



Informal Financing: Is It Attractive to The Companies?

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Abstract

Informal financing is essential as a source of company financing because, apart from being low risk, not all companies have adequate access to formal financing. However, until the latest study, no substantial evidence has been found for the role of informal financing sources on public perception. By taking samples from all companies in Indonesia for the period 2003 to 2022, this study aims to investigate this issue. A series of robust tests, including financial conditions, industry effects, and crises, show that informal financing plays a role in companies. Companies with higher managerial talent in trade credit management will be increasingly attractive to the public and become acquisition targets. The results of this study are useful, at least for academics, companies, and regulators in policy making.

Keywords: Informal Financing; Trade Credit; Acquisition; Crisis; Emerging Market

1. Introduction

Informal financing is a source of funds companies can obtain without going through intermediary financial institutions. This financing is essential in supporting operational activities, especially for companies in developing countries. One form of informal financing is trade credit (Hou, Yang, & Liu, 2022), which can be considered from two sides, namely as a distributor and recipient of trade credit. The difference between these two indicators will form net trade credit (James, Ngo, & Wang, 2023). Trade credit is an alternative source of company financing, especially if the company's internal funds are no longer reliable (Myers & Majluf, 1984). For companies in less developed financial markets, implicit loans in the form of trade credit are an alternative source of funds (Fisman & Love, 2003). Safe financing from trade credit can be obtained, especially if companies are faced with problems where banks are relatively uninformed (Giannetti, Burkart, & Ellingsen, 2011).

Trade credit, a deferred payment to suppliers, has proven to be an important source of short-term financing for small companies, especially for growing companies that are limited by institutional lenders (Wilson & Summers, 2002). Apart from short-term, trade credit is also commonly used by companies as a long-term financing source (Bartholdy & Olson, 2023). Trade credit is an attractive financing source, especially for companies that do not have access to formal financing. There are at least a number of main benefits from using trade credit. *First*, this financing source is more flexible than that obtained from financial institutions because it is easier to negotiate and cheaper payment delays than formal financing because companies face sanctions from financial institutions (Abdulla, Dang, & Khurshed, 2017). *Second*, this financing source is important in helping companies emerge from the financial crisis because it can help increase and create liquidity.

Third, the company's ability to provide and organize financing, in this case, can be an advantage in facing sales competition and competition from the supplier side. Trade credit can be a multifaceted and

important strategic or competitive tool that plays a role in attracting new business, building relationships with suppliers and customers, and signaling product quality, reputation, financial health, price competition, and price discrimination (Wilson & Summers, 2002). *Fourth*, trade credit can protect small companies and help them maintain the quality of the goods or services they receive (Wilson & Summers, 2002). *Finally*, the distribution of trade credit is beneficial for suppliers because it can create customer loyalty and recurring business, which in turn can increase company profits (Wang, Zhao, & Peng, 2017).

Good trade credit management shows solid managerial talent so that it can form positive perceptions from the public and even lead to acquisitions by other parties. Even though optimal trade credit shows positive things about the company, the acquirer is also faced with risks. Referring to the risk-exposure hypothesis, the acquirer's risk will increase after an M&A action due to considerations of personal profits from controlling shareholders and uncertainty of costs after the action (Li, Han, & Fok, 2020). In this case, cost uncertainty causes suppliers to provide less trade credit. Although post-M&A performance increased, as indicated by revenue growth, it was not enough to overcome cost diseconomies in other parts of the business (Rahman & Lambkin, 2015). Acquisitions are expensive and have a negative impact on the acquiring company (Moeller, Schlingemann, & Stulz, 2005).

To reconcile the conflicting importance of trade credit in public perception and the risks of acquisition actions that might arise, we raise two main theories, namely resource dependence theory and absorptive capacity theory. Optimal trade credit management is an essential characteristic of managerial talent in a company and a source of potential for value creation (James et al., 2023). In this case, trade credit is certainly an attraction for investors and even mergers and acquisitions (M&A). Acquisition logic becomes important when linked to resource dependence theory (Pfeffer & Salancik, 1978). Companies that are not economically independent and in resources make acquisitions an effective method for capturing desired resources and controlling the activities of the acquired company.

Acquisitions made by companies can open up the potential to absorb desired resources and can influence efficiency (absorptive capacity theory, see (Kim & Davis, 2019)). Furthermore, acquisitions can also open up opportunities to improve financing sources for the acquirer. Companies can use acquisitions to reduce financial constraints. Financially constrained firms are more likely to use undervalued equity to fund acquisitions and target less constrained and more liquid firms (Williamson & Yang, 2021). Recent empirical evidence by Williamson and Yang (2021) shows that acquiring financially constrained companies adds more debt, increases investment, and reduces cash holdings after the acquisition. Based on the entire description, we formulate a hypothesis: trade credit has a significant role in company acquisitions.

This study makes several significant contributions. *First*, this study introduces the impact of trade credit on public perception as a proxy for acquisitions. Investigating the role of trade credit in public perception is still an important topic today. *Second*, we use an indicator of public perception with an indicator of the proportion of acquisitions and changes in the company. *Third*, this study seeks to provide the latest evidence on Indonesia as a developing country and uses a long observation period involving two crisis periods. *Fourth*, this study aims to fill the gap in recent research (Satrio, 2022) linking formal financing and information inequality in Indonesia.

Indonesia is an interesting country to study regarding trade credit with a number of considerations. This country adheres to civil law and has a diverse culture between regions across 17,001 islands. In this case, cultures in different countries will have different business characteristics (Hou et al., 2022). *Furthermore*, this country has an information inequality problem (Satrio, Saleh, & Wendy, 2022). *Lastly*, although the government has attempted to channel low-cost credit facilities through state-controlled banks, obtaining this financing is not always easy, especially for public companies.

This paper is organized into four main parts. The sample, data, variables, and research model are discussed in the second part. The third section describes the results and discussion. In the final section, the conclusions and contributions of this research are presented.

2. Research Method

This study investigates all companies listed on the Indonesia Stock Exchange (IDX) from 2003 to 2022. Based on the availability of data on companies experiencing M&A, a final sample of 173 companies

was obtained. Acquisition is the dependent variable in this study. Acquisitions are proxied by being determined based on the amount of direct ownership in the company being acquired with a threshold of more than fifty percent (Rahman & Lambkin, 2015). This study also uses the percentage change in ownership (Δ Acquisition) in acquired companies to ensure test consistency. The logic is that the better the company's performance, the more attractive it is to acquirers, as indicated by changes in the larger portion of ownership.

Testing the main model in this study involved trade credit, which was investigated with trade receivables (Fisman & Love, 2003; James et al., 2023) and net credit (James et al., 2023). Trade receivable refers to the supply of credit to consumer companies. Furthermore, net credit refers to trade credit provided to customers and net credit received from suppliers. Companies with capable management should have less trade credit to customers (James et al., 2023). This study performs data scaling and natural logarithms on all trade credit proxies to overcome data imbalances in modeling.

Investigations related to company acquisitions include several control variables with indicators of financial performance (Chakraborty & Kattuman, 2023; Jain, Kashiramka, & Jain, 2020; Mavis, McNamee, Petmezas, & Travlos, 2020), business prospects (Harford, 1999; Rahman & Lambkin, 2015; Rao, Koirala, Aldhawayan, & Corbet, 2023), risk, and liquidity (Harford, 1999). Financial performance is proxied through asset turnover, which compares sales and overall assets. Company growth is determined by comparing sales between years (Afrifa & Gyapong, 2017). Companies with higher asset turnover show better financial performance, while company growth shows the company's future prospects. Following Deesomsak and Pescetto (2009), company risk is indicated by the earnings volatility of each company, which is obtained by dividing the company's business risk in the current period by the average business risk during the research period (since 2003). The business risk of each company is obtained from changes in net profit before calculating interest and taxes between years. Companies with increasingly high business risks have a role in public perception and the possibility of acquisition. Finally, liquidity is determined by comparing a company's current assets with its current liabilities. In this case, liquidity is essential to investigate in modeling because apart from being related to the company's financial condition, it is also important to examine the topic of trade credit.

Tests were also carried out, considering unobserved industry characteristics and crises. There are industries with a higher reliance on trade credit financing, and this financing source is higher for companies with weaker financial institutions (Fisman & Love, 2003). There were at least two crisis periods during the observation period: the subprime mortgage crisis in 2007-2008 and the COVID-19 pandemic that impacted Indonesia from 2020 to 2022. Investigations related to crises are important to carry out in this study because they have a role in investigations related to trade credit (Abdulla et al., 2017). The baseline model in this study is shown in the first equation, while the main model is shown in the second equation.

$$\text{Acquisition}_t = \alpha + \beta_1 \text{Asset Turnover}_{t-1} + \beta_2 \text{Growth}_{t-1} + \beta_3 \text{Risk}_{t-1} + \beta_4 \text{Liquidity}_{t-1} + \varepsilon \quad (1)$$

$$\text{Acquisition}_t = \alpha + \beta_1 \text{Trade Credit}_{t-1} + \beta_1 \text{Asset Turnover}_{t-1} + \beta_2 \text{Growth}_{t-1} + \beta_3 \text{Risk}_{t-1} + \beta_4 \text{Liquidity}_{t-1} + \varepsilon \quad (2)$$

3. Results and Discussion

An overview of the data for all variables in this study is shown in Table 1. The results show that not all acquired companies utilize trade credit as a source of short-term financing. Interestingly, there is dominating ownership in companies in Indonesia after the acquisition, shown by the fantastic ownership portion of 99.74 percent. This means that only 0.26 percent of ownership is owned by other parties. Acquisitions in Indonesia are not always about companies with good financial performance, high growth potential (minimum with negative value 83.07 percent), low risk (maximum value 79.9545), and maintained liquidity. This argument can be seen in the minimum values for asset turnover, growth, risk, and liquidity.

Table 2 presents the correlations between variables in this study. The high and significant correlation between the size of the acquisition and changes in target company acquisitions (r 0.7558)

Table 1: Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
Acquisition	0.6759	0.1469	0.5007	0.9974
Δ Acquisition	0.5425	0.2807	0.0082	0.9974
Trade Receivable	23.3517	6.5894	-	32.1291
Net Credit	23.2589	5.9623	-	29.0361
Asset Turnover	0.8309	1.0469	-	5.6427
Growth	4.7393	53.4943	(0.8307)	732.2484
Risk	3.7228	10.8124	-	79.9545
Liquidity	4.7278	21.1163	-	247.3508

Table 2: Correlation matrix

	1	2	3	4	5	6	7	8
Acquisition	1							
Δ Acquisition	0.7558*	1						
Trade Receivable	-0.2064*	-0.1485*	1					
Net Credit	-0.0796	-0.1079	0.6069*	1				
Asset Turnover	0.0997	0.1256	0.063	0.1256	1			
Growth	-0.0598	-0.1152	-0.006	-0.0034	0.0668	1		
Risk	0.1580*	0.1278	-0.1864*	-0.0338	-0.0177	0.1426	1	
Liquidity	0.0185	0.0739	-0.2501*	-0.1857*	-0.0881	-0.0081	-0.0278	1

Correlation with a significance level of 0.05

shows that these two indicators are suitable proxies for explaining company acquisitions. A significant correlation was also found in trade receivables with acquisitions and changes in ownership. This is an initial indication that management with high trade credit to customers seems less attractive to the public, especially to traders who will acquire the target company. Finally, there appears to be a correlation between the independent and control variables. However, all the equations tested in this study avoided multicollinearity problems, as indicated by a VIF value of less than 5.

Regression results for both the baseline and main models are presented in Table 3. Testing the first and third equations without considering industry or crisis effects, and vice versa for the second and fourth equations. The crisis effects tested in this case include the subprime mortgage and COVID-19 health crises. The consideration for testing using industry effects is to capture specific differences between sample companies. Notably, all models in this test have undergone post-estimation tests to ensure the model is suitable for testing.

The baseline test results of the first equation model show that the company's financial performance is an important factor for the public, including the acquirer (coefficient (β) = 0.0235). Interesting results appear in the company's business growth and risks. From the acquirer's perspective, target companies with smaller growth and higher profit volatility are attractive (β = -0.0003 and β = 0.0024). The overall results of this test remain consistent after factoring industry and crisis effects into the test. Liquidity appears to have a minimal role in shaping public perception, as indicated by a negative coefficient of 0.0010 and significant at the 0.1 level.

The main model in this study was tested to detect the role of trade credit in shaping public perceptions. The test results for the third and fourth equations show a coefficient value of -0.0044, all of which are significant at the 0.05 level. These results support the hypothesis in this study, which states that trade credit plays a role in shaping public perceptions. Companies that provide increasingly large supplies of credit to consumers cause limited funds for companies. This condition is certainly not good for the company because it will limit cheap informal funding sources. This condition indirectly

Table 3: Results

	Acquisition			
	Baseline Model		Main Model	
	(1)	(2)	(3)	(4)
Trade Receivable			-0.0044** (0.0021)	-0.0044** (0.0020)
Asset Turnover	0.0235** (0.0092)	0.0179* (0.0106)	0.0234** (0.0094)	0.0179* (0.0104)
Growth	-0.0003*** (0.0000)	-0.0003*** (0.0000)	-0.0003*** (0.0000)	-0.0003*** (0.0001)
Risk	0.0024** (0.0009)	0.0024*** (0.0009)	0.0018** (0.0008)	0.0018** (0.0008)
Liquidity	-0.0005 (0.0003)	-0.0010* (0.0005)	-0.0008** (0.0004)	-0.0011** (0.0005)
Constant	0.6526*** (0.0144)	0.6903*** (0.0339)	0.7614*** (0.0545)	0.7945*** (0.0586)
Crisis	-	Yes	-	Yes
Industry	-	Yes	-	Yes
R-squared	0.0657	0.1670	0.0962	0.1929

Robust standard errors in parentheses. The accent marks ***, **, and * indicate significance levels of 0.01, 0.05, and 0.1, respectively

shows that the company management is less capable of ensuring financial management. As a result, the company is perceived negatively by the public. In this case, acquirers will be increasingly reluctant to acquire companies with increasingly poor financial performance. This negative perception is very logical, considering that acquisitions are expensive and tend to have a negative impact on the acquiring company (Moeller et al., 2005).

To ensure consistency of results, the test was carried out again using the same proxy and an alternative proxy for trade credit, namely net credit, which is the difference between trade credit distributed to customers and trade credit distributed by suppliers. We also test the effect on acquisitions with a different approach, namely post-acquisition ownership changes. The overall robustness check results appear in Table 4. The test results for the first equation show that the trade receivable effect produces a coefficient value of -0.0070 and is significant at the 0.05 level. These results indicate that trade receivables consistently have a significant negative role in changes in the proportion of acquisitions in target companies.

The test results using the net credit proxy appear in the second to fifth equations. Tests on the second and third equations carried out without considering industry effects show that net credit has a significant role in public perception, which in this study is indicated by the size of acquisitions by companies (second equation), which is shown by the coefficient -0.0078 which is significant at the one percent level. The results remain significant when testing the role of net credit on changes in the proportion of company acquisitions (third equation). Next, the fourth and fifth equation tests were carried out again to ensure industry and crisis effects were included in the test. The overall test results remain consistent with the test results in the second and third equations ($\beta = -0.0075$ and -0.0133 ; significance level 0.01).

A larger net credit indicates that the company has larger trade receivables compared to trade payables. Companies in such conditions show a loss of credit for supply to consumers. This indirectly shows that the company cannot utilize informal financing within the company, which can negatively impact the company. Such companies cause negative perceptions, which is indicated by a decrease in the proportion of acquisitions made by acquirers.

Table 4: Robustness checks

	Δ Acquisition	Acquisition	Δ Acquisition	Acquisition	Δ Acquisition
	(1)	(2)	(3)	(4)	(5)
Trade Receivable	-0.0070** (0.0033)				
Net Credit		-0.0078*** (0.0009)	-0.0116*** (0.0013)	-0.0075*** (0.0013)	-0.0133*** (0.0026)
Asset Turnover	0.0288 (0.0178)	0.0252*** (0.0091)	0.0494*** (0.0171)	0.0206** (0.0103)	0.0337* (0.0173)
Growth	-0.0008*** (0.0001)	-0.0003*** (0.0000)	-0.0008*** (0.0001)	-0.0003*** (0.0001)	-0.0009*** (0.0001)
Risk	0.0025 (0.0017)	0.0025*** (0.0009)	0.0041** (0.0020)	0.0025*** (0.0009)	0.0035** (0.0018)
Liquidity	0.0004 (0.0007)	-0.0004 (0.0003)	0.0009 (0.0006)	-0.0007 (0.0005)	0.0012* (0.0007)
Constant	0.7618*** (0.0991)	0.8720*** (0.0245)	0.8170*** (0.0347)	0.8998*** (0.0481)	0.9675*** (0.0945)
Crisis	Yes	-	-	Yes	Yes
Industry	Yes	-	-	Yes	Yes
R-squared	0.2301	0.0845	0.0799	0.1793	0.2310

Robust standard errors in parentheses. The accent marks ***, **, and * indicate significance levels of 0.01, 0.05, and 0.1, respectively

4. Conclusion

The novelty of this study is that it investigates the role of informal financing on public perception. By taking a sample of all companies in Indonesia that were acquired in the period 2003 to 2022, we prove that trade credit exists in shaping public perceptions, which in this study is proxied by company acquisitions. In this case, companies with higher trade receivables indicate that informal financing is increasingly limited, and acquirers less favor this. The results remain robust with a series of tests and paying attention to endogeneity issues.

We contribute to at least three parties. For companies, managing informal financing is necessary because, apart from being cheap, this financing source is a substantial alternative, especially if formal financing sources are difficult to obtain. In this case, managerial talent plays an important role in managing trade credit, and this ability will shape public perception. For regulators, the results of this study are particularly useful regarding information disclosure and easy access to financing sources for companies. Finally, we also contribute to academics and open up opportunities for further study. Investigations related to managerial talent and corporate governance are interesting topics that can be raised, especially regarding trade credit in developing countries. Post-acquisition trade credit can also be an interesting topic.

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