

What Determines the Firm's Net Trade Credit? Evidence from Macedonian Listed Firms

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Abstract: *This paper analyses the net trade credit and its determinants for a sample of 25 non-financial firms for the period 2011-2013. The sample is derived from the Macedonian Stock Exchange. The net trade credit is the dependent variable. The dependent variable is defined as the difference between trade receivables and liabilities, and then this difference is divided by total assets. The maturity structure of assets, profitability, inventory investment, cash to assets ratio, long-term financing, total debt financing, and converting sales into cash are the independent variables. This study used the Shapiro-Wilk W test for normality, Kernel density estimation, Variance Inflation Factor for multicollinearity, and the model specification link test for single-equation models. The obtained results show that more profitable firms and with higher current assets and cash ratio have positive net trade credits. The net trade credit is significantly negatively associated with inventory to total assets ratio and net cash flows from operating activities to sales. On the other hand, the net trade credit is significantly positively associated with current assets to total assets ratio and profitability.*

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Introduction

Days' sales in receivables, days' purchases in payables and days' sales in inventory determine a firm's net trade credit. Hence, the longer the net trade cycle, the larger is a firm's working capital requirement (Bernstein and Wild, 1998, p. 418). On the other hand, the operating cycle (conversation period) is found as days to sell inventory plus collection period (see Bernstein and Wild, 1998, p. 425).

There is no doubt that neither net trade credit nor operating cycles can be analysed as short-term liquidity measures isolated from others financial measures. Namely, the purpose of this paper is to take into account some of factors that are thought to explain the conjunction between the credit offered to clients and credit obtained from suppliers. This is a pioneer study in Macedonia. The approach used could be a starting point for further studies in this subject. At the same time, it can support decision makers at the macro and micro economic levels, at a time when the Law for Financial Discipline in the Republic of Macedonia has already entered into force.

The basic problem starts from selling and buying on credit. Firms do not realize all sales in cash, as they do not pay all invoices (bills) with cash on the transaction date. Thus, in this process between debtor and creditor, goods are delivered, and/or services are provided without cash involvement. For accountants, this problem is known as accrual vs. cash base. To be precise, the concept of trade credit explains those relationships between a firm, its customers and suppliers. Petersen and Rajan (1996, pp. 2-4) list three main theories which explain trade credit. These are financing advantage theories of trade credit (advantage in information acquisition, advantage in controlling the buyer, advantage in salvaging value from existing assets), price discrimination through trade credit, and transactions costs theories.

For trade credit, many papers have been written and different evidence found from the micro and macro perspective. For example, Ferrando and Mulier (2012, p. 1) found that "firms that are more vulnerable to financial market imperfections, and therefore more likely to be financially constrained, rely more on the trade credit channel to manage growth." Kohler, Britton and Yates (2000, p. 20) found that "firms with direct access to capital markets – firms that are quoted on the UK stock exchange – both extend more and receive less trade credit during a recession. They therefore unambiguously provide unquoted firms with more net trade credit."

Delannay and Weill (2004) have examined the determinants of trade credit of about 9,300 firms from nine transitional countries (Central and Eastern European Countries). They provided evidence which suggest that "both financial and commercial motives explain the credit behaviour of firms." (p. 1) Moreover, they came to the conclusion that "suppliers act as financial intermediaries in favour of firms with a limited access to bank credit." (p. 21)

Altunok (2011, p. 2) found evidence that "suppliers' willingness to price discriminate, information asymmetry between suppliers and customers, market structure, stages of

business cycles, and customers' creditworthiness all play an important role in the determination of contract terms."

Garcia-Teruel and Martinez-Solano (2006) analyzing 3,589 small and medium sized firms in the UK found evidence that "larger firms, with better access to alternative internal and external financing and with a lower cost, use less credit from suppliers."

This paper also tries to study some of factors that are supposed to determine the net trade credit for selected firms. The paper is organized as follows: introduction, research design, analyses, and discussion of results, conclusions, references, and appendixes.

Research Design

The analysis performed in this study includes three basic financial statements. Firstly, the dependent variable, defined as $(\text{Trade receivables} - \text{Trade liabilities}) / \text{Total assets}$, means that both numerator and denominator are balance sheet articles. On the other hand, independent variables such as $\text{Current assets} / \text{Total assets}$, $\text{Inventory} / \text{Total assets}$, $\text{Cash and cash equivalents} / \text{Total assets}$, $\text{Long-term debt} / \text{Total assets}$, and $\text{Total liabilities} / \text{Total assets}$, contain balance sheet articles. Secondly, independent variable defined as $\text{Profit (Loss)} / \text{Sales}$ contains income statement articles. Finally, the independent variable defined as $\text{Net cash flows from operating activities} / \text{Sales}$ contains cash flow statement and income statement articles.

From an accounting point of view, it is well known that a balance sheet as a statement can be viewed as a photo, whereas the other two statements (cash flow and income statement) can be viewed as a movie. This is because a balance sheet denotes a balance sheet equation expressed as $\text{Assets} = \text{Liabilities} + \text{Equity}$ at a specific point in time (usually a specific date, as it is in Macedonia, i.e. 31 December). On the other hand, cash flow statements list cash flows from operating, investing, and financing activities over a given accounting period. In this case, cash flows from operating activities cover one year, for example from 01 January to 31 December, 2013. This is a reason why in cash flow statements and income statements it is written "as for the year ended at 31 December", and not "as of 31 December 2013" as in the case of balance sheets (financial position). Finally, an income statement denotes a firm's financial performance over a certain accounting period. In this case, this accounting period covers one year, i.e. from 01 January to 31 December, 2013. With other words, the regression model contains some variables that express something as it was at date 31 December 2013, and others express something that was generated during year 2013. After all, at the end of the accounting period, income statements, cash flow and statements of changes in equity are merged on the balance sheet.

In this study quantitative methods and regression and spearman analyses are used. The study begins with a brief theoretical framework for trade credit and its determinants. The study ends up with conclusions related with net trade credit for analysed firms.

The section below is focused on the process of data selection, sample-selected firms, processing the data, panel data, and finally the methodology of quantitative variables calculation.

This study starts from the general and a briefly theoretical part in order to come later to some specific conclusions. With other words, a deductive and result-oriented approach is used. Principally, case study as a research method is used in this study. Case study is used because the study is limited in two aspects. Firstly, the sample comprised just non financial firms which are listed on the Macedonian Stock Exchange, and therefore limited in the aspect of the number of firms. Secondly, the analysed period covers 2011-2013.

The sample is comprised of 25 non-financial firms (for more see the list of firms in the Appendix). Banks were not selected for analyze due to their specific characteristics that they have in comparison with other selected firms.

In total, 74 observations are examined and regression analysis is performed. Selected firms are non-financial entities. They belong to different types of businesses such as industry, services, construction, catering, trade and agriculture. In the industry sector there are nine firms or 36 percent as a structure of the sample; in the services sector there are five firms or 20 percent; in the construction sector are two firms or 8 percent; in the catering sector are three firms or 12 percent; in the trade sector are five firms or 20 percent; and in the agriculture sector there is one firm or 4 percent of the total of 25 firms.

Data are derived from firms' annual reports published on the Macedonian Stock Exchange web page (for more see: <http://www.mse.org.mk/>). Data are organized in the form of panel data. Unbalanced panel data are used. Analyses are performed by the Stata 10 software package. Some statistically performed analyses in this paper are based on concepts, ideas, and methodologies from UCLA.

In this study, seven independent variables are used. Net trade credit is a dependent variable. Maturity structure of assets, profitability, inventory investment, cash to total assets ratio, long-term financing, total debt financing, and converting sales into cash are independent variables. Both types of variables, dependent and independent, are expressed as their book values.

Table 1 describes the methodology of measuring quantitative variables used in this study. By using those seven independent variables in the regression model, there is an attempt to analyse the dependence of the net trade credit on these proxies.

The initial generalized regression model used in this study can be written as:

$$Y_{it} = \alpha + \sum_{k=1}^7 X_{kit} \beta_{kit} + \varepsilon_{it} \quad (1)$$

where, Y_{it} is the net trade credit of a firm (i) to the period (t),
 $i = 1, 2, 3, \dots, 25,$

$$k = 1, 2, 3, \dots, 7, \text{ and.}$$

$$t = 1, 2, 3.$$

Since net trade credit is a function of variables of interest, and then regression, model (1) can be expanded as follow (2):

$$\left(\frac{\text{Trade receivables} - \text{Trade liabilities}}{\text{Total assets}} \right)_{it} = \alpha + \beta_1 \left(\frac{\text{Current assets}}{\text{Total assets}} \right)_{it} + \beta_2 \left(\frac{\text{Profit (Loss)}}{\text{Sales}} \right)_{it} + \beta_3 \left(\frac{\text{Inventory}}{\text{Total assets}} \right)_{it} + \beta_4 \left(\frac{\text{Cash and cash equivalents}}{\text{Total assets}} \right)_{it} + \beta_5 \left(\frac{\text{Long-term debt}}{\text{Total assets}} \right)_{it} + \beta_6 \left(\frac{\text{Total liabilities}}{\text{Total assets}} \right)_{it} + \beta_7 \left(\frac{\text{Net cash flows from operating activities}}{\text{Sales}} \right)_{it} + \varepsilon_{it} \tag{2}$$

In this study, two types of regression are used: Pooled OLS (OLS regression without option vce, i.e. default standard errors) and OLS with vce (cluster-robust standard errors). Vce option performs cluster-robust standard errors. Clustering is done on the firm. As Cameron and Trivedi (2010) explained the error (here ε_{it} in equation 1) is likely to be correlated over time for a given individual (here firm) which is within correlation and possible correlation over individuals (here firms) which is between correlation. Hence, vce option is used to control this issue. According to Wiggins (1999) ... “regress ..., vce (cluster) estimates the model by OLS but uses the linearization/Huber/White/sandwich (robust) estimates of variance (and thus standard errors). These variance estimates are robust in the sense of providing correct coverage rates to much more than panel-level heteroskedasticity. In particular, they are robust for any type of correlation within the observations of each panel/group.”

Table 1: The Methodology of Quantitative Variables Calculation

Description	Abbreviation	Calculation
Net trade credit	trtpas	(Trade receivables – Trade liabilities) / Total assets
Maturity structure of assets	currasas	Current assets / Total assets
Profitability	profsales	Net income / Sales
Inventory to assets ratio	invas	Inventory / Total assets
Cash to assets ratio	cashas	Cash and cash equivalents / Total assets
Long-term financing	ldebtas	Long-term debt / Total assets
Total liabilities ratio	liabas	Total liabilities / Total assets
Converting sales into cash	coasales	Net cash flows from operating activities / Sales

Source: Grave (2011), Garcia-Teruel and Martinez-Solano (2006), Xhafa (2005), author.

Net trade credit, generally, net trade credit as a dependent variable, is differently defined by different authors. Net trade credit as a dependent variable used in this study is calculated as the difference between trade receivables (accounts receivables or debtors) and trade liabilities (accounts payables or creditors), and then this difference is

divided by total assets. This calculation is based on Grave (2011), which also analyses trade receivables divided by total assets and trade payables divided by total assets.

Some authors examined separately trade receivables and payables with others determinants, while some others authors separately and jointly. For example, Alatalo (2010, p. 27) uses trade credit provided (trade receivables per sales), trade credit obtained (trade credit payables per cost of goods sold) and net trade credit (difference between trade receivables and payables scaled by sales). Ge and Qiu (2007, p. 521) as a dependent variable use accounts payable/total assets, accounts payable/sales, (accounts payable - accounts receivable)/total assets, (accounts payable - accounts receivable)/sales.

Analyses

This section includes descriptive statistics, data and regression analyses. This section presents the overall picture of data and variables analysed in this study. Shapiro-Wilk W test for normality is performed. Obtained results from regression analysis are controlled and tested via necessary tests. These processes are carried out in order to get as far as possible reliable conclusions at the end of this study.

Descriptive statistics and analyses

Descriptive statistics presented in this section include number of observations, mean, standard deviation, minimum and maximum. Table 1 presents descriptive statistics and table 2 presents the mean for each variable according to years.

As table 2 shows, there are 74 observations per each variable. For one firm, there is missing data for one year. This implies that the panel data is unbalanced. Mean and standard deviation of each variable are less than one, except standard deviation for 'profsales'. From observed data, there are cases where firms have minus net cash flows from operating activities, i.e. inflows are less than outflows from the operating activities section. This is why on the 'min' column for 'coasales' is appeared a negative value. In the 'min' column, negative values appear also for the dependent variable 'trtpas' and the profitability variable 'profsales'. On the other hand, the 'max' column denotes that all values are less than one, except for 'profsales' and 'coasales'.

Table 2: Descriptive Statistics for 25 Firms

Variable	Obs	Mean	Std. Dev.	Min	Max
trtpas	74	0.028	0.111	-0.301	0.288
currasas	74	0.395	0.186	0.045	0.789
profsales	74	0.182	1.207	-1.693	9.850
invas	74	0.108	0.102	0.003	0.366
cashas	74	0.029	0.039	0.000	0.160

What Determines the Firm's Net Trade Credit? Evidence from Macedonian Listed Firms

ldebtas	74	0.106	0.115	0.000	0.379
liabas	74	0.397	0.233	0.018	0.840
coasales	74	0.128	0.676	-0.613	5.744

Source: author's calculations

On average, based on obtained results from descriptive statistics, the following interpretation can be drawn for selected firms and the analysed period. Firstly, trade receivables are slightly higher than trade payables. Secondly, long-term assets are higher than short-term assets, i.e. 39% short-term and rest 61% are long-term assets. Thirdly, for each 100 denar sales, 18 denar profits is generated. Fourthly, inventory to total assets participates with 11%, and cash and its equivalents with 3%. Fifthly, for each 100 denar sales, 13 denar net cash flow from operating activities is received. Finally, assets are financed more with capital than liabilities.

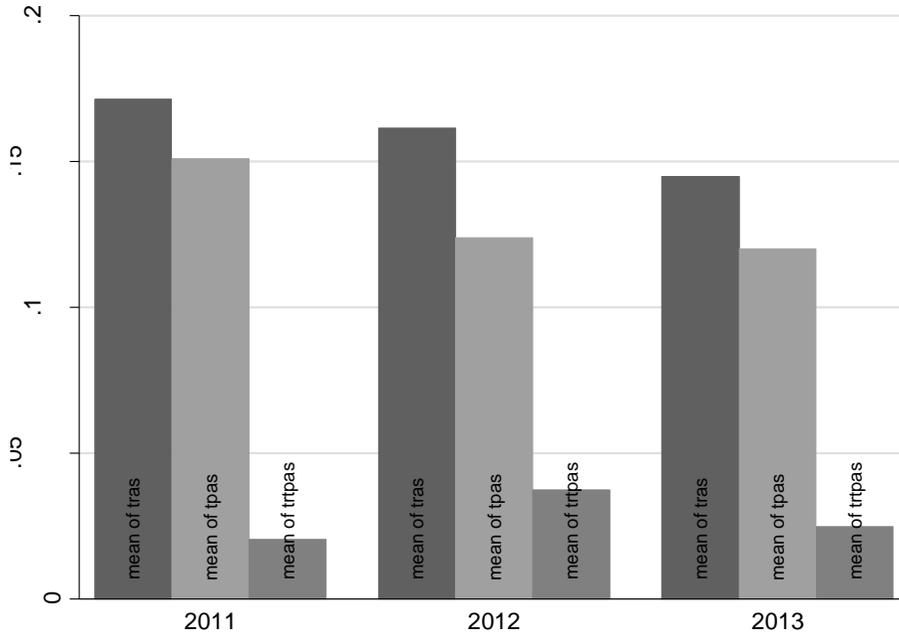
Table 3: Mean of the Variables by Years

Years	trtpas	currasas	profsa-s	invas	cashas	ldebtas	liabas	coasales
2011	0.020	0.389	0.496	0.111	0.030	0.103	0.409	0.064
2012	0.038	0.407	-0.014	0.108	0.032	0.101	0.406	0.038
2013	0.025	0.387	0.059	0.104	0.024	0.115	0.377	0.290
Total	0.028	0.395	0.182	0.108	0.029	0.106	0.397	0.128

Source: author's calculations

Figure 1 shows the trend analysis of mean for trade receivables to total assets, trade payables to total assets, and the net trade credit to total assets. For the analysed period 2011-2013, on average accounts receivable are higher than account payables. The difference is even higher in 2012 when the mean of net trade credit is obviously increased. Based on the concept of the time value of money, in this case it is preferable to have a negative percentage of the net trade credit.

Figure 1: Trade Receivables, Trade Payables, and Net Trade Credit to Total Assets, Mean by Years



Source: author's calculations

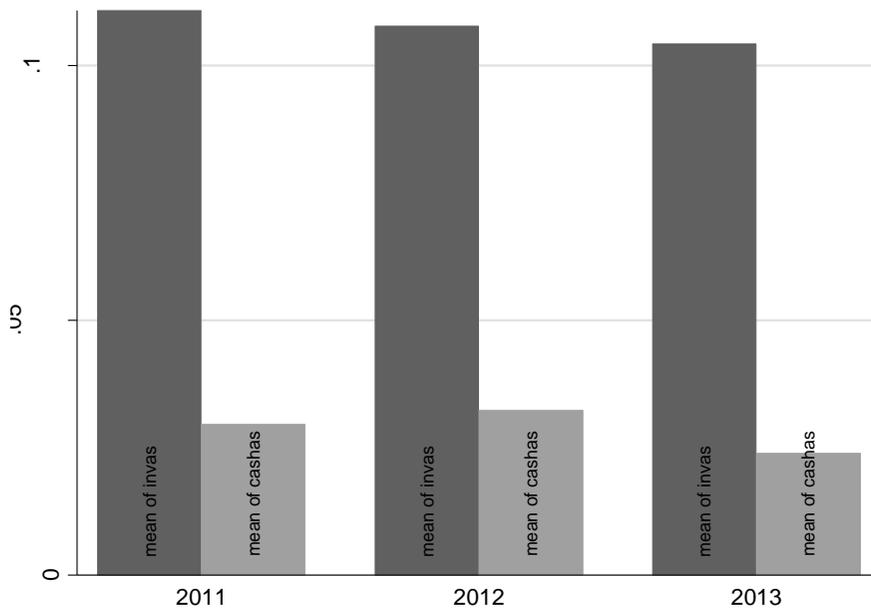
Current assets to total assets ratio—besides others classifications, assets are classified on short-term and long-term, or current and non-current assets. Knowing the structure of assets based on time to maturity, or using period classification is important on the financial decision making process. The portion of current assets to total assets is different for different firms. In fact, this ratio can change for one firm's view from different periods. However, many explanations can be found why some firms have lower current assets to total assets ratio, and others have higher. Selected firms for the period 2011-2013 on average have remained almost the same for the current assets to total assets ratio.

Profitability—there are many indicators for showing the profitability of an entity. For example, profitability may be measured by gross margin, operating margin, contribution margin, profit margin, return on assets (ROA), return on equity (ROE), return on total capital (ROTC), etc. In this study, a measure that takes into consideration sales and costs is used. Hence, in this study profitability is measured using profit margin. This ratio denotes how much denar profit every sales in denar generates. It is calculated as profit (loss) / sales. There are observations in this study where net income (profit or loss) for the period (year) is not equal with the overall profit (loss) for the period (year). This is due to some accounting adjustments made after net profit (loss) for the period is calculated. Obtained results show that more profitable firms and with higher

current assets and cash to total assets ratio have more trade receivable than payables. On the other hand, profitable firms have financed business activities more with capital rather than debt.

Inventory investment–inventory to total assets is a regular ratio which found in order to analyse the inventory level or investment. It is a very helpful analysis which gives a picture of assets composition. Selected firms for the period 2011-2013 on average have remained almost at the same inventory level.

Figure 2: Inventory to Assets; Cash and Cash Equivalents to Assets, Mean by Years



Source: author's calculations

Cash to total assets ratio–this ratio is calculated based on the same methodology as the previous ratio for inventory using vertical analysis. So, cash and its equivalents are divided by total assets. Figure 2 shows cash and its equivalents to assets for the period 2011-2013. As it can be noticed, selected firms on average have almost the same cash ratio for the analysed period. Obtained results show that firms with higher cash ratio are more able to convert sales into cash than counterparties.

Long term financing and total liabilities ratio–those two ratios explain how assets are financed. In other words, what percentage is long-term financing, or total debt on total assets? They both belong to the leverage ratios group. Firms finance their assets by both, short-term and long-term debt. On the other hand, assets can be financed by debt and (or) equity, and this issue is well known in financial management as the capital structure. On average, there is a decrease of total debt financing in 2013.

Converting sales into Cash – a cash flow statement is prepared because of an accrual versus cash accounting base problem. All sale revenues perhaps are not done on the cash basis. This means that a sale is recognized as an accounting transaction (record) on one date, and receiving money is done on another date. Due to this, the ratio net cash flows from operating activities / sales helps us to analyse how much denars from sales are converted into cash. Obtained results show that firms with higher leverage ratio are not able to convert sales into cash compared with counterparties. On the other hand, on average in 2013, selected firms have been more able to convert sales into cash.

Data and regression analyses

The Shapiro-Wilk W test for normality is used to check whether residuals are normally distributed. The results of the Shapiro-Wilk W test are presented in table 4. The p-value is 0.061. So, it is greater than 0.05, indicating that the null hypothesis cannot be rejected. In other words, it can be concluded that residuals are normally distributed.

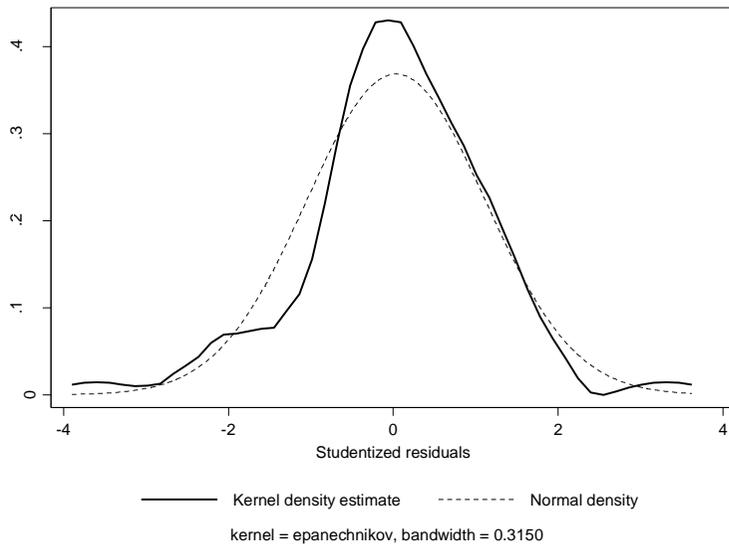
Table 4: Shapiro-Wilk W Test for Normal Data

Variable	Obs	W	V	z	Prob>z
r	74	0.968	2.031	1.546	0.061

Source: author’s calculations

Kernel density estimate is performed for 25 firms, and is presented on figure 3.

Figure 3: Kernel Density Estimate for 25 Firms



Source: author’s calculations

Variance Inflation Factor (VIF) is used for as a measure of control for multicollinearity, results of which are in table 5. The results indicate that for all variables VIF is lower than 10, which means that multicollinearity is not a problem in this study.

Table 5: VIF for the Independent Variables

Variable	VIF	1/VIF
currasas	1.78	0.56
invas	1.51	0.66
liabas	1.42	0.70
ldebtas	1.34	0.75
cashas	1.19	0.84
coasales	1.18	0.85
profsales	1.17	0.86
Mean VIF	1.37	

Source: author's calculations

Moreover, in order to analyse whether the regression model is correctly specified, a model specification link test for single-equation models is used. The results of this test are in table 6. Since hatsq is not significant ($t = -1.25$), then it looks like that there is no specification error for this model in this study.

Table 6: A Model Specification Link Test for Single-equation Models

Source	SS	df	MS	Number of obs = 74		
Model	0.448	2	0.224	F (2, 71) = 34.77		
Residual	0.457	71	0.006	Prob > F = 0		
Total	0.905	73	0.012	R-squared = 0.495		
				Adj R-squared = 0.481		
				Root MSE = 0.080		
trtpas	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
hat	1.116	0.153	7.31	0.000	0.811	1.420
_hatsq	-1.710	1.372	-1.25	0.217	-4.446	1.026
_cons	0.008	0.012	0.69	0.492	-0.016	0.032

Source: author's calculations

Discussion of Results

This section discusses obtained results based on performed analyses. Based on the Spearman analysis (see table 7), significant positive relationships are found between the net trade credit and current assets, profitability and cash to total assets ratio. This implies that more profitable firms and with higher current assets and cash to total assets ratio have more trade receivables than payables. Probably profitable firms have

generated internal funds and were more able to wait for their clients than counterparties.

Table 7: Spearman's Rank Correlation Coefficients

	trtpas	currasas	profsa-s	invas	cashas	ldebtas	liabas	coasales
trtpas	1.00							
currasas	0.52*	1.00						
profsales	0.23*	0.20	1.00					
invas	0.04	0.61*	-0.07	1.00				
cashas	0.31*	0.44*	0.37*	0.18	1.00			
ldebtas	-0.10	-0.15	-0.13	0.00	-0.17	1.00		
liabas	-0.07	0.09	-0.52*	0.26*	-0.22	0.37*	1.00	
coasales	-0.07	0.08	0.49*	-0.16	0.30*	0.04	-0.35*	1.00

(Obs = 74, * 0.05 Significance level)

Source: author's calculations

Significant positive relationships are found between current assets, the inventory ratio, and the cash to total assets ratio. As firms increased investments on inventories, current assets are increased too. Also cash are current assets. Significant positive relationships are found between profitability, cash ratio, and converting sales into cash. This implies that more profitable firms have a higher liquidity level and are more able to convert sales into cash than counterparties. On the other hand, profitability is significantly negatively associated with total debt financing. This implies that profitable firms have financed business activities more with capital than debt. A significant positive relationship is found between inventory ratio and total debt financing. A significant positive relationship is found between cash ratio and converting sales into cash. Firms with higher cash ratio are more able to convert sales into cash than counterparties. A significant positive relationship is found between long-term financing and total debt financing. As firms have increased long-term debt, total debt financing is increased too. A significant negative relationship is found between total debt financing and converting sales into cash. This result implies that firms with higher leverage ratio are less able to convert sales into cash compared with counterparties. Regression analyses are performed and results are presented in table 8. Both OLS regressions show that current assets to total assets ratio and inventory to total assets ratio are statistically significant determinants (0.05 significance level). R², the number of observations, signs, and coefficients (b) remain same in both OLS regressions.

Table 8: Regression Results According OLS and OLS with vce Option

Variable	OLS	OLSVCE
currasas	0.48	0.48
	0.07	0.1

What Determines the Firm's Net Trade Credit? Evidence from Macedonian Listed Firms

	6.75	4.57
profsales	0.01	0.01
	0.01	0
	0.79	2.16
invas	-0.33	-0.33
	0.12	0.13
	-2.75	-2.42
cashas	0.07	0.07
	0.27	0.3
	0.26	0.23
ldebtas	0.15	0.15
	0.1	0.12
	1.47	1.18
liabas	-0.17	-0.17
	0.05	0.09
	-3.41	-1.88
coasales	-0.03	-0.03
	0.02	0.01
	-1.88	-2.74
_cons	-0.07	-0.07
	0.03	0.04
	-2.36	-1.85
N	74	74
r2	0.48	0.48
Legend: b/se/t		

Source: author's calculations

Based on the results of the second regression model, the net trade credit is significantly negatively associated with inventory to total assets ratio and net cash flows from operating activities to sales. On the other hand, the net trade credit is significantly positively associated with current assets to total assets ratio and profitability.

Conclusions

The purpose of this paper was to analyse the net trade credit and its determinants for 25 non financial firms for the period 2011-2013. The paper has as its limitations the

number of firms and the analysed period. Hence, the paper provides evidence which cannot be generalized to other firms. In this context, the paper can serve as a starting point for future studies in terms of domestic firms, at least viewed from the methodological side.

Significant relationships between the net trade credit and analysed determinants are found using Spearman and regression analyses. The net trade credit is significantly negatively associated with inventory to total assets ratio and net cash flows from operating activities to sales. On the other hand, the net trade credit is significantly positively associated with current assets to total assets ratio and profitability. Selected firms for the selected period on average have provided more than obtained trade credit. Therefore, this implies that working capital needs are increased.

The study also revealed the following evidences:

- More profitable firms and with higher current assets and cash to total assets ratio have more trade receivables than payables;
- More profitable firms have a higher liquidity level and are more able to convert sales into cash than counterparties;
- Profitable firms have financed business activities more with capital than debt;
- Firms with higher cash ratio are more able to convert sales into cash than counterparties;
- Firms with higher leverage ratio are less able to convert sales into cash than counterparties.

Without a doubt this issue remains an open issue window for domestic firms. For future studies, it might be interesting to focus on the following aspects: Extend the analysed period and increase the number of firms in the sample, Add new independent and dependent variables, and Include financial crisis effects.

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Appendix: List of Analysed Firms

Firm	Firm code	Firm	Firm code
Alkaloid AD Skopje	ALK	RZ Institut AD Skopje	RZIN
Beton AD Skopje	BESK	Toplifikacija AD Skopje	TPLF
EMO AD Ohrid	EMO	VV Tikves AD Skopje	TKVS
Fersped AD Skopje	FERS	RZ Inter-Transsped AD Skopje	RZIT
Granit AD Skopje	GRNT	RZ Uslugi AD Skopje	RZUS
Hoteli Metropol Ohrid	MPOL	Skopski Pazar AD Skopje	SPAZ
Internesnel Hotels AD Skopje	INHO	Teteks AD Tetovo	TETE
Makedonijaturist AD Skopje	MTUR	Zito Luks AD Skopje	ZILUP
Makosped AD Skopje	MKSD	ZitoVardar AD Veles	ZTVR
Makoteks AD Skopje	MAKS	ZK Pelagonija AD Bitola	ZPKO
Makpetrol AD Skopje	MPT	Tehnometal-Vardar AD Skopje	TEH
Makstil AD Skopje	STIL	Vitaminka AD Prilep	VITA
Replek AD Skopje	REPL		