, some employees got wage increase but some experienced severe decrease).

Company F,

6.5 hectares, intensive apple producer, private entrepreneurship

Financial block

Increased cost of external financing has lenient effect on the activity of the farm thanks to its little share in the capital structure of the firm. After the expiration of agreements with Dutch partners in the start-up period (1999-2003) and withdrawal of foreign investment, the farm mostly relies on own resources. No visible changes in governmental support are documented since the farm raised one-time transfer of 60 UAH thousand to purchase engineering equipment and refrigerating capacities well before the negative developments of financial and real sector turmoil came into effect. Nevertheless, the change of organizational form of the farm (from family farm to private entrepreneurship) is partially attributed to the need of cash flows optimization to cut the transaction costs.

Sales block

Prices for output did not deteriorated sharply as long as the firm relies upon long-term cooperation with retail outlets (11 retailers). Storage capacities allow adjusting price accordingly to seasonal fluctuations. However, more stringent requirements for quality that appeared recently (namely, requirements of apples appearance) put upward pressure on the cost of production (losses after calibration)

Production block

Thanks to large share of imported inputs the cost of production raised considerably underpinned with hryvnia depreciation recognized as the biggest challenge for the farm. For certain fixed capital items such uphold amounted to 50% (tractor Yahnmar 66 supplied form Japan this year). The same holds to variable costs (increased price for bamboo imported from China used to stabilize young trees in the nursery garden). The same uphold pressure on costs comes from non-tradable inputs (energy price uphold from April used in storage and irrigation systems). To sustain reasonable level of sales the firm started to develop secondary activities: selling young trees, equipment for trees stabilization (posts, wire, and cord).

Additional pressure on costs together with more stringent quality requirements excludes “less-intensive” strategy that is the basis for higher yields and thus is vital for firm’s effectiveness. Instead, the company constantly searches for new production technologies. The most recent example is anti-hailstorm net scheduled for usage in 2009 (one year brought 480 UAH thousand of losses thanks to hail kills). Modern technologies are applied via knowledge exchange combined with own experience that helps to find the best technological decisions with minimized costs. Israeli anti-hail system with unique mechanism of light refraction was used in the form of less expensive European analogue that completely fits into the firm production requirements. In addition to this, the shift to own inputs is observed when expansion of garden acreage is considered.

Expectations from government

The firm recognizes the lack of experts in the field of intensive horticulture and believes this is where the governmental efforts should be focused on. The lack of knowledge is the primary
source of all inefficiencies of support programs. More flexible knowledge exchange in the background of undersupply in the domestic market creates good opportunities for industry development.

Company G,
50 hectares, crop cultivation, family farm

Financial block

The company did not experience any changes in the cost of external financing as long as the loans are taken from the government support programs (with zero interest rate). No revisions were made in terms of the maturity period or collateral requirements. Low capitalization, however, gained no possibility to apply for further financing (both with interest rate support or market loans). Own financial resources were fully exhausted in the autumn seeding campaign and lack of funds forced the farm to reduce the land bank. More than 20 hectares were leased to third parties with the rent payment level slightly above 300 UAH per hectare (lessees have monopsony power as the region is depressed)

Sales and production block

No storage capacities and need of financing made the farm sell low-priced commodities. This led to reduction of land back together with shift to more profitable commodities (the acreage left was allocated between wheat and sunseeds). Lack of funds were compensated with commodity credit (seeds) provided by new partner (lesser). This provided the opportunity to use high quality seeds and mitigate the effect of low amounts of fertilizers and pesticides purchased this year. Nevertheless, dry weather added to negative expectations about the yield this crop year.

Financial hardship resulted in no purchases of new machinery or equipment that increased the cultivation period and further decreased the productivity in the farm. These perspectives spur search for new low investment activities (like small scale fishery). No harvest capacities will also contribute to subtraction of potential cash flows in the summer 2009 and lack of funds to cover the cost of external harvesters may delay the harvesting period and thus again deteriorate the financial performance of the farm.

Expectations from government

Governmental main task is to establish clear rules of the game for small scale producers. The question about the land property rights is still not resolved. When Land Code provisions on permanent land use will be applied to current land plots this would further deteriorate producer’s terms of trade and may even lead to shut-down of the farm. Private property plots (acreage obtained from collective farms reformation) will be used and the other part of land bank is most likely to be leased to third parties.