Tam, Le Thanh, Ngan, Nguyen Phuong, Trung, Nguyen Trong, and Minh, Cao Phuong. (2020), Banking Relationship Ties to Firm Performance: Evidence from Food and Beverage Firms in Vietnam. In: Journal of Economics and Business, Vol.3, No.2, 602-616.

ISSN 2615-3726

DOI: 10.31014/aior.1992.03.02.224

The online version of this article can be found at: https://www.asianinstituteofresearch.org/
Banking Relationship Ties to Firm Performance: Evidence from Food and Beverage Firms in Vietnam

Le Thanh Tam1 Nguyen Phuong Ngan2 Nguyen Trong Trung3 Cao Phuong Minh4

1 School of Banking and Finance, National Economics University, Vietnam
2 School of Advanced Education Programs, National Economics University, Vietnam
3 School of Advanced Education Programs, National Economics University, Vietnam
4 School of Advanced Education Programs, National Economics University, Vietnam

Correspondence: Le Thanh Tam, School of Banking and Finance, National Economics University, Vietnam, 207 Giai Phong Road, Vietnam. Tel: +84-909 342 488; Email: tamlt@neu.edu.vn

Abstract
This paper is aimed at analyzing the effects of banking relationship on performance of Vietnamese firms in Food and Beverage (F&B), one of the highest potential sectors. Panel data of 170 observations covers 34 F&B firms listed in the Vietnam stock exchanges in the period 2014-2018. The fixed effect model (FEM) is applied. The key findings are: First, short-term loan financing, leverage, and fixed asset ratios all negatively impacted on F&B firm performance, while firm size and net profit margin had positive impacts. These findings were consistent with previous studies. Second, the opposite results with previous studies were: (i) negative corelation of ROE and number of banks firms working with, as F&B firms were inefficient in selecting bank partners; (ii) positive relation of short-term liabilities ratio and ROA/ROE, as F&B firms utilize other non-bank liabilities shortly; (iii) foreign ownership had negative relationship with ROA& ROE. Foreign investors did not have significant roles in most F&B firms. Third, long-term borrowing from banks, state ownership and ages all insignificantly correlated with firm performance. Recommendations to F&B firms include: (1) Reduce the short-term loans and fixed assets investment, while increase the cheap equity funding sources via shareholders (2) Be selective in working with banks to have better fees and interest saved with banks. (3) Utilize other short-term liabilities, including payables and advances – the low-cost funding sources. F&B firms have good bargaining powers in requesting advances from their clients. (4) Have smart buy-in strategies on foreign ownership.

Keywords: Bank Relationship, Firms’ Performance, Foreign Ownership, Leverage, Vietnamese Food and Beverage Listed Firms

1. Introduction

Literature have several discussions on the determinants of firm performance, focusing on firms’ internal factors such as size and age, export propensity, ownership, organizational innovation (Burger, Damijan, Kostevc &
Rojec, 2017; Thi Thuc Anh Phan, 2019). However, bank relationship is becoming an increasingly important factor. It can bring great benefits to both banks and firms, expanding their market and reputation (Diamond, 1984; Best & Zhang, 1993; Belaid, Boussaada & Belguith, 2017; Bonfirm, Dai, & Franco, 2018; Nguyen Thu Hang, Khuu Thanh Quy & Nguyen Ngoc Dieu Le, 2018). However, this relationship can also cause negative effects on firm performance due to four problems: holdup, soft-budget constraint, liquidity risk and asymmetric information problem (Diamond, 1991; Weinstein, & Yafeh, 1998; Ongena, & Degryse, 2001; Chen, Li & Zhang, 2016; Höwer, 2016; Yildirim, 2019). Therefore, how to confirm this relationship in specific conditions for improving firm performance is interesting for exploration.

Vietnam has been one of remarkable development markets with almost 97 million population in golden age and fast-growing economy (GDP growth rate of 6.51%/year in period 2000-2020) (Trading Economics, 2020). However, Vietnam is still the bank-based economy, with more than 80% of firms’ funding sources from banking system (Vuong, 2019; SBV, 2020). Even for listed firms, borrowing from banks are still common.

The Vietnamese F&B industry is very promising and potential, expected to maintain average growth of 10.9% per year thanks to household income improvement and consumer trend on higher value products will dominate the tastes consumption. The golden age population with eat-out habits lightened the future for this sector (Lien Nguyen, 2018; Kantar, 2019; Nielson, 2020; Le Ha, 2020). However, these firms are facing with several challenges in the future because of regulation changes (GoV, 2020) and the unexpected events such as COVID-19 pandemic.

Therefore, analysing the determinants of F&B firm performance, focusing on utilizing bank relationship and fundings are interesting for Vietnam case. Le & Nguyen (2012) did the assessment on the impact of long-term debts on F&B firm performance, while Nguyen (2017) did the analysis of determinants on F&B firms in Vietnam. However, none have considered bank relationship in wider aspects and put into account the ownership problems. This is the research gap for our study in period 2014-2018.

This paper is aimed at answering four critical research questions: (i) What are the determinants of F&B firm performance in Vietnam? (ii) What are the components of the banking-firm relationship in Vietnam? (iii) How such banking relationship’s variables affect to Vietnamese F&B listed firm performance and why? (iv) What are the implications for improving F&B firm performance via utilizing the bank relationship?

2. Literature review

Firm performance
Firm’s performance can be measured by two main indicators: financial efficiency and profitability (Walker & Brown, 2004; Reijonen, & Komppula, 2007). Companies’ financial results play an important part in the existence of them (Li, Markowski, Xu & Markowski, 2008; Nguyen Thu Hang, Khuu Thanh Quy, Nguyen Ngoc Dieu Le, 2018; Thi Thuc Anh Phan, 2019). Many different previous researches proposed various methods to measure the performance of firms. Among those probability ratios, return on equity (ROE) and return on asset (ROA), are appeared in many corporate governance studies (Yermack, 1996; Anderson & Reeb, 2003).

Bank-firm relationship
The bank – firm relationship is known as the long-term connection between a depository organization and an enterprise to provide financial services in addition to normal transactions (Udell & Berger, 1998). Typically, this banking relationship can be classified into two different relations: close and transaction. The banking relationship convey the benefits to either deposit institutions or businesses. The bank provides steady financial protection for the business, and in return, the firm offers profit and many other perks. Moreover, bank will hold firms’ shares with the banking system in exchange when providing a long-term lending relation and various banking services. Additionally, there are various factors which are being taken into consideration by firms when establishing the relationship with bank and those determinants include: number of banking relationship, size of the bank and ownership of banks (Aristei, Gallo & Angori, 2016).
The bank-firm relationships can bring benefits but also drawbacks to both parties. Following is the summary of literature review on this relationship.

Table 1. Summary of Literature Review on Bank-Firm Relationship

| Paper | Main Findings |
|-------|---------------|
| **Benefits of bank-firm relationship for banks** |
| (Diamond, 1984); (Rajan, 1992); (Thadden, 1995) | Banks can both acquire the cost-effectiveness in managing activities and find out diversification is an effective way to alleviate problem of the agency |
| (Limpaphayom & Polwitoon, 2004); (Prowse, 1990); (Agarwal & Elston, 2001) | Close bank-firm relationship plays a role as a solution to secure the creditors’ wealth against the action of shareholders |
| (Jensen & Meckling, 1976); (Weinstein, & Yafeh, 1998) | Banking relationship is a useful tool used in reducing the information asymmetric and incentive issues |
| **Benefits of bank-firm relationship for firms** |
| (Bonfirm et al., 2018) | Ongoing banking relationship with a clean credit record can be considered as a certificate for firm in defending the moral hazard problem |
| (Best & Zhang, 1993); (Bonfirm et al., 2018) | The more acknowledgement the public know about the bank loan; the higher company’s share price can be |
| (Hoshi, Kashyap & Scharfstein, 1990); (Belaid, Boussaada & Belguit, 2017); (Aristei et al., 2018); (Rajan & Petersen (n.d); (NguyenThu Hang et al, 2018) | Strong relationship with bank ensures a stable financial background and a strong credibility for the firm, attracting outsiders to invest and consequently, diversifying the number of sources of financing in the future |
| (Li et al., 2018); (Bonfirm et al., 2018); (NguyenThu Hang et al, 2018) | Firms can reduce the expenditure and cost |
| (Ongena & Degryse, 2001); (Le & Nguyen, 2012) | Long-term banking relationship brings profit and avoids switching cost for firms |
| (Hoshi et al., 1990) | Banking relationship is helping firms to reduce the risk of financial during the economic turmoil by effectively maintaining the borrowings |
| (Höwer, 2016) | Close banking relationship can not only help companies avoid risk during the financial crisis but also have positive effects on the financially distressed firms |
| (Campbell, 1979); (Aristei et al., 2018); (Strahan & Weston, 1998) | The close banking relationship is more necessary to relatively small-sized firms |
| **Drawbacks of bank-firm relationship for firms** |
| (Diamond, 1991); (Ongena & Degryse, 2001); (Chen et al., 2016); (Yildirim, 2019); (Castelli, Gerald & Hasan, 2006); (Höwer, 2016) | Bank may raise the required interest rate easily, which has negative effects to firms in relationship |
| (Weinstein & Yafeh, 1998); (Rajan, 1992) | The close relationship with bank tends to limit the firms from maximizing profitability as banks control over the firms in making investment |
(Weinstein & Yafeh, 1998); (Yasuda, A. 2005) (Agarwal, R. & Elston, J. A., 2001) (Arikawa, Y., & Miyajima, H., 2005) The deregulation in lending process will gradually turns the relationship to be less supportive to the funding process in long-term.

Source: Authors’ compilation from literature review

3. Data and method

Data
The data of this research is derived from financial statements and published reports of Vietnamese officially listed firms on the F&B Industry in Hanoi Stock exchange and HoChiMinh City Stock Exchange. Among 55 listed F&B firms, only 34 were chosen after omitting the firms with missing data and outliers (with Z-score analysis) to avoid interruption during the analysis process. Therefore, total final sample of 34 listed F&B firms in 5-year period (2014-2018) includes 170 observations for this study. The full name of these firms presents in appendix A.4.

Research approach and model
With panel data, either fixed effects model (FEM) or random effects model (REM) is proposed for regression analysis. The Hausman test is used to check the difference between the coefficient estimates observed by fixed and random effect at statistically significant level. Also, the heteroscedasticity and autocorrelation should be also tested and fixed in order to have a soundness estimation. Wald test is used to check heteroskedasticity while Durbin-Watson test is used to check autocorrelation. Following is the summary of research model and hypotheses bases on literature review in this article.

Table 2. Expected Relationship Between Variables And Firm Performance

| Variable | Code  | Formula | Hypothesis | References |
|----------|-------|---------|------------|------------|
| **Dependent variables** |       |         |            |            |
| Return on equity | ROE  | \(\frac{Net\ income_{t,t}}{Total\ Average\ Equity_{t,t}}\) |            |            |
| Return on asset | ROA   | \(\frac{Net\ income_{t,t}}{Total\ Average\ Asset_{t,t}}\) |            |            |
| **Independent variables** |       |         |            |            |
| Quantity of bank relations | Bank_num | Number of banks providing firm loans | Positive | (Castelli et al., 2006); (Vu & Nguyen, 2013) |
| | Bank_num^2 | The square of Bank_num | Negative |            |
| Short-term credit financing relationships (%) | Short_financing | \(\frac{Short\ term\ bank\ loans}{Total\ Liabilities}\) | Negative | (Vo & Le, 2017) |
| Long-term credit financing relationships (%) | Long_financing | \(\frac{Long\ term\ bank\ loans}{Total\ Liabilities}\) | Positive | (Schiantarelli & Jaramillo, 2002) |
| Firm size | Size | \(Ln(Total\ Assets)\) | Positive | (Wei, Xie & Zhang, 2005); (Geroski, Mata & Portugal, 2007) |
In order to have a good comparison on F&B firm performance, both ROE and ROA as dependent variables are chosen.

Two research models are applied as followed.

**Model 1:**
ROA<sub>i,t</sub> = β₁ + β₂ Bank_num<sub>i,t</sub> + β₃ Bank_num<sup>2</sup><sub>i,t</sub> + β₄ Short_financing<sub>i,t</sub> + β₅ Long_financing<sub>i,t</sub> + β₆ Size<sub>i,t</sub> + β₇ FATA<sub>i,t</sub> + β₈ Short_term_liabilities_ratio<sub>i,t</sub> + β₉ Leverage<sub>i,t</sub> + β₁₀ Net_profit_margin<sub>i,t</sub> + β₁₁ State_ownership<sub>i,t</sub> + β₁₂ Foreign_ownership<sub>i,t</sub> + β₁₃ Age<sub>i,t</sub>

**Model 2:**
ROE<sub>i,t</sub> = β₁ + β₂ Bank_num<sub>i,t</sub> + β₃ Bank_num<sup>2</sup><sub>i,t</sub> + β₄ Short_financing<sub>i,t</sub> + β₅ Long_financing<sub>i,t</sub> + β₆ Size<sub>i,t</sub> + β₇ FATA<sub>i,t</sub> + β₈ Short_term_liabilities_ratio<sub>i,t</sub> + β₉ Leverage<sub>i,t</sub> + β₁₀ Net_profit_margin<sub>i,t</sub> + β₁₁ State_ownership<sub>i,t</sub> + β₁₂ Foreign_ownership<sub>i,t</sub> + β₁₃ Age<sub>i,t</sub>

4. Results and discussions

4.1. Overview
Vietnam has been one of remarkable development markets with almost 97 million population in golden age and fast-growing economy (GDP growth rate of 6.51%/year in period 2000-2020, increased gradually from 5.98% in 2014 to 7.02%) (Trading Economics, 2020; GSO, 2014-2019). However, Vietnam is still the bank-based economy, with more than 80% of firms’ funding sources from banking system (Vuong, 2019; SBV, 2020). Even for listed firms, borrowing from banks are still common.
Figure 1. Vietnamese GDP's Growth From 2014-2019

![Graph showing Vietnamese GDP's Growth From 2014-2019](image)

Source: GSO (2014-2019)

In Vietnam, F&B industry is very promising and potential (Lien Nguyen, 2018; Kantar, 2019; Nielson, 2020; Le Ha, 2020). The F&B industry is expected to maintain strong growth momentum until 2020 with an average growth of 10.9% per year thanks to household income improvement and consumer trend on higher value products will dominate the tastes consumption (Kantar, 2019; Nielson, 2020). According to Statista (2019), revenue in the F&B segment amounts to USD 289 million in 2020. Also, revenue is expected to show an annual growth rate (CAGR 2020-2024) of 10.1%, resulting in a market volume of USD 423 million by 2024. The golden age population with eat-out habits lightened the future for Vietnamese F&B sector (Lien Nguyen, 2018; Kantar, 2019; Nielson, 2020; Le Ha, 2020). The F&B in Vietnam may still continuously attract investment from businesses and the participation of diverse global business chains since the profitability of the F&B industry in Vietnam is still promising. However, the government Decree 100/2019/ND-CP in effective from January 2020 on penalties for alcohol-related violations by vehicle operators has been negatively affected the growth rate of the F&B industry significantly (GoV, 2019; Le Ha, 2020). In addition, the COVID-19 pandemic has spread to almost all countries in the world including Vietnam, which may create the global economic depression worldwide (Duffin, 2020; McKinsey, 2020). It may strongly impact on the Vietnam GDP’s growth in general, the revenue of the F&B industry in particular.

4.2. Results and discussions

Descriptive statistics

The statistical description summary of variables in the appendix A.1 showed that the Vietnamese F&B firms have a diversified range of banking relationship, which can up to 20 banks; but in general, most firms only maintain about 3 to 4 relationships. On average, short-term bank borrowings takes up 32% of the firms’ total debts, but long-term loans just accounted for 5.8%. In addition to borrowing from banks, firms also borrowed short-term mainly from other sources, mainly under payables (average 90% of liabilities are short-term). F&B firms have wide range of leverage ratio, from 10%-80%, but on average, the F&B firms utilize its own equity than debt, with average leverage ratio of 42%. Fixed assets are minor for these firms, with 26% of total assets. There is no Vietnamese F&B firm that is totally owned by state or foreign partners, with the portion up to 60-62% of total ownership. Most of the firms listed in the stock exchange have been established for long time, with average 25 years of operation.

Correlation matrix result

As stated in appendix A.2, variables in the model has not very high correlation case between any two variables (both dependent and independent) expect for the bank_num and bank_num^2 which are calculated based on each other and thus, the high correlation is reasonable. Size and bank_num, however, have a moderate relationship because their correlation is +0.57, which also means that the bigger the firm size, the more bank relationships a firm has. It also implies that those identified variables are relevant and there is no need to conduct the sensitivity analysis on the effect of removing violated variables, no multicollinearity problem is detected in the model.

Hausman test for selecting the model

The result of Hasman test in appendix A.3 (p-value of 0.04) confirms that FEM should be applied for this regression.
Regression results and discussions

Table 2. The Regression Result Of Fixed Effects Model

| Model                     | ROE (1)      | ROA (2)     |
|---------------------------|--------------|-------------|
| Bank_num                  | -3.0216(**)  | -1.2461     |
| Bank_num^2                | 0.1003       | 0.0361      |
| Short_financing           | -0.1214(*)   | -0.1116(***)|
| Long_financing            | -0.0148      | -0.0444     |
| Size                      | 7.6380(**)   | 5.3223(***)|
| FATA (fixed assets/total assets) | -0.2654(*** | -0.2365(***|
| Short term liabilities ratio | 0.1408(*** | 0.0803(***|
| Leverage                  | 0.0148       | -0.1052(**) |
| Net Profit Margin         | 1.7558(***   | 0.9644(*** |
| State                     | -0.0665      | -0.0517     |
| Foreign                   | -0.2844(**)  | -0.1578(**) |
| Age                       | 0.3181       | -0.3782     |
| Observations              | 170          | 170         |
| R-squared                 | 0.772243     | 0.775914    |
| Adjusted R-squared        | 0.689590     | 0.694593    |

Notes: (***): Significant at 1% level, (**) Significant at 5% level, (*) Significant at 10% level
Source: Authors’ compilation from primary data

From the regression results with two models, the key findings are:
First, short-term loan financing, leverage, and fixed asset ratios all negatively impacted on F&B firm performance, while firm size and net profit margin had positive impacts. These findings were consistent with previous studies (Nguyen, 2009; Pham, 2011; Nguyen, 2013; Vu & Nguyen, 2013; Ilyukhin, 2015; Nguyen, 2017; Vo & Le, 2017; Mohammed & Andrew, 2019). It means that F&B firms have been using expensive short-term lending from banks, due to the interest rate fluctuation. The debts were also costly to F&B listed firms for in their capital structure, as equity source is now cheaper in Vietnam. Shareholders mostly did not pay attention to dividends. They bought firm shares because of the expected price increase. Investing in fixed assets heavily was also ineffective to firms due to the high proportion of depreciation, especially with industrial revolution 4.0. In addition, in this industry, big firms have strong comparative advantages thanks to their economies of scale and economies of scopes in penetrating huge market and diversifying various products. It also implies that the F&B firms still have potential to expand its size as they did not reach the best scale yet.
Second, the opposite results with previous studies were:
(i) Negative correlation of ROE and number of banks firms working with. It showed that F&B firms were inefficient in selecting bank partners, as average 3 banks to work with/firm seem too much. Some firms also worked with 20 banks. Therefore, these F&B firms did not get the highest preference rates for their loans and other services under bank’s customer profitability analysis pricing policies.

(ii) Positive relation of short-term liabilities ratio and ROA/ROE. F&B firms who have low short-term loans from banks, but higher level of payables and advances got the better financial results, as these sources are non- or low cost. These F&B firms have strong bargaining powers thanks to their potential growth and good liquidity status. Therefore, they can ask suppliers and buyers to provide them with these facilities.

(iii) Foreign ownership status had negative relationship with ROA & ROE. The main reasons are (i) all the big and famous F&B firms in Vietnam are domestic, such as Masan, VNM, Hanoi Beer Corporation. (ii) Foreign investors did not have significant roles in most F&B firms yet. Vietnam F&B sector has attracted foreign investors (VIR, 2018). However, except for Sabeco case, Vietnamese F&B firms are still mainly dominated by domestic shareholders.

Third, long-term borrowing from banks, state ownership and ages all insignificantly correlated with firm performance. the purpose of state ownership is for control or orient economy as well as divert firm objectives to social performance, but this also provides better access to the resources to meet the demand of companies. Therefore, in this situation, particularly in the context of F&B companies in Vietnam, these two effects of state ownership would cancel each other out, leaving no net effect on the firm's performance. For the age of firms, older firms may have been doing better in business with their experience; however, they also have slow adaptability to the change in technology to upgrade its quality of products. These effects might lead to no impact of firm age on firm performance. This insignificant result of age is consistent with Nguyen, Do & Trinh (2019) for all Vietnamese listed companies.

Table 3. Summary of Bank Relationship vs F&B Firm Performance – Vietnam Case

| Variable                        | Code                  | Hypothesis | Actual signal                        | Hypothesis acceptance |
|---------------------------------|-----------------------|------------|--------------------------------------|------------------------|
| Quantity of bank relations      | Bank_num              | Positive   | Negative with ROE, insignificant with ROA | Reject                 |
|                                 | Bank_num^2            | Negative   | Insignificant                        | No conclusion          |
| Short-term credit financing relationships (%) | Short_financing          | Negative | Negative                             | Accept                 |
| Long-term credit financing relationships (%) | Long_financing          | Positive | Negative                             | Reject                 |
| Firm size                       | Size                  | Positive   | Positive                             | Accept                 |
| Asset tangibility structure     | FATA                  | Negative   | Negative                             | Accept                 |
| Short-term liabilities ratio    | Short_term_liabilities_ratio | Negative | Positive                             | Reject                 |
| Firm leverage                   | Leverage              | Negative   | Negative with ROA, insignificant with ROE | Accept                 |
| Net profit margin               | Net_profit_margin     | Positive   | Positive                             | Accept                 |
| State ownership status          | State_ownership_status| Negative   | Insignificant                        | No conclusion          |
| Foreign ownership status        | Foreign_ownership_status| Positive | Negative                             | Reject                 |
| Firm age                        | Age                   | Positive   | Insignificant                        | No conclusion          |

Source: Authors’ compilation from primary data and analysis
5. Recommendations

For improving firm performance and utilizing the bank relationship, the following recommendations are proposed for listed F&B firms in Vietnam.

First, reduce the short-term loans from banks and fixed assets investment, while increase the cheap equity funding available in the market. As firms avoid keeping unnecessary amount of short-term credit, they can eliminate high borrowings cost in short run and therefore, increase both the amount of profit gained and firms performance. To take this solution into action, companies should improve the managerial activities and process of production following the demand of markets. Also, applying more advanced technology in doing business and finally, acquiring better organized accounting procedure and market analysis with the purpose of enhancing the efficiency of bank credit. Limitation on the amount of fixed assets will save F&B firms significantly, as the fixed assets in this industry have very high depreciation rates, especially with industrial revolution 4.0. F&B firms can raise funding by issuing more shares to the public or to existing shareholders, as this is still the cheap funding source in Vietnam thanks to shareholders’ expectation on pricing changes rather than dividends.

Second, be more selective in working with banks to have better fees and interest saved. Banks usually apply the customer profitability analysis pricing policies with clients having huge transactions in total. Therefore, reduce the relationship with banks down to 2-3 maximum, not up to 20. Choose the banks which can provide the whole packages of solutions to the firms to reduce all transaction opportunity costs.

Third, utilize other short-term liabilities, focusing on payables and advances – the low-cost funding sources. F&B firms have good reputation and advantages in requesting advances from their clients. They are in good position to ask for very low or zero payables or advances. This solution also can help to increase firm sizes.

Fourth, have smart buy-in strategies on foreign ownership. A reasonable ratio of foreign ownership can give firms advantages in having stronger financial background, more professional management and chances to study from people with long-term experience, while avoiding problems from information asymmetry and deconcentration from foreign ownership. To gain that ratio, board of director of firms should think carefully about how much foreign ownership is suitable for their ownership construction and how to use the strength of foreign shareholders in managing effectively.

Fifth, increase firm size to utilize the economies of scope and economies of scale in the market. F&B firms can do that by several ways: (i) increase equity and non-bank low cost liabilities such as payables, advances, (ii) issue subordinated debts; (iii) implement M&A with other firms.

6. Acknowledgement

This paper is part of the whole research for The Student Scientific Research Competition at National Economic University (NEU), Hanoi, Vietnam. We would like to send our special thanks to the School of Advanced Education Programs, NEU, for organizing this event for lightening up our research interests.

References

Agarwal, R. & Elston, J. A. (2001). Bank–firm relationships, financing and firm performance in Germany. *Economics Letters, 72*(2), 225-232. doi:https://doi.org/10.1016/S0165-1765(01)00427-X

Anderson, R. C., Reeb, D. M. (2003). Founding-Family Ownership and Firm Performance: Evidence from the S&P 500. *The Journal of Finance, 58*(3), 1301-1327. doi:10.1111/1540-6261.00567

Arikawa, Y., & Miyajima, H. (2005). Relationship banking and debt choice: evidence from Japan. *Corporate Governance, 13*(3), 408-418. doi:https://doi.org/10.1111/j.1467-8683.2005.00435.x

Aristei, D. & Gallo, M. (2016). The determinants of firm–bank relationships in Italy: bank ownership type, diversification and multiple banking relationships. *The European Journal of Finance, 23*(15), 1512-1543. doi:https://doi.org/10.1080/1351847X.2016.1186712
Aristei, D., Gallo, M., & Angori, G. (2018). Banking relationships, firm-size heterogeneity and access to credit: evidence from European firms. *Finance Research Letters*. doi:https://doi.org/10.1016/j.frl.2019.07.004

Baum, C. F., Schaefer, D., & Talavera, O. (2007). The effects of short-term liabilities on profitability: a comparison of German and US firms. Retrieved from https://fnwww.bc.edu/ec-p/wp636.pdf

Belaid, F., Boussaada, R., Belguith, H. (2017). Bank-firm relationship and credit risk: an analysis on Tunisian firms. *Research In International Business And Finance*, 42, 532-543. doi:https://doi.org/10.1016/j.ribaf.2017.04.011

Ben, S. H. (2017). Influence of debt maturity on firm performance: an international comparison. *International Journal of Economics and Management*, 9(5). doi:https://doi.org/10.5539/ijemf.v9n5p106

Best, R. & Zhang, H. (1993). Alternative information sources and the information content of bank loans. *The Journal of Finance*, 48(4), 1507-1522. doi:https://doi.org/10.2307/2329049

Bonfirm, D., Dai, Q., & Franco, F. (2018). The number of bank relationships and borrowing costs: the role of information asymmetries. *Journal of Empirical Finance*, 46, 191-209. doi:https://doi.org/10.1016/j.jempfin.2017.12.005

Boot, A. W. (2000). Relationship banking: what do we know? *Journal of Financial Intermediation*, 9(1), 7-25. doi:https://doi.org/10.1016/S1051-5224(00)00139-6

Burger, A., Damijan, J. P., Kostevc, C. & Rojec, M. (2017). Determinants of firm performance and growth during economic recession: the case of central and eastern European countries. *Economic Systems*, 41(4), 569-590. doi:https://doi.org/10.1016/j.ecosys.2017.05.003

Campbell, T.S. (1979). Optimal investment financing decisions and the value of confidentiality. *Working Paper*. Retrieved December 19, 2019, from https://www.academia.edu/22255244/Bank_Relationships_and_Small_Firms_Financial_Performance?auto=download

Chen, Z., Li, Y., & Zhang, J. (2016). The bank–firm relationship: helping or grabbing. *International Review of Economics & Finance*, 42, 385-403. doi:https://doi.org/10.1016/j.iref.2015.10.010

Costea, V. & Brasoveanu, L. O. (n.d.). Determinants of corporate financial performance. Retrieved from http://www.dafi.ase.ro/revista/6/costea%20valentin.pdf

Dhawan, R. (2001). Firm size and productivity differential: theory and evidence from a panel of US firms. *Journal of Economic Behavior & Organization*, 44(3), 269-293. doi:https://doi.org/10.1016/S0167-2681(00)00139-6

Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *The Review of Economics Study*, 51(3), 393-414. doi:https://doi.org/10.2307/2297430

Diamond, D. W. (1991). Monitoring and reputation: the choice between bank loans and directly placed debt. *Journal of Political Economy*, 99(4), 689-721. doi:https://doi.org/10.1086/261775

Du, J., & Li, D. D. (2007). The soft budget constraint of banks. *Journal of Coparative Economics*, 35(1), 108-135. doi:https://doi.org/10.1016/j.jcej.2006.11.001

Duffin, E. (2020). *Impact of the coronavirus pandemic on the global economy - Statistics & Facts*, Statistica Report, April 3, 2020.

Ericson, R. & Pakes, A. (1995). Markov-perfect industry dynamics: a framework for empirical work. *The Review of Economics Studies*, 62(1), 53-82. doi:https://doi.org/10.2307/2297841

Garriga, M. J. (2006). The effect of relationship lending on firm performance. Retrieved from https://ddd.uab.cat/pub/estudis/2006/hdl_2072_2233/UABDT06_1522.pdf

Geroski, P. A., Mata, J. & Portugal, P. (2007). Founding conditions and the survival of new firms. *Strategy Management Journal*. doi:https://doi.org/10.1002/smj.823

GoV (Government of Vietnam) (2019). *Decree No. 100/2020/ND-CP dated December 30, 2019 on administrative penalties for road traffic offences and rail transport offences*. Retrieved from https://www.gso.gov.vn/default_en.aspx?tabid=622&ItemID=14195

GSO - General Statistical Office of Vietnam (2014). Report on socio-economy situation 2014. Hanoi. Retrieved from https://www.gso.gov.vn/default_en.aspx?tabid=622&ItemID=15515

GSO - General Statistical Office of Vietnam (2015). Report on socio-economy situation 2015. Hanoi. Retrieved from https://www.gso.gov.vn/default_en.aspx?tabid=622&ItemID=16194

GSO - General Statistical Office of Vietnam (2016). Report on socio-economy situation 2016. Hanoi. Retrieved from https://www.gso.gov.vn/default_en.aspx?tabid=622&ItemID=16870

GSO - General Statistical Office of Vietnam (2017). Report on socio-economy situation 2017. Hanoi. Retrieved from https://www.gso.gov.vn/default_en.aspx?tabid=622&ItemID=19043

GSO - General Statistical Office of Vietnam (2018). Report on socio-economy situation 2018. Hanoi. Retrieved from https://www.gso.gov.vn/default_en.aspx?tabid=622&ItemID=19463

GSO - General Statistical Office of Vietnam (2019). Report on socio-economy situation 2019. Hanoi. Retrieved from https://www.gso.gov.vn/default_en.aspx?tabid=622&ItemID=19463
GSO - General Statistical Office of Vietnam (2020). Report on socio-economic situation in the first quarter of 2020. Hanoi. Retrieved from https://www.gso.gov.vn/default_en.aspx?tabid=622&ItemID=19568

Hakimi, A. (2017). On the nonlinear relationship between bank financing and firm performance: a PSTR model for Tunisian companies. *International Journal of Accounting And Financial Reporting*, 7(2), 2162-3082. doi:https://doi.org/10.5296/ijafr.v7i2.12348

Haseed, W. B. & Muhammad, A. K. (2019). The nexus between asset tangibility and firms’ performance. *Journal of Business And Management*, 5(31). Retrieved from http://eprints.gsm.uci.edu/viewdoc/download?doi=10.1.735.5527&rep=rep1&type=pdf

Hoshi, T., Kashyap, A., Scharfstein, D. (1990). The role of banks in reducing the costs of financial distress in Japan. *Journal of Financial Economics*, 27(1), 67-88. doi:https://doi.org/10.1016/0304-405X(90)90021-Q

Höwer, D. (2016). The role of bank relationships when firms are financially distressed. *Journal of Banking & Finance*, 65, 59-75. doi:https://doi.org/10.1016/j.jbankfin.2016.01.002

Huang, R. D. & Shiu, C. Y. (2009). Local effects of foreign ownership in an emerging financial market: evidence from qualified foreign institutional investors in Taiwan. *Financial Management*, 38(3), 567-602. doi:https://doi.org/10.1111/j.1755-053X.2009.01048.x

Ilyukhin, E. (2015). The impact of financial leverage on firm performance: evidence from Russia. *Journal of Corporate Finance Research*, 9(2), 24-36. doi:https://doi.org/10.17323/j.jcfr.2073-0438.9.2.2015.24-36

Jensen, M. C. & Meckling W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Political Economy*, 84(3), S213-S230. doi:https://doi.org/10.1086/260064

Kantar (2019). *Kantar World Panel Vietnam Insight Handbook 2019*, Market report.

Le Ha (2020), “New Regulations on Drunk Driving Affect the Beer Industry”, *Vietnamnet Newspaper*, Uploaded on Jan 17, 2020.

Le, P. D., & Nguyen, T. N. T. (2012). Các nhân tố ảnh hưởng đến nỗ lực đăng nhập hàng đại lý của các doanh nghiệp ngành sản xuất chế biến thực phẩm tăng trưởng trong Việt Nam. *Tạp chí phát triển kinh tế*, 8, 26-29. Retrieved from http://jubes.ueh.edu.vn/Home/SearchArticle?article_Id=ed3742bc-04c9-477f-bf61-d1478321fd40

Li, L., Markowski, C., Xu, L., & Markowski, E. (2008). TQM—a predecessor of ERP implementation. *International Journal of Production Economics*, 112(5), 569-580. doi:https://doi.org/10.1016/j.ijpem.2008.07.004

Li, Y., Nie, W., Xiang, E., Djadikerta, H. G. (2018). Can banks identify firms’ real earnings management? evidence from China. *Finance Research Letters*, 25, 23-29. doi:https://doi.org/10.1016/j.frl.2017.10.005

Lien Nguyen (2018), *Vietnam – 2018 food and beverage*, Report of Business Center for British Business Group Vietnam.

Limpaphayom, P. & Polwitoon, S. (2004). Bank relationship and firm performance: evidence from Thailand before the Asian financial crisis. *Journal of Business Finance & Accounting*, 31(9-10), 1577-1600. doi:https://doi.org/10.1111/j.0306-686X.2004.00585.x

Loderer, C. F., & Waelchli, U. (2009). Firm age and performance. *SSRN Electronic Journal*. doi:https://doi.org/10.2139/ssrn.1342248

Massa, M., & Dass, N. (2006). The dark side of bank-firm relationships: the (market) liquidity impact of bank lending. *SSRN Electronic Journal*. doi:https://doi.org/10.2139/ssrn.891046

McKinsey (2020). *COVID-19: Implication for Business*. Executive Briefing, April 2020.

Mohammed, M. & Andrew, A. (2019). The nexus between asset tangibility and firms’ financial performance: a panel study of non-financial firms listed on the Ghana stock exchange (GSE). *International Journal of Accounting And Financial Research*. Retrieved from https://www.researchgate.net/publication/333045889_The_Nexus_between_Asset_Tangibility_and_Firms' _Financial_Performance_A_Panel_Study_of_Non-Financial_Firms_Listed_on_the_Ghana_Stock_Exchange_GSE

Nguyen Thu Hang, Khui Thanh Quy, Nguyen Ngoc Dieu Le (2018). Determinants of Firm Growth: Evidence from Vietnamese Small and Medium Sized Manufacturing Enterprises. *Journal of Economics and Development*, Vol.20, No.3, December 2018, pp. 71-87 ISSN 1859 0020 | DOI: 10.33301/JED-P-2018-20-03-05.

Nguyen, D. T. (2009). Phần tích hiệu quả sử dụng vốn tài chính công ty cổ phần chế biến thực phẩm kinh doanh có thể. Hà Nội: Đại Học Kinh Tế - Đại Học Quốc Gia Hà Nội. Retrieved from https://123doc.net/document/4002023

Nguyen, L. T. (2013). Hội nghị công bố các nhân tố ảnh hưởng đến hiệu quả hoạt động kinh doanh của các công ty nhánh sản xuất chế biến thực phẩm niêm yết trên thị trường chứng khoán Việt Nam. Đại Học Đà Nẵng. Retrieved from http://taieluiss.udn.vn/bitstream/TTHL_125/5284/2/Tomat.pdf

Nguyen, Q. N., & Mai, V. N. (2011). Các nhân tố ảnh hưởng đến hiệu quả hoạt động kinh doanh của doanh nghiệp nhỏ và vừa ở thành phố Cần Thơ. *Tạp Chí Khoa Học*, 19b, 122-129. Retrieved from https://s1.ctu.edu.vn/ql/docgia/download/baibao-5576/trongtruong_so19b_15.pdf
Nguyen, T. P. (2017). Nghiên cứu các nhân tố ảnh hưởng đến hiệu quả kinh doanh của các doanh nghiệp ngành thuc phẩm và đồ uống niêm yết trên sàn chứng khoán Việt Nam. Đà Nẵng: Đại học Kinh Tế Đà Nẵng. Retrieved from https://xementihieu.vn/tai-liệu/nghien-cuu-cac-nhan-to-anh-nga-du-thuc-pham-vao-duong-niem-yet-len-truyen-san-chung-khoan-viet-nam-1856767.html.

Nguyen, T. T., Do, T. T., & Trinh, A. T. (2019). Ownership structure and firm growth: evidence from Vietnam. International Journal of Business Marketing Management, 4, 1-11. Retrieved from https://issuu.com/www.ijbmm/docs/2134292685

Nguyen, V. T. & Pham, T. Q. (2017). Anh hưởng của sở hữu cổ đông lợi nhuận có phiếu của các doanh nghiệp niêm yết Việt Nam. Kinh Tế Và Phát Triển, 242. Retrieved from https://tailieumienphi.vn/docs/d/162917/anh-huong-cua-so-huu-co-duong-len-loi-nhan-co-phieu-cua-cac-doanh-nghiep-niem-yet-viet-nam

Nielson (2020), Vietnamese fast moving consumer good industry 2018-2020, Market report.

Ongena, S., & Smith, D. C. (2001). The duration of bank relationship. (Elsevier, Ed.) Journal of Financial Economics, 61(3), 449-475. doi:https://doi.org/10.1016/S0304-405X(01)00691-9

Ongena, S., & Smith, D. C. (1999). Institutional patterns and corporate financial behavior in the United States and Japan. Journal of Financial Economics, 27(1), 43-66. doi:https://doi.org/10.1016/0304-405X(98)00020-Z

Rajan, R. (1992). Insiders and outsiders: the choice between informed and arm's-length debt. Journal of Finance, 47(4), 1367-1400. doi:https://doi.org/10.2307/228944

Rajan, R., & Petersen, M. A. (n.d.). The benefits of lending relationships: evidence from small business listed firms. Australian Economic Papers, 55, 63-98. doi:https://doi.org/10.1111/1467-8454.12056

Reijonen, H., & Komppula, R. (2007). Perception of success and its effect on small firm performance. Journal of Small Business And Enterprise Development, 14(4), 689-701. doi:https://doi.org/10.1108/14626000710832776

Schiantarelli, F., & Jaramillo, F. (2002). Access to long term debt and effects of firm’s performance: lessons from Ecuador. IDB Working Paper, 168. doi:https://doi.org/10.2139/ssrn.1814

Statista (2019). Food and personal care ecommerce report 2019. Vietnam.

Strahan, P. E. & Weston, J. P. (1998). Small business lending and the changing structure of the banking industry. Journal of Banking & Finance, 22(6-8), 821-845. doi:https://doi.org/10.1016/S0378-4266(98)00010-7

Sultan, J., Qing, Y., & Abid, A. (2016). Multiple bank relationship and their impact on firm’s performance: evidence from Pakistan. Journal On Innovation And Sustainability, 57-64. Retrieved from https://pdfs.semanticscholar.org/6b28/85ab759eca19f29e0b87c53b8cb2e08de677e.pdf

Suwanaporn, C. (2003). Determinants of bank lending in Thailand: an empirical examination for the years 1992 to 1996. Retrieved from https://www.peterlang.com/view/title/44096

Thadden, E. L. (1995). Long-term contracts, short-term investment and monitoring. Review of Economic Studies, 62(4), 557-575. doi:https://doi.org/10.2307/2298077

Thi Thuc Anh Phan (2019). Does organizational innovation always lead to better performance? A study of firms in Vietnam. Journal of Economics and Development, Vol. 21 No. 1, 2019 pp. 71-82. Emerald Publishing Limited e-ISSN: 2632-5330 p-ISSN: 1859-0020 DOI 10.1108/JED-06-2019-0003

Trading Economics (2020), Vietnam Annual Growth Rate 2000-2020 Data, official website https://tradingeconomics.com/vietnam/gdp-growth-annual

Tran, N. M., Waltermann, N., & Ann, J. (2014). Government ownership and firm performance: the case of Vietnam. International Journal of Economics And Financial Issues, 4(3), 628-650. Retrieved from https://pdfs.semanticscholar.org/b37b/d538f63ca3759ce7488603b5b7b731d15ea4.pdf

Udell, G. F., & Berger, A. N. (1998). The economics of small business finance: the roles of private equity and debt markets in the financial growth cycle. Journal of Banking And Finance, 22(6), 613-673. doi:https://doi.org/10.2139/ssrn.137991

Asian Institute of Research
Journal of Economics and Business
Vol.3, No.2, 2020
Vietnam Report (2020). *Annual report white paper: Vietnam’s economy 2020: Vietnamese big enterprises and growth challenges 2020*. Hanoi.

VIR (2018). Local F&B firms expand to counter foreign competitors. *Vietnam Investment Review Newspaper*, Uploaded on May 29, 2018. [https://www.vir.com.vn/local-fb-firms-expand-to-counter-foreign-competition-59614.html](https://www.vir.com.vn/local-fb-firms-expand-to-counter-foreign-competition-59614.html)

Vo, T. Q., & Le, T. M. N. (2017). Effects of working capital management on firm value - a studies of the fisheries industry in Vietnam. *Journal of Science Ho Chi Minh City Open University*, 7(3), 42-52. Retrieved from [http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKEwiDl9q--2MvoAhVGYsBHWlIBm8QFIaBegOARAB&url=http%3A%2F%2Ftckh.ou.edu.vn%2Fen%2Fdownload%3Fidbaiviet%3D690&usg=AOvVaw1achuOaE44WJch2enzEcl](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKEwiDl9q--2MvoAhVGYsBHWlIBm8QFIaBegOARAB&url=http%3A%2F%2Ftckh.ou.edu.vn%2Fen%2Fdownload%3Fidbaiviet%3D690&usg=AOvVaw1achuOaE44WJch2enzEcl)

Vu, H. T. & Nguyen, M. H. (2013). The effect of banking relationship on firm performance in Vietnam. *International Journal of Economics and Finance*, 5(5), 148. doi:https://doi.org/10.5539/ijef.v5n5p148

Vuong, Q.H. (2019). “The financial economy of Viet Nam in an age of reform, 1986-2016”. In U. Volz, P. Morgan and N. Yoshino (Eds.) *Routledge Handbook of Banking and Finance in Asia* (pp. 201-222). New York, NY: Routledge.

Walker, E. A. & Brown, A. (2004). What success factors are important to small business owners? *International Small Business Journal*, 22(6). doi:https://doi.org/10.1177/0266242604047411

Watts, R. L., & Zimmerman, J. L. (2006). *Positive Accounting Theory*. Prentice-Hall Inc. Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract_id=928677](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=928677)

Wei, Z., Xie, F. & Zhang, S. (2005). Ownership structure and firm value in China's privatized firms: 1991-2001. *Journal of Financial And Quantitative Analysis, 40*(1), 87-108. doi:https://doi.org/10.1017/S0022109000001757

Weinstein, D. E., & Yafeh, Y. (1998). On the costs of a bank-centered financial system: evidence from the changing main bank relations in Japan. *The Journal of Finance, 53*(2), 635-672. doi:https://doi.org/10.1111/0022-1082.254893

Yao, J., & Ouyang, H. (2007). Dark-side evidence on bank–firm relationship in Japan. *Japan And The World Economy, 19*(2), 198-213. doi:https://doi.org/10.1016/j.japwor.2005.10.001

Yasuda, A. (2005). Do bank relationships affect the firm's underwriter choice in the corporate-bond underwriting market? *The Journal of Finance, 60*(3), 1259-1292. doi:https://doi.org/10.1111/j.1540-6261.2005.00761.x

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics, 40*(2), 185-211. doi:https://doi.org/10.1016/0304-405X(95)00844-5

Yildirim, A. (2019). The effect of relationship banking on firm efficiency and default risk. *Journal of Corporate Finance*. doi:https://doi.org/10.1016/j.jcorfin.2019.101500.
Appendices

APPENDIX A.1. DESCRIPTIVE STATISTIC SUMMARY OF VARIABLES IN THE MODEL

| Variables                           | Obs. | Mean   | Std. Dev. | Min   | Max   |
|-------------------------------------|------|--------|-----------|-------|-------|
| ROE                                 | 170  | 17.16106 | 16.70943  | -42.88 | 91.24 |
| ROA                                 | 170  | 9.983176  | 10.11227  | -18.99 | 72.19 |
| Bank_num                            | 170  | 3.094118  | 2.90734   | 0      | 20    |
| Bank_num\(^2\)                      | 170  | 17.97647  | 42.33313  | 0      | 400   |
| Short_financing                     | 170  | 32.52672  | 29.00266  | 0      | 100   |
| Long_financing                      | 170  | 5.866341  | 13.86779  | 0      | 80.3515 |
| Size                                | 170  | 13.57818  | 1.595999  | 11.56092 | 18.1065 |
| FATA                                | 170  | 25.81366  | 17.07344  | 0      | 99.13 |
| Short_term_liabilities_ratio        | 170  | 88.16365  | 21.38562  | 0      | 100   |
| Leverage                            | 170  | 42.02941  | 17.54232  | 10     | 80    |
| Net_profit_margin                   | 170  | 10.09576  | 9.007154  | -6.39  | 43.33 |
| State_ownership                     | 170  | 16.12018  | 23.42762  | 0      | 61.9  |
| Foreign_ownership                   | 170  | 11.79868  | 14.79582  | 0      | 59.76 |
| Age                                 | 170  | 25.94118  | 13.18045  | 4      | 62    |

Source: Authors’ compilation from primary data

APPENDIX A.2. CORRELATION MATRIX

| Probability                        | [1]  | [2]  | [3]  | [4]  | [5]  | [6]  | [7]  | [8]  | [9]  | [10] | [11] | [12] | [13] | [14] |
|------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1. ROE__                            | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2. ROA__                            | 0.90*| 1    |      |      |      |      |      |      |      |      |      |      |      |      |
| 3. Bank_Num                         | -0.16*| -0.19*| 1    |      |      |      |      |      |      |      |      |      |      |      |
| 4. Bank_Num^2                       | -0.10 | -0.13*| 0.88*| 1    |      |      |      |      |      |      |      |      |      |      |
| 5. Short_Financing                 | -0.16*| -0.25*| 0.40*| 0.22*| 1    |      |      |      |      |      |      |      |      |      |
| 6. Long_Financing                  | -0.02 | -0.06 | 0.14 | 0.10 | -0.09 | 1    |      |      |      |      |      |      |      |      |
| 7. Size                             | 0.05 | 0.05 | 0.57*| 0.39*| 0.05 | 0.05 | 1    |      |      |      |      |      |      |      |
| 8. Fata                             | -0.07 | -0.06 | 0.04 | -0.02 | -0.11 | 0.23*| 0.22*| 1    |      |      |      |      |      |      |
| 9. Short_Term_Liabilities_Ratio    | 0.17*| 0.20*| -0.28*| -0.20*| -0.03 | -0.16*| -0.45*| -0.46*| 1    |      |      |      |      |      |
| 10. Leverage                        | -0.03 | -0.28*| 0.30*| 0.22*| 0.30*| 0.12 | 0.09 | -0.26*| 0.03 | 1    |      |      |      |      |
| 11. Net_Profit_Margin              | 0.31*| 0.37*| 0.16*| 0.10 | -0.12 | 0.01 | 0.44*| 0.10 | -0.15*| -0.05 | 1    |      |      |      |
| 12. State                          | -0.02 | 0.07*| -0.19*| -0.15*| -0.13*| -0.22*| -0.29*| -0.20*| 0.29*| -0.06 | -0.06 | 1    |      |      |
| 13. Foreign                        | -0.01 | 0.05*| 0.13 | 0.08 | -0.26*| -0.02 | 0.59*| 0.11 | -0.21*| -0.14*| 0.14*| -0.12 | 1    |      |
| 14. Age                            | -0.06 | -0.04*| -0.08 | -0.08 | 0.06 | -0.02 | -0.09 | -0.04 | 0.01 | -0.07 | -0.26*| -0.15*| -0.15*| 1    |

Source: Authors’ compilation from primary data

*P < 0.1
APPENDIX A.3: HAUSMAN TEST RESULT

APPENDIX A.4: LIST OF F&B FIRMS COVERED IN THE RESEARCH

| No | Code | Full name of the firm |
|----|------|-----------------------|
| 1  | AGM  | An Giang Import – Export Company |
| 2  | BBC  | Bibica Corporation |
| 3  | CAN  | Ha Long Canned Food Joint Stock Corporation |
| 4  | CAP  | Yen Bai Joint Stock Forest Agricultural Products And Foodstuff Company |
| 5  | CLC  | Cat Loi Joint Stock Company |
| 6  | DBC  | Dabaco Group |
| 7  | FMC  | Sao Ta Foods Joint Stock Company |
| 8  | GTN  | GTN Foods JSC |
| 9  | HAD  | Ha Noi – Hai Duong Beer JSC |
| 10 | HAT  | Ha Noi Beer Trading Joint Stock Company |
| 11 | HHC  | Haiha Confectionery JSC |
| 12 | HNM  | Hanoimilk Joint Stock Company |
| 13 | KDC  | KIDO Group |
| 14 | KTS  | Kon Tum Sugar Joint Stock Company |
| 15 | LAF  | Long An Food Processing Export Joint Stock Company |
| 16 | LSS  | Lam Son Sugar Joint Stock Corporation |
| 17 | MCF  | Mechanics Contruction & Foodstuff JSC |
| 18 | MSN  | Masan Group Corporation |
| 19 | NSC  | Vietnam National Seed Group JSC |
| 20 | NST  | Ngan Son Joint Stock Company |
| 21 | SAF  | Safoco Foodstuff Joint Stock Company |
| 22 | SBT  | Thanh Cong – Bien Hoa Joint Stock Company |
| 23 | SCD  | Chuong Duong Beverages Joint Stock Company |
| 24 | SGC  | Sa Giang Import Export Corporation |
| 25 | SLS  | Son La Sugar JSC |
| 26 | SMB  | Sai Gon – Mien Trung Beer JSC |
| 27 | SSC  | Southern Seed Corporation |
| 28 | TAC  | TuongAn Vegetable Oil Joint Stock Company |
| 29 | THB  | Ha Noi – Thanh Hoa Beer Joint Stock Company |
| 30 | TSC  | Techno – Agricultural Supplying Joint Stock Company |
| 31 | VCF  | Vinacafé Bienhoa Joint Stock Company |
| 32 | VDL  | Lam Dong Foodstuffs JSC |
| 33 | VNM  | Viet Nam Dairy Products Joint Stock Company |
| 34 | VTL  | Thang Long Wine Joint Stock Company |