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DETERMINANTS OF A FIRM'S NET TRADE CREDIT: THE CASE OF UKRAINE



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This article is devoted to the problems of enterprise trade credits. The importance of such credits becomes even more significant in times of financial crisis. This study also examines trade credits and their determinants using a sample of 27 Ukrainian firms from the period 2010-2014. The study examines trade receivables, trade payables and the difference between them known as net trade credit. Results are obtained based on descriptive and regression analyses. The results denoted that firms have sold more than have purchased on credit, i.e. a positive net trade credit is evidenced. Moreover, a relatively longer operating cycle is evidenced. This operating cycle has a positive trend line. On average the selected firms are liquid, but have an unsatisfactor level of return on assets and net profit. Furthermore, return on assets, fixed assets turnover, operating cash flow to sales, cash and long-term debt ratios are found to be statistically significant determinants that have influenced the net trade credit.

Determinants, trade receivable, trade payable, trade credit, regression, analyse.

ЧИННИКИ ФОРМУВАННЯ ЧИСТОГО КОМЕРЦІЙНОГО КРЕДИТУ ПІДПРИЄМСТВАМИ В УКРАЇНІ

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- Стаття присвячена проблемам використання фірмами комерційного кредиту. Актуальність проблеми зросла з розвитком фінансової кризи. Представлена стаття розкриває особливості комерційного кредиту та його чинників для 27 великих українських компаній протягом 2010–2014 рр. Досліджено кредиторську і дебіторську заборгованості та обсяги чистих продаж. Методологія дослідження ґрунтується на дескриптивному та регресійному аналізі. Результати засвідчили, що фірми продають у кредит більше, ніж купують, тобто наявний позитивний чистий комерційний кредит. Операційний цикл має позитивну тенденцію. У середньому досліджувані компанії ліквідні, але мають низький рівень рентабельності активів та чистого прибутку. Рентабельність активів, оборотність постійних активів, операційний грошовий потік, поточна та довгострокова заборгованість визначені ключовими чинниками, які впливають на чистий товарний кредит.
- 😰 Чинники, дебіторська заборгованість, кредиторська заборгованість, комерційний кредит, регресія, аналіз.

ФАКТОРЫ ФОРМИРОВАНИЯ ЧИСТОГО КОММЕРЧЕСКОГО КРЕДИТА ПРЕДПРИЯТИЯМИ В УКРАИНЕ

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Статья посвящена проблемам использования фирмами коммерческого кредита. Актуальность проблемы возросла с развитием финансового кризиса. Представленная статья раскрывает особенности коммерческого кредита и его факторов для 27 крупных украинских предприятий на протяжении 2010–2014 гг. Исследована кредиторская и дебиторская задолженности, а также чистые объемы продаж. Методология исследования базируется на дескриптивном и регрессионном анализе. Результаты показали, что фирмы продают в кредит больше, чем покупают, то есть существует чистый товарный кредит. Операционный цикл имеет положительную тенденцию. В среднем исследуемые компании ликвидные, но с низким уровнем рентабельности активов и чистой прибыли. Рентабельность активов, оборотность постоянных активов, операционный денежный поток, текущая и долгосрочная задолженность определены как ключевые факторы, влияющие на чистый товарный кредит.

🗈 Факторы, дебиторская задолженность, кредиторская задолженность, коммерческий кредит, регрессия, анализ.

Introduction

The current stage of Ukrainian economic development is characterized by a shortage of operating funds within companies. Most companies are forced to use trade credits in their practice because many banks in the last two years have not offered credit to companies, especially small and medium businesses. Moreover, bank loans, even for large companies, are no longer realistically affordable, because interest rates are generally much higher than profitability percentages in successful businesses. In this situation a trade credit becomes one of the possible ways to finance business activity and an efficient tool to manage liquidity.

A rational use of trade credit is safe for companies, while shortcomings in the management of accounts receivable and accounts payable can cause cash flow imbalance and negatively affect profitability. The risk of using trade credit during the crisis is caused by the growing threat of insolvency and bankruptcy, even for those customers who have been considered reliable. This situation forces financial management, particularly in management of trade credit, to clearly understand its use. Identifying the main factors of trade credit will help improve the quality of trade credit management and prevent its negative impact on the financial position of the company.

Theoretical Background

Trade credit provides bridge financing to cover the gap between the purchase of inputs and the sale of outputs, the gap between inventory acquisition and final sale. Some would argue that trade credit is not as cheap as it seems. In fact, some trade credit terms that are very common in practice involve interest rates that are much higher than bank rates. But even if trade credit is expensive, many companies use it because they cannot get a bank loan. Trade credit is useful for reducing costs inherent to borrowing. There are two main theories which could explain why trade credit can positively influence a company's financial situation. According to the first theory, firms facing uncertainty of the time of delivery of goods may use trade credit in anticipation of cash flow needs (Ferris, 1981). In this case, a buyer can synchronize cash inflows and cash outflows, which eliminates overdraft situations. Overdrafts are usually more expensive than trade credit usage, reducing costs. Trade credit can be useful in liquidity management, because companies can keep necessary amounts of money in their accounts during times of need. According to the second theory, trade credit is one of the most efficient ways to minimize liquidity management costs related to excess borrowing or insolvency (Emery, 1984). Companies

Prior research on trade credit has mostly focused on the necessity of trade credit and its characteristics as a relationship between buyers and suppliers - one in which small, young, generally financially constrained buyers are financed by their larger, more established suppliers when access to traditional financial markets is limited (Meltzer (1960), Schwartz (1974), Petersen and Rajan (1997). M. Giannetti (2003) maintained that trade credit was the most important type of short-term debt for the companies used in his research; in the US, trade credit is used twice as much as other short-term debt. Recent research has proven the central role of trade credit in financing (Mach and Wolken, 2006). J. Nilsen's (2002) research shows how different types of firms use trade credit at different phases of the business cycle. Small firms use trade credit to substitute for bank loans. The main issuers of this trade credit are a subset of larger firms, because they have a good credit rating.

Ukrainian economic research sees trade credit mostly in the cases of efficiency of trade receivables and payables management. Some aspects of trade receivables and payables, including the need to accelerate the turnover of receivables, are presented in the works of G. Goncharuk (2012) and N. Marusyak (2010). Accounts payable as a source of funding for companies was investigated in articles by N. Marchak and O. Fokina (2011), and areas of improvement in the management of accounts payable were investigated in works by H. Sirenko and O. Smirnova (2011). Systematic research on net trade credit determinants and its aftereffects in Ukraine has not yet been conducted. Yet, at the same time, trade credit has a significant impact on business activity in Ukraine, guite often not positive. The aim of this article is to discover determinants of net trade credit in Ukraine and their influence on the financial situation of large Ukrainian companies.

Data and Methodology

Primary data has been used for this study. It was derived from the annual reports of those firms under study, and which is available from SMIDA (Stock Market Infrastructure Development Agency of Ukraine). This agency is responsible for disclosing financial information of Ukrainian public issue companies. The data are organized in the form of panels. Analyses are performed using the Stata 10 software package. Initial data is expressed in thousands of UAH, and 134 observations are noted.

The methodology of measuring variables used in this study is presented in Table 1. It can be seen that the term sales is used instead of net sales. In the case of inventory turnover ratio (numerator) we used sales (instead of costs of goods sold due to missing data) divided by average inventory. As Bernstein and Wild (1998, p. 423) stated "sales is often used as the numerator in a "mod-ified ratio." Moreover, accounts receivable turnover is

calculated as sales divided by average accounts receivable. In the case of return on assets and assets turnover, total assets instead of average total assets are used. This is due to the small number of observations.

VARIABLE CALCULATIONS

| DESCRIPTION | ABBREVIATION | CALCULATIONS |
|--|--------------|--|
| Trade credit provided | tras | Trade receivables/Total assets |
| Trade credit obtained | tpas | Trade payables/Total assets |
| Net trade credit | trtpas | (Trade receivables - Trade payables)/ Total assets |
| Days to sell inventory | daystosell~v | 360/Inventory turnover |
| Accounts receivable collection period | arcollection | 360/Accounts receivable turnover |
| Return on assets (ROA) | incomeas | Net income/Total assets |
| Total asset turnover | salesassets | Sales/Total assets |
| Property, plant and equipment turnover | salesppe | Sales/Property, plant and equipment |
| Net profit margin | incomesales | Net income/Sales |
| Operating cash flow to income | coaincome | Operating cash flow/Net income |
| Operating cash flow to sales | coasales | Operating cash flow/Sales |
| Cash flow ratio | cfocurliab | Operating cash flow/Current liabilities |
| Working capital | curascurliab | Current assets - Current liabilities |
| Cash ratio | cashcuras | Cash and cash equivalents/Current assets |
| Current ratio | curasscurl~b | Current assets/Current liabilities |
| Liquidity ratio | curassinvc~b | (Current assets - Inventory)/Current liabilities |
| Long-term debt ratio | longdebtas | Long-term debt/Total assets |

Source: Bernstein and Wild (1998), Xhafa (2005), Grave (2011) and authors' calculations

Besides the descriptive statistics analysis in this study, regression analysis and results was performed and is presented in Table 2.

The initial generalized regression model used in this study is:

$$Y_{it} = \alpha + \sum_{k=l}' X_{kit} \beta_{kit} + \varepsilon_{it}$$

where, Y is net trade credit to total assets and denotes the dependent variable,

i = 1, 2, 3, ..., 27, k = 1, 2, 3, ..., 7 and t = 1, 2, 3, 4, 5.

Return on assets, property, plant and equipment turnover, net profit margin, operating cash flow to income, operating cash flow to sales, cash ratio, and long-term debt ratio are independent variables. Unnecessary variables have been omitted without affecting the accuracy of the model. The model specification link test for single-equation models is used in order to analyze whether the regression model is correctly specified. Results of this test, presented in Table 5, show that there is no specification error in our model. Moreover, the Ramsey RESET test is used to check whether the model has omitted variables. Results of this test showed that F(3, 123) =0.86 and Prob > F = 0.4655. Hence the model used in this study has no omitted variables. Finally, Variance Inflation Factor (VIF) is used as a measure of mulitcollinearity control and results are presented in Table 6. The results indicate that the mean of VIF is 1.18, i.e. is lower than 10. Thus, multicollinearity is not a problem in the performed regression model.

Table 1

Results and Discussion

Table 2 presents the sample composition. The data includes financial information about 27 large Ukrainian public joint stock companies. The companies are related to different branches of the non-financial sector, such as utilities, mechanical engineering, metallurgical industry, coal mining, and the food processing industry. All investigated companies have been active for more than 10 years in Ukrainian and international markets. All have securities listed on stock markets. The collected data are from the years 2010-2014, and all the companies remain in business in 2015.

Table 3 presents a summary of statistics for observed variables. The results denoted that the selected firms have sold more than they purchased on credit, so respectively a positive net trade credit is evidenced. On the other hand,

Table 2

accounts receivable are collected on average in 85 days, whereas 113 days are needed to sell inventory. Return on assets shows that on average one UAH has generated 0.02 UAH of net loss. Moreover, total assets turnover shows that one UAH of assets has generated an average value of 1.72 UAH of sales, whereas property, plant and equipment have generated an average value of 8.68 UAH of sales. Net profit margin shows that on average 0.14 UAH of net loss is generated by one UAH of sales. On the other hand, on average 0.05 UAH cash is obtained by one UAH of sales, respectively 3.94 UAH cash by one UAH of net income. Firms have on average a satisfied liquidity level measured by cash flow ratio (0.33), working capital, cash ratio (0.07), current ratio (2.53 vs. rule of thumb 2:1), and liquidity ratio (1.99). Finally, each UAH total asset is financed by 0.08 UAH long-term debts.

| FIRM CODE | FREO. | |
|-----------|-------|--|

SAMPLE COMPOSITION

| FIRM CODE | FREQ. | PER- CENT |
|-----------|-------|--------------|
| 100256 | 5 | 3.73 |
| 109339 | 5 | 3.73 |
| 110191 | 5 | 3.73 |
| 110912 | 5 | 3.73 |
| 114117 | 5 | 3.73 |
| 120141 | 5 | 3.73 |
| 122602 | 5 | 3.73 |
| 131328 | 5 | 3.73 |
| 132457 | 5 | 3.73 |
| 136768 | 5 | 3.73 |
| 152253 | 5 | 3.73 |
| 153488 | 5 | 3.73 |
| 158787 | 5 | 3.73 |
| 168076 | 5 | 3.73 |
| 177158 | 5 | 3.73 |
| 182863 | 5 | 3.73 |
| 186520 | 4 | 2.99 |
| 190644 | 5 | 3.73 |
| 190934 | 5 | 3.73 |
| 191224 | 5 | 3.73 |
| 191230 | 5 | 3.73 |
| 191299 | 5 | 3.73 |
| 191329 | 5 | 3.73 |
| 191483 | 5 | 3.73 |
| 191885 | 5 | 3.73 |
| 193074 | 5 | 3.73 |
| 193178 | 5 | 3.73 |
| Total | 134 | 100 |

| UMMARY STAT | ISTICS | | | | Table 3 |
|--------------|--------|---------|-----------|----------|----------|
| VARIABLE | OBS | MEAN | STD. DEV. | MIN | MAX |
| propertypl~t | 134 | 661881 | 2067403 | 388 | 12800000 |
| inventories | 134 | 134383 | 480496 | 0 | 3080833 |
| tradereciv~s | 134 | 243545 | 585618 | 0 | 2885184 |
| cashandcas~s | 134 | 14220 | 43878 | 0 | 284411 |
| currentass~s | 134 | 522557 | 1208093 | 0 | 7390183 |
| totalassets | 134 | 1389452 | 3788721 | 576 | 22800000 |
| longtermbo~s | 134 | 306496 | 1201595 | 0 | 7076301 |
| tradeliabi~s | 134 | 54690 | 168254 | 0 | 1231647 |
| currentlia~s | 134 | 515019 | 1556507 | 154 | 9271264 |
| salesreven~s | 134 | 1167292 | 3101866 | 0 | 22100000 |
| profitloss~r | 134 | 17710 | 194393 | -1497469 | 1120611 |
| netcashflo~a | 134 | 8320 | 28519 | 0 | 216491 |
| tras | 134 | 0.16 | 0.14 | 0.00 | 0.57 |
| tpas | 134 | 0.13 | 0.19 | 0.00 | 1.59 |
| trtpas | 134 | 0.03 | 0.25 | -1.57 | 0.57 |
| daystosell~v | 99 | 113 | 411 | 0 | 3600 |
| arcollection | 99 | 85 | 178 | 1 | 1532 |
| incomeas | 134 | -0.02 | 0.17 | -1.34 | 0.25 |
| salesassets | 134 | 1.72 | 4.21 | 0.00 | 35.76 |
| salesppe | 134 | 8.68 | 20.36 | 0.00 | 143.58 |
| incomesales | 134 | -0.14 | 0.68 | -4.88 | 0.20 |
| coaincome | 134 | 3.94 | 24.80 | -27.27 | 263.89 |
| coasales | 134 | 0.05 | 0.26 | 0.00 | 2.97 |
| cfocurliab | 134 | 0.33 | 1.06 | 0.00 | 8.28 |
| curascurliab | 134 | 7538 | 684703 | -3264041 | 2681734 |
| cashcuras | 134 | 0.07 | 0.14 | 0.00 | 0.92 |
| curasscurl~b | 134 | 2.53 | 3.54 | 0.00 | 27.93 |
| curassinvc~b | 134 | 1.99 | 3.07 | 0.00 | 26.78 |
| longdebtas | 134 | 0.08 | 0.16 | 0.00 | 1.25 |

Source: authors' calculations

Besides the summary statistics, a more detailed view of the mean values of selected variables is presented in Table 4. As can be seen from the calculations, the mean of trade credit provided is 0.16 in average, in 2014 the mean increased to 0.19 because companies experienced a lack of sort-term bank loans. Trade credit obtained was slowly growing, net trade credit in 2014 was smaller than the average mean. Financial theory proves that trade credit is useful in particular types of market imperfection, especially when asymmetric information in markets is growing. This happened to Ukraine in 2014.

The amount of days to sell inventory increased to 188 days in 2014; this is 75 days more than average mean in 2010-2014. The accounts receivable collection period was 147 days in 2014; this is 62 days more than the average mean. It shows that trade credit was also used by large firms as a cash management tool, by delaying payments firms may have been better able to match cash flow to their needs.

Return on assets decreased to -0.1 in 2014. This was caused not only by management decisions, but also by the economic and political problems in Ukraine, including the annexation of Crimea by Russia and the war in Donbass. Many companies lost their buyers and suppliers in those regions, so total asset turnover fell to 1.09 (the average mean was 1.72). Property, plant and equipment turnover decreased to 7.91 (the average mean is 8.68). In fact, efficiency of asset management decreased, because companies were not able to decrease their costs in the short-run, but at the same time, total turnover decreased because of reasons which did not depend on management.

| MEAN | BY Y | EARS |
|------|------|-------------|
| | | |

Table 4

| YEARS | TRAS | TPAS | TRTPAS | DAYSTO~V | ARCOLL~N | INCOMEAS | SALESA~S | SALESPPE |
|---|---|--|--|--|--|--|--|--|
| 2010 | 0.16 | 0.15 | 0.01 | • | • | 0.02 | 1.51 | 5.3 |
| 2011 | 0.15 | 0.1 | 0.05 | 92 | 65 | 0 | 2.61 | 9.87 |
| 2012 | 0.14 | 0.1 | 0.03 | 100 | 65 | 0 | 2.23 | 9.8 |
| 2013 | 0.15 | 0.12 | 0.03 | 72 | 63 | -0.02 | 1.2 | 10.56 |
| 2014 | 0.19 | 0.17 | 0.02 | 188 | 147 | -0.1 | 1.09 | 7.91 |
| Total | 0.16 | 0.13 | 0.03 | 113 | 85 | -0.02 | 1.72 | 8.68 |
| | | | | | | | | |
| years | incom~es | coainc~e | coasales | cfocur~b | cashcu~s | curassc~ | c~invc~b | longde~s |
| years 2010 | incom~es -0.04 | coainc~e 11.64 | coasales 0.13 | cfocur~b 0.31 | cashcu~s 0.07 | curassc~ 1.88 | c~invc~b 1.44 | longde~s 0.06 |
| years 2010 2011 | incom~es -0.04 -0.02 | coainc~e 11.64 1.69 | coasales 0.13 0.03 | cfocur~b 0.31 0.42 | cashcu~s 0.07 0.08 | curassc~ 1.88 2.06 | c~invc~b 1.44 1.64 | longde~s 0.06 0.05 |
| years 2010 2011 2012 | incom~es -0.04 -0.02 -0.22 | coainc~e 11.64 1.69 3.81 | coasales 0.13 0.03 0.02 | cfocur~b 0.31 0.42 0.52 | cashcu~s 0.07 0.08 0.09 | curassc~ 1.88 2.06 2.8 | c~invc~b 1.44 1.64 2.34 | longde~s 0.06 0.05 0.07 |
| years 2010 2011 2012 2013 | incom~es -0.04 -0.02 -0.22 -0.08 | coainc~e 11.64 1.69 3.81 1.5 | coasales 0.13 0.03 0.02 0.03 | cfocur~b 0.31 0.42 0.52 0.25 | cashcu~s 0.07 0.08 0.09 0.07 | curassc~ 1.88 2.06 2.8 3.58 | c~invc~b 1.44 1.64 2.34 2.88 | longde~s 0.06 0.05 0.07 0.09 |
| years 2010 2011 2012 2013 2014 | incom~es -0.04 -0.02 -0.22 -0.08 -0.32 | coainc~e 11.64 1.69 3.81 1.5 0.97 | coasales 0.13 0.03 0.02 0.03 0.03 0.03 | cfocur~b 0.31 0.42 0.52 0.25 0.15 | cashcu~s 0.07 0.08 0.09 0.07 0.05 | curassc~ 1.88 2.06 2.8 3.58 2.31 | c~invc~b 1.44 1.64 2.34 2.88 1.66 | longde~s 0.06 0.05 0.07 0.09 0.12 |

Source: Authors' calculations.

Operating cash flow to income had a negative trend, decreasing from 11.64 in 2010 to 0.97 in 2014. Operating cash flow to sales did not significantly change in 2011-2014, but it had a better mean in 2010. In fact, the amount of sales did not change much, but income became smaller because costs had increased. The cash flow ratio decreased because of a reduction in current liabilities in 2013-2014; primarily because companies actively used trade payables, it became 0.15 in 2014, which is $\frac{1}{2}$ of the average mean. The cash ratio did not change much, the mean in 2014 was 0.05 (the average was 0.07). The relationship between current assets and current liabilities

shows that companies have more assets than liabilities, which is the basis of their liquidity, and which changed during the investigated period, remaining close to the optimal mean. The long-term debt ratio slowly increased, but companies still had a shortage of long-run funding.

Figure 1 shows the mean of trade receivables and trade payables by year, which shows there was a weak positive trend line for trade receivables and payables. The trend for both receivables was the same. Still, a positive net trade credit was evidenced for the examined period. A higher net trade credit is observed for 2011, whereas it became lower in 2010.

Науково-практичне видання «Незалежний АУДИТОР» № 14 (IV) 2015





Regression results (tables 5-6) show that ROA, property, plant and equipment turnover, operating cash flow to sales, cash ratio, and long-term debt ratio are statistically significant factors that influenced the net trade credit for the selected firms. Other selected and examined factors in regression analysis are confirmed not to have played a role in the net trade credit.

Fig. 1. Mean of trade receivables and trade payables

Source: Authors' calculations.

REGRESSION STATISTIC

Table 5

| REGRESSION RESULTS | | | | | | |
|--|---------------------------|---|-------------------------------------|--|-------------------------|--|
| The model specification link test for single-equation models | | | | | | |
| Linear regression | | Numbo F (7, 26 Prob > R-squa Root M | er of obs 5) F Ired ISE | = = = = = (Std. E | rr. adjusted for 27 | 134 19.41 0 0.1909 0.22849 clusters in index) |
| trtpas | Coef. | Robust Std. Err. | t | P> t | [95% Conf. | Interval] |
| incomeas | 0.58 | 0.09 | 6.53 | 0.00 | 0.40 | 0.76 |
| salesppe | 0.00 | 0.00 | -3.02 | 0.01 | 0.00 | 0.00 |
| incomesales | -0.03 | 0.02 | -1.51 | 0.14 | -0.08 | 0.01 |
| coaincome | 0.00 | 0.00 | -0.55 | 0.58 | 0.00 | 0.00 |
| coasales | -0.03 | 0.01 | -2.88 | 0.01 | -0.06 | -0.01 |
| cashcuras | 0.35 | 0.10 | 3.57 | 0.00 | 0.15 | 0.55 |
| longdebtas | 0.43 | 0.14 | 3.01 | 0.01 | 0.14 | 0.73 |
| _cons | -0.01 | 0.04 | -0.18 | 0.86 | -0.10 | 0.08 |
| | Т | he model specificatio | on link test for sin | gle-equation mo | dels | • |
| Source Model Residual | SS 1.56129 6.569424 | df 2 131 | MS 0.78064476 0.050148275 | Number of ob F (2, 131) Prob > F R-squared Adj R-squared | S = = = = = | 134 15.57 0 0.192 0.1797 |
| lotal | 8.130/14 | 133 | 0.061133184 | Root MSE | = | 0.22394 |
| trtpas | Coef. | Std. Err. | t | P> t | [95% Conf. | Interval] |
| _hat | 0.97 | 0.19 | 5.03 | 0.00 | 0.59 | 1.35 |
| _hatsq | -0.22 | 0.52 | -0.42 | 0.67 | -1.24 | 0.80 |
| _cons | 0.00 | 0.02 | 0.16 | 0.87 | -0.04 | 0.05 |

Source: Authors' calculations.

As can be seen from Table 5, the coefficient of determination (R-squared) is not very high, which is typical for this type of data. The Fisher criteria (19.41 and 15.57) proves that the model is meaningful.

| VARIANCE INFLATION FACTOR | | | | |
|---------------------------|------|-------|--|--|
| VARIABLE | VIF | 1/VIF | | |
| incomesales | 1.32 | 0.76 | | |
| incomeas | 1.29 | 0.78 | | |
| cashcuras | 1.21 | 0.83 | | |
| coasales | 1.19 | 0.84 | | |
| longdebtas | 1.15 | 0.87 | | |
| salesppe | 1.05 | 0.96 | | |
| coaincome | 1.03 | 0.97 | | |
| Mean VIF | 1.18 | | | |

Source: authors' calculations

This result shows that companies use trade credit to manage their cash flows. Trade credits became more important for companies in 2013-2014 because of a lack of long-term financial recourses. Companies are trying to keep the same level of ROA, but their costs are increasing faster than turnover. This is why companies sold more on credit than they purchased on credit.

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Conclusion

The purpose of this study was to examine some factors that should explain trade credit composition. This is a case study and has its own limitations, thus the findings cannot be generalized. This study evidenced that firms with higher return on assets, cash, and long-term debt ratios have statistically significantly sold more on credit than they have purchased. On the other hand, firms with higher fixed asset turnover and operating cash flow to sales have statistically obtained significantly more than they have provided on credit. The results of the analysis show that in the years 2013-2014 companies mostly did not have needed income and continued to increase the amount of trade credit. To avoid the risk of insolvency or bankruptcy financial managers should pay more attention to the quality of debt. They should pay more attention to:

- analysis and ranking of customers (suppliers) based on the volume of procurement and credit history;
- monitoring of accounts receivable and payable which were past due and study the causes of noncompliance with contractual discipline;
- reduce risk of bad debts;
- providing sales conditions guaranteeing payment of cash in time.
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Fitim Deari, Paientko T.V.

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