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Assessment of Financial Situation of Farms in Ukraine

Introduction

Financial situation belongs to the key characteristics of every enterprise [Jansky 2002, p. 485]. A basic instrument for cognition of the company's financial situation is financial analysis. For assessment of financial situation, financial analysis uses different types of financial characteristics [Jansky, Novak 2002, p. 417]. The main tool of financial analysis is financial ratios. The evaluation of financial situation can be used for different aims to evaluate issues such as employee performance, the efficiency of operations, credit policies, potential investments and credit-worthiness of borrowers as well the evaluation can be used by the state for correction of agricultural policy tools, by the banking sector for loan policy management, etc.

For the past seven years, in Ukraine there are processes enlargement of agricultural enterprises. A lot of large-sized agricultural enterprises emerged in Ukraine last time, which continues to grow. These enterprises have special legal type – holdings and have vertical integration structure. As a rule they have preferential access to capital, markets, policy facilitation and innovation. There were 79 agroholdings in Ukraine on July 2011. They had 5200 thousand ha agricultural land. The average size of agroholdings was 66 thousand ha. Mostly there are 43.6% agricultural enterprises in Ukraine which had agricultural land from 1000 till 4000 ha. So, the assessment of financial situation of agricultural enterprises concerning their size will let us make conclusion which of size of enterprise is more financial stability and will let the state provide more effective agricultural policy.

Methods

The paper studies the comparison of the financial situation of agricultural enterprises in Ukraine in years 2005–2010. The farms were shared in four groups according to the size – very large, large, medium and small. The sharing was

carried out when they match at least one of the following conditions – operating revenue, total assets, and employees. Very large companies have to match at least one of the following conditions: operating revenue ≥ 100 million EUR, total assets ≥ 200 million EUR, employees ≥ 1,000. Large companies have to match at least one of the following conditions: operating revenue ≥ 10 million EUR, total assets ≥ 20 million EUR, employees ≥ 150. Medium sized companies have to match at least one of the following conditions: operating revenue ≥ 1 million EUR, total assets ≥ 2 million EUR, employees ≥ 15. Small companies are not included in another category.

We selected 44 very large, 697 large, 2920 medium and 4408 small agricultural enterprises for assessment of financial situation.

There are used the following ratios to evaluate the financial situation of agricultural enterprises: structure ratios, operational ratios, profitability ratios.

Results

Structure ratios consider liquidity ratios, solvency ratio and leverage ratio. Liquidity ratios provide a measure of a company's ability to generate cash to meet its immediate needs. We used two commonly liquidity ratios – current ratio and quick ratio. The current ratio is a reflection of financial strength. It is the number of times a company's current assets exceed its current liabilities, which is an indication of the firm's ability to pay short-term debt. A common rule of thumb is that a "good" current ratio is from 1.2 to 2.

The quick ratio is also called the "acid test" ratio. That's because the quick ratio looks only at a company's most liquid assets and compares them to current liabilities. The quick ratio tests whether a business can meet its obligations even if adverse conditions occur.

There are differences in liquidity ratios according to four groups of farms. For more details see tables 1–4. The value of current ratio meets the set standard for all types of farms. The large farms had the best value of current ratio during 2005–2010. The small farms had the worst value of liquidity ratios during the same period. The very large companies met better their obligations last years it means they had better the structure of liquid assets. The development of liquidity ratios tendencies was negative for all groups of agricultural enterprises.

Solvency ratio measure the stability of a company and its ability to repay debt. Solvency ratio gives a strong indication of the financial health and viability of company. In our case we computed solvency ratio as follows: (Equity/Total assets) × 100. This ratio measures how much of the firm's asset base is financed using equity.

Table 1
Financial ratios for very large agricultural enterprises (average values)

Ratios	2005	2006	2007	2008	2009	2010
Structure ratios						
Current ratio	1.74	1.51	1.82	1.65	1.82	1.94
Liquidity ratio	1.64	1.18	1.44	1.47	1.70	2.06
Solvency ratio [%]	57.56	50.37	51.86	50.2	45.48	46.38
Gearing [%]	31.09	45.49	48.19	51.08	56.43	52.4
Operational ratios						
Net assets turnover	0.64	0.51	0.49	0.74	0.78	0.65
Interest cover	11.09	7.50	3.55	2.99	2.92	3.75
Inventory turnover	2.11	1.60	1.28	2.02	2.04	2.21
Collection period [days]	143	121	172	136	146	169
Credit period [days]	52	34	84	54	58	78
Profitability ratios						
Return on equity [%]	31.02	21.51	10.75	11.63	17.19	27.03
Return on assets [%]	17.84	10.69	5.55	5.8	7.51	12.04
Gross Margin [%]	49.58	39.74	42.61	48.18	48.3	50.36
EBITDA Margin [%]	21.74	18.42	14.39	11.21	11.73	19.47
EBIT Margin [%]	18.79	15.7	11.01	8.76	10.16	17.48
Cash flow / Operating revenue [%]	31.39	21.53	15.57	10.95	12.42	20.41

The value of solvency ratio shows a continuous decrease since 2005 in all groups of farms. The solvency ratio for small company was the least during 2005–2010. It means the small enterprises were not so good solvent as other farms and the greater the probability that the farms will default on their debt obligations. The large farms show the highest value of solvency and in 2010 it reached 62.9%. This means they have stable financial statement.

Gearing is a measure of financial leverage, demonstrating the degree to which a company's activities are funded by owner's funds versus creditor's funds. We computed gearing as follows: (Non current liabilities + Loans / Equity) × 100. In our case the very large agricultural enterprises have the highest gearing, in 2010 it reached 52.4%. This means they are more vulnerable to downturns in the business cycle. The 40–50% debt to equity ratio is high and the company needs to look at its financial statements more carefully.

Table 2
Financial ratios for the large agricultural enterprises (average values)

Ratios	2005	2006	2007	2008	2009	2010
Structure ratios						
Current ratio	2.33	2.19	2.35	1.89	1.91	2.13
Liquidity ratio	1.15	1.31	1.69	1.59	1.69	1.84
Solvency ratio [%]	66.77	63.24	63.11	54.75	57.6	62.85
Gearing [%]	27.01	30.91	33.14	41.92	33.92	27.25
Operational ratios						
Net assets turnover	0.38	0.37	0.37	0.38	0.4	0.41
Interest cover	5.78	3.45	5.45	4.47	4.05	4.43
Inventory turnover	1.09	1.1	1.2	1.23	1.37	1.38
Collection period [days]	89	106	120	111	117	121
Credit period [days]	68	82	74	70	63	62
Profitability ratios						
Return on equity [%]	16.8	14.61	18.32	16.82	18.09	18.81
Return on assets [%]	11.04	8.98	11.11	8.50	9.71	11.40
Gross Margin [%]	32.95	28.45	35.36	38.79	37.52	38.80
EBITDA Margin [%]	25.46	21.58	26.86	22.70	24.55	26.28
EBIT Margin [%]	19.90	15.60	21.16	17.85	19.76	21.67
Cash flow / Operating revenue [%]	32.59	26.60	33.99	27.54	28.70	31.40

The ratios discussed under operational activity are net assets turnover, interest cover, stock (inventory) turnover, collection period, credit period. They use to measure the efficiency of company's operations. Due to data of tables 1–4 the development of operational ratios tendencies was more stable and steady for the large agricultural enterprises. There are more effective operations of very large farms.

Inventory turnover of very large farms shows a continuous increase since 1996 and in 2010 it reached 2.2 what is much higher than inventory turnover of other types of farms, especially small farms, where there was reached 1.1 in 2010.

The efficiency of the assets was more also for very large farms. There was in twice more than its value of other types of farms in 2008–2009.

For 2005–2010 it is evidence that the value of interest cover has decreased for all farms, especially rapidly in very large farms, where there was reached 3.8

Table 3
Financial ratios for medium sized agricultural enterprises (average values)

Ratios	2005	2006	2007	2008	2009	2010
Structure ratios						
Current ratio	1.62	1.65	1.83	1.65	1.61	1.70
Liquidity ratio	0.72	0.87	1.03	1.14	1.2	1.31
Solvency ratio [%]	55.24	53.07	53.10	39.47	43.68	49.30
Gearing [%]	30.99	35.04	31.48	39.13	27.89	21.63
Operational ratios						
Net assets turnover	0.46	0.46	0.48	0.48	0.5	0.52
Interest cover	3.16	2.96	4.43	1.51	1.51	2.22
Inventory turnover	1.00	1.06	1.13	1.11	1.22	1.32
Collection period [days]	89	102	85	92	110	110
Credit period [days]	115	107	95	111	108	91
Profitability ratios						
Return on equity [%]	14.10	13.24	21.63	16.80	16.32	22.90
Return on assets [%]	7.48	6.88	10.99	2.79	4.12	9.48
Gross Margin [%]	26.52	26.62	35.98	37.89	33.56	37.88
EBITDA Margin [%]	18.16	17.6	23.32	12.99	15.53	21.45
EBIT Margin [%]	13.27	12.62	18.84	8.17	10.55	16.84
Cash flow / Operating revenue [%]	21.88	20.71	27.39	11.14	14.06	23.17

in 2010 that is more less compare 11.1 in 2005. Small farms had interest coverage ratio below 1 (exception 2007, 2010) it means that the small farms were not generating sufficient revenues to satisfy interest expenses.

The analysis of accounts receivable (collection period ratio) and accounts payable (credit period ratio) concerning different types of farm shows very interesting tendency (tables 1–4). The management of accounts receivable of very large farms is worse than that of other types of farms but at the same time they manage of accounts payable better than that of other. It is caused that very large farms have vertical integration structure with own processing plants which like customers are not good payers. The small farms had the worst values of credit period for 2005–2010. This means they had not enough on hand to run their business and keep their suppliers not paid on time.

Table 4
Financial ratios for small sized agricultural enterprises (average values)

Ratios	2005	2006	2007	2008	2009	2010
Structure ratios						
Current ratio	1.12	1.05	1.06	1.06	1.02	1.10
Liquidity ratio	0.68	0.73	0.82	1.02	1.04	1.16
Solvency ratio [%]	46.30	42.77	45.3	43.28	45.32	44.19
Gearing [%]	26.57	28.46	26.88	17.66	12.74	10.96
Operational ratios						
Net assets turnover	0.47	0.48	0.54	0.51	0.43	0.41
Interest cover	0.51	-0.01	2.00	0.94	0.91	1.02
Inventory turnover	1.08	0.99	1.39	1.36	1.23	1.13
Collection period [days]	105	115	119	132	154	149
Credit period [days]	165	174	162	147	165	168
Profitability ratios						
Return on equity [%]	6.94	2.68	8.96	7.94	6.77	10.33
Return on assets [%]	2.56	-0.77	3.24	1.56	1.76	3.76
Gross Margin [%]	21.41	21.22	25.69	33.64	28.01	34.36
EBITDA Margin [%]	10.13	7.62	11.96	11.91	11.96	7.62
EBIT Margin [%]	5.84	2.50	8.08	7.13	8.01	14.35
Cash flow / Operating revenue [%]	12.27	8.23	13.74	14.08	13.25	23.44

The ratios discussed under profitability are: return on equity (ROE), return on assets (ROA), profit margin, gross margin, EBITDA margin, EBIT margin. Profitability is the measure of companies' ability to create new resources, to create profit with the use of the invested capital [Jansky 2002, p. 488].

The development of profitability ratios of all farms was negative in 2006, after that was positive in 2007, after that was again negative in 2008 which is caused financial world crisis. For the last years of the followed period the tendency of profitability was positive.

The small farms had the worst values of profitability ratios for 2005–2010.

The development of profitability ratios of very large farms was negative up to 2008 after that it was positive but there was not reached the value of 2005.

The development of profitability of medium size farms was very volatility. The values of profitability ratios decreased rapid in 2008, it was caused the influence of financial world crisis. So, this group of farms is subjected more by the external factors than the other.

The development of profitability ratios of the large farms was more stable than other farms for 2005–2010 and they showed high values.

According to the individual ratios of profitability we made the following conclusion.

Gross margin is a measure of income that is the direct result of production management. This ratio tells us the portion of each dollar (or national currency) of sales that remains after deducting production expenses [Fabozzy 2003, p. 736]. Due to the ratio very large farms had highest value for 2005–2010. The gross margin for very large company for 2005–2010 was about 50% that there was higher on 10–20% than other farms. So, very large companies managed their production facilities better than other farms.

EBIT margin (operating profit margin) evaluates the operating performance of company. To do this, operating expenses (e.g., selling and general administrative expenses) removes from gross profit, leaving us with operating profit, also referred to as earnings before interest and taxes (EBIT). Due to data of tables 1–4 we see that very large companies managed their operating expenses not so good like the large and medium-sized companies. Operating profit margin of very large companies declined rapidly from 2005 to 2008 after that it increased up to 17% in 2010. The development of EBIT margin of large farms was more stable.

The large companies managed their investment in assets in the best way than other farms for 2005–2010. Return on assets of very large companies decreased rapidly from 17.84% in 2005 to 5.8 in 2008 after that it increased up to 12.04% in 2010.

The development of return on equity of the large and medium-sized farms was more stable for 2005–2010 than there was in other farms. Shareholders of these companies earned about 19% from their investment. So, from this point of view mentioned above farms was more profitable for investors.

Conclusion

So, the financial situation of the large company was more stable than the other. They are not so subjected by external factors like other agricultural enterprises. They could provide their activity without any government support.

The development of very large company is not good way for Ukraine. It could lead to monopolisation of land leasing market and the agricultural market

and the loss of competition for them and thus forcing out small and medium businesses. The assessment of financial situation of very large farms showed that they could not stable development and their growing could lead to the threat of country food safety.

The evaluation of medium and small size enterprises showed they could not compete with very large and large companies in this case the government should support their activity.

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Ocena sytuacji finansowej przedsiębiorstw rolniczych na Ukrainie

Streszczenie

W opracowaniu przedstawiono kształtowanie się sytuacji finansowej przedsiębiorstw rolniczych na Ukrainie w latach 2005–2010. Obiekty zostały podzielone na 4 grupy według ich wielkości: bardzo duże, średnie i małe. Analiza sytuacji finansowej została przeprowadzona z wykorzystaniem wskaźników finansowych dotyczących płynności, wspomagania finansowego, sprawności i rentowności.