

**WORKING CAPITAL MANAGEMENT IN FARMS
IN THE YEAR 2007 (BASED ON FADN DATA)**

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Abstract. Article is an attempt to describe the way of the net working capital management in farms in the year 2007. Data on the farms were taken from the FADN database and include the farms from the 27 European Union countries (EU-27). A descriptive and comparative analysis was used, and also the fundamental indicators of the financial analysis were made. The analysis showed that agriculture in the EU in 2007 year was characterized by: a high share of current assets in total assets, over-liquidity and low importance of short-term liabilities, and commonly used strategy of net working capital management was an aggressive-conservative one. This strategy was characterized by a moderate profit and risk. There was also a high diversity of assets and capital structure depending on the country. The study was extended by the comparison of net working capital management in the average farms from Poland with the average one from the EU-27 according to the ESU and the agricultural type.

Key words: farm, working capital, strategy, liquidity

INTRODUCTION

As we know, working capital management in the enterprise is one of the most important financial decisions. Decisions should lead to the harmonization of the level of working capital to the size of the demand for capital by optimizing current assets (stocks and receivables), or using different sources of financing [Sierpińska and Wędzki 1997]. In the literature there are many definitions of working capital. In the broadest terms, working capital is based on assets, which are financed long-term liabilities, the short-term liabilities and the equity. Then called gross working capital (GWC). However, some assets, which is not financed by short-term loans, but by long-term capitals and by

equity is called net working capital (NWC) [Brigham and Houston 2005, Sierpińska and Wędzki 1997, Zimon 2008].

The possession of capital determines the maintaining of the continuity of the production cycle in the company. The way of it, depends on the applied strategy [Konieczna 2008]. This article is an attempt to apply the theory of the net working capital and management strategies, not so far in the enterprise, but in farms. Proper management of NWC components seems to be particularly important for farms, because of the biological nature of production. Any lack of means of production are reflected in the yields obtained, and their complementarity with the delay might not achieve the desired effect [Wasilewski 2004]. It is also noteworthy that the characteristic feature of most farms is the high share of fixed assets in total assets and the fixed assets turnover ratio is much slower than the current assets turnover ratio [Mańko and Płonka 2010].

SOURCE MATERIAL AND METHODS RESEARCH

The source material from the FADN database was used in this article, which related to the year 2007 [FADN 2010]. The study was conducted in three systems, analysing data concerning to the average farms: from each EU-27 countries, according to ESU from Poland compared with the average from the EU-27 and by agricultural type from Poland compared with the average from the EU-27.

The descriptive and comparative analysis were used in this study, and also the basic methods of descriptive statistics were applied. 12 indicators were calculated for analysed farms, which presented how to manage NWC¹:

- X1 – the share of current assets in the total assets (%),
- X2 – the share of short-term loans in total liabilities (%),
- X3 – the level of NWC – the difference between the current assets and short-term loans (euro)²,
- X4 – the cover of assets by its equity – the ratio of the equity to the total assets,
- X5 – current ratio – the ratio of the current assets to the short-term loans,
- X6 – quick ratio A – the ratio of the current assets without stocks to the short-term loans,
- X7 – quick ratio B – the ratio of the current assets without stocks and non-breeding livestock to the short-term loans,
- X8 – stocks' turnover ratio – the ratio of the total inputs to the stocks,
- X9 – receivables and cash's turnover ratio – the ratio of the other circulating capital multiplied by 365 days to the total output of the farm (days)³,

¹ The ratio's formulas derived from: FADN [2010], Kulawik [1995], Sierpińska and Wędzki [1997], Wyniki standardowe... [2005], Tatka [1999]. However, for example, indicators X9, X10 and X11 were changed because of the lack of data.

² In the literature also functions as net current assets or working capital.

³ The interpretation of the changes in the X9 is very careful, because the receivables and cash are included in total in the FADN database [FADN 2010]. Although it is believed that it does not bring much value – but the absence of other, more accurate data – retains it and try to interpret this ratio. (In the case of interpreting the changes in the X9 is very careful, because in the FADN database receivables and cash are included in total [FADN 2010]. Although it is believed that he does not bring much essential value – the absence of other, more accurate data – retains it and try to interpret the author).

- X10 – return on total assets – the ratio of the farm net income to the total assets,
- X11 – net rentability – the ratio of the farm net income to the total output,
- X12 – Cash Flow II – total sales of products increased by the others incomes, sales of livestock, subsidies (concerning to the operations, investments), VAT balance, net increase in fixed assets, closing valuation of debts and diminished by the paid costs, purchases of livestock, farm taxes (including from the investments) (euro).

Moreover, in this article an attempt was made to determine which management strategy NWC was chosen by farms. In the management of current assets and liabilities can be distinguished conservative and aggressive strategy (Fig. 1). Four possible combinations of strategies occurs, of which one is a conservative and one is an aggressive and two moderate [Sierpińska and Wędzki 1997]. Conservative strategy (CC) is accompanied by low risk, but the possibility of achieving low income, and an aggressive strategy (AA) increases the chances of big profits, but they are accompanied by high risk. The cautionary company may use a combination of conservative and aggressive strategy, it is a moderate strategy (AC or CA). Then this company reach a modest profit, incurring a moderate risk [Konieczna 2008]. It is worth noting that, when applying the conservative strategy, liquidity ratios are higher, and indicators of effectiveness of assets and the rentability are lower. You can also add that the conservative strategy boils down to maintain the cash collection period at an optimum level with shortening the period of regulatory obligations. However, when using an aggressive strategy, the efficiency indicators of assets and the rentability are improved, and liquidity ratios are lower. It seeks to shorten the period of revenue collection, while lengthening the adjustment period commitments [Gajdka and Walińska 1998, Sierpińska and Wędzki 1997].

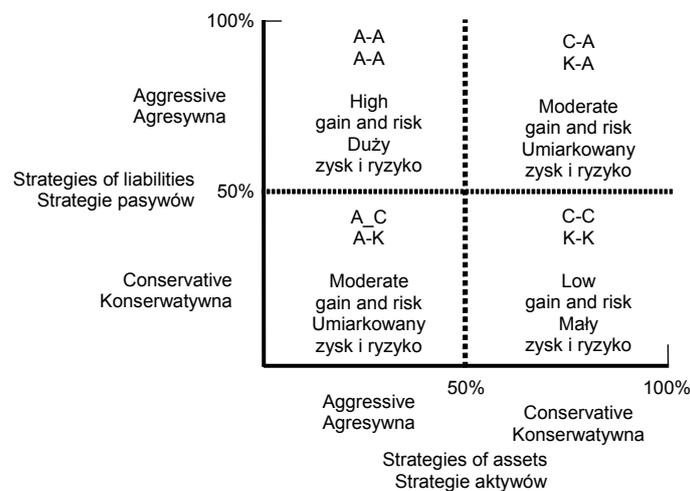


Fig. 1. Strategies of working capital

Source: own work based on: Sierpińska and Wędzki [1997].

Rys. 1. Strategie kapitału obrotowego

Źródło: opracowanie własne na podstawie: Sierpińska i Wędzki [1997].

THE STRATEGIES OF WORKING CAPITAL IN THE AGRICULTURE OF THE EU-27

The data, presented in Table 1, indicate that the sector of agricultural in the EU-27 had an assets-capital specificity, which was characterized by a noticeable share of current assets in total assets, by the excess of liquidity and by little importance of short-term loans. The aggressive-conservative (AK) strategy is commonly used and is characterized by a moderate gain and risk (Fig. 2).

Analysing data from the Table 1, we can say that in the year 2007 the average share of current assets in total assets (X1) for the EU-27 amounted to approximately 19.92% and for Poland approximately 17.51%. However, the data presented indicate the existence of significant differences between countries. And so, for example, the share of current assets in total assets greater than 30% had the average farms from: Lithuania, Latvia, Hungary, Bulgaria, Spain and France. While in agriculture of Ireland, Greece, Slovenia and Malta, this share was only 4.01-8.83%. Smaller differences are noticeable in the case of participation of short-term loans in total liabilities (X2), which on average for the EU-27 amounted to about 3.57% and 3.04% for the Poland (Table 1). It may be noted, that the financment based on the short-term loans plays the biggest role in French agriculture (about 13.22%) and Hungarian one (16.68%), and the smallest importance has in the agriculture of: Cyprus, Slovenia, Greece, Belgium, Italy, Ireland and Spain, in which those loans did not exceed 1% of total liabilities.

There were also clear differences in the evolution of the level of NWC (X3) and Cash Flow II (X12) in the EU-27 (Table 1, Fig. 3). The average level of NWC for a farm from the EU-27 in the year 2007 amounted to 45026 euro, and from Poland to 12 557 euro. The highest resources of NWC had the average farms from: Spain, the Czech Republic, Luxembourg, Denmark and Slovakia (from about 113 741 to about 279 600 euro), and the lowest had the average farms from Greece (about 3861 euro) and Romania (6318 euro). However, Cash Flow II, which demonstrates the ability of a farm to self-finance its operations and create cost savings, amounted to about 19 573 euro at the average in the EU-27, while in Poland to 8321 euro. Its highest level (over 40 000 euro) had an average farms from: the United Kingdom, Germany, Belgium, the Netherlands, Slovakia and Denmark, and the lowest – less than 5000 euro – from Romania, Slovenia and Bulgaria.

Table 1. The indicators of net working capital's management in the average farms from the EU-27 according to the country in the year 2007

Tabela 1. Wskaźniki opisujące zarządzanie KON w przeciętnych gospodarstwach rolnych z UE-27 według kraju w 2007 roku

Country Kraj	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12
1	2	3	4	5	6	7	8	9	10	11	12	13
BEL	13.68	0.19	73 769	0.73	72.48	64.51	21.88	20.04	40.65	0.11	0.29	47 947
BGR	37.56	6.36	11 142	0.84	5.90	5.05	4.56	8.64	193.48	0.13	0.25	4 613
CYP	13.23	0.01	23 414	0.99	1 464.38	1 464.30	1 294.88	1 160.50	264.48	0.05	0.30	9 993

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5	6	7	8	9	10	11	12	13
CZE	26.53	8.97	132 627	0.77	2.96	2.56	2.10	12.11	172.31	0.05	0.13	26 322
DAN	16.29	3.27	236 348	0.44	4.98	4.29	3.32	7.69	247.15	0.00	0.01	56 938
DEU	14.63	6.29	63 807	0.82	2.33	2.20	1.61	34.10	129.17	0.06	0.22	44 513
ELL	5.06	0.15	3 861	1.00	34.00	26.38	16.74	13.70	37.27	0.17	0.68	14 164
ESP	40.08	0.38	113 741	0.98	105.73	104.24	101.43	15.16	947.40	0.08	0.55	23 055
EST	21.84	9.91	24 013	0.71	2.20	1.48	1.05	5.41	93.44	0.12	0.30	14 900
FRA	40.09	13.22	93 711	0.64	3.03	2.13	1.69	3.21	194.57	0.11	0.27	39 408
HUN	37.25	16.68	30 342	0.70	2.23	1.88	1.66	8.01	217.48	0.08	0.16	16 443
IRE	4.01	0.29	37 344	0.98	13.93	12.69	4.50	11.55	110.25	0.02	0.49	22 740
ITA	11.60	0.20	39 655	0.99	59.32	50.95	42.63	6.49	180.30	0.08	0.48	31 321
LTU	34.27	6.67	27 743	0.83	5.14	4.00	3.54	3.48	242.32	0.19	0.53	13 514
LUX	17.43	2.13	150 199	0.83	8.20	7.69	5.48	14.52	271.21	0.05	0.33	34 316
LVA	35.94	9.58	24 097	0.70	3.75	3.08	2.64	6.95	204.97	0.15	0.33	7 973
MLT	8.83	2.28	19 001	0.95	3.88	3.88	1.94	–	78.16	0.08	0.41	22 300
NED	13.78	5.41	142 761	0.61	2.55	2.13	1.81	9.23	156.01	0.03	0.11	55 707
OST	21.95	2.56	82 473	0.91	8.57	7.71	6.71	6.45	364.60	0.08	0.45	27 369
POL	17.51	3.04	12 557	0.90	5.75	3.61	2.51	3.67	88.57	0.11	0.36	8 321
POR	16.46	1.66	13 140	0.96	9.94	8.25	6.19	7.80	141.67	0.10	0.39	6 725
ROU	23.67	1.45	6 318	0.96	16.37	14.43	12.05	11.12	172.70	0.11	0.30	2 646
SUO	18.53	1.58	61 394	0.74	11.72	9.13	7.68	6.80	196.43	0.08	0.34	18 693
SVE	24.61	5.94	119 635	0.69	4.14	3.52	2.98	7.01	258.23	0.05	0.18	26 126
SVK	26.71	4.42	279 600	0.92	6.05	4.73	3.92	8.78	155.44	0.01	0.02	55 856
SVN	5.67	0.06	11 042	0.98	97.86	39.97	3.39	3.28	6.46	0.03	0.28	3 362
UKI	12.34	5.66	91 442	0.89	2.18	1.81	1.30	7.91	156.81	0.04	0.24	40 750
27*	19.92	3.57	45 026	0.86	5.59	4.82	4.07	6.70	242.025	0.07	0.32	19 573

BEL – Belgium, BGR – Bulgaria, CYP – Cyprus, CZE – Czech Republic, DAN – Denmark, DEU – Germany, ELL – Greece, ESP – Spain, EST – Estonia, FRA – France, HUN – Hungary, IRE – Ireland, ITA – Italy, LTU – Lithuania, LUX – Luxembourg, LVA – Latvia, MLT – Malta, NED – The Netherlands, OST – Austria, POL – Poland, POR – Portugal, ROU – Romania, SUO – Finland, SVE – Sweden, SVK – Slovakia, SVN – Slovenia, UKI – United Kingdom.

*It is an aggregate sum for the EU-27, not an arithmetical mean of the lines 2-28.

Source: own calculations based on FADN 2010.

BEL – Belgia, BGR – Bułgaria, CYP – Cypr, CZE – Czechy, DAN – Dania, DEU – Niemcy, ELL – Grecja, ESP – Hiszpania, EST – Estonia, FRA – Francja, HUN – Węgry, IRE – Irlandia, ITA – Włochy, LTU – Litwa, LUX – Luksemburg, LVA – Łotwa, MLT – Malta, NED – Holandia, OST – Austria, POL – Polska, POR – Portugalia, ROU – Rumunia, SUO – Finlandia, SVE – Szwecja, SVK – Słowacja, SVN – Słowenia, UKI – Wielka Brytania.

*Jest to wartość zagregowana dla UE-27, a nie średnia arytmetyczna z wierszy 2-28.

Źródło: obliczenia własne na podstawie danych FADN 2010.

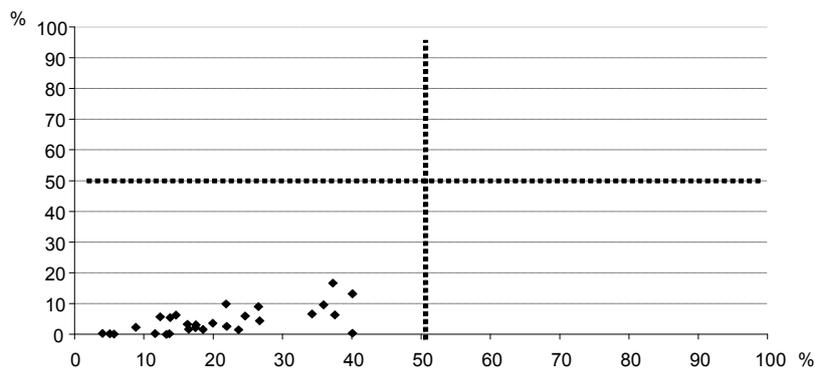


Fig. 2. Strategies of net working capital in the average farms from the EU-27 according to the country in the year 2007
Source: own work based on FADN [2010].

Rys. 2. Strategie kapitału obrotowego netto w przeciętnych gospodarstwach rolnych z UE-27 według kraju w 2007 roku
Źródło: opracowanie własne na podstawie danych FADN [2010].

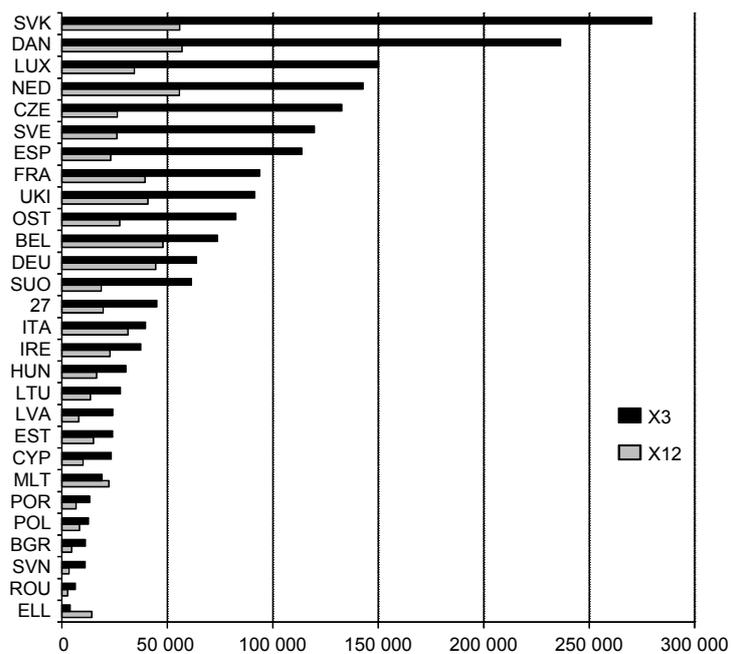


Fig. 3. The level of NWC (X3) and Cash Flow II (X12) according to the country of the EU-27 in the year 2007. Explanations as in Table 1
Source: own work based on FADN [2010].

Rys. 3. Poziom KON (X3) i Cash Flow II (X12) według kraju UE-27 w 2007 roku. Oznaczenia jak w tabeli 1
Źródło: opracowanie własne na podstawie danych FADN [2010].

It should be underlined, that the cover of assets by equity (X4) in the EU-27 farms' sector were high and amounted to about 86% in the year 2007. In the Polish average farm was even higher (90%). However, it didn't reach even 70% in the average farms in Denmark, the Netherlands, France, Sweden and Latvia (Table 1).

The effect of variation of the assets and capital's structure in the farms' sector of the EU-27 countries, was a different shape of the current (X5) and quick (X6 and X7) ratios. These indicators have reached high values. At the average for the EU-27, the cover of short-term loans by current assets amounted to more than 5.5-times, the cover of short-term loans by current assets without the stocks increased to more than 4.8-times and the cover of short-term loans by current assets without the stocks and non-breeding livestock increased to more than 4-times⁴.

It is worth to emphasize, that there was a large variation of liquidity between countries (Table 1). The highest values of these indicators have reached the average farms from: Italy, Belgium, Spain and Cyprus. A special farm is Slovenian one, which pointed out the high states of stocks and non-breeding livestock. However, the average Polish farm showed an over-liquidity in the amount of respectively: 5.75, 3.61 and 2.51. At the average in the year 2007, the lowest liquidity was maintained by an average farm from Hungary and from the United Kingdom. Such developments of the liquidity ratios confirm the specificity of the agricultural sector, in which the equity and long-term liabilities are the most committed, and does not finance the activities by short-term loans.

At the average, the stocks' turnover ratio (X8) in the farm from the EU-27 in the year 2007 was equalled to 6,70. The highest values of this indicator characterized the farms from: Belgium, Germany and Cyprus. However, its value has been low in most countries, with the value less than 4.00 had an average farm from: France, Slovenia, Lithuania and Poland. Malta was a special case, where the average farm didn't maintain the stocks. However, receivables and cash's turnover ratio (X9) in the countries of the EU-27 was high and averaged about 242 days, while in Poland only about 88.57 days (Table 1). This turnover ratio was above 250 days in farms from: Sweden, Cyprus, Luxembourg, Austria and Spain, and has not reached 100 days in farms from: Slovenia, Greece, Belgium, Malta, Estonia, and as already mentioned from the Poland.

In case of return on total assets (X10) in the year 2007, it was equalled to about 7% for the average farm from the EU-27, while the values over 10% received the average farms from: Portugal, Belgium, Romania, Polish, France, Estonia, Bulgaria, Latvia, Greece and Lithuania. However, the amount less than 5% was reached by farms from: Denmark, Slovakia, Ireland, Netherlands, Slovenia, Great Britain, Sweden and Cyprus (Table 1). In the case of net rentability (X11), the average level amounted to about 32% for the farm from the EU-27, and about 36% for a farm from Poland. It should be underlined, that the net rentability above 40% was achieved in seven agricultures, namely: Maltese, Austrian, Italian, Irish, Lithuanian, Spanish and Greek. The lowest net rentability (less than 20%) characterized: Danish, Slovak, Dutch, Czech, Hungarian, Swedish and German agriculture (Table 1).

⁴ Detailed studies of the liquidity holdings were carried out by Bieniasz and Gołaś [2008].

THE STRATEGIES OF WORKING CAPITAL IN THE FARMS ACCORDING TO THE ESU IN POLAND AND IN THE EU-27

In a system of economic size's classes, measured in ESU, we can distinguish the differences between farms, both in Poland and the EU-27 in the year 2007 (Table 2). The share of current assets in total assets in Poland was similar to the average share in the total EU, but the class of Polish farms above 100 ESU was notable with the level exceeding 30%. It may be also found, that when the farm was larger according to the ESU, the higher was the tendency to borrow short-term liabilities. With the increase in economic size increased level of NWC, and decreased the assets' coverage by equity (Table 2). These phenomena are related to both: Poland and the EU-27. Consequently, the current and quick ratios were the lower, the higher was a farm according to the economic size. In this respect, differences were significant. For example, small and very small Polish average farms (less than 8 ESU) were at the level of liquidity: 8.98-11.00 (X5), 5.21-7.32 (X6) and 1.75-2.17 (X7), while the large and very large farms (over 40 ESU) had these values about: 3.20-3.90 (X5), 2.41-2.46 (X6) and 0.39-0.69 (X7). Therefore, in Poland there was about 3-times higher difference in liquidity, and in the EU-27 approximately 9-times.

Table 2. The indicators of net working capital's management in the average farms from Poland and the EU-27 according to the ESU in the year 2007

Tabela 2. Wskaźniki opisujące zarządzanie KON w przeciętnych gospodarstwach rolnych z Polski i UE-27, według ESU, w 2007 roku

ESU	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12
Poland – Polska												
0-< 4	15.55	1.41	6 719	0.97	11.00	7.32	2.17	3.68	107.78	0.094	0.38	4 539
4-< 8	15.93	1.78	8 614	0.95	8.98	5.21	1.75	3.16	82.49	0.100	0.37	6 074
8-< 16	16.62	2.57	13 901	0.91	6.46	3.78	1.30	3.28	76.29	0.116	0.38	9 973
16-< 40	17.09	3.54	23 966	0.86	4.83	2.89	1.05	3.54	69.54	0.136	0.40	16 640
40-< 100	18.49	4.74	50 349	0.79	3.90	2.46	0.69	4.19	77.36	0.147	0.37	34 380
≥ 100	30.58	9.57	281 521	0.73	3.20	2.41	0.39	5.91	141.34	0.104	0.21	104 172
EU-27 – UE-27												
0-< 4	17.56	0.56	7 179	0.98	31.42	26.85	3.99	5.49	253.16	0.072	0.39	2 987
4-< 8	22.26	0.59	24 105	0.98	37.86	35.52	2.05	6.31	532.81	0.073	0.54	9 180
8-< 16	16.86	0.89	29 357	0.96	19.02	17.15	1.83	6.36	347.83	0.067	0.47	13 090
16-< 40	17.28	2.08	51 282	0.92	8.31	7.46	1.15	7.42	294.77	0.066	0.41	22 213
40-< 100	19.33	3.82	94 019	0.85	5.06	4.45	0.84	7.97	227.96	0.075	0.34	44 024
≥ 100	22.60	6.41	248 319	0.74	3.52	2.85	0.51	6.20	178.67	0.072	0.24	107 374

Source: own work based on FADN [2010].

Źródło: opracowanie własne na podstawie danych FADN [2010].

It is also worth noting, that in the year 2007 the stocks's turnover ratio in the Polish farms by ESU was lower than in the EU-27 and stood for the Polish in the range of 3.16-5.91, and in the EU-27 reached a value of between 5.49 and 7.97. But in Poland, appeared much more favourable level of receivables and cash's turnover ratio (X9) than in the EU-27 total. This was especially true for the average Polish farms 4-100 ESU size (small, medium and large), where it received a value of between 69.54 and 82.49 days (Table 2). Polish farms by ESU were characterized by higher average return on total assets (X10) than in the average from the EU-27. Particularly preferred values of this rentability were adopted for the Polish farms from 16 to 100 ESU, so medium-large and large (13.6-14.7%), with the EU's level about 7% (regardless of class ESU). While the lowest net profitability, both in Poland and in the EU-27, reached the largest farms (more than 100 ESU). However, they were most able to self-finance their operations and create cost savings, because their indicators of Cash Flow II (X12) exceeded 100000 euro in the year 2007 (Table 2).

THE STRATEGIES OF WORKING CAPITAL IN THE FARMS ACCORDING TO THE AGRICULTURAL TYPE IN POLAND AND IN THE EU-27

The differentiation of NWC's management was also a noticeable in the farms by the agricultural type (grouping TF14)⁵. In the year 2007 in Poland, the highest share of the current assets in the total assets (X1 – over 20%) had 4 types of agriculture, namely farms with: specialist cereals, oilseed and protein crops; specialist other fieldcrops; permanent crops combined and specialist sheep and goats. However, in the EU-27 the level of this indicator has exceeded by the 7 of the 14 types (Table 3). In the case of participation of short-term loans in total liabilities, the value of above 4% were farm: specialist cereals, oilseed and protein crops (13), specialist horticulture (20) and specialist granivores (50). On average in the EU-27, this level exceeded the types: 14, 20, 31, 50, 70 and 80 (Table 3).

Table 3. The indicators of net working capital's management in the average farms from Poland and the EU-27 according to the agricultural type (TF14 grouping) in the year 2007

Tabela 3. Wskaźniki opisujące zarządzanie KON w przeciętnych gospodarstwach rolnych z Polski i UE-27 według typu rolniczego (grupowanie TF14) w 2007 roku

TF14	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12
1	2	3	4	5	6	7	8	9	10	11	12	13
Poland – Polska												
13	21.82	5.70	18 816	0.84	3.83	2.50	0.16	3.22	153.36	0.14	0.44	13 417
14	20.58	3.91	15 324	0.89	5.26	2.98	0.20	2.75	118.83	0.13	0.39	11 618
20	10.55	4.74	7 384	0.73	2.22	1.98	0.01	30.13	70.18	0.13	0.27	13 234

⁵ In Poland, due to climatic conditions, didn't exist two agricultural types: 31 – specialist wine and 33 – specialist olives, so is realised 12 of 14 of agricultural types observed in the EU-27.

Table 3 – cont. / Tabela 3 – cd.

1	2	3	4	5	6	7	8	9	10	11	12	13
32	14.37	2.22	12 403	0.90	6.47	2.66	0.03	1.89	83.74	0.10	0.41	10 563
34	35.19	2.51	37 470	0.90	14.00	4.77	0.06	0.72	155.52	0.12	0.44	11 860
41	12.77	2.37	11 551	0.90	5.38	3.16	1.21	3.36	61.35	0.13	0.48	9 905
44	22.35	2.19	31 665	0.97	10.21	9.69	2.73	12.67	220.20	0.12	0.49	12 016
45	15.53	2.46	13 951	0.89	6.32	4.00	2.01	3.09	70.70	0.12	0.46	7 901
50	19.51	4.39	17 687	0.86	4.44	3.48	1.76	10.95	50.38	0.11	0.21	11 655
60	17.49	2.96	9 180	0.93	5.91	3.42	0.87	3.13	92.88	0.11	0.38	6 890
70	16.58	1.60	9 583	0.95	10.38	6.26	3.20	3.27	69.71	0.09	0.33	4 884
80	18.34	2.56	11 208	0.92	7.15	4.16	1.52	2.98	88.40	0.10	0.35	6 259
EU-27 – UE-27												
13	19.92	3.84	56 682	0.87	5.19	4.37	0.24	5.25	309.07	0.08	0.41	24 301
14	17.23	4.07	39 181	0.85	4.23	3.58	0.21	6.97	228.90	0.08	0.35	22 851
20	23.04	7.53	48 310	0.68	3.06	2.56	0.01	10.54	145.47	0.09	0.19	32 226
31	31.01	5.72	76 841	0.87	5.42	2.47	0.01	0.96	208.86	0.09	0.37	27 908
32	24.64	1.77	42 494	0.94	13.88	13.05	0.04	8.61	397.15	0.09	0.44	18 933
33	26.81	0.47	46 746	0.99	57.12	56.19	0.10	11.16	1072.12	0.06	0.63	9 578
34	17.52	2.29	27 978	0.93	7.65	5.81	0.05	3.79	200.30	0.10	0.41	17 635
41	14.78	3.35	52 258	0.81	4.41	4.09	0.89	16.74	185.59	0.07	0.33	29 736
44	17.07	2.03	39 705	0.92	8.40	8.03	1.61	17.62	323.27	0.06	0.41	16 208
45	16.47	2.19	66 356	0.92	7.53	7.14	2.85	13.55	290.58	0.05	0.38	20 735
50	25.08	6.50	75 883	0.70	3.86	3.70	1.43	39.64	119.19	0.06	0.14	34 296
60	21.40	2.35	25 412	0.93	9.10	7.89	0.57	5.97	279.85	0.09	0.38	11 652
70	19.55	4.46	19 018	0.83	4.39	3.80	1.37	9.92	136.70	0.07	0.23	8 549
80	21.86	4.57	39 647	0.81	4.79	4.23	1.00	9.22	214.22	0.06	0.26	15 292

13 – specialist cereals, oilseed and protein crops, 14 – specialist other fieldcrops, 20 – specialist horticulture, 31 – specialist wine, 32 – specialist orchards fruits, 33 – specialist olives, 34 – permanent crops combined, 41 – specialist milk, 44 – specialist sheep and goats, 45 – specialist cattle, 50 – specialist granivores, 60 – mixed crops, 70 – mixed livestock, 80 – mixed crops and livestock.

Source: own work based on FADN [2010].

13 – zboża, oleiste, strączkowe, 14 – inne uprawy polowe, 20 – uprawy polowe ogrodnicze, 31 – winnice, 32 – drzewa i krzewy owocowe, 33 – gaje oliwne, 34 – pozostałe uprawy trwałe, 41 – bydło mleczne, 44 – owce i kozy, 45 – bydło mleczne, hodowlane, tucznik, 50 – zwierzęta żywione paszami treściwymi, 60 – mieszany z przewagą upraw, 70 – mieszany z przewagą zwierząt, 80 – mieszany uprawy i zwierzęta.

Źródło: opracowanie własne na podstawie danych FADN [2010].

It is worth emphasize, that in Poland, especially high level of NWC was engaged in farms with permanent crops combined and specialist sheep and goats. Both: in Poland and the EU-27, the average cover of assets by equity was high and exceeded 90% in six types of agriculture.

According to data from the Table 3, especially strong liquidity remained farms in Poland with permanent crops combined (34), specialist sheep and goats (44) and mixed livestock (70). Otherwise, in the EU-27 the most liquid were farms with specialist orchards – fruits (32), specialist olives (33), specialist sheep and goats (44) and mixed crops (60).

It is worth mentioning, that the high stocks' turnover ratio in Poland and the EU-27 was observed in farms with type: specialist horticulture, specialist sheep and goats and specialist granivores. Moreover, in this respect the EU-27 stood out even the farms specialist olives, specialist milk and cattle (Table 3). In the Polish farms with specialist milk (41), specialist granivores (50) and mixed livestock (70), the receivables and cash's turnover ratio was achieved lower than 70 days. In Poland, the difficulty with this indicator had specialist sheep and goats' farms – it exceeded 220 days, and in the EU-27 the highest value (over 1072 days) was achieved by specialist olives' farms. It should be noted, that at the average the best return on total assets (X10) and Cash Flow II in Poland and the EU-27 were reached by the farms with crops production. However, net rentability was highest in Poland, in farms with specialist milk, sheep, goats and cattle (Table 3).

SUMMARY

The sector of farms in the EU-27 has a specificity of assets-capital, manifested in the management of the components of net working capital. It is characterized by a considerable share of current assets in total assets, overliquidity and low importance of short-term loans. Thus, the working capital management which is applied, it is the aggressive-conservative strategy generating a moderate profit, but also guarantees a moderate risk. In addition, the components of working capital management, liquidity, asset turnover and rentability are highly varied both in spatial layout, how and by the economic size and by the agricultural type.

The study also showed, that the highest levels of working capital are observed in very large farms, which are the most capable to self-finance their operations and create savings, but also have the lowest liquidity and rentability. In Poland, particularly high levels of working capital and liquidity were observed in farms with permanent crops combined and specialist sheep and goats, and the best return on total assets was reached by the farms with crops production.

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ZARZĄDZANIE KAPITAŁEM OBROTOWYM W GOSPODARSTWACH ROLNYCH W 2007 ROKU (NA PODSTAWIE DANYCH FADN)

Streszczenie. W artykule podjęto próbę opisanie sposobu zarządzania kapitałem obrotowym netto w gospodarstwach rolnych w 2007 roku. Dane dotyczące gospodarstw pochodzą z bazy FADN. Obejmują gospodarstwa rolne z 27 krajów Unii Europejskiej (UE-27). Posłużono się analizą opisową i porównawczą, a także wykorzystano podstawowe wskaźniki z analizy finansowej. Analiza wykazała, że rolnictwo Unii Europejskiej w 2007 roku charakteryzowało się: wysokim udziałem aktywów obrotowych w aktywach ogółem, nadpłynnością i małym znaczeniem zobowiązań krótkoterminowych. Powszechnie była stosowana strategia agresywno-konserwatywna zarządzania kapitałem obrotowym netto, którą charakteryzował umiarkowany zysk i ryzyko. Wystąpiło również duże zróżnicowanie struktury majątku i kapitałów w zależności od kraju. Badanie rozszerzono o porównanie zarządzania kapitałem obrotowym netto w przeciętnych gospodarstwach rolnych z Polski ze średnią z UE-27 według ESU i typu rolniczego.

Słowa kluczowe: gospodarstwo rolne, kapitał obrotowy, strategia, płynność

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