



**“Impact of Corporate Social Responsibility on Trade Credit:  
Evidence from Listed Non-Financial firms in Pakistan Stock Exchange”**

**Alina Sajjad;** *Administration & Political Officer, Royal Danish Embassy, Islamabad*

**Shahzad Butt;** *Assistant Professor, Department of Management Studies, Bahria University, Islamabad*

**Muhammad Awais;** *HOD/Associate Professor, Department of Economics & Finance Foundation University, Islamabad*

---

**Received:** October 6, 2023  
**Accepted:** December 19, 2023  
**Published:** December 31, 2023

---

**KEY WORDS**

**Corporate  
Social  
Responsibility  
, Trade credit,  
Firm Age,  
Firm Size,  
Market  
capitalization,  
Financial  
leverage,  
Listed non-  
financial  
firms,  
Pakistan**

**ABSTRACT**

*This study explores the relationship among Corporate Social Responsibility and Trade credit of listed non-financial firms of Pakistan. This study have used a sample of 40 listed nonfinancial firms in Pakistan for analysis. Data is extracted from annual reports of firms for year 2012 to 2020 and numerous examination techniques like descriptive statistics, correlation analysis, regression and Hausman test have been performed on the data. The study finds significant association of trade credit with corporate social responsibility which indicates that firms that are indulged more in corporate social responsibility activities will have more dependence on trade credit. Firm age, Firm size and financial leverage have also found to have significant impact on trade credit. This indicates that older firms having strong reputation have more accessibility to trade credit, trade credit reliance also increases with the increase in firm size and financial leverage. Market capitalization has found to be insignificantly impacting trade credit. This study is significant as fewer studies have been found in context of Pakistan. This study aids in managerial decisions for investors and regulatory bodies.*

## **Introduction**

The most essential and prevalent unit of broad range of business activities is trade credit. Trade credit is basically known as deferred payments for intervening goods, most common financial arrangement in acquisition associations and 2/3 of universal trade is financed by trade credit as suggested by the statistics. One of the aspects that substantially impact the propensity of trade credit provision and receiving is corporate social responsibility. Much of the literature has highlighted the importance of CSR in financing. (Cheng et al. 2014) stated that companies having more interest towards CSR shows be less susceptible towards the default risk and in extension to this study (Sun and Cui, 2014; Boubaker et al., 2020) concluded that more engagements in corporate social responsibility activities leads the business to have more access to finance. Study conducted by (Cheung et al., 2018) explains that firms with higher involvement in activities related to corporate social responsibility will have low financing costs. The Non-financial sector of Pakistan use trade credit for its financing means. These firms in Pakistan most often face financing issues and because of these external financing sources are required for solving this problem of scarcity of finance and here trade credit is used by Non-financial sector.

## **Trade Credit**

The most essential and prevalent unit of broad range of business activities is trade credit. Trade credit is basically known as deferred payments for intervening goods, most common financial arrangement in acquisition associations and 2/3 of universal trade is financed by trade credit as suggested by the statistics. Cowton and San-Jose (2017) explained that trade credit benefit business and exceptionally firms that in financial distress to pursue their operations and enhance the income and business progress. A study conducted by (Chen, 2015) explained that trade credit is basically when payments are delayed by the supplier for its customers when they made the purchase of goods in short this can be called as extended credit

## **Corporate Social Responsibility**

Corporate social responsibility is a conception that proves to be an encouragement for business to engage themselves in business activities that are concerned with environmental and social issues.. Frynas and Yamahaki (2016) stated that for the survival and growth of business they need to move according to the concerned people interests and also codify their practices to aid in consilience between the firm and its surrounding. According to (Ponda and Modak, 2018) in business logistics CSR engagements leads to the high level payback margins in comparison to the wealth maximization

goal. As stated by Chen, Liu, and Qin (2019), when companies practice corporate social responsibility it builds up the prestige, competitive edge, curtails the turnovers, ensures finance suppliers and customer's satisfaction and all this combines to financial benefits of firms and also increases that market value of businesses.

### **Research Questions**

1. How corporate social responsibility impacts trade credit of listed non-financial firms in Pakistan?
2. Does the association between CSR and trade credit in different and separate companies changes?

### **Research Problem and Objective**

Trade credit is considered as most essential and common way by the businesses for the purpose of financing. There are many firms that are facing financial challenges are also accessibility to the finance providing markets is not available, in these types of difficulties trade credit proves to be the best solution. According to the study of (Cowton and San-Jose, 2017) the most useful tool for economically deprived businesses for continuation of its operations, expansion and increasing turnover is trade credit. Some of the imperfections are also associated to the trade market. Therefore, a good relationship has to be generated by the finance sector of the non-financial firm. Trade credit has a very strong relation with the corporate social responsibility as stated by the earlier researches (Ge

and Liu, 2015; Cheung et al., 2018; Bae et al., 2018) corporate social responsibility engagements leads the firms to have more accessibility to various financing sources because CSR seems to be a positive indication for the supplier and makes a good image of buyer firm in the eyes to its stakeholders.

The principal objective of this study is to evaluate the association between corporate social responsibility and trade credit and using firm age, firm size and market share as control variables.

### **Significance of Study**

Our study contributes to the existing literature of corporate social responsibility by investigating how it affects trade credit in developing economy like Pakistan. And expands the research about how CSR enhances the finance availability for a firm. There are also some important implications for managers as they should be very cautious in deciding the CSR and go for those that help to gain more trade credit. Implications for investors includes that they should be heedful and exercise exertions discovering the inducements related to corporate social responsibility and pay exceptional consideration to levels of CSR operations. For Regulators this study is helpful to have more clear view of CSR and will be able to circulate regulations for further dictation on various components of activities linked to corporate social

**Butt et al; Impact of Corporate Social Responsibility on Trade Credit: Evidence from Listed Non-Financial firms in Pakistan Stock Exchange**

responsibility. This study also contributes to the study of (Shou et al., 2020; Xu et al., 2020) by exploring the association among corporate social responsibility and trade credit in context of Pakistani nonfinancial sector.

## Literature Review

### Trade Credit and Corporate Social Responsibility

Cheung and Pok (2019) investigated the relationship between trade credit and corporate social responsibility along with three distinct perspectives of corporate social responsibility, using a sample period of year 1991 to 2015 and data of 20,591 firms concluded that when a firm's corporate social responsibility is at high level this demoralizes the postponement of trade credit by the supplier to its customers or buyers. Bae et al. (2018) conducted a study to explore how credit spreads of syndicated banks loan are affected by the activities related to CSR and particularly focusing on its impact on credit ratings are interconnected as mutual factors of credit spreads. With a sample of 5810 bank loans for period of 1991 to 2008 concluded that risk associated with business can be lowered with the increase in CSR activities and in turn this causes the credit spread to depress. On contrary, activities linked to corporate social responsibility that causes the firms risk to increase results in greater credit spreads. Guiso et al. (2015) presented

their study results that were based upon stakeholder theory, CSR cantered firms aims to have huge social capital for the reason of their enhanced relation with the stakeholders and this protects the firms from business related risks. A study performed by (Harjoto and Laksmana, 2016) examined the impact of corporate social responsibility on value of firm. Employing a sample of 1718 United States firms for the time span of 1998 – 2011 they evaluated that high corporate social responsibility is related to low divergence from levels of optimal risk taking. Their study concluded that bettered corporate social responsibility is positively linked to value of business as indulgence in corporate social responsibility activities diminishes extreme risk taking behavior and also help in avoiding the risk. Study of (Jiraporn et al., 2014) in which the proximities were based upon the Zip codes and using a sample of 2,516 firms for the time period of 1995 to 2007. They concluded that Corporate social responsibility concernment and strengths impact on credit ratings is asymmetrical as the corporate social responsibility strengths are infinitesimally linked to the credit ratings and corporate social responsibility concerns are remarkably associated to the credit ratings. We can find these results of study coherent with the opinion that businesses investment in CSR activities is mainly for the reduction of exposure to risk.

### **Firm Age and Trade Credit**

Cuevas et al (2019) examined the impact of life cycle on SME's finance related decisions with the focus on trade credit and study showed negative and also the substantial nonlinear association between the trade credit and firm age. Psillaki M and Eleftheriou K (2015) examined how the financial downturn affects the allotment of credit to SMEs, concluded that association among the age of firm and trade credit is dependent upon the specific area which is highly essential in economic decisions. Study conducted by (Altunok., 2011) suggested that firms that are older and larger are more trustworthy firms and are provided more trade credit. Author concluded that more solvent, large and older businesses gain more advantage from the trade credit. This gain can be treated as the price cuts for those firms and these price cuts are relevant to the various terms of trade credit.

### **Firm Size and Trade Credit**

(Appendini and Garriga., 2013) concluded that fall the supply of net trade credit as the result of economic downturn of 2007/2008 is less noticeable in SMEs in comparison to the larger companies. Gama and Auken (2015) examined the interdependence among the trade credit and bank credits and they concluded that small and medium sized enterprises replace the sort term bank loan with the trade credit to evade the high priced holdup costs that are supercharged by their sole

connections bank.

### **Market Capitalization and Trade Credit**

Research conducted by (Mubarak and Hamdan, 2016) suggested that corporate governance have a positive influence on the market capitalization of firms. They argued that by enhancing the clearness and enhancing the belief of investors in disclosures of financial statements, absolutely contemplated in the listed shares value.

### **Financial Leverage and Trade Credit**

Financial leverage is mostly accounts for total debt to total assets. This basically explains the degree to which the firm depends upon debt for their businesses financing purposes (Berk & DeMarzo, 2013). Zhang et al. (2015) concluded that leverage of Chinese firms is negatively impacted by EPU. According to (Mukherjee and Wang, 2013) firms that are over-levered face bankruptcy costs greater than the rate of prerequisite of tax shield when the deviation of leverage occurs from the target.

## **Theoretical Support**

### **Stakeholder Theory**

As stated in stakeholder theory of (Freeman, 1984) contended in contrary to the conventional management model. He postulated that it is not the responsibility of management to safeguard the interest of groups apart from shareholders. He explained Stakeholder as "any individual or groups who can influence

or is contrived by the accomplishments of business goals.” Acting good in the field of corporate social responsibility is as essential as generation of value for stakeholders. This statement is linked to study of (Freeman et al., 2010) description of enduring and non-segregated approach to corporate social responsibility, where the benefit is given to society only when the profits are generated, while the former is related to assimilate the economical with social, moral decision making and brings accountability related to its stakeholders.

### **Financial Advantage Theory**

Convenience over the financial institutions and banking sector is presented by the supplier in determining the financial standing of its customers but also a superior power in controlling and imposing the credit reimbursements. And according to (Schwartz, 1974), Trade credit offering by the supplier leads to viable cost benefits for the purveyor over financial institutions. There are three sources for this cost advantage.

First advantage is associated with the capability of supplier of having intimate relationship with clients than the banks generally have. This gives a better chance to perceive the nature of its customer related to repetition and proportion of order and ability of taking advantage of rebate linked to early payments. Second source of advantage is related to the type of goods which are being sold by

the supplier and their role in the buyer’s activities. The supplier can conveniently intimidate the buyer for cutting the future provisions in case when the client is unable for fulfilling its accountability, specifically when the buyer is not core person in business associations. The third advantage arises when the default occurs from supplier’s side. In this situation supplier have the ability to take back the goods provided and barter the supplies using a well-established medium of business associations which in case of banks doesn’t exists.

### **Hypothesis Development**

- H1: Corporate Social Responsibility has a significant positive impact on Trade Credit.
- H2: Firm Age has a significant positive impact on Trade Credit.
- H3: Size of firm has a significant positive impact on Trade Credit.
- H4: Market capitalization has a significant positive impact on Trade Credit.
- H5: Financial leverage has a significant positive impact on Trade Credit.

### **Research Methodology**

Our research attempts to explore the causal association among Corporate Social Responsibility and Trade Credit. Study relies upon the secondary data and outcomes are in numeric data. In this study data for Corporate Social Responsibility, Trade credit, and Firm Size, Firm Age and Market capitalization has been gathered from annual reports of listed non-

financial firms. To analyze the regression analysis of variables quantitative method has been used. This study has used sample of 39 listed non-financial firms in Pakistan for the time period of 2011 to 2020.

Data is collected from the analysis of Annual reports of selected firms for trade credit information and Corporate Social Responsibility. Data is gathered from published annual reports of listed non- financial firms that are accessed by PSX and companies official sites.

### **Dependent Variable**

This study has used trade credit as dependent variable, the ratio of accounts payable to cost of goods sold (COGS) to analyse that how much of trade credit is obtained by the buyers firms from the suppliers.

$$\text{Trade Credit} = \frac{\text{Accounts Payable}}{\text{Cost of Goods Sold}}$$

### **Independent Variable**

Donations are used as a proxy for CSR measurement. In our study we have used quantitative measure that is monetary donations keeping in consideration the study of (Brammer and Millington, 2008).

$$\text{CSR} = \text{Natural log of No of monetry donations}$$

### **Control Variables**

#### **Firm Age**

Firm Age is measured as the numbers of years since the firm has established

this measure was used in the study of (Lam et al., 2016; Shou et al., 2020).

$$\text{Firm Age} = \text{Natural log of No of years since firm has established}$$

#### **Firm Size**

Firm size is measured as Natural logarithm of total assets and this measure was used in the study of (Xu et al., 2019).

$$\text{Firm Size} = \text{Natural Log of Total Assets}$$

#### **Market Capitalization**

According to (Odogunde et al., 2006) market capitalization has notable impact on firm growth and economy development and this impact is increasing.

$$\text{Market Capitalization} = \text{Natural Log of Market capitalization}$$

#### **Financial Leverage**

This study has added the ratio of total debt to total assets that is known as financial leverage considering the study of (Horne and Wachowicz, 2009) in our study as control variable.

$$\text{Financial Leverage} = \text{Natural Log of}$$

Total Debt to Total  
Assets

### Econometric Equation

The purpose of this study is to explore and evaluate the factors of corporate social responsibility and trade credit along with firm age, firm size and market capitalization. Below is regression equation which is treated for panel and regression analysis.

$$TRCD_{it} = \beta_0 + \beta_1(Donn_{it}) + \beta_2(FAG_{it}) + \beta_3(FSZ_{it}) + \beta_4(MKCP_{it}) + \beta_5(FINLV_{it}) + \epsilon_{it}$$

Where  $\epsilon_{it}$  represents error term.

TRCD = Trade credit of firm 'i' in year t.

Donn = Monetary donations for firm 'i' in year t.

FSZ = Size of firm 'i' in year t.

FAG = Age of firm 'i' in year t.

MKCP = Market capitalization of firm 'i' in year t.

FINLV = Financial leverage of firm 'i' in year t.

### Results and Discussions

Descriptive statistics results demonstrate the common behavior of variables of study and it comprised of mean, standard deviation, minimum, maximum and Jarque-Bera statistics. This shows the results of data procured in analysis. Mean values show the average and standard deviation shows the dispersion over the mean value. Minimum and maximum shows the low and high values in data. The data is from 2012 to 2020, variables used in study are corporate social responsibility, trade credit (accounts payable to cost of goods sold), firm size, firm age, market capitalization and Financial Leverage.

	TRCD	FAG	FSZ	FINLV	DONN	MKCP
Mean	0.156917	3.460820	16.72274	0.317797	14.10606	18.81559
Median	0.106097	3.553348	16.83705	0.291939	16.00000	19.02614
Maximum	1.426842	4.290459	19.51528	2.306125	21.00000	21.53363
Std. Dev.	0.170909	0.609206	1.311015	0.231466	5.306682	1.421551
Jarque-Bera	5784.355	59.14991	5.210093	3216.794	348.4251	11.89959

### Correlation Matrix

To examine the association between the regressor and regressand and also to inspect the Multicollinearity among the variables. The value of correlation with its own must have to be equal to 1 or greater than 1 which shows that variables have a perfect correlation. Positive coefficient of Pearson correlation shows that association among the variables is positive as with the increase in one variable. Negative Pearson correlation coefficient shows a negative relation among the variables of study. Negative relation means that in case one variable increases other will decrease and vice versa.

	TRCD	FAG	FSZ	FINLV	DONN	MKCP
TRCD	1.000000	0.076062	-0.002917	0.140353	-0.178597	-0.122589
FAG	0.076062	1.000000	-0.033667	-0.122781	0.041866	0.002009
FSZ	-0.002917	-0.033667	1.000000	0.288734	0.440166	0.941618
FINLV	0.140353	-0.122781	0.288734	1.000000	-0.032211	0.270277
DONN	-0.178597	0.041866	0.440166	-0.032211	1.000000	0.447524
MKCP	-0.122589	0.002009	0.941618	0.270277	0.447524	1.000000

Correlation matrix table shows that trade credit and donations are negatively



correlated with each other with a magnitude of 0.178597. This depicts that when corporate social responsibility increases the trade credit decreases. The correlation among trade credit and firm age is positive with the magnitude of 0.076062. This shows that with the increase in age of firm trade credit also increases as older firms rely more on trade credit than the smaller firms. Value of correlation between Firm size and Trade credit is negative with the magnitude of 0.002917. This explains that trade credit have negative association with size of firm, when the total assets of firm increases they will rely less on Trade credit. Correlation value among trade credit and Market capitalization is negative with the magnitude of 0.122589 which shows that when market capitalization of firm increases trade credit decreases and vice versa. Trade credit and Financial leverage coefficient value is positive with the magnitude of 0.140353. This shows that with the increase in financial leverage the trade credit will also increase.

### Regression Analysis

For regression analysis in panel data, fixed effect or random effect is used. Concerning which technique is suitable for study, Hausman test is used. According to the results of analysis of Hausman test Prob. value is 0.0014 which is significant figure and shows us that fixed effect method is more suitable than the random effect method.

### Correlated Random Effect – Hausman test

Correlated Random Effects - Hausman Test			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	19.742142	5	0.0014

### Regression Analysis

Variable	Coefficient	t-Statistic	Prob.
Firm Age	0.096864	3.389591	0.0008
Firm Size	0.043160	4.359260	0.0000
Financial Leverage	0.115865	4.820652	0.0000
Donations	0.000982	3.118424	0.0459
Market Capitalization	-0.036237	-3.510988	0.0005
C	-0.251490	-1.497847	0.1352
Effects Specification			
Cross-section fixed (dummy variables)			
Weighted Statistics			
R-squared	0.756188		
Adjusted R-squared	0.721804		
S.E. of regression	0.098458		
F-statistic	21.99262		
Prob(F-statistic)	0.000000		

According to the results of regression analysis, we have used Fixed Effect method for analysis of data. R-Squared value is 0.756188 which demonstrates that dependent variable is 75.62% explained by the independent variable. This can also be interpreted as Trade credit is 75.62% explained by corporate social responsibility using donations as a measure. Value of Durbin-Watson is 1.167262 which is less than 2 and states that there is no autocorrelation in the residuals. Prob (F-statistic) is used to identify the F-

statistical significance. The value of Prob(F-statistic) in the regression results table is 0.000000 which shows that results of regression are significant. For corporate social responsibility the value of coefficient is 0.000982, value of t-statistic is 3.118424 which show an almost significant positive relation. These results show us that donations (CSR) have almost significant impact on trade credit for non-financial firms in Pakistan. And Hypothesis 1 of the study is accepted. This result is evident through the study of (Xu et al, 2019) which explored that enhancement in activities related to corporate social responsibility enhances the reputation of firm and is consider as signal of trustworthiness and this trustworthiness leads to better access to trade credit. Coefficient value for Firm Size is 0.043160 with t-statistic value of 4.359260 which is greater than 2 and prob of 0.0000 which is less than 0.05. All these results show the significance of relation among the trade credit and size of firm and Hypothesis 2 of study is also accepted. These results are in line with the studies of (Klapper et al, 2012; Murfina and Njoroge, 2015) which states significant impact of firm size on trade credit. For Firm age the coefficient value is 0.096864 with the t-statistics of 3.389591 and Prob value of 0.0008. These results suggests a positive significant impact of firm age on trade credit with the t-statistics value greater than 2 and Prob value less than 0.05. These results have with supported by the prior literature of (Ge and Qiu,

2007; Hasan & Cheung, 2018) which showed that age of the firm significantly impacts trade credit. For Market Capitalization the value of coefficient is -0.036237, value of t-statistic is -3.510988 and Prob. value is 0.0005. With the t-statistics value of less than 2 we conclude an insignificant impact of market capitalization on trade credit. Coefficient value financial leverage is 0.115865 with the t-statistics value of 4.820652 and Prob of 0.0000. Results are showing a significant impact of financial leverage on trade credit with the positive coefficient value, t-statistic greater than 2 and prob value less than 0.05. These results are consistent with the study of (Zhang et al, 2015) which states that firms having less access to the banking finance they use trade credit as a mean of financing.

## **Conclusion, Limitations and Policy Implications**

### **Conclusion**

This research is conducted to investigate the relationship among the corporate social responsibility and trade credit for listed non- financial firms in Pakistan. This research study has found significant relationship between the corporate social responsibility and trade credit, Firm age, Firm size and financial leverage. With market capitalization the relation is found to be insignificant. The direction of relationship among the dependent and independent variable is positive which shows that with the increased level of

involvement in CSR activities the dependency on trade credit by the firm increases, for firm age the nature of relation is also positive which shows the older firms have more accessibility to trade credit. Firm size has a positive relation with trade credit which explains that with the increase in total assets of firm the trade credit of the firm increases. Market capitalization has the insignificant impact on trade credit while financial leverage has been found to be significantly impacting trade credit of Pakistan nonfinancial firms. Our study results are significant with the prior studies related to trade credit.

### **Implications of Study**

This research study is of great importance expecting its implications in the field of trade credit and corporate social responsibility. Considering the importance in theoretical viewpoint, this study will magnify the literature related to corporate social responsibility and trade credit and their beneficence in enhancing performance of firms. This study through the empirical facts about the impact of corporate social responsibility on trade credit on listed non-financial firms in Pakistan will be a great inclusion in context of Pakistan for prior studies. This research contributes to the expanding body of literature related to corporate social responsibility in the concern of corporate finance. By spotlighting the trade credit in this study, suggestions

are given related to management decision making about the spending in activities related to corporate social responsibility which are constructive in attaining the assurance of its stakeholders and aid in gaining more financing for the firm.

### **Limitations of the Study and Future Recommendations**

This study has a great part in theoretical and practical perspectives, but also has certain limitations. First limitation is related to sample size which according to our understating is very small. The sample is 40 firms used to analyse the study the association among corporate social responsibility and trade credit. Future research can eliminate this limitation by using more firms for study. Another limitation of study is limited number of dependent and independent variables because of which our results significance has been compromised. Future research can add more variables to get more accurate results. Third limitation is time constraint as the time of study was limited.

### **References**

Abdulla, Y., Dang, V. A., & Khurshed, A. (2017). Stock Market Listing and the Use of Trade Credit: Evidence from Public and Private Firms. *Journal of Corporate Finance*, 46, 391-410.

Altunok, F. (2012). *Three essays on trade credit*. North Carolina State University.

Allen, Franklin, Jun Qian, and Meijun

**Butt et al; Impact of Corporate Social Responsibility on Trade Credit: Evidence from Listed Non-Financial firms in Pakistan Stock Exchange**

- Qian. Law, finance, and economic growth in China. *Journal of financial economics* 77(1), 57-116.
- Axjonow A, Ernstberger J, Pott C (2018) The impact of corporate social responsibility disclosure on corporate reputation: a non-professional stakeholder perspective. *J Bus Ethics* 151:429–450
- Al Mubarak, M., & Hamdan, A. (2016). The impact of corporate governance on market capitalization: Evidence from Bahrain Bourse. *Corporate Ownership and Control*, 13(3), 120-129.
- Al-Ababneh, M. M. (2020). Linking ontology, epistemology and research methodology. *Science & Philosophy*, 8(1), 75-91.
- Bae SC, Chang K, Yi H-C (2018) Corporate social responsibility, credit rating, and private debt contracting: new evidence from syndicated loan market. *Rev Quant Finance Acc* 50:261–299.
- Benlemlih M (2017) corporate social responsibility and firm debt maturity. *J Bus Ethics* 144:491–517
- Breza, E., Liberman, A., 2017. Financial contracting and organizational form: evidence from the regulation of trade credit. *J. Finance*. 72(1), 291–324.
- Box, T., Davis, R., Hill, M., Lawrey, C., 2018. Operating performance and aggressive trade credit policies. *J. Banking Finance*. 89, 192–208.
- Barrot, J. N. (2016). Trade credit and industry dynamics: Evidence from trucking firms. *The Journal of Finance*, 71(5), 1975-2016.
- Boubaker, S., Cellier, A., Manita, R., & Saeed, A. (2020). Does corporate social responsibility reduce financial distress risk?. *Economic Modelling*, 91, 835-851.
- Boyer, M. M., & Gobert, K. Financing investment with trade credit.
- Burkart, M., & Ellingsen, T. (2004). In-kind finance: A theory of trade credit. *American economic review*, 94(3), 569-590.
- Burney, A., & Saleem, H. (2008). Inductive and deductive research approach. *Department of Computer Science, University of Karachi, Pakistan*, 22.
- Cheung, A.W., Pok, W.C., 2019. Corporate social responsibility and provision of trade credit.
- J. Contemp. Account. Econ.* 15 (3), 100159.
- Chen, J., Liu, J., & Qin, J. (2019). CORPORATE SOCIAL RESPONSIBILITY AND CAPACITY SELECTION. *Transformations in Business & Economics*, 18.
- Chen, X., 2015. A model of trade credit in a capital-constrained distribution channel. *Int. J. Prod. Econ.* 159, 347–357
- Cheng B, Ioannou I, Serafeim G (2014)

**Butt et al; Impact of Corporate Social Responsibility on Trade Credit: Evidence from Listed Non-Financial firms in Pakistan Stock Exchange**

- Corporate social responsibility and access to finance. *Strateg Manag J* 35:1–23.
- Cowton, C. J., & San-Jose, L. (2017). On the ethics of trade credit: Understanding good payment practice in the supply chain. *Journal of business ethics*, 673-685.
- Cho, S., Woods, R. H., Jang, S. S., & Erdem, M. (2006). Measuring the impact of human resource management practices on hospitality firms' performances. *International Journal of Hospitality Management*, 25(2), 262-277.
- Creswell John, W. (2007). Qualitative inquiry and research design: Choosing among five approaches. *Lincoln: Sage Publications*.
- Cunat, V. (2007). Trade credit: suppliers as debt collectors and insurance providers. *The Review of Financial Studies*, 20(2), 491-527.
- Cull, R., Xu, L. C., & Zhu, T. (2009). Formal finance and trade credit during China's transition. *Journal of Financial Intermediation*, 18(2), 173-192.
- Delannay AF, Weill L (2004) The determinants of trade credits in transition countries. *Econ Plan* 37:173–193.
- Eckert, C. (2017). Corporate reputation and reputation risk: Definition and measurement from a (risk) management perspective. *The journal of risk finance*.
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). Stakeholder theory: The state of the art.
- Fabbri, D., & Klapper, L. F. (2008). Market power and the matching of trade credit terms. *World Bank Policy research working paper*, (4754).
- Frynas, J. G., & Yamahaki, C. (2016). Corporate social responsibility: Review and roadmap of theoretical perspectives. *Business Ethics: A European Review*, 25(3), 258-285.
- Frank, D. H., & Obloj, T. (2014). Firm-specific human capital, organizational incentives, and agency costs: Evidence from retail banking. *Strategic Management Journal*, 35(9), 1279-1301.
- Fisman, R., & Love, I. (2003). Trade credit, financial intermediary development, and industry growth. *The Journal of finance*, 58(1), 353-374.
- Ge, Y., & Qiu, J. (2007). Financial development, bank discrimination and trade credit. *Journal of Banking & Finance*, 31(2), 513-530.
- Ge, W., & Liu, M. (2015). Corporate social responsibility and the cost of corporate bonds. *Journal of Accounting and Public Policy*, 34(6), 597-624.
- Guiso, L., Sapienza, P. and Zingales, L.J. (2015), "The value of corporate culture", *Journal of Financial Economics*, Vol. 117 No. 1, pp. 60-76.
- Garcia-Appendini, E., & Montoriol-

- Garriga, J. (2013). Firms as liquidity providers: Evidence from the 2007–2008 financial crisis. *Journal of financial economics*, 109(1), 272-291.
- Guthrie, J., Petty, R., & Ricceri, F. (2006). The voluntary reporting of intellectual capital: comparing evidence from Hong Kong and Australia. *Journal of intellectual capital*.
- Giannetti, M., Burkart, M., & Ellingsen, T. (2011). What you sell is what you lend? Explaining trade credit contracts. *The Review of Financial Studies*, 24(4), 1261-1298.
- García-Teruel, P. J., & Martínez-Solano, P. (2010). Determinants of trade credit: A comparative study of European SMEs. *International Small Business Journal*, 28(3), 215-233.
- Humphrey, J. (2009). Are exporters in Africa facing reduced availability of trade finance?. *IDS bulletin*, 40(5), 28-37.
- Huyghebaert, N. (2006). On the Determinants and dynamics of trade credit use: Empirical evidence from business Start-ups. *Journal of Business Finance & Accounting*, 33(1-2), 305-328.
- Habib, A., & Hasan, M. M. (2019). Corporate life cycle research in accounting, finance and corporate governance: A survey, and directions for future research. *International Review of Financial Analysis*, 61, 188-201.
- Hasan, M. M., & Cheung, A. (2018). Organization capital and firm life cycle. *Journal of Corporate Finance*, 48, 556–578.
- Jaleel, A., Hui, X., Virk, M. U., & Abdullah, M. (2015). Investigation of causal relationship between trade credit and bank loan during 2008 financial crisis. *Journal of Asian Business Strategy*, 5(5), 90.6.
- Jiraporn, P., Jiraporn, N., Boeprasert, A., & Chang, K. (2014). Does corporate social responsibility (CSR) improve credit ratings? Evidence from geographic identification. *Financial Management*, 43(3), 505-531.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Klapper, L., Laeven, L., & Rajan, R. (2012). Trade credit contracts. *The Review of Financial Studies*, 25(3), 838-867.
- 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*, 20(1), 36-52.
- Liu, B., Wang, Y., & Shou, Y. (2020). Trade credit in emerging economies: an inter-organizational power perspective. *Industrial Management & Data Systems*.
- Levin, D. M. (1988). *The opening of vision: Nihilism and the postmodern situation*. London: Routledge.

- Matias Gama, A. P., & Van Auken, H. (2015). The interdependence between trade credit and bank lending: Commitment in intermediary firm relationships. *Journal of Small Business Management*, 53(4), 886-904.
- Muttakin, M. B., & Khan, A. (2014). Determinants of corporate social disclosure: Empirical evidence from Bangladesh. *Advances in accounting*, 30(1), 168-175.
- Matias Gama, A. P., and Mateus, C. (2010). Does trade credit facilitate access to bank finance? An empirical evidence from Portuguese and Spanish small medium size enterprises. *International Research Journal of Finance and Economics*, 45, 26–45.
- Molina, C. A., & Preve, L. A. (2012). An empirical analysis of the effect of financial distress on trade credit. *Financial Management*, 41(1), 187-205.
- Murfin, J., & Njoroge, K. (2015). The implicit costs of trade credit borrowing by large firms. *The Review of Financial Studies*, 28(1), 112-145.
- Nguyen, L., & Nguyen, K. (2021). Corporate social responsibility, trade credit provision and doubtful accounts receivable: the case in China. *Social Responsibility Journal*.
- Ng CK, Smith JK, Smith RL (1999) Evidence on the determinants of credit terms used in interfirm trade. *J Finance* 54:1109–1129.
- Nematollahi, M., Hosseini-Motlagh, S. M., & Heydari, J. (2017). Coordination of social responsibility and order quantity in a two-echelon supply chain: A collaborative decision-making perspective. *International Journal of Production Economics*, 184, 107-121.
- Ologunde, A. O., Elumilade, D. O., & Asaolu, T. O. (2007). Stock market capitalisation and interest rate in Nigeria: A time series analysis. *Economic and Policy Review*, 13(2).
- Ologunde, A. O., Elumilade, D. O., & Asaolu, T. O. (2007). Stock market capitalisation and interest rate in Nigeria: A time series analysis. *Economic and Policy Review*, 13(2).
- Psillaki, M., & Eleftheriou, K. (2015). Trade Credit, Bank Credit, and Flight to Quality: Evidence from French SMEs. *Journal of Small Business Management*, 53(4), 1219-1240.
- Petersen, M. A., & Rajan, R. G. (1997). Trade credit: theories and evidence. *The review of financial studies*, 10(3), 661-691.
- Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches*. sage.
- Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing research in business and management: an introduction to process and method*. Sage.
- Rupp, D. E., & Mallory, D. B. (2015). Corporate social responsibility: Psychological, person-centric, and progressing. *Annu. Rev. Organ. Psychol. Organ. Behav.*, 2(1), 211-236.
- Shou, Y., Shao, J., Wang, W., & Lai, K. H. (2020). The impact of corporate social responsibility on trade credit: Evidence from Chinese small and medium-sized manufacturing enterprise.