

# Evolution of Trade Credit in Romania – Trends and Challenges

GHEORGHE CATALIN

Department of Engineering and Industrial Management

Transylvania University of Brasov

29 Eroilor Street, 500036, Brasov

ROMANIA

gheorghe.c@unitbv.ro

*Abstract:* One of the most used methods is the sale of products or services with payment at a later date, agreed by the customer (sale on credit). Trade credit or supplier credit is generally granted by a supplier of goods or services to a buyer, and their payment will be made at a later date, agreed upon. Trade credit is usually granted in the short term, with maturities between 30 and 90 days. For a company at the beginning of the road, trade credit is an important instrument, generating cash flow, which gives it the possibility to buy and sell products or services with a subsequent settlement, according to the understanding of the parties. Unlike bank credit or factoring, provider credit is not interest-bearing, under certain conditions. Starting from these fundamental elements, the article has as its subject the evolution of the commercial credit in Romania during the last five years, a period considered representative for establishing trends and determining factors.

*Key-Words:* Trade credit, trends, causes, solutions, Romania

## 1 Introduction

The success of a company depends largely on the volume of sales it makes. The more the company sells, the more it gains a bigger market share and becomes stronger. Among the most important internal factors that influence the volume of sales, along with the price, quality, advertising and advertising are the trade credit policy. Such a form of lending appears as a facility granted by a firm to customers, based on a sale-purchase contract. It is presented in the form of sales of goods, executions of works or services, in which their payment will be made at a later date, established by negotiation between participants. Having such content appears as an accessible source of short-term financing, especially for small and vulnerable firms (Rebel, 2018) [15].

When a company sells goods on credit to a client, it creates a commercial effect to be received, a customer's debt to the firm. Trade credit management has become one of the most used methods of increasing the profitability of a company, by increasing sales.

Holding commercial receivables is costly, but good management makes these costs be covered as a result of increased sales. For any company, the value of the commercial effects to be received is mainly determined by two factors: the size of the sales on the

respective credit, the average time elapsed between the time of sale and the collection of the money.

## 2 Subject Synthesis

If a company, which goes to a bank for financing, is refused, it can resort to a trade credit, due to the fact that the seller has become familiar with the buyer over time and trusts it. In some cases, trade credit may be more expensive than any other form of financing, because granting credit involves a cost, which must be borne by the selling company, and this could increase the prices of its products, to balance the trade credit it offers.

In order to finance the operating and investment activity, the companies have the possibility to contract a bank loan or to call trading partners to obtain a deferred payment. During periods of monetary constraint, banks show a tendency not to credit small firms, forcing them to borrow more from their suppliers (Gama, Mateus, Teixeira, 2010) [10]. The same claim is supported by the results of empirical studies conducted by (Seifert, Protoppa-Sieke, 2013) [21]. An efficient trade credit policy stimulates sales, representing a strategy of diminishing the company's stocks, without resorting to price reductions (Emery, 1984) [7].

A purely financial explanation for using trade

credit is that it offers the seller an efficient way to respond to fluctuations in demand. The granting of the trade credit can be considered as a problem of allocation (investment) of the capital, and its extension constitutes an investment that is materialized in the increase of the profits, resulting from the size of the sales (Box, Davis, Hill, Lawrey, 2018) [2]. Providers who have access to financing sources in the financial markets can become credit sources for their customers by selling the goods in instalments. Firms in good relations with banks use trade credit only as a substitute for financing, while firms constrained by the too high cost of a bank loan use trade credit both as a substitute and as a complementary alternative to bank credit, but in different time periods (Fisman, Love, 2003)[8]. Other specialized studies mention a relevant aspect of trade credit, namely the role of product guarantee certificate, when a company does not have a consolidated reputation in the market, since the customers have the opportunity to observe the quality of the products before they are paid (Saito, Bandeira, 2010) [20].

Trade credit is regarded as a mechanism that separates the exchange of money from the uncertainty present in the exchange of goods (Ferris, 1981) [9] or as a substitute for bank credit (Burkart, 2004) (Jiri, Lyandres, Yang, 2019) [3][13]. There are authors who do not treat trade credit from a financial perspective but from a supplier perspective and present it as an instrument for coordinating the supply chain (Chang, 2011) [5]. As can be seen from the analysis of the specialized literature, the justification of the presence of trade credit in economies is quite diversified (Lee, Zhou, Wang, 2018) (Ross, Chen, Wensi, 2018) [12][17]. The specialized studies show, in one form or another, the need to participate in the economic circuit formed by the trade credit, due to the advantages offered, big enough to cover the risks and the additional expenses. Trade credit leads to increased liquidity risk, but it ensures a competitive advantage for the company, by expanding the customer portfolio and faster selling of products (Hill, Kelly, Preve, 2010), (Yazdanfar, Öhman, 2017) [11][22].

After an analysis of the specialized literature, the research included a dynamic analysis of the commercial credit in Romania. Several determinants were calculated according to the specialized literature throughout the analysis period. The research also targeted the dynamics of economic units in the

banking system, which, according to the specialized literature, determine the contracting or extension of commercial credit (Burkart, Ellingsen, 2004) [3].

Another direction of evolution of the research focused on the dynamics of macroeconomic aggregates with an impact on commercial credit. Also, large companies, but also small and medium-sized enterprises, were followed (Andrieu, Stagliano, Van der Zwan, 2018) (McGuinnessa, Hogan, Powell, 2018) [1][14]. The insolvency and the number of companies affected by such events have been the subject of research known that the high rate of debt indebtedness is one of the main causes. After identifying the causes, two sets of solutions were elaborated to mitigate the negative effects found. One set refers to macroeconomic solutions while the second, more consistent, is located at the level of any enterprise that enters the commercial credit circuit.

### 3 Research Organization

The extension of the term of debt collection represents one of the big problems of the active companies in Romania, especially the small ones. The average term of receivables has increased significantly from the moment of the impact of the financial crisis until now, because the debts have increased faster than the incomes. For presentation and problem solving were following steps:

- a) Establishing the analysis period. It was established for at least five years, deemed representative for understanding trends;
- b) Calculation and interpretation of specific indicators that will allow to establish the trends of the analysed phenomenon: the average duration of debt collection, the rate of non-performing loans in the banking system, the expenses with provisions in the banking sector, the evolution of trade credit versus bank credit, the evolution of trade credit versus sales of non-financial corporation and others;
- c) Finding practical solutions to mitigate and solve the phenomenon reported in the case of Romanian companies.

### 4 Factors Determining the Evolution of Trade Credit in Romania

Among the determining factors that determined the increase of the share of trade credit in Romania

during the analysis period were:

a) Bank loans granted to non-banking companies in the period 2014-2018 (Table 1).

Table 1. Evolution of loans during 2014-2018

Year	Millions RON	Average annual variation (%)	Percentage in total domestic loans
2014	110120	-4.9	51.1
2015	105048	-4.6	49.2
2016	101952	-2.9	46.9
2017	104132	2.2	45.8
2018	107587	3.3	44.4

Data source [19]

As can be seen from table 1, the evolution of loans granted to non-financial companies was different. Although there is an increase in the volume of loans since 2017, their share in total domestic loans, granted in the banking system, has continued to decrease. The main causes that have led to such an evolution are:

- a relative recovery of the confidence of the private sector in the last two years and its maintenance throughout the period at a high level after 2014;
- continuing to alleviate the constraints on credit institutions' balances on non-performing loans;
- extension of the tendency of diminishing the credit / deposits ratio at the level of the banking system, this reaching in December 2018 the level of 76.2% - the minimum of the last ones over 13 years;
- structural influences in the corporate sector, as well as the risks associated with new legislative initiatives promoted in the banking sector;

b) Interest on deposits and loans of non-financial companies. The differentiated evolution of deposits and loans in lei (figure 1) and euro (figure 2) was marked by the following events:

- the increase of the credit was restrained by the upward adjustment of the interest rates to the new loans in lei granted to non-financial companies, under the influence of the monetary policy measures of the NBR, but also of a gradual tightening of the lending standards.
- the share in GDP of the credit granted to companies tended to stop their decline in 2018, however, finally

registering a marginal decrease (to 26.6%, from 27.2% in 2017) [18][19]. At the sectoral level, the share of credit in lei stopped during the period of non-financial corporations, given that the advance up to the last 22 years, reached in June 2018, was followed by a slight decrease.



Fig. 1. Interest rate on loans and deposits in RON  
Source of data [19]

- the dynamic growth of the stock of loans was more pronounced in the segment of short-term loans, respectively of the medium-term loans - attributable in the first case to the component in lei, and, in the second, to loans in foreign currency - but the annual variation of long-term loans remained relatively higher. With regard to the structure by destinations, the flow of loans extended its growth in the services and construction sectors, but decreased in the industry, where the downward evolution observed in the previous year proved to be temporary, but also in agriculture, for the first three years;
- over the period, the average interest rate on new loans of non-financial companies increased by 0.91%;
- The indebtedness of the companies in the banking system continued the upward trend observed in recent years, but at a slower pace. In relative terms, the level of private sector debt decreased to 37.1% of GDP at the end of 2018, Romania continuing to be in the last position at European level in terms of the degree of financial intermediation. At sectoral level, the most important changes were observed in the case of non-financial companies. At the end of 2018, this sector registered a 1.8 percentage point decrease in the debt ratio to 21% of GDP [19].

c) New firms entering the insolvency procedure. The

number of companies in insolvency remained almost unchanged in 2018 compared to 2017 (39.4 thousand companies), the number of newcomers being slightly higher than those coming out of the insolvency procedure (Figure 3) [18][19].

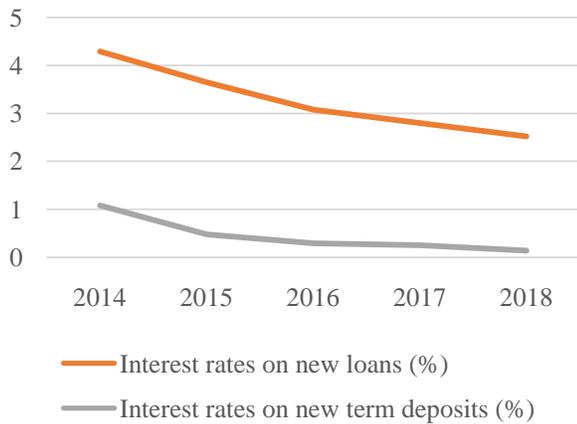


Fig. 2. Interest rate on loans and deposits in EUR  
 Source of data [19]

Also, the number of companies for which the reorganization procedure was opened in 2018 remained relatively constant (542 companies in 2018, compared with 569 companies in 2017). In fact, the insolvency was identified as an urgent problem by a smaller number of companies (10% in September 2018, compared with 11.4% in September 2017 or 15% in September 2016), which highlights the reduction of the importance of this phenomenon in the relationships between companies.

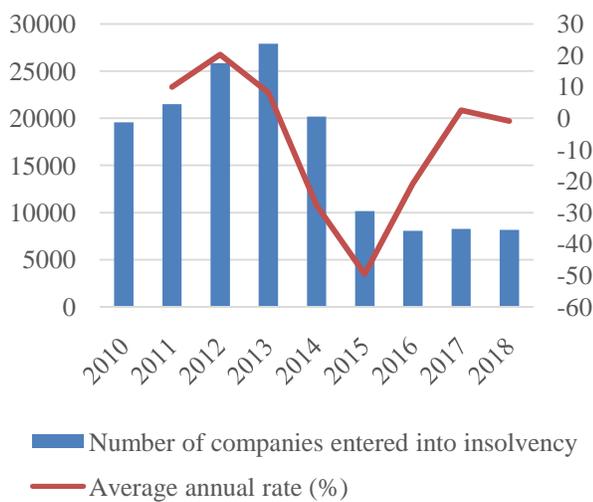


Fig. 3. The dynamics of the companies entered into insolvency. The average annual rate of evolution (right scale)

d) The quality of the loan portfolio granted to non-financial companies continued to improve in 2018, the rate of non-performing loans adjusting by 3.6%, to 8.5% in December 2018 (Figure 4) [18][19]. The reduction of the volume of non-performing loans and, implicitly, of the rate of non-performing loans was generalized at the level of the non-financial companies sector, being observed for all categories of companies, both by size and activity sector. However, the changes were more pronounced in the case of high risk companies. Thus, the rate of non-performing loans for SMEs decreased by 4.9%, to 10%, while, for corporations, it decreased by 1.1%, to 5.8% (December 2018). Even if the evolution is downward, we notice the still high level of this phenomenon that causes the blockage of some capital in the economy.

Despite the increasing lending rate from 2010-2018, under the pressure of increasing provisions and withdrawals of financing lines from parent banks, the banking sector has gradually reduced its exposure to corporate financing. The consequences propagated in the economic environment were: the increasing pressure of the repayment of the loans to banks and the decrease of the revenues due to the contraction of the demand, under the conditions of the credit reduction. Thus, starting with 2010, the companies have been increasingly oriented towards financing by extending the terms of collection and payment in commercial relations with business partners.

In the segment of non-financial companies, the quality of the loan portfolios is expected to deteriorate in the next period, especially as a result of the changing economic and financial conditions, in the context of tempering the growth rate of the economic activity and the tension of the macroeconomic balances.

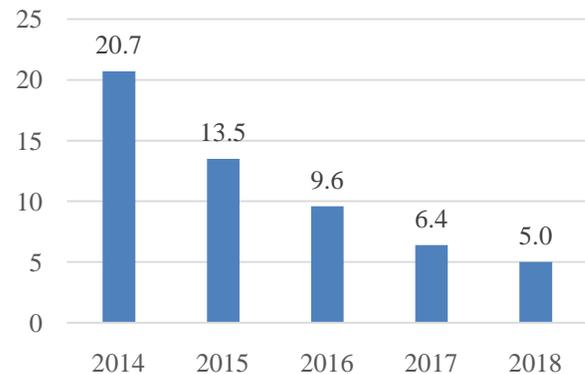


Fig. 4. The average annual rate of evolution of insolvency firms in the period 2014-2018

(Source of data [16])

Thus, the loan repayment rate granted to non-financial companies is expected to increase in the following period from 2.9% in December 2018 to 4.1% in December 2019, while the repayment rate is expected to double in the case of mortgage loans. (from 0.3% to 0.6% between December 2018 - December 2019) [18][19]. The minimum number of successful reorganizations from the insolvency procedure is noted (only 5% of the insolvent companies submit a plan for reorganization, and only half of them succeed).

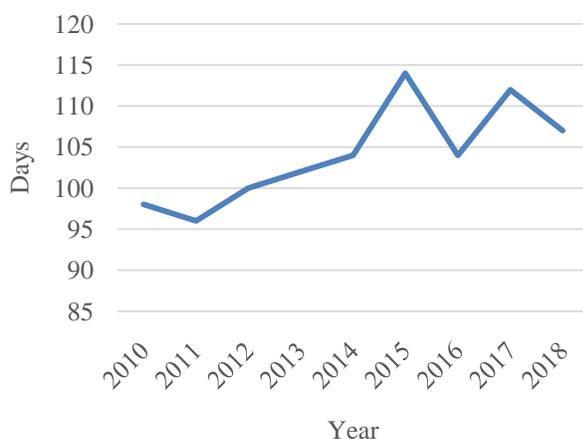


Fig. 5. The average trade receivables collection during 2010-2018

Among the most important challenges for the economic activity identified in the period 2014-2018 were, on the one hand, the high level of taxation and the unpredictability of the fiscal environment and, on the other hand, the increase of production costs (especially those with the force of and the availability of a well-trained workforce). The result of the factors previously identified on the evolution of the trade credit and the average duration of collection of the commercial debts, established as a ratio between the trade credits granted and the daily turnover, is shown in figure 5.

## 5 Trade Credit Management Solutions in Romanian Companies

Compared to the evolution presented in figure 5, solutions have been identified that can be applied at the level of a company in the economic environment.

The identified solutions were delimited in external (macroeconomic) and internal (microeconomic) and have an impact on the evolution of trade credit.

### 5.1 Macroeconomic Solutions

- Greater orientation of commercial banks towards non-financial companies could be likely to have positive effects on the real sector development capacity and the reduction of the receivables due to the capitalization of firms. Such recapitalized companies could have broad access to financial resources by increasing the eligibility for accessing loans from banks;
- Increasing the discipline of payment in economy. The number of companies with equity below the minimum regulated level is significant (262.1 thousand companies at the end of 2017);
- The consolidation of the balance sheet of the companies sector could help to strengthen the payment discipline in the economy by increasing the transparency regarding the financial situation of the companies.
- Complete taking over of the provisions of the Directive (EU) 2017/1132 regarding the conditioning of the distribution of dividends to shareholders of the fulfilment of the requirements regarding the net assets, the easier conversion of the debts from the shareholders / associates into shares, requirements regarding the increase of the registered capital subscribed by the conversion of the debts from the shareholders if the net asset is below the minimum value provided by the law, the prohibition of financing by means of the debts from shareholders / associates of the companies having capital below the regulated limit [6].

### 5.2 Microeconomic Solutions

- Correlation of the payment terms of the short-term obligations with the duration of the trade credit collection. As current assets have certain unfavourable receipts (characterized by a certain duration of liquidity), they will allow for offsets of favourable payments (characterized by a due period). As a result, the balance between the liquidity duration of the current assets and the maturity of the operating debts is pursued.
- The reduction of the period of granting the trade credits represents a decrease of the time interval offered to the clients from the moment of the sale of the products until the payment of their value. Usually this interval is determined according to

the nature of the traded products or services and the quantity sold;

- c) Granting discounts (rebate or discount) to stimulate faster payments. For example, if the customer pays within 24 hours from the moment of purchase, then he will benefit from a 5% discount on the price of the product;
- d) Establishing requirements that a customer must meet in order to receive trade credit. In the category of requirements can be classified: financial results, company image on the market, business partners, etc.
- e) Establishing the customer's payment capacity. The evaluation is made on the basis of the client's previous performances, based on his future plans, as well as on the basis of information obtained from the business environment (banks, trading room, other business partners of the client);
- f) Analysis of the general financial situation of the client. The analysis is made on the basis of the rates method, the main issues being debt and solvency;
- g) Requesting material guarantees when the value of the trade credit is high;
- h) Establishing a minimum threshold, physical or value, from which the trade credit is granted. If the threshold value is high, the company avoids bad paying customers and may lose profits from good paying customers. If the threshold is set at low values, then profits are obtained from good paying customers, but the number of bad paying customers also increases;
- i) Establishing a payment scheme that offers an efficient and precise instrument for monitoring commercial loans. An example of a scheme is: 20% of the order value is paid on the spot, 30% within 15 days, 50% within 30 days.

## 6 Conclusions

Business relationships have developed a lot on trust and instinct, with an amazing speed for market risks, without being understood proactively, but managed reactively when they have materialized. The dynamics of trade credit outpaces bank credit, which causes a slowdown in payments in Romania. The lack of additional profits for financing, liquidity, the inability of the shareholders to capitalize the company, the high degree of debt and the rigid position on the part of the state authorities determine the extension of the trade credit. To solve such a

situation, several solutions have been proposed.

### References:

- [1] Andrieu G., Staglianò R., Van der Zwan P., (2018) *Bank debt and trade credit for SMEs in Europe: firm-, industry-, and country-level determinants*. Small Business Economics, Volume 51, Issue 1, pp. 245–264.
- [2] Box T., Davis R., Hill M., Lawrey C., (2018) *Operating performance and aggressive trade credit policies*. Journal of Banking & Finance, Volume 89, pp. 192-208.
- [3] Burkart M., Ellingsen T. (2004) *In-kind finance: a theory of trade credit*. American Economic Review, 94 (3). pp. 569-590. ISSN 0002-8282.
- [4] Carbó-Valverde S., Rodríguez- Fernández F., Udell G.F. (2016), *Trade Credit, the Financial Crisis, and SME Access to Finance*. Journal of Money, Credit and Banking, 48, pp. 113-143, doi:10.1111/jmcb.12292.
- [5] Chang H. L., Byong-Duk R., (2011) *Trade credit for supply chain coordination*, European Journal of Operational Research, Volume 214, Issue 1, pp. 136-146, ISSN 0377-2217, <https://doi.org/10.1016/j.ejor.2011.04.004>.
- [6] Directive (EU) 2017/1132 of the European Parliament and of the Council of 14 June 2017 on certain aspects of company law accessed at <http://data.europa.eu/eli/dir/2017/1132/oj>
- [7] Emery G., (1984) *A pure financial explanation for trade credit*, Journal of Financial and Quantitative Analysis, Vol. 19, No. 3, pp. 271-285. DOI: <https://doi.org/10.2307/2331090>.
- [8] Fisman, R. and Love, I. (2003), *Trade Credit, Financial Intermediary Development, and Industry Growth*. The Journal of Finance, 58: 353-374. doi: [10.1111/1540-6261.00527](https://doi.org/10.1111/1540-6261.00527).
- [9] Ferris J. S., (1981) *A Transactions Theory of Trade Credit Use*, *The Quarterly Journal of Economics*, Volume 96, Issue 2, pp. 243–270, <https://doi.org/10.2307/1882390>.
- [10] Gama A. P., Mateus C., Teixeira A., (2010) *Does trade credit facilitate access to bank finance? Empirical evidence from Portuguese and Spanish small medium size enterprises*. International Research Journal of Finance and Economics, Issue 45, pp. 1-35.
- [11] Hill M. D., Kelly G. W., Preve L. A., Sarria-Allende V. (2017) *Trade Credit or Financial*

*Credit? An International Study of the Choice and Its Influences*, Emerging Markets Finance and Trade, 53:10, pp. 2318-2332.

- [12] Lee H. H., Zhou J., Wang J., (2018) *Trade Credit Financing Under Competition and Its Impact on Firm Performance in Supply Chains*. Manufacturing & Service Operations Management, Vol. 20, No. 1.
- [13] Jiri C., Lyandres E., Yang S. A., (2019) *Trade credit and supplier competition*. Journal of Financial Economics. Volume 131, Issue 2, pp. 484-505.
- [14] McGuinnessa G., Hogan T., Powell R., (2018) *European Trade Credit use and SME Survival*, Journal of Corporate Finance, Volume 49, pp. 81-103.
- [15] Rebel C., (2018) *Bank Credit, Trade Credit or No Credit: Evidence from the Surveys of Small Business Finances*. Available at SSRN: <https://ssrn.com/abstract=1540221> or <http://dx.doi.org/10.2139/ssrn.1540221>.
- [16] Romania Insolvency Study (2018) accessed at the address <http://www.coface.ro/Stiri-Publicatii/>, pp 5.
- [17] [Ross L.](#), [Chen L.](#), [Wensi X.](#), (2018) *Corporate Resilience to Banking Crises: The Roles of Trust and Trade Credit*, Journal of Financial and Quantitative Analysis, Volume 53, Issue 4, pp. 1441-1477.
- [18] National Bank of Romania. *Annual Report 2017*. ISSN 1584-0913 (online version).
- [19] National Bank of Romania. *Annual Report 2018*. ISSN 1584-0913 (online version).
- [20] Saito R., Bandeira M.L., (2010) *Empirical Evidence of Trade Credit Uses of Brazilian Publicly Listed Companies*, BAR, Curitiba, vol. 7, no. 3, art. 2.
- [21] Seifert D., Seifert R. W., Protopappa-Sieke M., (2013) *A review of trade credit literature: Opportunities for research in operations*, European Journal of Operational Research, Volume 231, Issue 2, pp. 245-256, ISSN 0377-2217, <https://doi.org/10.1016/j.ejor.2013.03.016>