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IMPACT OF ACCOUNTS RECEIVABLE AND PAYABLE ON THE FINANCIAL CONDITION OF AGRICULTURAL ENTERPRISES OF UKRAINE

The article examines the economic content of the categories “accounts receivable” and “accounts payable”. The methodological foundations of the formation of information on accounts receivable and payable in accounting are considered. The classification of external and internal factors affecting the number of receivables and payables is proposed. The expediency of a comprehensive assessment of receivables and payables of agricultural enterprises has been substantiated.

An assessment of the accounts receivable according to the system of relative indicators of agricultural enterprises in Ukraine, an assessment of the current accounts payable of agricultural enterprises of Ukraine, and an assessment of the effectiveness of the use of financial resources of agricultural enterprises in Ukraine have been made.

Keywords: accounts receivable, accounts payables, financial resources, financial condition, capital.

Problem statement. One of the conditions for improving the financial condition of agricultural enterprises is to ensure the optimal ratio of the level of receivables and payables.

Analysis of recent research and publications. Research of the theoretical foundations of the categories “accounts receivable” and “accounts payable”, reflected in the scientific works of G. A. Kramarenko, A. E. Chorna; V. Potiy, G. Kulish and other scientists. At the same time, these scholars do not have a single point of view regarding the indicators for assessing receivables and payables. As well as the identification of external and internal factors affecting the number of receivables and payables. This determines the relevance of this study.

Purpose of the article. The purpose of the article is to disclose the essence of receivables and payables. Determine the influence of external and internal factors affecting the number of receivables and payables. To assess receivables and payables of agricultural enterprises in Ukraine.

Statement of the main research material. In modern economic conditions, an increase or decrease in receivables from agricultural enterprises has a significant impact on the turnover of capital, which is invested in their current assets and on their financial condition¹.

The methodological basis for the formation of information on accounts receivable in accounting and its disclosure in financial statements is determined by the Regulation (standard) of accounting 10 “Accounts receivable”. In accordance with the Regulation (standard) of accounting 10, accounts receivable is the amount owed by debtors to the enterprise on a certain date. And debtors are legal entities and individuals who, due to past events, owe the enterprise certain amounts of cash, cash equivalents or other assets².

Accounts receivable – economic benefits in the future period, directly or indirectly create additional cash receipts.

Accounts receivable is one of the types of the least liquid part of the assets of an agricultural enterprise, which requires additional costs. The longer the period for repayment of receivables, the less income from invested funds. In addition, in conditions of inflation, funds depreciate.

¹ Лесюк, А. С. (2017). Оцінка дебіторської заборгованості сільськогосподарських підприємств України. *Актуальні проблеми та перспективи розвитку обліку, аналізу та контролю в соціально-орієнтованій системі управління підприємством: Матеріали III Міжнародної науково-практичної конференції* (м. Полтава, 20 квітня 2017 року). Полтава: РВВ ПДАА, 5, 18-21.

² Положення (стандарт) бухгалтерського обліку, 1999, 10 Дебіторська заборгованість (Верховна Рада України). *Офіційний сайт Верховної Ради України* <<http://zakon3.rada.gov.ua/laws/show/z0725-99>> (2020, July, 10).

An increase in accounts receivable negatively affects the lender's financial condition, which may lead to bankruptcy. Therefore, it is necessary to monitor the state of the debt, which will ensure the timely collection of funds.

The financial condition of agricultural enterprises in Ukraine is characterized by an increase in accounts receivable in the structure of their assets, which leads to a slowdown in the payment turnover of enterprises.

For the 2014 – 2018 accounts receivable of agricultural enterprises of Ukraine increased by 174419,5 million UAH (115,2 %). In 2014, receivables from agricultural enterprises in Ukraine amounted to – 151461,0 million UAH (56,6 % of the total current assets of agricultural enterprises in Ukraine), and in 2018 the receivables were – 325880,5 million UAH (49,8 %). An increase in accounts receivable in the structure of current assets of agricultural enterprises contributes to the occurrence of financial losses, risks and a deterioration in their financial condition (Figure 1).

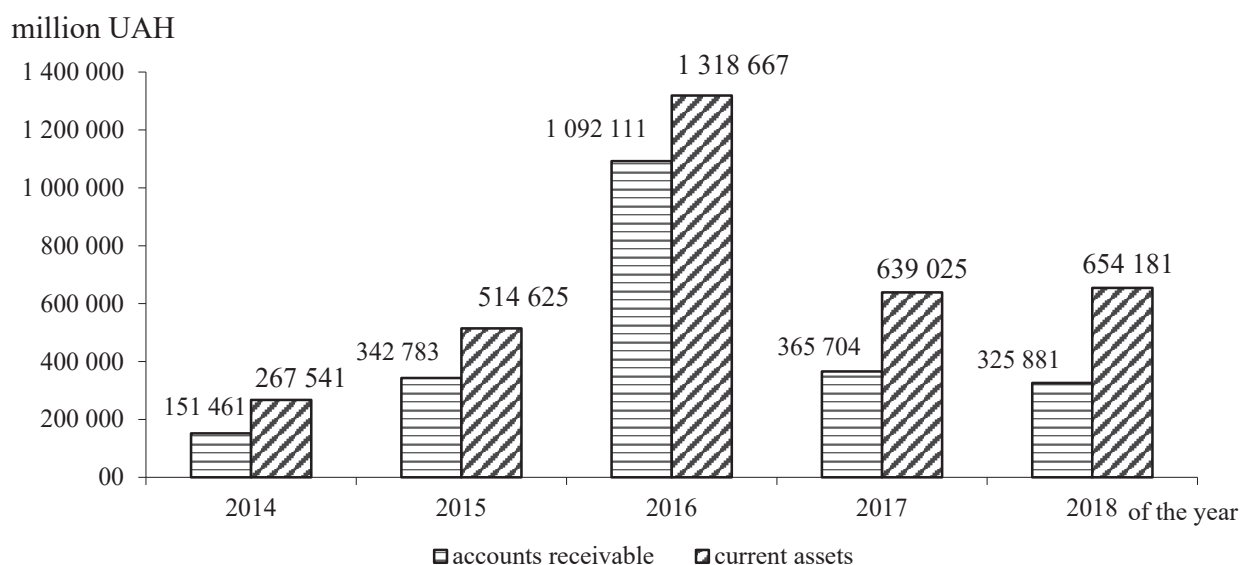


Fig. 1. Accounts receivable of agricultural enterprises of Ukraine in the structure of their current assets, 2014 – 2018 pp., million UAH

Source: designed by the author based on data¹

In the course of the enterprise's activity, under the influence of external and internal factors, certain signs appear that characterize its unstable state:

- decrease in demand for the enterprises products;
- loss of consumers of the enterprises products;
- lower prices and profitability of production;
- irregularity of production;
- underutilization of production facilities;
- increase in production and sales costs;
- increase in the volume of illiquid circulating assets;
- violation of deadlines execution of obligations;
- decrease in quotations of securities (if any);
- job cuts;
- increased conflict in the collective of the enterprise;
- decrease in labor productivity².

¹ Державна Служба Статистики (2019). *Статистичний збірник Діяльність суб'єктів господарювання* <http://www.ukrstat.gov.ua/druk/publicat/kat_u/publ9_u.htm> (2020, July, 10).

² Lesyuk, A. S. (2017). The bankruptcy company: notion, signs and measures to prevent. *Proceedings of II International scientific conference "World Science in 2016: Results"*. Morrisville, Lulu Press, 36-38.

For the 2014 – 2018, the indicators of receivables of agricultural enterprises of Ukraine have mostly negative dynamics (Table 1).

Table 1

**Assessment of receivables according to the system of relative indicators
of agricultural enterprises in Ukraine, 2014 – 2018**

Indicators	2014	2015	2016	2017	2018	Deviation of 2018 from 2014 (+, -)	
						absolute	relative, %
Net income (proceeds) from the sale of agricultural products	214972,5	366966,4	402597,4	452760,1	528657,8	313685,3	145,9
Average annual accounts receivable	124875,6	247121,8	717446,9	728907,6	345792,2	220916,6	176,9
Average annual amount of accounts payable	61341,4	104549,3	154551,4	179474,0	181458,0	120116,6	195,8
Average annual property value	351851,9	538226,0	1111582,0	1224466,6	947603,9	595752,0	169,3
Average annual value of current assets	231281,2	391082,9	916645,9	978846,2	646603,0	415321,8	179,6
Coefficient circulation of receivables	1,721	1,485	0,561	0,621	1,529	-0,192	x
Duration of one turnover (average return period) of receivables, days	209	242	642	580	235	26	12,4
Share of receivables in property, %	35,5	45,9	64,5	59,5	36,5	1,0	x
Share of receivables in current assets, %	54,0	63,2	78,3	74,5	53,5	-0,5	x
Ratio of accounts receivable and payable	2,036	2,364	4,642	4,061	1,906	-0,130	x
Ratio of accounts receivable to net income from sales of products (goods, works, services), %	58,1	67,3	178,2	161,0	65,4	7,3	x

Source: calculated by the author based on data¹

Thus, the ratio of accounts receivable turnover decreased from 1,721 in 2014 to 1,529 in 2018, and the duration of one turnover of accounts receivable increased by 26 days (12,4 %). These dynamics is explained by an increase in the average annual value of accounts receivable by 176,9 % amid growth in net income from product sales by only 145,9 %. The share of receivables in property increased from 35,5 % to 36,5 %, while the share of receivables in current assets decreased from 54,0 % to 53,5 %. The indicator characterizing the ratio of accounts receivable to net income from product sales increased from 58,1 to 65,4 %, which is a sign of the deterioration of the state of settlements with debtors.

As a result of the outstripping growth of the average annual value of accounts payable by 195,8 % compared to the growth of the average annual value of accounts receivable by 176,9 %, the ratio of accounts receivable to accounts payable decreased from 2,036 to 1,906. If in 2014 for 1 UAH of accounts payable there were 2,04 UAH of receivables, then in 2018 – respectively 1,91 UAH, or less by 6,4 %.

So, because agricultural enterprises in Ukraine have large amounts of accounts receivable, which is growing every year, therefore, in the future, the issue of improving the state of settlement and payment relations remains relevant for them.

¹ Державна Служба Статистики (2019). *Статистичний збірник Діяльність суб'єктів господарювання* <http://www.ukrstat.gov.ua/druk/publicat/kat_u/publ9_u.htm> (2020, July, 10).

In modern economic conditions, an important element of a comprehensive assessment of the financial condition of agricultural enterprises is the assessment of accounts payable, namely: its composition, structure, dynamics and its ratio with accounts receivable¹.

Accounts payable are the amount of short-term obligations of the enterprise to suppliers, employees for wages, the budget and other financial obligations. The stability (sustainability) of the financial condition is characterized by the volume and qualitative composition of accounts payable, and its movement determines the state of payment discipline of enterprises².

Accounts payable is a source of coverage for current assets. The efficient use of borrowed funds provides additional economic benefits.

Accounts payable directly depends on the financial and economic activities of an agricultural enterprise, primarily on the production and sale of products.

The increase in accounts payable indicates the lack of own working capital.

The presence of accounts payable at the enterprise significantly affects the provision of working capital. Slow settlements to on its repayment, providing businesses with additional short-term financing options.

In most cases, enterprises independently resolve issues related to volumes, terms and forms of payments to suppliers³.

For the 2014 – 2018, the indicators of accounts payable of agricultural enterprises have mostly positive dynamics (Table 2).

Thus, the turnover ratio of current accounts payable decreased from 2,462 in 2014 to 2,207 in 2018, and the duration of one turnover of current accounts payable, respectively, increased from 146 to 163 days. These dynamics is explained by the fact that for an increase in the cost of agricultural products sold by 165,1 %, the average annual value of the current accounts payable increased by 195,8 %.

The share of current accounts payable in the capital of the enterprise increased from 17,4 % in 2014 to 19,1 % in 2018, and in liabilities and collaterals increased from 16,0 to 18,6 %, this indicates an increase in the level of financial dependence of agricultural enterprises on creditor loans.

The indicator characterizing the ratio of current accounts payable to circulating assets increased from 26,5 to 28,1 %, this indicates a deterioration in the state of payment and settlement relations of agricultural enterprises. The same applies to the ratio of current accounts payable to net income from sales of products (goods, works, services), which increased from 28,5 % in 2014 to 34,3 % in 2018. As a result of the outstripping growth of the average annual value of current accounts payable (195,8 %) compared with the growth of the average annual value of accounts receivable (by 176,9 %), the indicator characterizing how much current accounts payable per 1 UAH of accounts receivable increased from 0,49 in 2014 up to UAH 0,52 in 2018, or 6,1 % (with an optimal level of about UAH 1). If in 2014, coefficient the ratio of the periods of repayment of receivables and current payables of agricultural enterprises was 1,432, then in 2018 it increased to 1,442.

So, the financial condition of agricultural enterprises in Ukraine is characterized by a stable trend towards an increase in the average annual value of accounts receivable and current accounts payable, as well as an increase in the average period of repayment of current accounts payable, the average period of repayment of accounts receivable. Growth in the average annual value of the current accounts payable of agricultural enterprises for 2014 – 2018 – 195,8 % due to the deterioration of the state of settlements with debtors. In the period under review, the current accounts receivable was more than the current accounts payable – this indicates that part of the current assets was withdrawn from the economic activities of agricultural enterprises and was in the turnover of debtors.

A stable financial condition of agricultural enterprises can be ensured through the efficient use of all types of resources⁴.

¹ Лесюк, А. С. (2017). Оцінка кредиторської заборгованості як елемент комплексної оцінки фінансового стану сільськогосподарських підприємств. "Проблеми обліково-аналітичного забезпечення управління підприємницькою діяльністю": Матеріали ІІ Всеукраїнської науково-практичної конференції, 26 жовтня 2017 р. Полтава: ПДАА, 37-39.

² Крамаренко, Г. О., Чорна, О. Є. (2008). *Фінансовий аналіз*. Київ: Центр учбової літератури.

³ Потій, В., Куліш, Г. (2010). Кредиторська заборгованість і її роль у формуванні капіталу підприємства. *Ринок цінних паперів в Україні*, 3-4, 23-26.

⁴ Томілін, О. О., Перетяцько, Т. О. (2010). Основні напрямки фінансової стабілізації аграрних підприємств при загрозі банкрутства. *Економіка: проблеми теорії та практики: збірник наукових праць*. В 9 т.,

Table 2

Assessment of current accounts payable agricultural enterprises of Ukraine, 2014 – 2018

Indicators	2014	2015	2016	2017	2018	Deviation of 2018 from 2014 (+, -)	
						absolute	relative, %
Net income (proceeds) from the sale of agricultural products	214972,5	366966,4	402597,4	452760,1	528657,8	313685,3	145,9
Cost of agricultural products sold	151037,8	231825,1	278375,7	328071,3	400452,2	249414,4	165,1
Average annual accounts receivable	124875,6	247121,8	717446,9	728907,6	345792,2	220916,6	176,9
Average annual amount of accounts payable	61341,4	104549,3	154551,4	179474,0	181458,0	120116,6	195,8
Average annual cost of capital	351851,9	538226,0	1111582,0	1224466,6	947603,9	595752,0	169,3
Average annual liabilities and collateral	382952,1	637216,4	1578489,3	1643224,6	975891,3	592939,2	154,8
Average annual current liabilities and collateral	138398,8	252987,8	724175,5	761069,1	417214,7	278815,9	201,5
Average annual value of current assets	231281,2	391082,9	916645,9	978846,2	646603,0	415321,8	179,6
Coefficient turnover of current accounts payable	2,462	2,217	1,801	1,828	2,207	-0,255	x
Duration of one turnover (average repayment period) of current accounts payable, days	146	162	200	197	163	17	111,6
Share of current payables in equity, %	17,4	19,4	13,9	14,7	19,1	1,7	x
Share of current accounts payable in liabilities and collateral, %	16,0	16,4	9,8	10,9	18,6	2,6	x
Share of current accounts payable in current liabilities and collateral, %	44,3	41,3	21,3	23,6	43,5	-0,8	x
The ratio of current accounts payable to current assets, %	26,5	26,7	16,9	18,3	28,1	1,6	x
The current accounts payable is accounted for 1 UAH of accounts receivable, UAH	0,49	0,42	0,22	0,25	0,52	0,03	6,1
The ratio of current accounts payable to net income from the sale of products (goods, works, services), %	28,5	28,5	38,4	39,6	34,3	5,8	x
Ratio of the ratio of periods of repayment of receivables and current payables	1,432	1,494	3,210	2,944	1,442	0,010	x

Source: calculated by the author based on data¹

Дніпропетровськ: ДНУ, 265: VIII, 2252-2256. <<http://dspace.pdaa.edu.ua:8080/handle/123456789/1562>> (2020, July, 08).

¹ Державна Служба Статистики (2019). *Статистичний збірник Діяльність суб'єктів господарювання* <http://www.ukrstat.gov.ua/druk/publicat/kat_u/publ9_u.htm> (2020, July, 10).

The functioning of agricultural enterprises in Ukraine is aimed at obtaining a financial result (profit). Therefore, it is important to timely and high-quality assessment of the effectiveness of the use of available financial resources by enterprises' financial services. Evaluation of the effectiveness of the use of financial resources of agricultural enterprises makes it possible to determine how effectively agricultural enterprises use their own and borrowed capital. The main purpose of assessing the effectiveness of the use of financial resources is to increase the profitability of capital and ensure the stability of the enterprise¹.

For the 2014 – 2018, there is a tendency towards a decrease in the level of financial stability of agricultural enterprises in Ukraine (Table 3).

Table 3

Effective use of financial resources agricultural enterprises of Ukraine, 2014 – 2018

Indicators	2014	2015	2016	2017	2018	Deviation of 2018 from 2014 (+, -)
Financial leverage ratio	1,383	1,491	3,162	1,089	1,037	-0,346
Financial stability ratio	0,723	0,671	0,316	0,918	0,965	0,242
Long-term borrowing ratio	0,278	0,198	0,144	0,119	0,146	-0,132
Long-term liabilities and collateral ratio	0,278	0,166	0,053	0,124	0,164	-0,114
Current liabilities and collateral ratio	0,722	0,834	0,947	0,876	0,836	0,114
Total liquidity ratio	1,635	1,503	1,192	1,536	1,564	-0,071
Solvency ratio	0,058	0,049	0,018	0,048	0,052	-0,006
Return on assets	6,2	19,2	8,2	5,7	7,5	1,3
Net return on equity	13,4	46,8	28,1	17,1	15,4	2,0

Source: calculated by the author based on data²

So, according to the financial leverage ratio in 2014 for 1 UAH of equity capital there were 138,3 UAH borrowed capital, and in 2018 – 103,7 UAH. Accordingly, the value of the financial stability coefficient shows that in 2014 equity capital exceeded borrowed capital by 0,7 times, and in 2018 – 1 times.

A decrease in the ratio of long-term borrowing from 0,278 in 2014 to 0,146 in 2018 indicates a decrease in the dependence of agricultural enterprises on long-term external sources of financing. The values of the ratios of long-term liabilities and collateral and current liabilities and collaterals characterizing the structure of borrowed capital, in which long-term liabilities and collateral decreased from 27,8 % in 2014 to 16,4 % in 2018, and current liabilities – respectively increased from 72,2 % in 2014 to 83,6 % in 2018, which generally has a positive effect on the assessment of the financial stability of agricultural enterprises.

The actual value of the total liquidity ratio decreased from 1,635 in 2014 to 1,564 in 2018. Comparison of this indicator with the standard value (more than 1.0) indicates a high level of property solvency of agricultural enterprises in Ukraine. As of the end of 2014, the current assets of agricultural enterprises exceeded current liabilities and collateral by 1,64 times, and at the end of 2018 – by 1,56 times.

The solvency ratio decreased by 0,006: from 0,058 in 2014 to 0,052 in 2018 comparison of this indicator with the standard value (more than 0,1) indicates insufficient provision of funds for agricultural enterprises in Ukraine.

Return on assets increased from 6,2 % in 2014 to 7,5 % in 2018, which indicates an increase in the efficiency of using the assets of agricultural enterprises. Net return on equity increased from 13,4 % in 2014 to 15,4 % in 2018, which characterizes the efficiency of using equity capital invested in agricultural enterprises.

¹ Лесюк, А. С. (2017). Оцінка ефективності використання фінансових ресурсів сільськогосподарських підприємств України. *Матеріали IV Міжнародної науково-практичної конференції "Проблеми формування та розвитку інноваційної інфраструктури: виклики постіндустріальної економіки"*, Львів, 18-19 травня 2017 р. Львів: Видавництво Львівської політехніки, 261-262.

² Державна Служба Статистики (2019). *Статистичний збірник Діяльність суб'єктів господарювання* <http://www.ukrstat.gov.ua/druk/publicat/kat_u/publ9_u.htm> (2020, July, 10).

External factors affect the number of receivables and payables of agricultural enterprises in Ukraine (Figure 2).

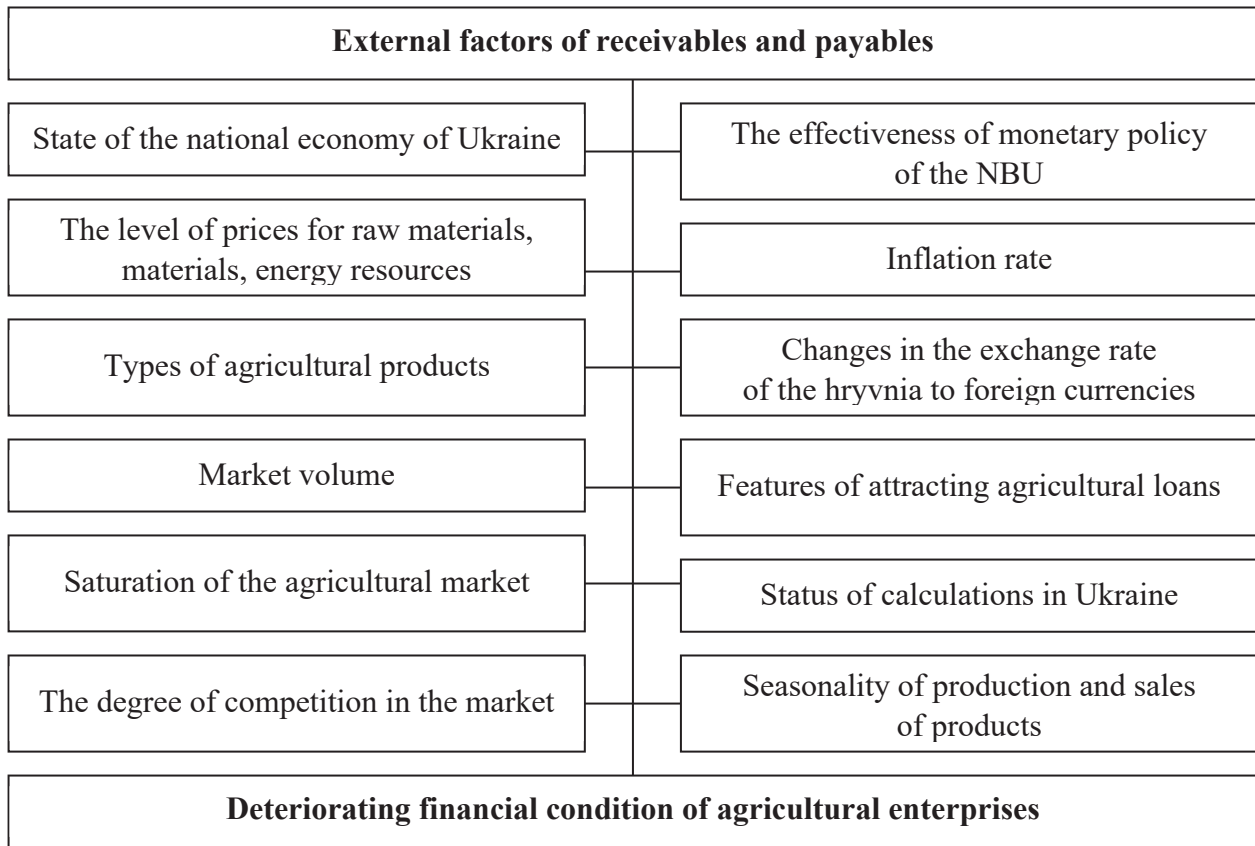


Fig. 2. Classification of external factors of the occurrence of receivables and payables of agricultural enterprises

Source: author development

The number of receivables of agricultural enterprises in Ukraine is influenced by internal factors (Figure 3).

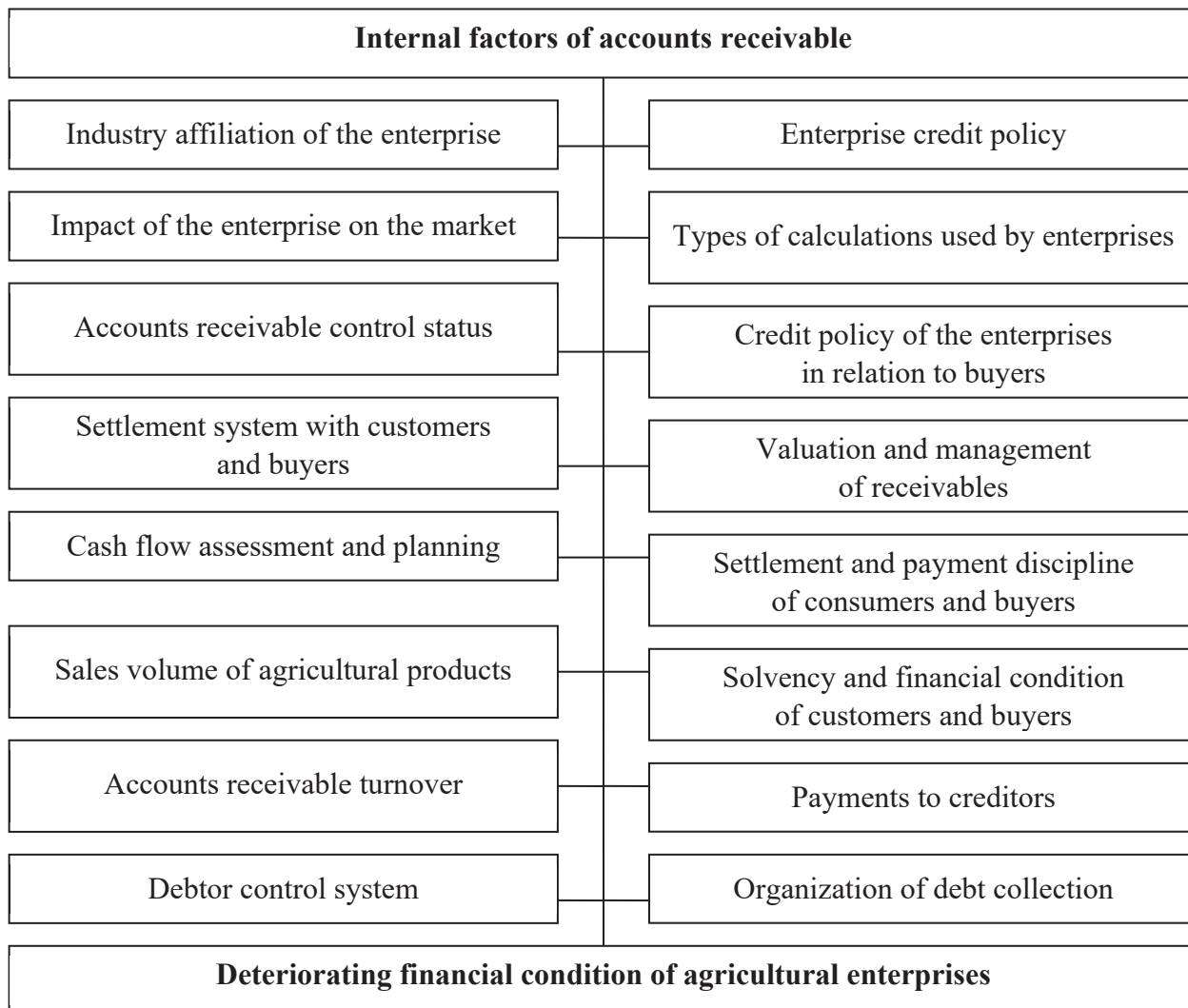


Fig. 3. Classification of factors of occurrence receivables agricultural enterprises

Source: author development

The amount of accounts payable of agricultural enterprises in Ukraine is influenced by internal factors (Figure 4).

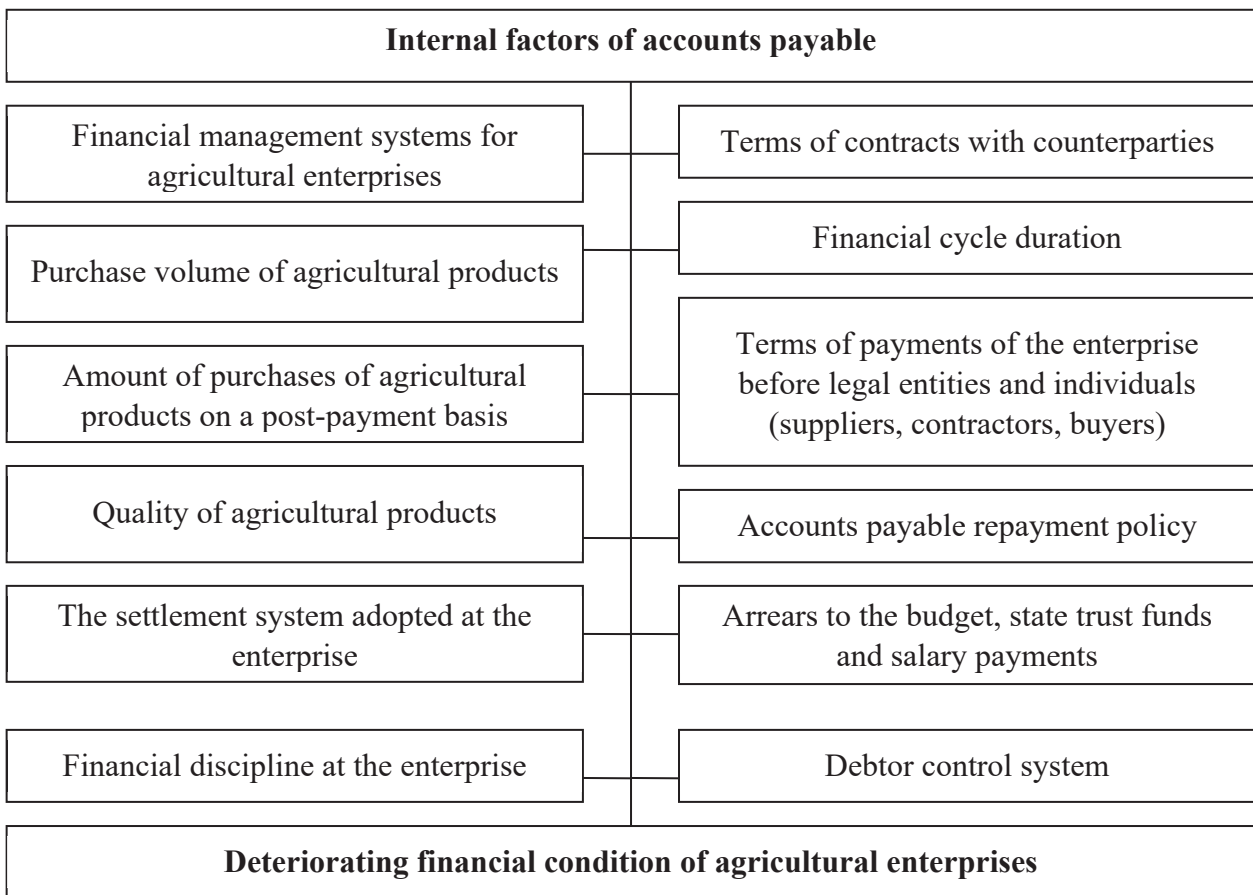


Fig. 4. Classification of factors of origin of accounts payable of agricultural enterprises

Source: author's development

So, the financial condition of agricultural enterprises is formed under the influence of external (independent of the financial and economic activities of an agricultural enterprise) and internal (directly dependent on the financial and economic activities of an agricultural enterprise) factors. The listed factors of the occurrence of receivables and payables of agricultural enterprises are interconnected and interact with each other.

Conclusions from the conducted research. Accounts receivable and payable, its composition and structure, dynamics of changes is an integral part of the financial and economic activities of agricultural enterprises. These indicators have a direct impact on the financial condition of agricultural enterprises, therefore it is necessary to monitor the level of debts and analyze them on time to reduce the risks of non-repayment of receivables and the creation of accounts payable. The most optimal is the excess of accounts receivable over accounts payable.

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