

Intellectual Capital Component and Trade Credit Relationship: Evidence from Non-Financial Sector of India

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Abstract: This empirical study examines intellectual capital components such as human capital relationship with trade credit in India. Human capital is related to the use of firm trade credit. Using nonfinancial sector data of India, we found empirical evidence that, human capital helps managers to make better decisions regarding increasing their credit sales and avoiding bad debts. Our analysis also reveals that human capital enables managers to use short-term financing and gain a competitive edge in the market. Other indicators like profitability, short-term bank credit, financial leverage firm size are also employed. Panel data is utilized for empirical inquiry from 2010 to 2019. This study is critical for corporate managers, policymakers, investors, academics, and scholars in India chosen industry.

Keywords: intellectual capital, trade credit extended, trade credit utilized, human capital, non-financial sector.

1. Introduction

In the market, trade credit is frequently used as part of transactions. It is widely recognized as a leading short-term financing method ([Seifert, Seifert, & Protopappa-Sieke, 2013](#)). Trade credit is a financing mechanism utilized by businesses all over the world for a variety of purposes, including daily operations, expansion, and development in order to gain a competitive advantage in the market. Trade credit has further two sides as supplier side trade credit which is accounts payable, and buyer side trade credit, which is accounts receivable Throughout the world, firms use trade credit as a complementary strategy to their daily operations, business, and product development activities in order to gain a significant benefit in a marketplace ([Lee, Zhou, & Wang, 2018](#)). During the course of the business cycle, enterprises frequently use trade credit, and some regard it as a preferable alternative to bank credit for many business operations ([Pattnaik, Kumar, & Vashishtha, 2020](#)).

In many developing nations, trade credit is widely used. There are many reasons why this happens, but one of the main ones is because the Trading platforms and investment firms are underdeveloped ([Liu, Wang, & Shou, 2020](#)). Trade credit is a vital part of the finance of a company, as demonstrated in the above section. In light of the prominence and relevance of trade credit, businesses have been examining elements in order to design and implement a realistic and effective trade credit policy that will effectively and efficiently address its challenges. As can be seen from the above, trade credit is an essential component of gaining a significant advantage in the marketplace. Trade credit, on the other hand, cannot provide a growth advantage to enterprises or nations by itself. Intellectual capital and, in particular, its subcomponent, human capital, are other elements that influence trade credit and, as a result, business expansion.

Human capital is a means of defining the economic value of a person's skills, experience, and abilities. In addition to educational, training, intellectual, and other attributes valued by employers, such as loyalty and punctuality, human capital includes physical assets such as health and physical education, skills, and training. It is widely believed that human capital can boost productivity, and therefore profitability. Increasing investment in firm employees is a sign of a more productive and successful firm. Because of this, is essential for firms to get a competitive advantage in the marketplace ([St-Pierre, Sakka, & Bahri, 2018](#)).

The human capital theory is critical in connecting employee talents to accounts receivable management within the company. Human capital is critical in corporate decision-making policies. According to the human capital idea, having more knowledge allows you to make better judgments in the future by accessing more quickly and efficiently. As a result, whether directly or indirectly, human capital plays a vital influence in choices about the use or extension of trade credit ([Peng, Tan, & Zhang, 2020](#))

There has been a huge increase in attention paid to trade credit by scholars in the past few years, with scholars analyzing the reasons for extending and using trade credit. There is an increasing number of studies that look at the influence of factors, which are directly related to the economic health of a company, such as “gross margin, increase in sales and therefore profitability, firm size, stock-in-trade, liquidity, collateral, and leverage”, on the extent to which financial institutions have access to trade credit from customers. According to the existing literature, no previous research has examined Experience and understanding Decision-Making Aspects, such as human capital, which is a fictitious property, nor have they analyzed how the attributes of these characteristics directly influence trade credit on a firm's level. The purpose of our study is to explore the impact of human capital on trade credit used and extended in the non-financial sector of India.

Following is a brief overview of how the remainder of this article will be organized. We examine the relevant literature in Section 2. Section 3 describes the empirical model and analytic approach. In this section, the findings and opinions are given in 4.

2. Literature review

There is no doubt that trade credit has become one of the most unique components of funding for large and small green organizations because trade credit contributes and supports sustainable development more than conventional banking does. Therefore, the success of green small-medium enterprises is due to the fact they utilize a greater portion of the trade credit market to finance their operations ([Desai, Foley, & Hines](#)

[Jr, 2016](#)). [Niskanen and Niskanen \(2006\)](#) believe that “if companies have easy access to capital markets and banks, more trade credit could be made available”. In addition, the legal system has a considerable impact on trade credit, and it is more prominent in the US and other developed countries, and less prevalent in the less developed countries ([Li, Zhou, Du, & Zhao, 2018](#)). [Delannay and Weill \(2004\)](#) Previously highlighted that the extent of trade credit extended by an organization can be greatly influenced by its structure, profitability, development, and debt. Countries where large business groups are dominant in the multiple segments, such as Korea large business groups, impact the trade credit financing because these large business groups have more bargaining power and access to the availability for the trade credit if they are facing a financial crisis ([Chong & Im, 2020](#)). [Ahmad, Afza, and Nafees \(2017\)](#) claimed that a company that pays a higher interest rate on their debt loans is fewer users are more likely to be given payment terms. Whereas, the companies generating a higher cash flow from their business are more likely to offer trade credit to their users ([García-Teruel & Martínez-Solano, 2010](#)). According to [Su \(2012\)](#); [Vaidya \(2011\)](#) Companies that are highly profitable and have liquid positions tend to offer more trade credit to their users. The number of internal funds a company uses can have a positive impact on the amount of trade credit it can provide to its clients, which in turn increases their client's liquidity. [Tsuruta \(2013a\)](#) Found significant evidence to suggest that companies paying higher interest rates also face liquidity deficits, preventing them from being able to offer more trade credit to customers.

Human capital

Human capital indicates expertise, career assessment, job-related expertise, competence and knowledge, psychological assessment, innovation competence, initiative and responsiveness, and variability. To a broader extent, human capital constitutes not only the human resource considerations of the company's workforce, but also the specific requirements of an employee's personal ability in the form of knowledge, skills, and values ([McGregor, Tweed, & Pech, 2004](#)).

An efficient and productive human capital management system may boost the firm's productivity as well as its future potential to innovate. ([Burkart & Ellingsen, 2004](#)). In highly competitive industries, investment in intellectual capital has become a critical vital contribution, since most organizations consider it important to their long-term survival. Human capital is a component of intellectual capital, which cannot be ignored as it is responsible for most of the decision-making in firms. For a company to grow and be profitable, it must have a good amount of human capital. Human capital, therefore, plays a vital role in securing a place of competitiveness for firms in the market among other competitors ([St-Pierre et al., 2018](#)).

Human capital, across all levels, the origin of creativity is the secret to improving comprehension. ([Nowak & Grantham, 2000](#)). According to [Becker \(1992\)](#), it is difficult to distinguish each organization's productivity, abilities, and beliefs, therefore spending on people is similar to purchasing securities assets, as the company itself is producing human capital as well as physical capital. To a certain extent, a company's human capital is determined by the talent of its employees ([Haslinda & Sarinah, 2009](#)). This capital does not belong to the company permanently; this means that the capital is also distributed when a person leaves the organization. As a result, human capital might be characterized as a collection of all the default knowledge that a corporation has already incorporated, as stipulated in its bylaws.

It is vital to emphasize that human capital consists of an organization's competencies, skills, talents, analytical skills, and a positive mindset (Blair & Kochan, 2002). Previous research has discovered a link between human capital and economic growth, particularly legislation, judgment, sales volumes, efficiency as well as capacity (Diebolt & Hippe, 2019). A study of the research reveals that social trust promotes economic growth via numerous processes, one of which is the building of human capital (Schuller, 2001). Fundamentally, human capital may be viewed as a powerful force capable of improving organizational governance, increasing investments, and increasing transaction volume (Burton-Jones & Spender, 2012).

It is more common for businesses to offer and receive trade credit than formal loans (Aguinis, Gottfredson, & Joo, 2012). Therefore in case, it appears that respect is the most significant aspect. As a result, the majority of research has concentrated on the effects of relationship quality on the amount of trade credit that enterprises obtain and lend to new businesses. While the literature regarding the direct impact of human capital on trade credit is still lacking, the direct impact on trade-credit must be captured in the future. It is the knowledge resources that are more critical to the survival, growth, and sustainability of the organization than the products it produces. Despite that, human capital is one of the most important knowledge-based assets for companies to pay attention to as strategic assets. Based on previous evidence collected in this research, we have hypothesized that human capital can impact trade credit.

3. Methodology

The research focuses on India's non-financial sector. The Bombay Stock Exchange (BSE) includes 5170 listed businesses, with 100 chosen from various industries. Companies in these industries account for a sizable amount of the BSE's market capitalization. Furthermore, when choosing the sample, relevant data access, i.e. the availability of 10-year data from 2010 to 2019, was taken into account. To minimize backfilling and survivorship bias, companies that lacked the necessary data for the current study were excluded from the sample. The information is gathered via a secondary source, such as a Thomson router. Panel data are utilized to accomplish research goals and reasons. Panel data approaches are excellent for analyzing the influence of independent variables on trade credit used and extended. As a result, the econometric models of dependent, independent are as follows:

$$TCE_{it} = \beta_0 + \beta_1 HC_{it} + \beta_2 LEV_{it} + \beta_3 PROF_{it} + \beta_4 SBC_{it} + \beta_5 FS + \mu_{it} \quad (1)$$

$$TCU_{it} = \beta_0 + \beta_1 HC_{it} + \beta_2 LEV_{it} + \beta_3 PROF_{it} + \beta_4 SBC_{it} + \beta_5 FS + \mu_{it} \quad (2)$$

In the above equations trade credit extended and trade, credit used is regressed against human capital along with other variables such as leverage, sustainability, short-term bank credit, and firm size, as is shown in the equation. In the above model, for i^{th} cross-sections, the period. The independent, and dependent variables sometimes cannot be measured directly therefore, to operationalize them we use proxies. in the table below variables and their proxies are mentioned.

Table 1: Proxies

Sr.no	Regressors	Symbol	Formulas
1	Firm size	FS	NL (Total Assets)
2	leverage	LEV	Total debt/total equity

3	Short term bank credit	STBC	Short term bank borrowings/sales
4	Profitability	PROF	(Operating profit + depreciation)/sales
5	Human capital	HC	Net income/no of employees
6	Trade credit used	TCU	Trade payable/EBIT
7	Trade credit extended	TCE	Trade receivables/total assets

4. Findings and Discussions

Descriptive statistics are used to convey information about the patterns and characteristics of data. In descriptive statistics, the two types of measurements are measures of central tendency and measures of variability. There are several measurements of central tendency that can be described, such as mean, median, mode, kurtosis, and skewness, whereas standard deviation, variance, minimum, maximum, and kurtosis, can all be described as measurements of variability.

Table 2: Descriptive statics

	TCE	TCU	HC	LEV	PROF	STBC	FS
Mean	0.1772	0.1286	295.4736	0.6358	0.1575	0.4070	6.8560
Median	0.1431	0.1103	140.5608	0.3006	0.1607	0.0730	6.7629
Maximum	1.0536	0.9735	5010.7900	6.3991	0.4415	83.3961	10.8891
Minimum	0.0016	0.0018	0.5276	0.0000	-0.1774	0.0000	-0.5167
Std. Dev.	0.1426	0.0893	599.8103	0.8224	0.0788	4.7189	1.6048
Skewness	1.9312	2.8695	5.5564	2.2915	0.1284	15.8002	0.2987
Kurtosis	8.8556	21.7383	37.3223	10.6232	4.2579	256.8990	4.3330

Table 2 shows the mean, median, maximum, minimum, standard deviation, skewness, and kurtosis for nonfinancial sector data in India. Averages for India's non-financial industry are shown as averages, with HC having the greatest average. The maximum and minimum values indicate the range of data that can be raised or lowered above or below the average. The volatility of India's non-financial sector data is computed to quantify the variation of values from the mean standard deviation. HC has the largest standard deviation number, which depicts the data's departure from its mean, whereas TCU has the lowest standard deviation, indicating that the variables follow the same pattern and do not stray from it. Skewness demonstrates how data is distributed to the left and right of the normal distribution. The variables exhibited positive tail bias, with STBC exhibiting the most right tail bias and PROF exhibiting the least positive tail bias. Kurtosis defines the form of the data distribution curve by displaying the position of the data beyond the mean. All variables have kurtosis values greater than 3, indicating that their tails are heavier and sharper than the normal distribution.

Correlation matrix

In a correlation matrix, one can observe the coefficients of correlation between the variables in a table format. The values in the cells represent how the two variables interact with one another. There are several uses for correlation matrices which include summarizing data, providing input for more advanced analyses, or acting as the basis for a diagnostic.

	TCE	TCU	HC	LEV	PROF	STBC	FS
TCE	1						
TCU	0.4120	1					
HC	0.4790	0.6103	1				
LEV	-0.4186	-0.505	0.3140	1			
PROF	0.582	0.4444	0.6053	0.3131	1		
STBC	0.472	0.4226	0.4329	0.5695	0.4072	1	
FS	0.819	0.374	0.4974	0.3275	0.4589	0.3901	1

The correlation matrix represents the degree of the pair-wise linear relationship between two variables or more and varies over time but the correlation matrix does not show a cause and effect relationship. This correlation between variables varies from -1 to 1 ([Rapisarda, Brigo, & Mercurio, 2007](#)). Where near to 1 refers to a strong positive correlation and near to -1 refers to a strong negative correlation ([Nawaz & Arslan, 2020](#)). In this study, HC has a positive correlation with LEV up to 31.4%. Whereas HC has a linear relation with PROF to the extent 60.5, STBC and HC 58% correlated, FS and HC 32 % correlated, TCU and HC 46% correlated, and TCE and HC 39% correlated. A positive correlation means both variable moves in the same direction. TCU has a positive relation with TCE up to 41%, with PROF up to 58.2%, with FS up to 42%, with STBC up to 45.2%. TCU has negative relation with LEV up to 39%. TCE has a negative correlation with LEV up to 41%, negatively correlated means both variables move in the opposite direction if one variable increases other decreases. Whereas TCE has relation with PROF to the extent of 39.2 %. STBC and TCE are 32% positively correlated. TCE has a positive relation with FS up to 32%.

Trade credit extended

In the table below the traditional panel, regression is used to check the empirical relationship between the “human capital, leverage, profitability, short term bank credit, leverage, and firm size”

Variable	Coefficient value	t stat value
Constant	0.820	3.26**
Prof	0.048	2.00**

STBC	0.0028	2.43**
LEV	-0.0104	-2.34**
FS	0.0085	2.31**
HC	0.0133	3.12**
“Adj. R Square: 0.71 F Stat: 34.74 (0.000)** Hausman Stat: 12.4(0.0001)** D.W Stat :1.95”		
** show 5 per cent level of significance.		

In table 3 the coefficient of Leverage (Lev) used by firms is - 0.0104 at a 5 percent level of significance, which means leverage has a significant negative relation with TCE, our results are consistent with the previous studies. The reason for the negative relationship of leverage with TCE is that highly indebted enterprises on the edge of default were found to be providing less trade credit to their customers to prevent default ([Tsuruta, 2013b](#)).

Trade credit extended and profitability are positively related with a coefficient value of 0.048 at a 5 percent level of significance. Firms with greater profitability would wish to issue more trade credit since they rely heavily on trade credit to generate larger continuous sales. As a result, firms with bigger profits are expected to extend more trade credit. The findings ([García-Teruel & Martínez-Solano, 2010](#)) are consistent with our results and support the idea that customers are given more trade credit when suppliers have a high-profit margin. They argue that increasing profit makes it simpler for suppliers to accept lower earnings or even losses on the credit terms they offer. Firms with strong profitability generate higher cash flows and consequently transmit liquidity to their customers by selling things on credit, according to the financing motive. In theory, enterprises with the ability to generate cash flows would make additional sales by extending trade credit. Since enterprises with a strong cash flow generation capability provide more trade credit.

Based on our findings, we found STBC and TCE to be positively correlated with one another with an approximate coefficient value of 0.0028 at a 5% level of significance ([Bougheas, Mateut, & Mizen, 2009](#)). It has been argued by [Burkart, Giannetti, and Ellingsen \(2004\)](#) that opportunistic borrowers find it difficult to divert inputs purchased on credit, but they can divert bank loans just as easily. Additionally, they claimed that trade receivables were appropriate security for bank loans. Using trade receivables as collateral for bank loans could even enable businesses to borrow additional bank credit. As a result, our findings are not in agreement with those of [Vaidya \(2011\)](#) who found that short-term bank credit is negatively associated with trade credit extended. As a consequence, there are few trade credit guarantees available to banks, which means that it is a mistake to disregard trade credit as collateral for loans in less developed credit markets. As

a result of financial restrictions, businesses are increasingly relying on bank loans to fund operations, and they are less likely to redistribute the funds to consumers through the trade credit channel, whose study found negative relationships between short-term bank credit and trade credit extended. Because of the financial constraints faced by enterprises, banks lend to them on a much more frequent basis than they would use the trade credit channel to distribute it to their customers.

There is a positive correlation between firm size and trade credit extended, as reflected by the data, which demonstrates that large firms extend greater trade credit than small firms. Our results, which found the same relationship with coefficient 0.0085 at a 5 percent significance level, were consistent with other studies in the literature. Based on this evidence, it is evident that trade credit extended is positively correlated with company size, suggesting that as the company grows, so does the amount of trade credit extended. There is a direct correlation between the size of the business and the use of trade credit by companies ([Ahmad et al., 2017](#)). Companies of different sizes may receive different amounts of trade credit. Typically, larger companies have higher bargaining power and own substantial amounts of stock. [Wilson and Summers \(2002\)](#) concluded that the size and reputation of firms affect their trade credit behavior. If suppliers are experiencing a problem of reputation on their side, they will normally offer a longer period of net credit to buyers. Generally, firms offer credit terms if they are worried about the opportunistic behavior of their customers and they wish to reduce the problem with cash flow. Additionally, financial motivations induced firms of a higher size with easy access to bank credit to extend trade credit services to their more financially constrained customers so that they could purchase products at a lower price. [Khan, Tragar, and Bhutto \(2012\)](#) explored that the size of the textile company significantly affects the amount of trade credit extended by the company. Furthermore, studies conducted by, [Chou, Yang, and Line \(2011\)](#); [Desai et al. \(2016\)](#) claimed that firms' creditworthiness is positively related to the amount of trade credit they extend to customers. In other words, our results are compatible with previous studies that have been conducted, as previously mentioned.

As presented in our results, trade credit extended is positively related to human capital at a 5% level of significance, with a coefficient of 0.0133. In an attempt to enrich management skills and create efficient policymaking, the human capital theory emphasizes that building and developing human resources in the form of training, health, safety, and international exposure seminars, webinars, educational bonuses, and benefits is very important to enhance management skills. As a result of this investment, the employees get to gain valuable experience and knowledge through which they can make better decisions regarding trade credit extended and avoid bad debts. The managers can develop policies for the organization which is beneficial in the long run and the end, will increase the volume of credit sales, and in return help the company to grow and gain a competitive edge in the marketplace ([Ahmad et al., 2017](#); [Bousslama & Bouteiller, 2019](#)).

Trade credit used

Table: 4 Trade credit utilized		
Variable	Coefficient value	t stat value
Constant	0.21	2.26**
Prof	0.008	2.20**
STBC	0.034	2.49**
LEV	-0.01	-2.34**
FS	0.040	
HC	0.032	2.48**
“Adj. R Square: 0.69 F Stat: 35.56 (0.000)** Hausman Stat: 23 (0.005)** D.W Stat :1.96”		
** show 5 per cent level of significance.		

A traditional panel regression approach was applied to get the results shown in Table 4, where trade credit utilized is a dependent variable. The results of the model indicated that a power fitness was achieved, as the adjusted R² value was 0.69 and, in addition, the model has significant F statistics, as the value was 35.56. On the other hand, only TCU has a significant negative relationship with LEV, while other variables STBC, FS, HC, and PROF have a significant positive relationship with TCU. It is important to realize that “a firm's decision to use trade credit and bank credit simultaneously is positively correlated”. The paper suggests that loans from commercial banks and trade credit can work together as a complementary force. It has further been noted that optimal capital structure theory focuses on ensuring that funding is derived from a variety of sources, rather than relying on a single source. Therefore, to maintain the proportion of each source in their financial structure constant, enterprises that use more bank credit also use more trade credit. This result is consistent with what we had found in our literature review (Ghosh, 2015). There is a positive relationship between firm size and the amount of trade credit used by the firm. Companies that are large and creditworthy can obtain financing from a variety of sources. The stronger the bargaining position of these enterprises, the better their credit terms are and the greater the trade credit they receive from their suppliers. Recent studies have also been able to provide evidence about a positive relationship between trade credit use and firm size for example (Desai et al., 2016; Marques, 2010).

Human capital and trade credit used to have a positive relationship, as human capital help in taking appropriate decision regarding making an appropriate ratio proportionate. Firms investing in human capital have better chances of loan acceptance and they can even foresee the credit risk associated with them and take better decisions accordingly [Bousslama and Bouteiller \(2019\)](#); [Bruns, Holland, Shepherd, and Wiklund \(2008\)](#). Profitability and trade credit used to have a positive relationship, as Profitable firms are predicted to have lower default risk and a longer life expectancy. Suppliers appropriately assess buyer firms' existing and future financial conditions before deciding whether to extend credit. Suppliers may be able to issue loans to less risky firms. According to pecking order theory, organizations with strong profitability may pursue expansion possibilities and invest more in fixed assets, requiring them to rely on short-term funding. This could result in a two-way interaction between profitability and trade credit used. Profitability was positively connected to trade credit used, implying that profitable enterprises direct their assets to other investments and receive more trade credit from suppliers as being more creditworthy ([Mubashar, Chughtai, & Raheman, 2018](#)).

Managerial and Theoretical Implications

This section contributes to the research by discussing managerial and theoretical implications drawn from this research and future research avenues that emerged from this study found.

Theoretical Implications

The findings of this research have many theoretical implications. The human capital theory argues as the total of human understanding, experiences, capabilities, and desires. It is considered alongside the other categories of total assets by individuals to ensure their life goals in terms of the notion. Several variables contribute to the building of “human capital”: working qualifications, primary prevention, geographical mobility, proactive decision making, and so on. On the other hand, it can be thought of as a storehouse of expertise ([Bousslama & Bouteiller, 2019](#); [Bruns et al., 2008](#)). The reservoir of the information held by individuals is transformed into intellectual capital for financial gains, increasing the company's performance. The intellectual resource is computed as the total of a worker's expertise, experiences, and abilities. The main contribution of a human capital theory is to improve trade credits and the motivation of employees. Another theoretical advantage of this research is to identify some categories in human capital with intellectual capital are: “the firm’s financial capacity to service the debt and the economic conditions in which the loan takes place” and “the firm’s capital, and the collateral or guarantees provided, and finally and lastly “the character of the borrower, including their education, experience, and integrity” ([Mubashar et al., 2018](#)). Such implications encourage the researcher to motivate and conduct new researches.

Managerial Implications

In particular, the recent study gives helpful information to policymakers in many ways. According to policymakers, organizations that increase the effectiveness of their intellectual resources are much more capable of earning a capital gain than enterprises with less adjusted human asset utilization. Intellectual capital in financial but rather as a credit officer provides no impact when it comes to hedge funds. This research brings several key policy insights for the **Intellectual capital component and trade credit** who are looking for the **non-financial sector of India**. It encompasses workers' cognitive capacity, capabilities, innovative work ethic, devotion, and excitement. It contains the change process in an organization, patterns, processes, operations, techniques, and so on. As a result, administrators and policymakers should

look for **Intellectual capital components and trade credit firms** for financing and gain a competitive edge in the market. As a result, the findings of this study will enable economic policymakers in implementing fiscal reforms that are appropriate for the current economic and market conditions.

Future Directions and Limitations

In addition to its many great aspects, the present study, like all others, has significant flaws that must be considered in future research efforts. The various recommendations are depending on the outcomes of this research. This research is cross-sectional-based in the future researchers might be using longitudinal research. Because data were not given from all over India in the next research researcher collected data from all companies. Another limitation of this study is only checking the impact on company growth and development. In future research, authors can check the relationship with experiences and training of companies employees, how its affects intellectual capital and trade credit in India. There is also a need to study financial development with trade credit and intellectual capital with the use of human capital theory.

Conclusion

The findings of this study's empirical findings describe the significance of relationships between intellectual capital and trade credit, as well as their impact on company growth and development. Robert's notion of micro modeling (micro) to how businesses use it to obtain a competitive advantage over their competitors and, in turn, contribute to economic growth and development. As a result, the findings of the study assist managers in developing trade-credit strategies and policies while simplifying various aspects based on their importance, allowing the corporation to maintain its liquidity position while reducing bad debt risk because trade credit contract components are also dependent on the borrower's market growth. To optimize the firm's value and maintain a strong competitive position, the manager will apply the empirical findings of this study to the efficient and effective usage of human capital components. The company's management can analyze the impact of profitability on TCE and TCU according to their firm size to acquire more market share and customers from competitors. The findings of this study will aid economists in developing economic strategies that will promote the country's economic growth. Furthermore, when corporations make policies, analysts and policymakers will feel at peace.

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