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# The impact of board size and independence on trade receivables in Vietnam

Nguyen Thanh Liem<sup>1,2,\*</sup>, Nguyen Thị Thao Vy<sup>1,2</sup>

#### ABSTRACT

Trade credit plays a significant role in firm performance, and proper corporate governance can help manage trade credit in the best interest of shareholders. Given the nature of high levels of information asymmetry and inadequate institutional quality in developing countries, the role of corporate governance linked to board characteristics is highly relevant in determining the level of trade credit granted. Even though trade credit might help firms win customers, excessive trade credit extension puts the firms at risk of working capital being abused by purchasers, and low liquidity which hampers smooth operations or even bankruptcy. In a developing country like Vietnam, it is likely that boards can act as a deterrence to business practices that are harmful to corporate performance. This research paper investigates the relationship between two board characteristics and trade receivables in Vietnam using data from 2010 to 2022. The research utilizes conventional panel data estimators, including the random effects model and the System Generalized Method of Moments. We find that board size tends to reduce trade receivables, implying that larger boards prevent firms from extending much trade credit which could lead to increased implicit costs and hamper firms' liquidity. This result implies that firms benefit more from larger boards, rather than encounter troublesome coordination caused by more crowded boards. However, board independence is insignificantly associated with trade credit extension, suggesting that this factor does not help curb trade credit extension. This result negates the view that firms benefit more from independent directors and that independent directors do not necessarily enhance corporate governance in Vietnam. Based on these results, the research offers implications for the directors monitoring role and strategy management especially in a developing country.

Key words: board size, board independence, trade receivables, developing countries

#### <sup>2</sup>Vietnam National University, Ho Chi Minh City, Vietnam.

#### Correspondence

Chi Minh City, Vietnam.

Nguyen Thanh Liem, University of Economics and Law, Ho Chi Minh City, Vietnam.

<sup>1</sup>University of Economics and Law, Ho

Vietnam National University, Ho Chi Minh City, Vietnam.

Email: liemnt@uel.edu.vn

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INTRODUCTION

A specific type of interfirm funding, known as trade credit, has garnered considerable academic interest due to its widespread use and significant impact on firms. This financial arrangement allows buyers to delay payment until a predetermined point in time. This financing source constitutes a quarter of firms' total debt liability across 34 countries from 1990 to 2011<sup>1</sup>, reaching 1.3 times as large as bank loans<sup>2</sup>.

In a developing market like Vietnam, Pham et al.<sup>3</sup> document that trade credit accounts for a fifth of the total assets of Vietnamese listed firms. Since it plays a crucial role in corporate operations, there have been conducted to understand its effects on firm performance  $^{1,4-8}$ .

Firms can find it more challenging to access capital markets in developing nations due to heightened levels of information asymmetry and inadequate institutional quality that protects lenders. Consequently, trade credit allows financially constrained firms with the ability to capitalize on lucrative expansion prospects or invest in technologies that enhance efficiency, thereby improving overall firm performance<sup>9</sup>. However, for the seller or the party that extends trade credit, increased net working capital ties up money used for other activities. Accumulating excess working capital harms the firm by adversely affecting shareholders' wealth. Consequently, the firm needs to adopt an optimal working capital management policy.

Effective corporate governance plays a crucial role in overseeing the management of working capital management through the establishing proper policies. The significance of board characteristics as a component of corporate governance in the managing working capital cannot be understated. According to Jensen and Meckling<sup>10</sup>, managers often pursue self-interested objectives that may deviate or conflict with the principal's goals. Consequently, governance mechanisms are necessary to regulate the opportunistic behaviors of managers and align them with the shareholders' best interests. The board serves as one such mechanism, and its efficacy is influenced by characteristics such as size and composition. Nu-

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merous studies highlight the impact of the board of directors on corporate performance.

Trade credit is a crucial liquidity source that stimulates economic activities across various industries. It functions as a form of informal or alternative finance, fulfilling short-term working capital needs in fostering growth<sup>11</sup>. In less developed nations, trade credit is vital for providing short-term capital essential for sustaining businesses and overall economic stability<sup>12</sup>. However, the ability of firms to extend trade credit is often influenced by the availability of capital input, and businesses in developing countries may need help securing external financing to redirect funds to their buyers. Given the prevalent high levels of information asymmetry and inadequate institutional quality, the role of corporate governance, particularly in terms of board characteristics, becomes highly significant in determining the extent of trade credit granted.

The present study aims to determine whether boards of directors exert any significantly influence over trade credit among listed firms in Vietnam. Numerous investigations have concentrated on the factors influencing trade receivables<sup>13-15</sup>. However, corporate governance as a determinant has yet to be thoroughly explored. Furthermore, the available evidence on the relationship between corporate governance and working capital management predominantly pertains to developed economies, with limited attention given to emerging markets. The current study aims to provide new empirical insights into the determinants of trade credit in an emerging market. Trade credit is a crucial source of finance for listed firms in Vietnam. It also contributes to the need for more academic work on the impact of corporate governance on trade credit.

The remainder of the study proceeds as follows. Section 2 provides a literature review, on which the hypotheses about the link between board characteristics and trade credit extension are established. Section 3 discusses research methodology, covering the specification of research models, variable construction and estimation strategies. Section 4 presents the empirical results and discussions. Finally, section 5 concludes the study with implications for relevant stakeholders.

# LITERATURE REVIEW

#### Trade credit and firm performance

Effective trade credit administration can improve a firm's financial performance, elevate stock returns and competitiveness, mitigate information asymmetry, and foster industry growth, as documented by Fisman & Love<sup>16</sup>, Huang et al.<sup>17</sup>. Additionally, providing credit to customers enables firms to minimize the risk of losing customers to competitors<sup>18</sup>.

However, Białowolski<sup>19</sup> finds that delays in payment for receivables can curtail growth opportunities, compelling firms to reduce investments and employment, and impeding their capacity to introduce new products. Additionally, the use of trade credit carries the risk of bad debt, where buyers may default on their obligations to repay suppliers, negatively impacting a supplier firm's cash flow and profitability. The consequences of bad debts include implicit costs such as collection expenses, legal fees, and the opportunity cost associated with funds tied up in uncollectible debt<sup>20,21</sup>. Furthermore, Jacobson<sup>22</sup> and Dankiewicz<sup>23</sup> emphasize that credit losses arising from debtor default significantly elevate the risk of bankruptcy for creditors.

In line with the two potential theoretical effects, the impact of trade credit on firm performance is mixed at best, according to the literature review. Some studies point to a positive association  $^{7,24,25}$ , while some others show negative linkages  $^{21,26,27}$ .

## Corporate governance, board characteristics and trade credit extension

Building excess working capital can block funds and potentially diminish shareholders' wealth, and a proper working capital management policy is thus necessary for a firm. Ineffective corporate governance leads to poor working capital management and adverse effects on shareholder wealth<sup>28</sup>. On the contrary, improving the optimization of trade credit has the potential to augment free cash flows<sup>28</sup>.

Agency theory highlights the possible conflicts of interest arising from companies' separation of ownership and control in companies<sup>10</sup>. The principal's objective is to maximize firm value and hope that the agent (manager) can facilitate this desire. However, the manager's objectives may not be consistent with principal's. Agency theory views the board of directors as an essential element of the control mechanism to ensure that the problems resulting from the principal and agent relationship are well controlled. Moreover, aligning with the principles of Resource dependence theory, effective boards of directors contribute enhance a company's performance by diminishing the firm's reliance on the external environment and contingencies<sup>29</sup>. Agency theory posits that a giant board monitors the CEO more effectively, reducing CEO domination<sup>30</sup>. Meanwhile, according to the Resource dependence theory, the director boards could improve corporate performance by providing more knowledge and skills and human capital<sup>31</sup>. Nonetheless, the literature has presented mixed views regarding the influence of board size on firm performance, with indications of both positive and negative effects<sup>32</sup>. On the one hand, in line with Agency theory, a larger board size has proven effective in mitigating inefficient and unproductive activities<sup>30</sup>. Larger boards can enhance financial performance in a volatile, uncertain, complex, and ambiguous environment by developing decent strategies<sup>33</sup>. Examining the financial performance of Indian textile firms from 2015 to 2019, Nepal and Deb 32 investigate the impact of board size and independence and find a positive correlation between board size and firm performance. Nevertheless, challenges associated with larger board size, such as ineffective coordination, diverse member objectives, and communication gaps, have been raised by Merendino & Melville<sup>34</sup>. Consistently, positive outcomes have been associated only with a board size of fewer than six members<sup>35</sup>.

A substantial number of independent board directors are deemed crucial for facilitating broader access to resources and enhancing financial performance, which aligns with the Resource Dependency Theory<sup>32</sup>. Kim et al.<sup>36</sup> suggest that independent directors do not only perform the role of watchdogs but also professional consultants thanks to their expertise, which is much needed to improve firm performance. In emerging economies, the pivotal role of independent directors is considered particularly significant due to the inherent instability and exposure to various external shocks experienced by these countries (Park et al., 2007). The positive correlation between board independence and performance has been observed in both family and non-family-owned firms<sup>37</sup>. Using a relatively large sample of 1003 observations covering 169 firms from 2010 to 2017 in Vietnam, Tran and Truong<sup>38</sup> find a positive correlation between the proportion of independent directors and firm performance, which aligns with Agency theory. Pham and Nguyen<sup>39</sup> find that debt financing negatively affects firm performance and board independence dampens the adverse effect of debt financing on firm performance in Vietnam.

Conversely, there might be negative consequences associated with more independent directors regarding performance. Independent directors need more firmspecific experience, and their decision-making capabilities are impeded by asymmetric information<sup>40</sup>. Nepal and Deb<sup>32</sup> investigated the impact of board independence on the financial performance of Indian textile firms from 2015 to 2019, revealing a significant inverse relationship between board independence and corporate performance. The author suggests that firms could establish a policy limiting independent directors' involvement in other companies to enhance sound decision-making. Similarly, Adhikary and Hoang<sup>41</sup> find a negative correlation between independent directors and the financial performance of firms in Vietnam.

Investing in receivables has the potential to improve a company's profitability but also escalates operational risk and ties up funds. Additionally, in a developing country with a young financial market, firms find it challenging to obtain funds cheaply and then finance their buyers. The governance structure promotes resource efficiency and demands accountability for their responsible management. Consequently, the board assumes the responsibility of crafting trade credit policies that are both efficient and effective in order to lower costs and enhance profits. The board's characteristics, including its size and composition, may impact its capability to establish trade credit policies. As a result, there may be a negative correlation between board size/independence and receivables. An effective board is expected to minimize a company's operational risk, thereby improving overall performance, particularly in a developing countries where firms may face elevated financing costs for funding trade receivables.

Like many other developing nations, Vietnam's legal framework is in its early stages, and the implementation of corporate governance is a relatively recent development <sup>42</sup>. Without proper corporate governance, trade credit extension in developing countries could trigger problems for firms. In this context, board size and independence might help to oversee the operations of the firm and formulate proper working capital management policies the following testable hypotheses are established:

Hypothesis H1: Board size is negatively associated with trade credit receivables.

Hypothesis H2: Board independence is negatively linked with trade credit receivables.

## **RESEARCH METHODOLOGY**

The data for this study is collected from various sources. The sample for this study includes all the nonfinancial listed firms in Vietnam from 2010 to 2022. For the financial data, we retrieve from Thomson Refinitiv database. For nonfinancial data including board size and board independence, we manually collect the information from each firm's annual reports or other sources from each firm. We remove firms with at most three years of observations, because those firms are likely to be subject to extreme values. The baseline model in the research is as follows:

 $\begin{aligned} \textbf{REC}_{it} &= \beta_0 + \beta_1 \textbf{REC}_{it-1} + \beta_2 \textbf{BOARD}_{it} + \\ \beta_3 \textbf{SGROW}_{it} + \beta_4 \textbf{FSIZE}_{it} + \beta_5 \textbf{STFIN}_{it} + \alpha_i + \\ \varepsilon_{it} \end{aligned}$ 

#### Where:

Following Petersen and Rajan<sup>43</sup>, García-Teruel and Martínez-Solano<sup>44,45</sup> and Nepal and Deb<sup>32</sup>, we construct trade credit receivables (REC) using the ratio of receivables to total sales, indicating the amount of money a firm's customers owe it for buying goods and services on credit. Our primary independent variable is corporate governance (CG) operationalized under the two proxies of board size (BSIZE) and board independence (BIND). We measure BSIZE as the number of board members and BIND as the proportion of the number of independent directors to total directors. We construct the control variables in line with García-Teruel and Martínez-Sola<sup>44,45</sup>. These variables include receivables (REC), firm size (FSIZE), sales growth (SGROWTH), and short-term finance (STFIN - short-term debt to total assets). The construction of the variables is detailed in Table 1.

As for the estimation strategy, we employ conventional estimation techniques for panel data models, i.e., fixed effects and random effects models. However, since we know that the level of receivables/trade credit extension is highly dependent on the characteristics of industry, we add industry dummies to control for the effects of industry characteristics on the dependent variable. With this addition, the random effects model is more appropriate since the fixed effects model cannot include the effects of the timeinvariant factors, an industry effect, in our study. Furthermore, we further employ the System Generalized Method of Moments to account for the potential dynamism of the dependent variable and the possible two-way relationship between the dependent and independent variables<sup>46</sup>. This two-way relationship is possible since a firm's decisions could depend on each other. To ensure that the estimates are valid for statistical inferences, we conduct two tests, namely, autocorrelation of order two of the residuals in the differenced model and the overidentification test. If the p-values of these two tests are higher than the significance level, the estimates are deemed valid and dependable.

# **RESULTS AND DISCUSSION**

#### **Descriptive statistics**

Table 2 provides the descriptive statistics of the variables in the model. The average value of Rec is 0.37, or firms tend to grant credit in a third of the total sales made. Bsize is on average 5.4, or the average is between five and six members on each board. The mean value of Bind is fifteen, indicating that less than a fifth of the members are external to the firm. This number is low, potentially affecting the objectivity of the board. The ratio of the liquid assets to total assets (Liquid) is about two thirds of total assets, meaning that firms on average manage to keep adequate coverage of the short-term liabilities. However, the shortterm liability to total assets (Stfin) is about 80 percent, or firms tend to use short-term liabilities to finance operations and capital expenditure.

#### **Correlation matrix**

Table 3 provides the correlation coefficients between variables in the model. Many variables are negatively related to Rec. First, Size is negatively related to Rec, suggesting that large firms tend to offer less trade credit, probably because they have more substantial bargaining power. Second, board size and board independence are also negatively associated with trade receivables. This gives tentative approval to the expectation that better governance tends to contain the extension of trade credit, since this type of financing is costly. Third, firms with higher sales growth rates must also extend more credit. Finally, firms with more short-term liabilities and liquidity can offer more trade credit. We can see that the highest correlation coefficient is only about 0.6, suggesting that multicollinearity is not the issue here. We also run the Variance Inflation test to check the presence of high multicollinearity, and all the coefficients are lower than four. This consolidates the view that correlation among independent variables is not manageable.

#### **Regression results and discussions**

As discussed, we perform regression using two methods, namely random effects and the System Generalized Method of Moments. We add industry dummies to control for the industry characteristics that could affect the level of trade financing. The control of industry characteristics is essential since each industry is likely to have different practices in terms of trade financing as a means to capture market share. Table 4 provides the estimates using the Random ef-

fects model. In line with the hypothesis H1, board size (Bsize) is negatively and significantly related to receivables, suggesting that a more giant board minimize a

| Table | 1: | Variable | construction |
|-------|----|----------|--------------|
|-------|----|----------|--------------|

| Variable                       | Formula  | Expected sign |
|--------------------------------|--|---------------|
| Dependent variable             |  |               |
| REC-trade credit               | Amount of trade credit extended/total sales                            | NA            |
| Independent variable           |  |               |
| CG1<br>BSIZE-board size        | Number of board members  | -             |
| CG2<br>BIND-board independence | Number of independent directors/Total number of directors in the board | -             |
| FSIZE-firm size                | Natural logarithm of total assets                                      | -             |
| SGROWTH-sales growth           | (Salet – Salet-1)/Salet-1  | +             |
| STFIN-short-term finance       | Short-term debt to total assets  | +             |
|                                | Individual effects   | NA            |

Source: author's compilation

#### Table 2: Descriptive statistics

| Variable | Obs   | Mean   | Std. Dev. | Min    | Max     |
|----------|-------|--------|-----------|--------|---------|
| Rec      | 5,715 | 0.340  | 1.515     | 0.000  | 48.424  |
| Size     | 5,715 | 27.495 | 1.626     | 23.322 | 33.990  |
| Bsize    | 5,715 | 5.431  | 1.224     | 1.000  | 11.000  |
| Bind     | 5,715 | 15.513 | 17.385    | 0.000  | 100.000 |
| Sgrow    | 5,715 | 0.402  | 4.418     | -0.993 | 244.456 |
| Liquid   | 5,715 | 0.611  | 0.234     | 0.005  | 1.000   |
| Stfin    | 5,715 | 0.812  | 0.235     | 0.029  | 1.000   |

Source: author's calculation from research sample

#### Table 3: Correlation matrix

|        | Rec     | size    | Bsize   | Bind    | Sgrow  | Liquid | Stfin  |
|--------|---------|---------|---------|---------|--------|--------|--------|
| Rec    | 1.0000  |         |         |         |        |        |        |
| Size   | -0.0334 | 1.0000  |         |         |        |        |        |
| Bsize  | -0.067  | 0.3172  | 1.0000  |         |        |        |        |
| Bind   | -0.0146 | 0.1524  | 0.0567  | 1.0000  |        |        |        |
| Sgrow  | -0.0002 | -0.0247 | -0.0351 | -0.0083 | 1.0000 |        |        |
| Liquid | 0.0267  | -0.1828 | -0.1188 | -0.0568 | 0.0054 | 1.0000 |        |
| Stfin  | 0.0258  | -0.3672 | -0.1314 | -0.0691 | 0.0184 | 0.5935 | 1.0000 |

Source: author's calculations from research sample

firm's operational risk. As the investment in trade receivables would tie up funds for other activities for some amount of time, this inconvenience might be significant in a country with few financing options for firms<sup>21</sup>. In this case, firms have to forgo investment in other opportunities. In addition, firms can also lose capital if the buyer fails to honor their liabilities. Pattnaik et al. <sup>47</sup> analyze nonfinancial firms in India and show that board size is negatively related to trade receivables.

This result also aligns with the previous studies on the relationship between board size and firm performance. Studying a sample of 10314 firm-year observations in 34 countries, Pucheta-Martinez & Gallego-Alvarez<sup>48</sup> suggest that board characteristics, such as board size and board independence, positively affect firm performance. Nepal and Deb<sup>32</sup> examine whether board size and board independence impacted the financial performance of the Indian textile firms from 2015 to 2019, documenting a positive association between board size and firm performance. The findings must align with the view that a larger board size might lead to various challenges, including ineffective coordination and diverse member objectives <sup>34,49</sup>. In the context of Vietnamese firms, despite potential drawbacks associated with larger boards, the advantages of having a more extensive pool of experienced individuals overseeing companies appear noteworthy, especially in an environment characterized by low institutional quality and significant levels of information asymmetry.

Iskander and Chamlou<sup>50</sup> suggest that corporate governance aims to enhance the effective utilization of resources and strengthen accountability in managing those resources. Existing literature underscores the significance of the board of directors as a crucial and highly efficient internal component of corporate governance. The board serves two vital functions within companies: overseeing and evaluating executive management on behalf of shareholders and supplying business resources. In their supervisory capacity, boards invest time and resources to monitor both firm performance and the managers' conduct.

Concerning the second proxy of corporate governance, board independence (BIND) is insignificantly related to receivables, which does not extoll the role of proper corporate governance in managing firms' operational risk. The result contradicts the hypothesis H2 on the link between independent directors and trade receivables. Pattnaik et al.<sup>47</sup> use a dataset comprising nonfinancial firms in India and OLS and fixed effects model and show that board independence is negatively related to trade receivables.

The result does not necessarily negate the view of the Resource dependency theory<sup>32</sup> that more independent directors enable more comprehensive access to resources and enhance financial performance. The positive role of the independent directors in the emerging economies has been considered of utmost importance as the tendency of the economy to face instability and various external shocks in the economy along with the problems in liquidity and infrastructure have been considered to be high<sup>51</sup>. The positive relationship between board independence and performance in the family and non-family corporate ownership structure has been documented 37,52. The insignificant effect of board independence may be due to both the positive and negative effects. Since independent directors might not understand the firm's operations adequately, a higher proportion of the outside directors could negatively affect on the optimality of the firm's operations.

Table 5 provides estimates of the empirical model using the System Generalized Method of Moments. We further use the System Generalized Method of Moments to estimate the models to check robustness of the findings. The p-values of the tests of autocorrelation tests of order two and overidentification are more significant than 5 percent, indicating that the valid use of instruments and the estimates are valid for statistical inferences<sup>46</sup>.

Table 5 results similar results to those in Table 4. Specifically, board size is negatively associated with trade receivables, while board independence is not significant. The similar results confirm the robustness of the findings. Pattnaik et al. do not find a significant relationship between board size and board independence and trade receivables for a sample of Indian firms, when the author uses the System GMM estimator. The author did not control for the effect of industry characteristics. The insignificant effect of the two factors might be due to the failure to control the industry characteristics. In our study, we consistently control for the critical industry effects.

#### CONCLUSION AND IMPLICATIONS

Trade credit provides essential liquidity and spurs economic activities, especially in developing countries. Two conditions that render the study extraordinarily relevant and essential in developing countries. First, firms in developing countries might need help to obtain external financing to redirect the funds to their suppliers. Therefore, extending trade credit is quite costly and might erode firm performance. Second, given the nature of high levels of information asymmetry and inadequate institutional quality, the role

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|-------------------------|-------------------|-------------------|---------------------|-------------------------|
|                         |                   |                   |                     |                         |

| Table 4: | Random | effects model | estimates |
|----------|--------|---------------|-----------|
|----------|--------|---------------|-----------|

| lable 4: Random effe | cts model estimates |           |           |           |
|----------------------|---------------------|-----------|-----------|-----------|
|                      | Rec                 | Rec       | Rec       | Rec       |
| Bsize                | -0.0653***          | -0.0567** |           |           |
|                      | (-2.95)             | (-2.55)   |           |           |
| Bind                 |                     |           | -0.00182  | -0.00185  |
|                      |                     |           | (-1.39)   | (-1.42)   |
| Size                 | -0.023              | -0.0374   | -0.0334   | -0.0474** |
|                      | (-0.92)             | (-1.49)   | (-1.45)   | (-2.09)   |
| Sgrow                | -0.0140**           | -0.0144** | -0.0139** | -0.0145** |
|                      | (-2.49)             | (-2.45)   | (-2.54)   | (-2.49)   |
| Liquid               | 0.128               | -0.0237   | 0.145     | -0.00875  |
|                      | (0.64)              | (-0.10)   | (0.71)    | (-0.04)   |
| Stfin                | -0.055              | 0.102     | -0.0524   | 0.108     |
|                      | (-0.30)             | (0.49)    | (-0.29)   | (0.51)    |
|                      |                     | (2.56)    |           | (2.13)    |
| _cons                | 1.300*              | 1.648**   | 1.246*    | 1.683**   |
|                      | (1.74)              | (2.14)    | (1.75)    | (2.28)    |
| Industry dummies     | no                  | yes       | no        | yes       |
| No of obs.           | 5715                | 5715      | 5715      | 5715      |

Source: author's calculations from research sample. \*, \*\* and \*\*\* indicate significant at 10, 5 and 1 percent. Numbers in brackets are test statistics.

of corporate governance which covers board characteristics is highly relevant in determining the level of trade credit granted.

The present study aims to determine whether the board characteristics significantly influence over trade credit among listed firms in Vietnam. This developing country which should be a highly relevant research setting for the link between board characteristics and trade receivables. It also provides new empirical insights on the determinants of trade credit in an emerging market. Trade credit is a crucial source of finance for listed firms in Vietnam. It also contributes to need for more academic work linking the impact of corporate governance on trade credit.

Using the random effects model and the System Generalized Method of Moments, the research shows that board size is negatively related to trade receivables. This implies that a giant board tends to act as a monitoring mechanism and prevent firms from extending much trade credit which could increase implicit costs. However, board independence is not related to trade credit extension. This could be due to the two contrasting effects of this factor. Even though independent directors bring new insights and resources, and are objective in observing the management team, they need more expertise in the firm than insiders. The first implication of this study is to first verify whether on average increased trade credit extension harms firm performance. If yes, firms could take advantage of more directors on the board to monitor the management in their decisions regarding trade receivables. Furthermore, in order to benefit from independent directors, firms could prioritize those with solid experience in the related fields to offer decent views on the level of receivables in the firms.

The research has some limitations. First, we only have data on some board characteristics, such as board size and board independence. Future research could explore other characteristics such as board gender or the educational background of board members.

# **ABBREVIATIONS**

**CEO:** Chief Executive Officer **GMM:** Generalized Method of Moments **NA:** Not available

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| Table 5: System GMM estimates |  | Table | 5: 9 | System | GMM | estimates |
|-------------------------------|--|-------|------|--------|-----|-----------|
|-------------------------------|--|-------|------|--------|-----|-----------|

| Table 5. System GMM estimates |           |           |
|-------------------------------|-----------|-----------|
|                               | Rec       | Rec       |
| L.Rec                         | 0.0745*** | -0.391*** |
|                               | (12.87)   | (-30.84)  |
| Bsize                         | -0.253*** |           |
|                               | (-3.21)   |           |
| Bind                          |           | -0.00406  |
|                               |           | (-1.58)   |
| Size                          | 0.0497    | 0.0703    |
|                               | (0.77)    | (0.91)    |
| Sgrow                         | -0.176*** | -0.273*** |
|                               | (-7.22)   | (-5.99)   |
| Liquid                        | -1.212*** | 0.859**   |
|                               | (-4.41)   | (2.09)    |
| Stfin                         | 1.355***  | -0.726    |
|                               | (3.76)    | (-1.56)   |
| _cons                         | 10.26     | -45.58*** |
|                               | (0.89)    | (-2.71)   |
| Industry dummies              | yes       | yes       |
| No of obs                     | 5033      | 5033      |
| AR2 test p-value              | 0.614     | 0.154     |
| Hansen test p-value           | 0.584     | 0.154     |

Source: author's calculations from research sample. \*, \*\* and \*\*\* indicate significant at 10, 5 and 1 percent. Numbers in brackets are test statistics.

# **CONFLICT OF INTEREST**

The authors declare that they have no conflicts of interest"

# **AUTHORS' CONTRIBUTION**

Author Nguyen Thanh Liem came up with the idea, built hypotheses, collected data, performed regression and analyzed the results.

Author Nguyen Thi Thao Vy reviews the empirical studies, writes conclusions and gives implications.

# REFERENCES

- Levine R, Loayza N, Beck T. Trade credit and access to finance. World Development. 2018; 36(2): p. 199-229;Available from: https://doi.org/10.1093/jae/ejz018.
- Yang J, Birge JR. Trade credit, risk sharing and inventory financing portfolios. Management Science. 2018; 64(8); p. 3667-3689;Available from: https://doi.org/10.1287/mnsc.2017. 2799.
- Pham QV, Tran QP. Does trade credit spur firm performance? A case study in Vietnam. International Journal of Economics and Business Administration. 2020; 0(3): p. 215-227;Available from: https://doi.org/10.35808/ijeba/497.

- Mahmud A, Miah M, Bhuiyan M. Does trade credit financing affect firm performance? Evidence from an emerging market. International Journal of Financial Studies. 2022; 85: p. 3-19;Available from: https://doi.org/10.3390/ijfs10040085.
- D'Mello R, Toscano F. Economic policy uncertainty and shortterm financing: The case of trade credit. Journal of Corporate Finance. 2020; 64: p. 1-23;Available from: https://doi.org/10. 1016/j.jcorpfin.2020.101686.
- Barrot J. The effects of trade credit on firm performance: Evidence from French manufacturing firms. Journal of Business Research. 2016; 69(12): p. 5703-5710;Available from: https: //doi.org/10.1111/jofi.12371.
- Box T, Davis R, Hill M, Lawrey C. Operating performance and aggressive trade credit policies. Journal of Banking & Finance. 2018; 89: p. 192-208;Available from: https://doi.org/10.1016/j. jbankfin.2018.02.011.
- Li D, Lu Y, Ng T, Yang J. Does trade credit boost firm performance? Economic Development and Cultural Change. 2016; 64(3): p. 573-602;Available from: https://doi.org/10. 1086/685764.
- Demirguc-Kunt A, Maksimovic V. Law, finance and firm growth. 1998; p. 1-44;Available from: https://doi.org/10.2139/ ssrn.139825.
- Jensen MC, Meckling WH. Theory of the firm: managerial behaviour, agency costs and ownership structure. J Financ Econ. 1976; 3: p. 305-360;Available from: https://doi.org/10.1016/

#### Science & Technology Development Journal – Economics - Law and Management 2024, 8(1):5078-5088

0304-405X(76)90026-X.

- McGuinness G, Hogan T, Powell R. European trade credit use and SME survival. Journal of Corporate Finance. 2018; 49: p. 81-103;Available from: https://doi.org/10.1016/j.jcorpfin.2017. 12.005.
- Hermes N, Lensink R, Lutz C, Thu U. Trade credit use and competition in the value chain. Economics of transition and institutional change. 2016; 24(4): p. 765-795; Available from: https: //doi.org/10.1111/ecot.12106.
- Choi WG, Kim Y. Trade credit and the effect of macro-financial shocks: Evidence from US panel data. Journal of Financial and Quantitative Analysis. 2005; 40: p. 897-925;Available from: https://www.jstor.org/stable/27647229.
- Cosci S, Guida R, Meliciani V. Does trade credit really help relieving financial constraints? European Financial Management. 2020; 26: p. 198-215;Available from: https://doi.org/10. 1111/eufm.12211.
- Giannetti M, Burkart M, Ellingsen T. What you sell is what you lend? Explaining trade credit contracts. Review of Financial Studies. 2011; 24: p. 1261-98;Available from: https://doi.org/ 10.1093/rfs/hhn096.
- Fisman R, Love I. Trade credit, financial intermediaries, and firm financing. Journal of Financial Economics. 2003; 68(3), p. 515-540:Available from: https://www.istor.org/stable/3094490.
- Huang L, Ying Q, Yang S, Hassan, H. Trade credit financing and sustainable growth of firms: empirical evidence from China. Sustainability. 2019; 11(4): 1032;Available from: https://doi. org/10.3390/su11041032.
- Mian SL, Smith CW. Accounts receivable management policy: Theory and evidence. The Journal of Finance. 1992; 47(1): p. 169-200;Available from: https://doi.org/10.2307/2329094.
- Białowolski P. Impact of Overdue Receivables on Economic Decisions of Enterprises. Prace i Materiały, Instytut Rozwoju Gospodarczego (SGH). 2011; 86(2): p. 67-79;Available from: http://194.145.100.18/repec/files/wsd/irgpim/wsd\_irgpim\_ v86\_2011\_i2\_n3\_2.pdf.
- Myers SC, Majluf NS. Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics. 1984; 13(2): p. 187-221;Available from: https://doi.org/10.1016/0304-405X(84) 90023-0.
- Detthamrong U, Chansanam W. Do the trade credit influence firm performance in agro-industry? Evidence from Thailand. Heliyon. 2023; 9(3): e14561;Available from: https://doi.org/10. 1016/j.heliyon.2023.e14561.
- Jacobson T, Schedvin, EV. Trade Credit and the Propagation of Corporate Failure: An Empirical Analysis. Econometrica. 2015; 83: p. 1315-1371;Available from: https://www.jstor.org/stable/ 43616972.
- Dankiewicz R. Impact of Overdue Receivables on the Condition of Polish Enterprises: A Sector Analysis. Oeconomia. 2018; 52(1): p. 39-48;Available from: http://dx.doi.org/10.17951/h. 2018.52.1.39.
- Dary SK, James HS. Does investment in trade credit matter for profitability? Evidence from publicly listed agro-food firms. Research in International Business and Finance. 2019; 47(C): p. 237-250;Available from: https://doi.org/10.1016/j.ribaf.2018. 07.012.
- 25. Afrifa G. Trade credit and firm performance. SSRN. 2015;Available from: https://ssrn.com/abstract=2643816.
- Osiichuk D, Wnuczak P. Do generous trade credit terms provide a competitive edge? Asia-Pacific Journal of Business Administration. 2022; 14(1): p. 72-100;Available from: https://doi. org/10.1108/APJBA-03-2021-0120.
- Farooq U, Ahmed J, Ashfaq K, Tabash M. Trade credit as a determinant of firm's financial performance: moderating role of bank financing. Global Business Review. 2021; p. 1-21;Available from: https://doi.org/10.1177/ 09721509211036860.
- Gill A, Shah C. Determinants of corporate cash holdings: Evidence from Canada. International Journal of Economics and Finance. 2012; 4(1): p. 70-79; Available from: https://doi.org/10.

5539/ijef.v4n1p70.

- Pfeffer J, Salancik G. The external control of organizations: a resource dependency perspective. SSRN. 1978;Available from: https://papers.srn.com/sol3/papers.cfm?abstract\_id=1496213.
- Fauzi F, Locke S. Board structure, ownership structure and firm performance: A study of New Zealand listed-firms. Asian Academy of Management Journal of Accounting and Finance 2012, 8(2), p. 43-67;Available from: https://doi.org/10.2139/ ssrn.2047218.
- 31. Akhtaruddin M, Hossain MA, Hossain M, Yao L. Corporate governance and voluntary disclosure in corporate annual reports of Malaysian listed firms. Journal of Applied Management Accounting Research. 2009; 7(1): p. 1-19;Available from: https://www.researchgate.net/publication/237435847\_ Corporate\_Governance\_and\_Voluntary\_Disclosure\_in\_ Corporate\_Annual\_Reports\_of\_Malaysian\_Listed\_Firms.
- Nepal M, Deb R. Board characteristics and firm performance: Indian textiles sector panorama. Management and Labour Studies. 2022; 47(1): p. 74-96;Available from: https://doi.org/ 10.1177/0258042X211026.
- Coles JL, Daniel ND, Naveen L. An examination of the relationship of governance mechanisms to performance. J Manag. 2008; 27: p. 23-50;Available from: https://doi.org/10.1177/ 0149206301027001.
- Merendino A, Melville R. The board of directors and firm performance: Empirical evidence from listed companies. Corporate Governance. 2019; 19(3): p. 508-551;Available from: https://doi.org/10.1108/CG-06-2018-0211.
- Bennedsen M, Kongsted HC, Nielsen KM. The causal effect of board size in the performance of small and medium-sized firms. Journal of Banking & Finance. 2008; 32(6): p. 1098-1109;Available from: https://doi.org/10.1016/j.jbankfin.2007. 09.016.
- Kim K, Mauldin E, Patro S. Outside directors and board advising and monitoring performance. Journal of Accounting and Economics. 2014; 57(2-3): p. 110-131;Available from: http: //dx.doi.org/10.1016/j.jacceco.2014.02.001.
- Leung S, Richardson G, Jaggi B. Corporate board and board committee independence, firm performance, and family ownership concentration. Journal of Contemporary Accounting & Economics. 2014; 10(1): p. 16-31;Available from: https://doi. org/10.1016/j.jcae.2013.11.002.
- Tran QT, Truong T. Independent directors and firm performance: Evidence from Vietnamese stock market. Tap chi Khoa hoc & Dao tao Ngan hang. 2019; 207: p. 13-23;Available from: https://hvnh.edu.vn/tapchi/vi/thang-8-19/tran-quoctrung-luong-thi-thuy-trang-independent-directors-and-firm-performance-evidence-from-vietnamese-stock-market-304.html.
- 39. Pham and Nguyen???;.
- Hamdan AMM, Al Mubarak, MMS. The impact of board independence on accounting-based performance: Evidence from Saudi Arabia and Bahrain. Journal of Economic and Administrative Sciences. 2017; 33(2): p. 114-130;Available from: https: //doi.org/10.1108/JEAS-03-2017-0012.
- Adhikary BK, Hoang LHG. Board structure and firm performance in emerging economies: Evidence from Vietnam. Ruhana Journal of Management and Finance. 2014; 1(1): p. 53-72;Available from: https://researchmap.jp/7000005707/ published\_papers/13515103/attachment\_file.pdf.
- World Bank. Vietnam overview. 2023 (accessed 31 December 2023);Available from: https://www.worldbank.org/en/country/ vietnam/overview.
- Petersen MA, Rajan, RG. Trade credit: theories and evidence. Review of Financial Studies. 1997; 10(3): p. 661-691;Available from: https://doi.org/10.1093/rfs/10.3.661.
- Garcia-Teruel PJ, Martinez-Solano P. Determinants of trade credit: a comparative study of European SMEs. International Small Business Journal. 2010a; 28(3): p. 215-233;Available from: https://doi.org/10.1177/0266242609360.
- 45. Garcia-Teruel PJ, Martinez-Solano, P. A dynamic perspec-

tive on the determinants of accounts payable. Review of Quantitative Finance and Accounting 2010b; 34(4): p. 439-457; Available from: https://doi.org/10.1007/s11156-009-0124-0.

- Roodman, D. A note on the theme of too many instruments. Oxford Bulletin of Economics and Statistics. 2009; 71(1): p. 135-158;Available from: https://doi.org/10.1111/j.1468-0084. 2008.00542.x.
- Pattnaik D, Baker K, Kumar S. Factors affecting trade credit in India. International Review of Economics & Finance. 2023; 88: p. 634-649;Available from: https://doi.org/10.1016/j.iref.2023. 07.005.
- Pucheta-Martinez M, Gallego-Alvarez I. Do board characteristics drive firm performance? Review of Managerial Science. 2020; 14: p. 1251-1297;Available from: https://doi.org/ 10.1007/s11846-019-00330-x.
- 49. Kota HB, Tomar S. Corporate governance practices in Indian

firms. Journal of Management & Organization. 2010; 16(2): p. 266-279; Available from: https://doi.org/10.5172/jmo.16.2.266.

- Iskander M, Chamlou N. Corporate governance: a framework for implementation (English). Washington, D.C. World Bank Group. 2000;Available from: http: //documents.worldbank.org/curated/en/810311468739547854/ Corporate-governance-a-framework-for-implementation.
- Park SW, Choi, JJ, Yoo, SS. The value of outside directors: Evidence from corporate governance reform in Korea. Journal of Financial and Quantitative Analysis. 2007; 42(4): p. 941-962;Available from: https://www.jstor.org/stable/27647330.
- Dunn P, Sainty B. The relationship among board of director characteristics, corporate social performance and corporate financial performance. International Journal of Managerial Finance. 2009; 5(4): p. 407-423;Available from: https://doi.org/ 10.1108/17439130910987558.

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# Tác động của quy mô và tính độc lập của hội đồng quản trị đến khoản phải thu tại Việt Nam

Nguyễn Thanh Liêm<sup>1,2,\*</sup>, Nguyễn Thị Thảo Vy<sup>1,2</sup>

#### TÓM TẮT

Tín dụng thương mại đóng một vai trò quan trọng đối với hiệu quả hoạt động của công ty và quản trị doanh nghiệp phù hợp giúp quản lý tín dụng thương mại đạt hiệu quả cao nhất. Do tính chất bất cân xứng thông tin ở mức độ cao và chất lượng thể chế còn yếu ở các nước đang phát triển, vai trò của hội đồng quản trị là quan trọng trong việc xác định mức tín dụng thương mại được cấp. Măc dù tín dung thương mai có thể giúp doanh nghiệp giành được khách hàng nhưng việc gia tăng tín dụng thượng mại quá mức khiến doanh nghiệp có nguy cơ bị người mua chiếm dụng vốn lưu động và tính thanh khoản thấp gây cản trở cho hoạt động của doanh nghiệp, hoặc thậm chí dẫn đến phá sản. Ở một quốc gia đạng phát triển như Việt Nam, hội đồng quản trị có thể giúp ngăn chặn những hoạt động có hại cho hiệu quả hoạt động của doanh nghiệp. Mục đích của bài nghiên cứu này là điều tra mối quan hệ giữa hai đặc điểm của hội đồng quản trị và các khoản phải thu thương mại ở Việt Nam sử dụng dữ liệu từ năm 2010 đến năm 2022. Nghiên cứu sử dụng các phương pháp ước lượng cho dữ liệu bảng thông thường, bao gồm mô hình tác động ngẫu nhiên và Phương pháp mô men tổng quát hệ thống. Kết quả cho thấy quy mô hội đồng quản trị có xu hướng giảm các khoản phải thu, hàm ý rằng hội đồng quản trị lớn hơn ngăn cản các công ty cấp tín dụng thương mại nhiều, điều này có thể dẫn đến tăng chi phí ngầm và làm giảm tính thanh khoản của công ty. Kết quả này hàm ý rằng các công ty được hưởng lợi nhiều hơn với hội đồng quản trị lớn hơn thay vì gặp phải trở ngại trong việc phổi hợp do hội đồng quản trị đông hơn. Tuy nhiên, tính độc lập của hội đồng quản trị không giúp hạn chế việc gia tăng tín dụng thương mại. Kết quả này phủ nhận quan điểm cho rằng doanh nghiệp được lợi nhiều hơn từ thành viên HĐQT độc lập, và thành viên HĐQT độc lập không nhất thiết giúp nâng cao năng lực quản trị doanh nghiệp ở Việt Nam. Dựa trên những kết quả này, nghiên cứu đưa ra những hàm ý về vai trò giám sát và quản lý chiến lược của hội đồng quản trị, đặc biệt là ở một nước đang phát triển.

**Từ khoá:** đồng quản trị, tính độc lập của hội đồng quản trị, khoản phải thu, các quốc gia đang phát triển

<sup>1</sup>Trường Đại học Kinh tế - Luật, Tp. Hồ Chí Minh, Việt Nam.

<sup>2</sup>Đại học Quốc gia Tp. HCM, Việt Nam.

#### Liên hệ

Nguyễn Thanh Liêm, Trường Đại học Kinh tế - Luật, Tp. Hồ Chí Minh, Việt Nam.

Đại học Quốc gia Tp. HCM, Việt Nam.

Email: liemnt@uel.edu.vn

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