

## Trade Credit in the Financial Structure of Polish Companies

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**Abstract:** *Purpose* – The aim of this paper is to analyse the changes in the financial structures of companies in different sectors in the years 2010–2014.

*Methodology* – In the research the data published by GUS (Polish Central Statistical Office) were used.

*Findings* – The share of the trade credit in the finances of companies is changing slowly and is a big part of a firm's budgets.

**Keywords:** trade credit, financial structure of company

### Introduction

In business practice trade credit refers to a broad range of feeds and can take the form of a bank loan, commercial, working capital, consumer, mortgage, investment, or pawn shop loan, may also be granted in a current or credit account. The credit agreement is determined by its duration, the conditions for reimbursement of the amount of the loan together with interest (expense) and the amount of any commission of one of the parties to the agreement or a third party. Party lending is mostly done by commercial banks which provide loans to companies and individuals. A special case is deferment by the supplier having to pay for the delivered goods or a supply service to a customer (Łuczka, 2000, p. 132; Cuñat, 2007, p. 491). This type of financing in both business practice and in scientific discourse is known as trade credit, from suppliers or commercial sources and is associated with the process of the exchange of goods and services between two sides, which one party expresses the demand and willingness to pay on a specified date, and the other accepts these conditions and is ready to bear the risk of any possible insolvency of a partner (Adams, Wyatt, Kim 1992, p. 95). Due to the difficulty in accessing capital for many companies, especially small and micro-group ones (Fisman, Love, 2003, p. 353; Burkart, Ellingsen, 2004, pp. 569–590) is the primary source of financing for short-term operations, and thus replaces the working capital loan (Atanasova, 2008, p. 49), this allows access to capital to companies that are not able to obtain it using traditional channels. Because it is believed that the supplier (the lender) may better, faster and more correctly assess the credit risk of the buyer than specialized financial

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institutions do (Petersen, Rajan, 1997, p. 662; Burkart, Ellingsen, 2004, p. 569). The most common one is granted by the company, which by nature believe they have easier access to it, which means that trade credit is a kind of substitute for institutional funding. In some situations it is believed that the loan provider is the only source of funding, a donor as the subject of a “last resort” (Fisman, Love, 2003, p. 354).

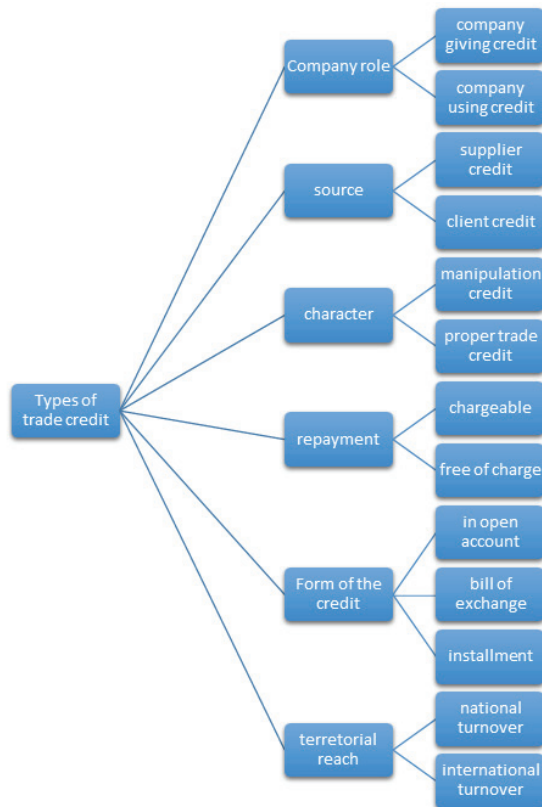
According to Ferries (1981, p. 243) trade credit increases the flexibility of the company in terms of regulating obligations, and thus contributes to the reduction of the necessary safeguards, which are compulsorily required by banks and other commercial financial institutions. It should be noted, however, that the essence of this form of financing comes down to the issue of trust, because in the period between the delivery of specific goods and the time of their payment a provider has no control regarding the products delivered, as well as receivables arising from the delivery. An essential condition for granting a certain level of credit is therefore a period of previous cooperation and experience flowing from it, single or repeated transactions do not allow to take advantage of this form of financing. At the same time it is worth noting that the value of the credit depends on the contractor (both supplier and recipient), which provides credit to close to a specified amount, which is the maximum level of risk they are willing to take in relation to a specific recipient.

## **1. Important factors for trade credit**

When looking at trade credit there is a possibility to distinguish different types based on different criteria. The first one pays close attention to the person who is the source of the credit noticing that when a customer is paying an advance payment for example Mr Smith is paying the builders of his house before it is finished in advance. This is called a customer credit. On the other hand when a company delivers a product to the shop and later the owner pays for it after receiving an invoice this is called supplier credit. This division is called “trade credit source”. Other criterion looks from the perspective of one company. It states if the company is providing or taking the trade credit. It is called the “company role criteria”. The next trait taken into consideration is the character of the trade credit. A manipulation credit is when the length of the credit is connected with technical problems with payment for instance the credit is made for the time it takes to make a transfer in the bank. A proper trade credit is unconnected with technical problems. The other criteria taken into consideration are: territorial, form and repayment. Figure 1 shows the main criteria.

While considering trade credit the main determinants are an important factor in the whole process. In scientific discourse there are a wide range of theories to explain the development of trade credit represented by Cheng and Pikeb (2003). The authors indicate that there are five main reasons that fully explain the essence of the issue, however, they point out that there is no universal concept, the application of which would explain the phenomenon discussed (Nowak, Górczyński, 2017):

- information asymmetry relates to credit risk and is associated with the lack of symmetry of information between the financial market and non-financial and the need to incur the cost of credit transactions to close the gaps of information between buyer and seller,
- the efficiency is associated with the formation of the cost and operational efficiency, and the separation of the exchange of goods and services from the exchange of funds,
- allows funding, through appropriate management, reducing the imperfections of the financial markets,
- the investment concerns the placement and multiplication of capital by investing in debt,
- competitiveness and the market shall be considered in the context of improving the competitive position and build a positive image of the company, which can be achieved for instance through an appropriate process of making decisions or the ability to correctly do pricing.



**Figure 1.** Types of trade credit

Source: own work.

After careful examination of all the factors above scientific researchers have noticed motives that are leading companies to give or take trade credit. Most of the time a company is aware of only one of them when considering it long term and there are many more that influence their decision. The most commonly examined motives from the perspective of a company using a trade credit are:

- financial,
- maintaining liquidity reserves,
- guarantying,
- staying independent from partners,
- capital,
- transactional,
- verification of product quality,
- financial benefits,
- operational opportunities.

Trade credit is connected very strongly with interorganizational relationships (IOR). The possibility of acquiring it is based on trust which is a fundamental element of IOR. Three main determinants of IOR are deeply connected to the core of trade credit when looking at it from a financial point of view (Górczyński, 2015):

- asymmetry,
- efficiency,
- stability.

In Table 1 there are some examples for each determinant and each company from role criteria.

**Table 1**

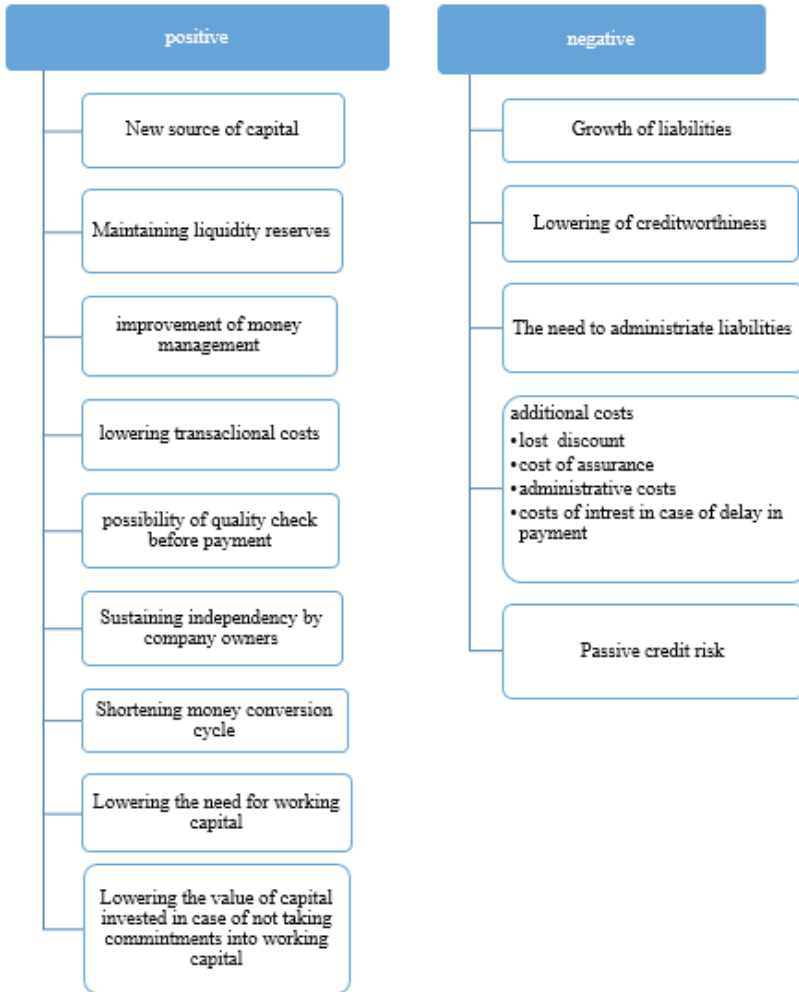
Determinants most relevant with trade credit

Determinant	Company giving credit	Company taking credit
Asymmetry	Noticing the potential in cooperation in a long term manner.	Showing possibilities for further growth.
Efficiency	Possibilities for outsourcing the processes that are more costly.	Possibilities for growth with further investments.
Stability	Working with the same companies in long term cooperation so lower problems with changing clients with unknown requirements.	Long term relationship insures that in the case of small payment issues the product will not stop being delivered.

Source: own work.

Furthermore, sales and supply agreement are very often said to be examples of IORs in simple forms (Macias, 2012). If the long term factor becomes relevant the relationship is changes in a more permanent way. Creditworthiness is a slow process that builds through time when both companies get to know each other's position on the market and as well as

the opinions of other companies about them. They take into consideration the market situation and prior transactions before starting the process of granting and receiving trade credit.



**Figure 2.** Effects of trade credit

Source: own work.

Trade credit has many effects that influence not only the company that is strictly connected to the companies involved in the process. Companies that do not pay their credits on time have a lower possibility to negotiate future trade credit. However, if it is a micro or small company working in a small market it becomes a problem with other supplier that can demand payment on time and are not inclined to propose a long credit time. Always effects

can be assigned to the categories which are either good or bad. Sometimes the same effect from a different perspective can be noticed differently. In many situations both types of effects take place like when a company takes a trade credit as a possibility of quality checking before payment at the same time when the company's liabilities are growing. The double effect can be sometimes unnoticed and becomes the source of a company's liquidity problems. Figure 2 shows the most often noticed effects.

While researching trade credit aside from motives and determinants the scientific dispute notices the five base functions that can be seen in dealings with it. The first one and most intuitive one is financial function. It is strictly connected with financial motive and efficiency. It consists in funding by the supplier the costs of bought products and services from the moment of purchase to the actual payment is made by the buyer. Five base functions can be seen in Table 2 with connection to the corresponding motives and determinants.

**Table 2**

Functions of trade credit

Function	Description	Motive	Determinant
Financial	funding by the supplier the costs of bought products and services from the moment of purchase to the actual payment is made by the buyer	Financial	Efficiency
Liquidity improvement	It reduces the cash conversion cycle in the enterprise. Cash can longer remain in the purchasing company	Maintaining liquidity reserves	Stability
Insurance in case of low-quality products	Supports the enforcement of warranty claims and guarantees, because the recipient can usually check the quality of goods and services before the due date	Guarantying, Verification of product quality	Asymmetry, stability
Capital structure management support	Liabilities for trade credit are operational and not financial. This function occurs when a company does not include operating liabilities to capital	Staying independent from partners, operational opportunities	Stability, efficiency
Informative	The fact that companies are willing to provide trade credit for it informs about its good financial condition	Verification of product quality, guarantying	Asymmetry

Source: own work.

## 2. Research of the usage of trade credit by companies in different sectors

When considering the matter of the size of short-term sources funding should be adopted at a point of reference that will allow for a comparison of the relative size of these commitments. The size of assets may be such a point. Short-term liabilities are still the primary source of working capital financing. Their participation in the financing of assets is one of

the factors determining the qualification of a company's strategy as aggressive, moderate or conservative. And so, for example, an increase in the share of current liabilities and thus a decrease in net working capital determines the change in strategy towards being aggressive. The relative size of net working capital can therefore differentiate the company from the point of view of the use of short-term financing sources.

An analysis of the use of short-term liabilities by businesses was based on statistical data published in editions of the Statistical Bulletin of the Central Statistical Office (GUS) from 2011–2015. The following tables have been prepared on the basis of charts which show the share of current liabilities for services and supplies in the financing of assets of enterprises in Poland in the years 2010–2014.

**Table 3**

Current assets of enterprises

Year	Working capital	Industry	Construction	Trade
2014	Current assets total	425,151	55,846	169,353
	receivables	184,049	22,842	69,128
	trade receivables	154,689	19,847	59,834
2013	Current assets total	402,868	55,573	164,354
	receivables	177,510	21,570	68,617
	trade receivables	148,930	18,955	60,740
2012	Current assets total	392,652	58,347	159,229
	receivables	175,082	22,745	68,967
	trade receivables	147,220	19,596	60,208
2011	Current assets total	414,642	61,711	158,195
	receivables	179,705	25,394	71,517
	trade receivables	152,161	21,966	61,755
2010	Current assets total	358,406	55,383	144,042
	receivables	164,406	20,995	63,629
	trade receivables	140,687	18,187	54,679

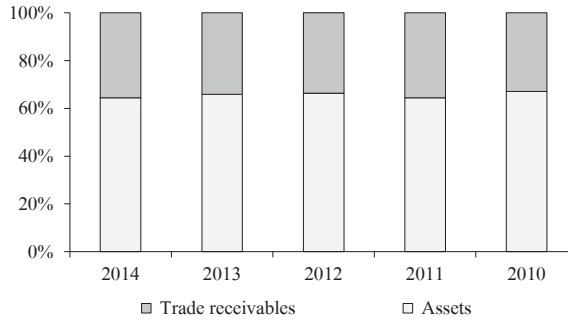
Source: own work.

**Table 4**

The percentage of trade receivables in current assets (%)

Year	Industry	Construction	Trade
2010	39.25	32.84	37.96
2011	36.70	35.59	39.04
2012	37.49	33.59	37.81
2013	36.96	34.11	36.96
2014	36.38	35.54	35.33

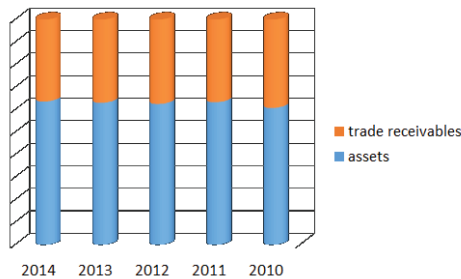
Source: own work.



**Figure 3.** Change of the percentage in the years 2010–2014

Source: own work.

The tables and figure above show the slow decrease in the percentage of short term trade receivable in the total current assets in industry and trade. In construction in the last five years they increased more sharply and in 2010 they decreased slightly over the next two years. From 2012 the percentage is slowly and steadily growing. In these three sectors in the year 2010 and from 2013 the industry had the highest percentage of short term trade receivables to assets.



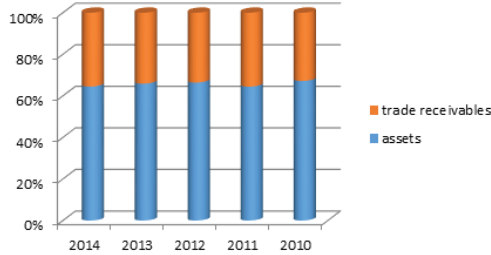
**Figure 4.** The percentage of receivables in industry

Source: own work.

When looking at Figures 3–5 it is possible to notice that throughout 2010–2014 the percentage was around 36.37%. The percentage is similar in all three categories which can suggest equality in these sectors when it comes to the source of funding and possibilities on the financial market. The high percentage of trade credit suggests high levels of trust in the market between enterprises. They are inclined to offer trade credit more easily than if the situation on the market was erratic. The stability on the market suggests as well the overall stability of the country and its structures. Enterprises trust that governments will prolong the stability and not add additional responsibilities that could influence the market situation.

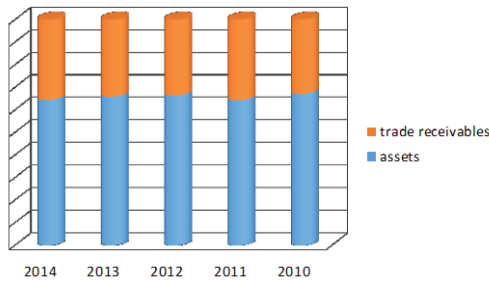


Furthermore, the small changes indicate that the level of cooperation between enterprises is growing at the same pace with the current assets of the companies.



**Figure 5.** The percentage of receivables in construction

Source: own work.



**Figure 6.** The percentage of receivables in trade

Source: own work.

In the 1990s enterprises engaged in commercial activities were characterized by the highest share of trade credit in the structure of short-term sources. In recent years there has been a correction in the share of trade credit in other sectors. The equal possibilities in all sectors to use trade credit give as well the possibilities of long term relationship and innovation from other companies. The possibility of using trade credit is a convenient form of short term funding, because it is simple to take, requires a small amount of formalities as well as there is no need to show creditworthiness. Some researchers underline the elasticity of it in the understanding as the swiftness of taking it, possibility of controlling the size of the source and the length of the due date. The data above shows trade credit from the perspective of the company giving it, not the one receiving it. The position of the company receiving it is from the point in which the short term liabilities are growing so they can be seen by banks as less being creditworthy than others. On the other hand these companies notice one of the biggest advantages of trade credit: that it is free of other costs if the discount for

earlier payment is not taken into consideration or is not given by the company giving the trade credit. The data below takes a closer look at trade credit from this perspective.

**Table 5**

Short term liabilities in enterprises in the years 2010–2014

year	credits and loans	trade credit	rest
2014 industry	57905	133056	83752
2014 construction	5772	19007	11202
2014 trade	24227	88081	19488
2013 industry	62950	134484	72526
2013 construction	5886	19903	9000
2013 trade	26348	85592	20336
2012 industry	60464	128131	70304
2012 construction	6508	22053	10600
2012 trade	26770	83739	16586
2011 industry	38292	139389	88353
2011 construction	5572	23035	10941
2011 trade	19693	82572	23418
2010 industry	37044	122514	77026
2010 construction	4250	17866	9243
2010 trade	19171	74134	23913

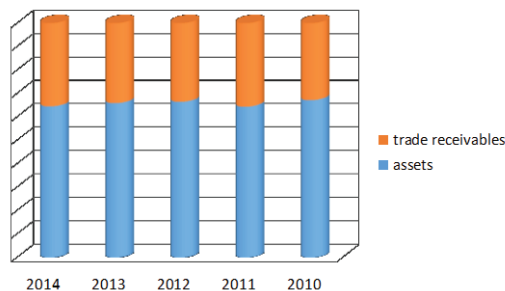
Source: own work.

**Table 6**

The percentage of trade credit and bank loans in the short term liabilities of enterprises in 2010–2014

year	credits and loans	trade credit	rest
2014 industry	21,08	48,43	30,49
2014 construction	16,04	52,83	31,13
2014 trade	18,38	66,83	14,79
2013 industry	23,32	49,82	26,87
2013 construction	16,92	57,21	25,87
2013 trade	19,92	64,71	15,37
2012 industry	23,35	49,49	27,15
2012 construction	16,62	56,31	27,07
2012 trade	21,06	65,89	13,05
2011 industry	14,39	52,40	33,21
2011 construction	14,09	58,25	27,67
2011 trade	15,67	65,70	18,63
2010 industry	15,66	51,78	32,56
2010 construction	13,55	56,97	29,47
2010 trade	16,35	63,24	20,40

Source: own work.

**Figure 7.** The percentage division of short term liabilities

Source: own work.

As can be seen above the current liabilities structure confirms that the biggest short-term source of funding is the trade credit. In commercial enterprises, its share in 2010 was 63% and in subsequent years it increased to about 67%. In industrial enterprises the level of credit in 2010 was about 52% which slowly dropped to the level of 48% in 2014. In the construction sector enterprises within 5 years a percentage of the total short-term liabilities fluctuated. In 2010, the level of the share was close to 57%. In 2011, it increased to 58.25% and the next year it fell to 56%. In 2013, it was approximately 57%, but in 2014 it declined to 52%.

In these sectors the overall level of percentage was the highest in trade enterprises and the lowest in industrial enterprises. The specification of the sectors dictates the access to the trade credit. In trade it is much easier to gain trade credit than in industry. Nevertheless, in all sectors more than half of the current liabilities come from trade credit. The use of liabilities from supplies and services may therefore be crucial for the survival and development of enterprises. In enterprises it can be observed that the development strategy was pursued by trade credit. Sometimes companies use trade credit to finance the fixed assets of the company by imposing long payment periods, which can last up to 90 days.

The second largest sources of short-term financing are bank credits and loans. Their percentage in all sectors ranged between 13% and 23%. In the construction sector it was dominated by the value of the lower limit, and in the industrial sector from the upper limit. The usage of this source is comparable in all sectors and has gained some importance. Among the loans granted by banks to companies short-term loans dominate. This is probably due to the fact that in the case of short-term credit, a bank customer usually encounters less formal and organizational barriers that have to be overcome when applying for long-term credit.

Other short-term liabilities in trade enterprises fluctuated in 2010–2014 between 13 and 20%. It is a small percentage compared with the other sectors (in the construction sector 26–31% and industry 27–33%). Analysing other current liabilities it can be stated that in trade enterprises the share of taxes and social security is almost twice lower than in other sectors. This may result from the features specific to each sector.

Therefore, the advantages of short-term sources of funding, as they are larger, than in the case of long-term liabilities, availability, flexibility, and generally have a lower cost of borrowing in relation to long-term loans, are factors conducive to their use by enterprises. In 2010–2014 stabilization of the market sources of funding for all sectors was observed. Enterprises choose the source that is readily available and cheaper. Hence the dominance of trade credit. Trade liabilities are the most important and the most common source of financing in the short term perspective. Especially large companies use their market position and raise inexpensive capital for further development. It should be noted, however, that a high proportion of short-term liabilities associated with a greater risk of the loss of liquidity requires running a business with greater effort and considerable management abilities in on-going operations.

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### KREDYT KUPIECKI W STRUKTURZE FINANSOWEJ PRZEDSIĘBIORSTWA

**Streszczenie:** *Cel* – Celem tego artykułu jest analiza zmian w strukturach finansowych przedsiębiorstw z różnych sektorów w latach 2010 do 2014.

*Metodyka* – W badaniu dane publikowane przez GUS zostały używane.

*Wyniki* – Udział kredytu kupieckiego w finansach firm zmienia się powoli i jest dużą częścią budżetów przedsiębiorstw.

**Słowa kluczowe:** kredyt kupiecki, struktura finansowa firmy

## Citation

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