

Impact of The Ratio of Foreigners In Executive Board On Firm Performance In Southern Vietnam

Tran Duy Thuc

Dong Du Investment and Consulting Company

Duong Viet Linh

Dong Du Investment and Consulting Company

Dr Nguyen Hoang Tien*

Saigon International University

Phung The Vinh

Hoa Sen University

**Corresponding Author: Dr Nguyen Hoang Tien*

ABSTRACT: This research examines the impact of the ratio of foreigners in the executive board on the business performance of 154 companies, including companies with Foreign Direct Investment (FDI) in Vietnam and companies on the Ho Chi Minh City Stock Exchange (HOSE), with data collected in two years, 2015 and 2016. From this viewpoint, investors will build a better view in the training and distributing human resources in their executive board for investment projects in developing countries in Southeast Asia, especially Vietnam. In addition, on a macro level, we desire this research to become the basis for a deeper systematic research in evaluation of business performance of foreign investment in Vietnam in the future. This research is an achievement of application of the resource dependence theory and agency theory to the specific context in firms in Southern Vietnam. This research uses the ROA, ROE, ROCE, and PAT variables to measure business performance and method of running a linear regression model to measure the impact of foreign executive board on business performance. A result of the research shows that the ratio of foreigners in the board of directors has a reserve relationship with the firm performance in the Southern Vietnam. This result supports the resource dependence theory when it is said that there is a link between the diversity in executive board and business performance, but does not support the agency theory for the direction of the interaction between two objects.

Keywords: executive board, firm performance, foreign administrators, Vietnam

JEL classification: L25

I. INTRODUCTION

In the context of strong industrialization, modernization and integration at present, joining the World Trade Entity (WTO), the Association of Southeast Asian Nations (ASEAN), especially the ASEAN Economic Community (AEC) has facilitated and promoted the opening up of markets, especially the labor market. According to statistics from the Employment Bureau, the Ministry of Labor, Invalids and Social Affairs (MOLISA), the number of foreigners working in Vietnam in the following year always increases in comparison with previous year. Specifically, the number of foreigners was 52,633 people in 2008, 55,428 people in 2009 and 56,929 people in 2010, and the number reached 74,000 people¹ in 2011. According to the information from Mrs. Dao Hong Lan, Deputy Minister of Labor, War Invalids and Social Affairs, announced at the meeting with the press on the occasion of the 91st anniversary of Vietnam Revolutionary Press Day, as of May 2016, both country had a 82,585 foreign workers working in Vietnam². The foreigners working in Vietnam have come from more than 60 countries, of which 58% of Asian citizenship (Chinese, Japanese, Korean, Malaysian), about 28.5% of European citizenship (Britain, France...) and about 13.5% of other countries. In terms of qualifications and occupational structure, foreigners with university or post-university degrees account for 48.3% of total number of foreigners working in Vietnam, those who have certificates and professional certificates account for 34.6%, those who are artisans under traditional industries account for 17.1%. About sex, age, males account for 89.9% of total number of foreigners working in Vietnam, females account for 10.1%. Foreigners with age 30

¹ According to website:
http://vieclamvietnam.gov.vn/TinTuc/tabid/447/catid/3559/itemid/21718/Default.aspx?Tieude=Ve_tinh_hinh_lao_dong_nuoc_ngoai_tai_Viet_Nam.

² According to website: <http://laodongthudo.vn/hon-825-nghin-lao-dong-nuoc-ngoai-dang-lam-viec-tai-viet-nam-38831.html>

and over account for 86%³. With the data above, the number of foreigners working in Vietnam has increased over the years and has become a component to contribute to the labor market significantly. Therefore, the research on foreign workers is a necessary and important need to manage and improve the quality of operations of firms with foreign workers, especially firms with foreigners in the executive board.

This research examines the diversity of nationalities in the executive board of firms in Southern Vietnam. In particular, we want to consider the impact of the ratio of foreigners on the firm performance. In addition, when referring to the researches on the influence of foreigners on the firm performance, the author has found that there are many reverse opinions on this relationship. According to Oxelheim, L & Randoy, T. (2003)⁴, foreign administrators will positively impact the business performance of Swedish companies. According to the research results, a firm with foreign board of directors may increase the reputation and firm value in the financial market, thereby increasing its potential competitiveness in the international competitive environment.

The research by Masulis, R. W., Wang, C. and Xie, F. (2012)⁵ confirmed that the geographic distance between the residence of foreign administrators and head office, as well as national borders with passports and control for entry-exit procedures, hinders foreign administrators of the US companies from operating effectively. In addition, foreign directors are less likely to be familiar with local accounting rules, laws and regulations, governance standards, management methods, which make it difficult for them to assess managerial efficiency and make decisions. This also raises controversy that foreign directors may cause the decrease in the effectiveness of supervision of board of directors to result in greater problems among managers and shareholders leading to poor firm performance.

Another aspect of the relationship between foreign operator and firm performance was also concluded by Salim Darmadi (2010)⁶ and Rose (2007)⁷: The situation of firm performance is not affected by the foreign operator.

With the above reverse research results, the author found that previous researchers have not found a clear conclusion on the relationship between the foreign operator and and firm performance. Therefore, this research considers this relationship in 154 firms, including companies with FDI and companies on the HOSE. Foreign administrators are measured by the percentage of foreigners in the executive board. Firm performance is measured by four factors: return on assets (ROE), return on equity (ROE), return on capital employed (ROCE) and profit after tax (PAT).

The results of this research are documented in the application of resource dependence theories and agency theories to the foreigners in board of directors, and the relationship between the foreign operator and firm performance in Southern Vietnam. In addition, the research supports the view that there may be differences in the research results when considering objects not in the same geographical area, expressed by Igors Protasovs (2015).

The following sections of the research will delve into the description of theoretical basis and research methodology, data description, results, conclusions and limitations as well as the development direction of the topic.

II. THEORETICAL BASIS AND RESEARCH METHODOLOGY

2.1 Theoretical basis

2.1.1 Summary of relevant researches.

According to Adam and Hermalin et al., 2009⁸, "There are many researchers who said that foreign board of directors will positively affect firm performance, especially in international operations. Foreign leaders thought that foreign directors may add value to firm performance by helping firms improve advisory capacity of board of directors by providing knowledge of foreign markets and supporting firms to exploit or develop a new connection system with their knowledge of the nations and create close links with local firms, society and politics. These resources may allow foreign consultants to provide advice and support value to foreign operations and corporations with the intent of expanding globally."

³ According to website: <http://baochinhphu.vn/Utilities/PrintView.aspx?distributionid=91053>

⁴Oxelheim, L., & Randoy, T. (2003). The impact of foreign board membership on firm value. *Journal of Banking & Finance*, 27, 2369—2392.

⁵Masulis, R. W., Wang, C. and Xie, F. (2012). 'Globalizing the boardroom - the effects of foreign directors on corporate governance and firm performance'. *Journal of Accounting and Economics*, 53, 527-54.

⁶ Salim Darmadi (2010), "Board diversity and firm performance: The Indonesian evidence", 24.

⁷Rose, c. (2007), "Does female board representation influence firm performance? The Danish evidence", *Corporate Governance: An International Review*, Vol. 15 No. 2, pp. 404-413.

⁸Adams, R.B., Almeida, H., and Ferreira, D. (2009), "Understanding the relationship between founder-CEOs and firm performance", *Journal of Empirical Finance*, Vol. 16 No. 1, pp. 136-150.

According to Oxelheim, L., & Randoy, T., (2003), Luo, (2005)⁹ and Sanders & Carpenter, (1998)¹⁰, a firm with foreign board of directors may increase reputation and firm value in the financial market, thereby increase the potential competitiveness of firm in the international competitive environment. In addition, a foreign operator may be said to be a commitment to supervised transparency. This conclusion is also consistent with the opinion of

The research by Ruigrok, W. and Kaczmarek, S., (2008)¹¹, also pointed out that foreign administrators will positively impact on firms, especially as firms tend to globalization. In addition, in handling company information and supporting ideas, foreign directors are evaluated that they will increase the group's perception and behavioral characteristics of the board of directors, thereby creating the condition for the board of directors to perform the strategic function well and help the company to operate more effectively. According to Masulis, R. W., Wang, C. and Xie, F., (2012), foreign administrators may use international and specialized platforms to enhance the advisory functions of boards and companies about activities or plans to expand abroad. Furthermore, Ntim, C. G., (2014)¹² concluded that firms with foreign board of directors have a lower handling risk because its interest conflict is lower than firms with local board of directors. Their knowledge and experience of competition in local and global markets are also their advantages when running a firm, helping to increase the firm performance. In addition, ethnic diversity within the managerial apparatus will increase the market value of firm.

Dunning and Lundan, (2008)¹³, also pointed out that the advantage of board of directors including members who come from many countries is originated from access to new customers, better supplies and cheaper funding.

According to Cox, Jr., (1991)¹⁴; Cox and Blake, (1991)¹⁵; Robinson and Dechant, (1997)¹⁶, diversity brings benefits to firms, such as having more viewpoints on decision-making, creation and innovation, and more successful access to types of different customers.

Favreau & Segalowitz (1983)¹⁷ thought that the use of foreign language in discussion also leads to more careful problem-solving and decision-making.

However, many other researches give contradictory opinions, as the researches by Igors Protasovs, (2013)¹⁸ and Lehman & Dufrene, (2008)¹⁹: potential costs associated with the existence of foreign directors may arise such as conflict and communication problems; Cox, Jr., (1991) also concluded that there may be conflict among individuals in the executive board.

In addition, the research by Chin See Wah, (2015) also mentioned that the effectiveness of control by foreign director will be decreased because the travel distance from head office arises a high cost when the director goes to work. Attending board meetings also becomes more difficult and time consuming. This will limit the director's ability to collect information and manage it.

Based on the Korea Corporate Governance Service (KCGS)²⁰, the attendance of foreign directors at the board meetings of Korean public companies was evaluated that they seldom supervised during the period from 2005 to

⁹ Luo, Y., 2005. How does globalization affect corporate governance and accountability? A perspective from MNEs. *Journal of International Management*, 11: 19-41.

¹⁰ Sanders, G. & Carpenter, M.A. 1998. Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. *Academy of Management Journal* 41 (2): 158-178.

¹¹ Ruigrok, w. and Kaczmarek, s. (2008), "Nationality and international experience diversity and firm performance: Country effects" *University of St Gallen*, St Gallen, September.

¹² Ntim, C. G. (2014), Board diversity and organizational valuation: Unravelling the effects of ethnicity and gender. *Journal of Management & Governance*

¹³ Dunning, J. H. and Lundan, s. M. (2008). *Multinational Enterprises and the Global Economy*, 2nd edition. Cheltenham: Edward Elgar.

¹⁴ Cox, Jr., T. (1991), "The multicultural organization", *Academy of Management Executive*, Vol. 5 No. 2, pp. 34-47.

¹⁵ Cox, T.H. and Blake, s. (1991), "Managing cultural diversity: implications for organizational competitiveness", *Academy of Management Executive*, Vol. 5 No. 3, pp. 45-56.

¹⁶ Robinson, G. and Dechant, K. (1997), "Building a business case for diversity", *Academy of Management Executive*, Vol. 11 No. 3, pp. 21-30.

¹⁷ Favreau, M., & Segalowitz, N. (1983). Automatic and controlled processes in the first- and second-language reading of fluent bilinguals, *Memory & Cognition*, 11, 565-574.

¹⁸ Igors Protasovs (2015), "Board diversity and firm's financial performance: evidence from South-East Asia".

¹⁹ Lehman, C.M. and Dufrene, D.D. (2008), *Business Communication*, 15th edition, ThomsonL1, T, Sun, L & Zou, L 2009, 'State ownership and corporate performance: A quantile regression analysis of Chinese listed companies', *China Economic Review*, vol. 20, pp. 703-16.

²⁰ Korea Corporate Governance Service (KCGS) was established in June 2002 as a non-profit organization of member entities including the Korea Exchange, the Korea Financial Investment Association, the Korean listed

2007. A researcher at KCGS believed, "The main reason behind less participation of foreigners is that most of them live outside of Korea and may not attend meetings because of their schedules."

The research by Emrah Arioglu, (2015)²¹ showed that if a director resides abroad, it will lead to a reduction in the effectiveness of the supervision, resulting in difficulties and limitations such as: it takes time to go to head office, it is difficult to reach with special information of company, the ability of the director to be reduced when dealing with issues such as lack of knowledge of accounting applications, business applications and other national regulations; it takes time and resources necessary to travel and it is inconvenient due to the international time zone.

The research by Rebecca Piekkari, Lars Oxelheim and Trond Randoy, (2013)²² also showed that language barriers also have negative effects on business operations, especially in the working progress and in decision-making. The research also highlighted some of the difficulties: Some members of board of directors find it difficult to contribute to the meeting, and language disagreements make them feel isolated from the board of directors. Language barriers are also likely to reduce the business efficiency of multinational corporations according to discovery by Marschan-Piekkari et al. (1999)²³, Mäkelä et al. (2007)²⁴ and Neeley, (2013)²⁵, as well as cohesion within the corporation, according to Bamer-Rasmussen and Bjorkman, (2007)²⁶. Communication and culture issues as well as personal conflicts were addressed by Lehman & Dufrene (2008).

In addition to two opposing views on the positive / negative influence of foreign administrators on the firm performance, the Salim Darmadi's (2010) research concluded that firm performance is not affected by the foreign administrators.

The above research shows that the previous researchers have not concluded concisely on the relationship between the foreign executive board to the firm performance: some researches show the positive relationship, meanwhile, some researches show a negative relationship, and the researches conclude that there is no relationship between the foreign administrators and the firm performance. In addition, the author finds that these researches are measured in firms with different sectors of activity, according to Igors Protasovs (2015), which may lead to different results in the research of this relationship.

Unlike the researches above, this paper examines the impact of foreign executive board on the firm performance in the Southern Vietnam. Moreover, when examining the impact of factors in executive board on performance, these researches typically use ROA, ROE or ROCE variables to measure firm performance, in the research, in addition to these variables, we also added a profit after tax (PAT) variable to better reflect firm performance during the accounting period under review.

2.1.2 Definition of firms with foreign investment in Vietnamese law

In Vietnamese law, the 2005 Investment Law²⁷ is the first legal document to create a basic legal framework for domestic and foreign investors. Accordingly, under Clause 6, Article 3 of the 2005 Investment Law, the concept of foreign-invested firms was as follows: "Foreign-invested firms include firms invested and established by foreign investors to carry out investment activities in Vietnam; Vietnamese firms that foreign investors buy its shares, merger or acquire it." This stipulate shows that there is no limitation on the investment rate for foreign investors. This will make these firms incur investment conditions for foreign invested firms, especially the limited conditions to join markets under Vietnam's commitments with the WTO.

To overcome the inadequacies, the Decree No. 102/2010/ND-CP²⁸ of the Government guiding in detail the implementation of the Enterprise Law promulgated, regulating that firms with foreign investors less than 49% of

companies Association, the Korean Securities Dealers Automated Quotation (KOSDAQ). KCGS offers a variety of professional services including ESG, Proxy consulting, social responsibility investment consulting, and sustainability reporting consultancy services to help companies find strategies to sustain growth and build a better society by promoting a strong capital market. KCGS will play an important role as the best ESG research institute to strongly promote the ability of corporate governance and corporate social responsibility.

²¹ Emrah Arioglu (2015), "Demographic diversity in the boardroom: Evidence from Borsa Istanbul"

²² Rebecca Piekkari, Lars Oxelheim and Trond Randoy (2013), "The role of language in corporate governance: the case of board internationalization", 4

²³ Mason.Marschan-Piekkari, R., Welch, D. and Welch, L. (1999a). 'In the shadow: the impact of language on structure, power and communication in the multinational firm'. *International Business Review*, 8, 421—40

²⁴ Mäkelä, K., Kalla, H. and Piekkari, R. (2007). 'Interpersonal similarity as a driver for knowledge sharing within multinational corporations'. *International Business Review*, 16, 1-22.

²⁵ Neeley, T. B. (2013) 'Language matters: status loss & achieved status distinctions in global entities'. *Organization Science*, 24,476-97.

²⁶ Bamer-Rasmussen w. and Bjorkman I. (2007). 'Language fluency, socialization and inter-unit relationships in Chinese and Finnish subsidiaries'. *Management and Organization Review*, 3, 105-28.

²⁷ National Assembly, Investment Law No. 59/2005/QH11 issued November 29, 2005.

²⁸ National Assembly, Law on Vietnamese Nationality No. 24/2008/QH12 issued on Nov. 13, 2008.

shares shall be applied the investment and business conditions as for domestic investors. The implication of this situation is that firms are entangled in the procedures for obtaining investment certificates.

Recently, the National Assembly of Vietnam has promulgated the 2014 Investment Law²⁹. In particular, in Clause 17, Article 3 stipulates that "Foreign-invested economic entities are economic entities with foreign investors being members or shareholders." In addition, Article 23 of this law also provides:

"Economic entities must satisfy the conditions and implement investment procedures in accordance with regulations applicable to foreign investors when investing in the establishment of economic entities; investment in capital contribution, share purchase, capital contribution of economic entities; BCC investment in one of the following cases:

a) Foreign investors hold 51% or more of the charter capital or a majority of partners being foreign individuals to economic entities being partnerships;

b) Economic entities defined at Point a of this Clause hold 51% or more of the charter capital;

c) Foreign investors and economic entities defined at Point a of this Clause hold 51% or more of the charter capital.

Foreign-invested economic entities not falling into the cases specified at Points a, b and c, Clause 1 of this Article shall have to comply with investment conditions and procedures prescribed for domestic investors when investing in establishment of economic entities; investment in the form of capital contribution, share purchase, capital contribution of economic entities; investment in the form of BCC contract.

Foreign-invested economic entities which was established in Vietnam, if having new investment projects, may carry out the procedures for executing such investment projects without necessarily establishing new economic entities. "

2.1.3 Definition of foreigners in Vietnamese legal documents:

According to the provisions of Clause 5, Article 3 of the Law on Vietnamese Nationality 2008³⁰: "Foreigners are non-Vietnamese nationals, including foreign nationals and stateless people." This definition is provided specifically in Clause 1, Article 3 of the Law on Vietnamese Nationality 2008 as follows: "The foreign nationality is the nationality of a country other than Vietnamese nationality", and in Clause 2, Article 3 of this Law, "Stateless person is a person who has neither Vietnamese nationality nor foreign nationality."

As provided for in Paragraph 1, Article 3 of the Law on Entry, Exit, Transit, and Residence of Foreigners in Vietnam 2014³¹, "Foreigners are those who bearing the papers proving their foreign nationalities, or those who without nationalities who enter, leave, transit, or reside in Vietnam".

2.1.4 Executive Board

Corporate Governance describes the power structure and responsibilities of the board of management, board of directors and stakeholders in the company. Corporate governance in a company's operations is seen as a dynamic factor in controlling the company's day-to-day business operations. Thus, executive board is an essential element in the corporate governance system of a company. The role of executive board is to oversee and advise corporate decisions such as budget spending and capital payment policies as well as oversight and discipline to manage companies to ensure that the managers are working to serve the firm value, according to the research by Brickley and Zimmerman et al. (2010)³².

Foreign administrators in this research are defined as persons belonging to the executive board of the enterprise and having a foreign nationality.

2.1.5 Business performance

A business performance in Financial and Banking Crisis Prediction through Early Warning Systems³³ is a measurement of firm performance and may not only depend on the company's own performance but also on the market where it operates. In the financial sector, it is also called financial stability or financial health. There are various financial measures that may be used to evaluate firm performance. Some common financial measures are revenue, return on equity, return on assets, profit margins, revenue growth, capital balance, liquidity ratio and stock price. Depending on the industry the company operates in, some financial indicators will be more meaningful than others.

²⁹ National Assembly, Law on Investment No. 67/2014/QH13 issued on Nov. 26, 2014.

³⁰ National Assembly, Law on Vietnamese Nationality No. 24/2008/QH12 issued on Nov. 13, 2008.

³¹ National Assembly, Law on Entry, Exit, Transit and Residence of Foreigners in Vietnam No. 47/2014/QH3 issued on June 16, 2014

³² Brickley, J.A., and Zimmerman, J.L. (2010). Corporate governance myths: Comments on Armstrong, Guay, and Weber. Working Paper, University of Rochester

³³ Qaiser Munir (2015), Financial and Banking Crisis Prediction through Early Warning Systems

In the researches of business performance measurement of previous researchers, firms' performance is measured by variables: Return on Assets (ROA) and Asset Turnover, according to Chin See Wah, (2015); Salim Darmadi, (2010) used ROA and Tobin's Q to measure; Igors Protasovs, (2015) used ROA and return on equity (ROE); Adhikary and Hoang's (2014) research used three indicators to measure firm performance: ROA, ROE, Tobin's Q,

2.1.6 Background theory

This research develops on the basis of resource dependence theory³⁴. Theory states that the behavior of an entity is influenced by external resources that the entity uses. Firms which may collect, modify, and exploit resources faster than their competitors will succeed. According to a research by Yusoff & Alhaji (2012)³⁵, the ability to link between firm and the external environment of executive board leads to an increase in firm performance. Furthermore, Erhardt et al. (2003), the diversity of executive board will better support decision making and increase firm performance. From there, this theory leads to assumptions: the firm performance is affected by the diversity in executive board.

In addition, the research is also developed by agency theory. This theory is often used by financial and economic researchers to clarify the relationship between the characteristics of the executive board and the firm value. According to D.A Carter et al (2003)³⁶, the role of executive board within the framework of agency theory is to solve problems between managers and owners of firms by controlling whether executive board creates value for the owner. In addition, the research also pointed out that the diversity of the executive board will increase the independence of executive board, create a monitoring mechanism, so that they may not go against the interests of the owner. Thus, this theory supports the assumption that the diversity of executive board will lead to an increase in firm performance.

In this research, the author considers the assumption: The diversity of nationality in the executive board will have a relationship on the firm performance. At the same time, the research contributes specifically to the resource dependence theory with the resources represented as foreigners in executive board and is considered in the specific context in Southern Vietnam. Moreover, the research further clarifies whether in firms in Southern Vietnam, the diversity of the executive board increases the value of the firm performance as represented by the theory.

2.1.7 Research hypothesis

Since there are many opinions and researches on the impact of foreign managers on firm performance, we give the following hypothesis to consider this impact in the firms environment in South Vietnam:

H₀: The percentage of foreigners in executive board is not related to firm performance.

H₁: The percentage of foreigners in executive board is related to firm performance.

2.2 Research Methodology

2.2.1 Data and research samples

To ensure the update of the topic, the author collects research data for two years 2015 and 2016 from the audited financial statements of firms.

Theoretical basis for determining sample size: According to Tabachnick and Fidell (1996)³⁷ for determining sample size in multivariate regression analysis, the minimum sample size should be determined by the formula:

$$n = 50 + 8 * m$$

With m: independent variables

In this research, with each research hypothesis, we used three independent variables including: Firm leverage based on debt ratio (DEBT), firm size measured by logarithm of total asset (FIRMSIZE), and percentage of foreigners in executive board (D_FR). Therefore, the data collection group has sample size at least 74 observations.

The research sample consists of 154 firms, including companies with Foreign Direct Investment (FDI) in Vietnam and companies on the HOSE. Since the data was collected for 2 years, total number of observation variables was 212, after excluding unreasonable observations and lack of information.

³⁴ The book "The External Control of Organizations: A Resource Dependence Perspective (1970)" written by Jeffrey Pfeffer and Gerald R. Salancik

³⁵ Yusoff, w. F. w., & Alhaji, I.A. (2012). Insight of Corporate Governance Theories. *Journal of Business & Management*, 1(1), 52-63

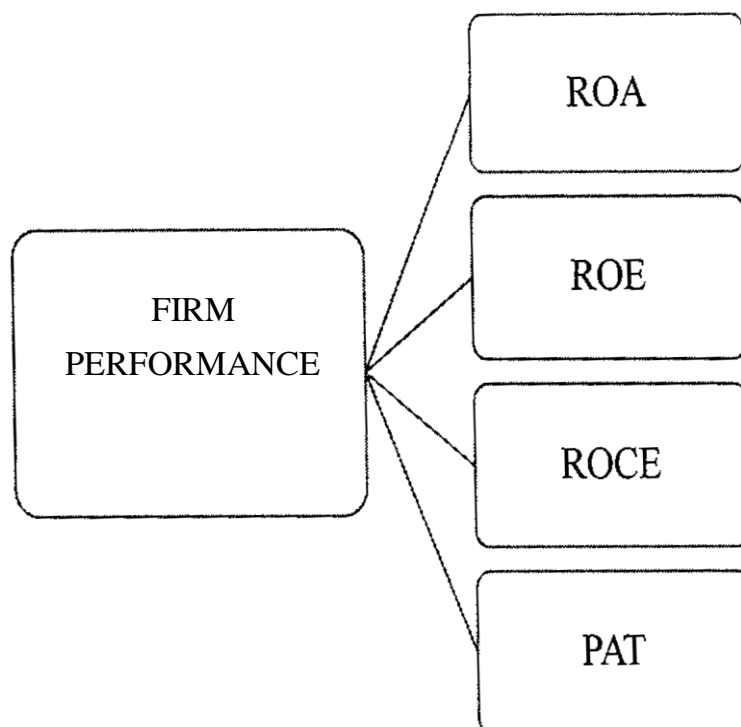
³⁶ Carter, D. A., Simkins, B. J., & Simpson, w.G. (2003). Corporate Governance, Board Diversity, and Firm Value. *Financial Review*> 35(1), 33-53

³⁷ Tabachnick, B.G., & Fidell, L.s. (1996). Using multivariate statistics (3rd ed.). New York: HarperCollins.

2.2.2 Measurement of dependent and independent variables in the model:

Based on previous researches on measurement of firm performance, this research continues to use accounting values to construct the research function: return on assets (ROA), Return On Equity (ROE) and Return on Capital Employed (ROCE). However, we would like to consider the relationship between the ratio of foreigners and firm performance in the short term, so profit after tax (PAT) variable is included. Since after-tax profit will express the most direct firm performance in accounting period.

Model 2.1: Factors of measurement of firm performance



- Return On Assets (ROA) is calculated by taking profit divided average total assets between two consecutive years. The higher the ROA, the higher the amount of money earned in same investment and the higher firm performance, Riyanto, Bambang, (2001)³⁸.
- Return on equity (ROE): In addition to return on assets (ROA), ROE is also used to evaluate the short-term profitability of a firm according to Hu, Y& Izumida, (2008)³⁹. This indicator reflects the profitability of capital, calculated by taking profit divided the average equity between two consecutive years. According to Sawir, Agnes, (2005)⁴⁰, the high ROE ratio shows effectiveness in the use of capital, the profitability of equity, also known as business profits, also shows the harmony in the structure between equity and corporate loans. In Irawan's research, (2011)⁴¹ it also pointed to the relationship between ROE and profit growth. The high ROE reflects that the nature and pattern of firm's investments are very accurate, so the assets are used effectively and achieve maximum profit.

Although ROE and ROA are consistent with institutional research and is most commonly used by financial analysts to evaluate firm performance (eg, Shrader et al. (1997)⁴², Erhardt et al. (2003)⁴³, the calculation of ROA and ROE depends on the method of calculation of profit. In this research, we use profit after

³⁸ Riyanto, Bambang. (2001). "Dasar-Dasar Pembelanjaan Perusahaan".
³⁹ Hu, Y & Izumida, S 2008, 'Ownership Concentration and Corporate Performance: A Causal Analysis with Japanese Panel Data', *Corporate Governance: An International Review*, vol. 16, no. 4, pp. 342-58
⁴⁰ Sawir, Agnes, (2005). Analisis Kinerja Keuangan dan Perencanaan Keuangan Perusahaan. Jakarta : Penerbit Gramedia Pustaka Utama
⁴¹ Irawan (2011), Pengaruh Rasio Keuangan Terhadap Pertumbuhan Laba Pada Perusahaan Asuransi yang terdaftar di Bursa Efek Indonesia selama tahun 2007-2011.
⁴² Shrader, C., Blackburn, V. and Iles, P., "Women in Management and Firm Financial Performance: An Exploratory Study", *Journal of Managerial Issues*, 9(3), 1997, 355-372
⁴³ Tabachnick, B.G., & Fidell, L.s. (1996). Using multivariate statistics (3rd ed.). New York: HarperCollins.

tax and interest to calculate return on assets and return on equity, such as the researches by LI, Sun & Zou, (2009)⁴⁴ and Tian & Estrin, (2008)⁴⁵ to evaluate firm performance.

- Return on capital employed (ROCE) measures tangible investment capital that a firm has used to make a profit. In other words, ROCE measures total profit that a firm earns from each investment in inventory and assets, plant and equipment. The higher the return on capital employed, the greater the scalability of firm grows. Similarly, the high profits and profit growth, in theory, will attract investors and stocks buyers. Return on capital employed is calculated by the formula:

$$ROCE = \text{Profit before interest and taxes} / (\text{total assets} - \text{short-term debt})$$

- Profit after tax (PAT) is added to measure firm performance, measured by the natural logarithm of profit after tax and interest at the end of the fiscal year.

The percentage of foreigners in executive board (D_FR) is calculated by the formula: total foreigners in executive board of total members in executive board.

2.2.3 Regression model

In addition to the above variables, the author includes two control variables in the model to consider the relationship between the ratio of foreign administrators and the firm performance.

- Firm size (FIRMSIZE) is measured by the log of total assets of the firm at the end of the financial year.

- Firm leverage (DEBT) represents the solvency of a firm, measured by the ratio between total debt and total assets of a firm at the end of the financial year because when a firm makes a financial decision, it should consider the optimal capital structure to ensure that the increase in debt or equity will increase firm value, by Chin See Wah, (2015). The low debt ratio represents the stability of long-term business potential. Each industry has its own debt-to-equity ratio, but the rational ratio is usually 0.5.

Regression model:

$$FP_i = \alpha_0 + \alpha_1 D_FR_i + \alpha_2 FIRMSIZE_i + \alpha_3 DEBT_i + \epsilon_i$$

Inside:

- α_0 : free coefficient

- α_i (i = 1,3): regression coefficient of independent factors D_FR_i, FIRMSIZE_i, DEBT_i respectively.

- D_FR: Percentage of foreigners in executive board

- FIRMSIZE_i: Firm size

- DEBT_i: Firm leverage

III. RESEARCH RESULT

Table 1: Statistical description of variables

Variables	Mean	Minimum	25%	Median	75%	Maximum	Standard Deviation
D_FR	36.07%	0%	0.00%	9.09%	100.00%	100%	43.658%
FIRMSIZE	25.24	19	22.76	26.19	27.27	32	2.836
DEBT	.505	.004	.176	.367	.594	19.080	1.328
ROA	.046	-1.402	.007	.033	.104	1.339	.218
ROE	.099	-2.706	.014	.074	.175	3.448	.424
ROCE	.065	-4.997	.014	.060	.183	2.473	.519
PAT	15.497	-24.184	18.512	21.891	24.402	29.293	16.206

Source: Author's calculation

Table 1 shows that on average in executive board of the surveyed firms, foreigners account for 36.07% of executive board. The average size of firms measured by logarithm of firm's assets at the end of financial year is 25.24. The average debt ratio of firms is 0.505, the ROA, ROE and ROCE ratios of firms were 0.046%, 0.099% and 0.065% respectively. The average after-tax profit of firms calculated by natural logarithm of profit after tax and interest reaches 15,497.

⁴⁴ LI, T, Sun, L & Zou, L 2009, 'State ownership and corporate performance: A quantile regression analysis of Chinese listed companies', *China Economic Review*, vol. 20, pp. 703-16

⁴⁵ Tian, L & Estrin, s 2008, 'Retained state shareholding in Chinese PLCs: Does government ownership always reduce corporate value?', *Journal of Comparative Economics*, vol. 36, no. 1, pp. 74-8

Table 2. Correlation of matrix

	D_FR	FIRMSIZE	DEBT	ROA	ROE	ROCE	PAT
D_FR	1	-.491***	.068	-.193***	-.133*	-.198***	-.354***
FIRMSIZE	-.491***	1	-.163**	.164**	.047	.156**	.456***
DEBT	.068	-.163**	1	.093	.008	-.020	-.038
ROA	-.193***	.164**	.093	1	.515***	.669***	.576***
ROE	-.133*	.047	.008	.515***	1	.789***	.297
ROCE	-.198	.156**	-.020	.669***	.789***	1	.353***
PAT	.354***	.456***	-.038	.576***	.297***	.353***	1

Note: *, **, *** represent 10%, 5%, 1%, respectively

Source: Author's calculation

According to the correlation coefficient presented in Table 2, we found that the D_FR variable has a reverse relationship with all variables measuring firm performance (ROA, ROE, ROCE and PAT). In particular, return on equity (ROE) variable shows that the ratio of foreigners in executive board has a negative effect on firm performance with value and p parameter: -0.133 and 0.052, respectively. The remaining variables show a negative correlation with reliability $p < 0.05$, specifically, return on assets (ROA) variable with value and p parameter: -0.193 and 0.005, respectively, return on capital employed (ROCE) variable: -0.198 with the p parameter: 0.004, and PAT variable: -0.354 with p parameter: 0.000.

Table 3: Relative results of OLS show the influence of the ratio of foreign administrators on firm performance

VARIABLES	ROA		ROE		ROCE		PAT	
	Coef.	t	Coef.	t	Coef.	t	Coef.	t
P	-.155	-0.964	.228	.718	-.225	-.585	-36.936***	-3.432
D_FR	-.001*	-1.897	-.001*	-1.838	-.002***	-2.063	-.064***	-2454
FIRMSIZE	.009	1.432	-.003	-.269	.014	.985	2.160***	5360
DEBT	.020*	1.774	.005	.205	.001	.048	.432***	.575
R	.241		.136		.209		.481	
R²	.058		.018		.044		.232	
ADJUSTED R²	.044		.004		.030		.221	
F_VALUE	4.261		1.302		3.180		20.916	
P_VALUE	.006		.275		.025		.000	
MEAN VIF	1.230		1.230		1.230		1.230	

Note: *, **, *** represent 10%, 5%, 1%, respectively

Source: author's calculation

Table 3 presents the relative results of the ROA, ROE, ROCE, and PAT dependent variables with the D_FR independent variable to verify the hypothesis. The results show that all variables of measurement of firm performance show a negative relationship with the D_FR variable. In particular, the regression model with ROCE and PAT variables has a significant level of $p < 0.05$. The ROA and ROE variables also show a negative relationship with the ratio of foreigners in the executive board at a significant level of 10%.

This conclusion does not support the theory that diversity in executive board will lead to an increase in firm performance. At the same time, the conclusion of the article is consistent with the research by Igrs Protasovs (2015), using a sample including the top 100 ASEAN companies operating in various industries, ranked by the Nikkei Asian Review magazine based on specific criteria. The research has also shown that the results are contrary to the researches on European and American firms, so the differences in the conclusions about the relationship between the foreign administrators and firm performance is because the firms in the

researches have different geographic locations. This research, therefore, further strengthens the argument for differences when comparing the impact of the foreign board of directors on firm performance in different geographic locations.

IV. CONCLUSION

This research has used a 154-firm sample, including FDI firms and Vietnamese firms. The data was collected according to the financial statements of firms in two years 2015 and 2016 to consider the influence of ratio of foreign administrators on firm performance. The results show that the ratio of foreigners in executive board has a negative relationship with firm performance measured by ROA, ROE, ROCE and PAT variables. Therefore, the author rejects the H_0 hypothesis and accepts the H_1 hypothesis: The ratio of foreigners in the executive board is related to firm performance. Furthermore, according to the results obtained from running the correlation models, the authors assert that foreign administrators also reduce the firm performance in Southern Vietnamese.

V. RESTRICTION AND RESEARCH DEVELOPMENT

Although the figures used in the financial statements for two years 2015 and 2016 meet the update on firm performance, this research only considers this relationship for 2 years; therefore, this topic has not a long term view.

Next researches may expand the sample size of the research and collect data for a longer period of time to clarify this correlation. We will implement the hypothetical experiment on the expanded sample at least 500 samples including FDI companies in the research scope from 3 to 5 years. In addition, next researches may choose according to each industrial group or firm size.

In addition, we also need to develop the above perception in more detailed research directions in order to find the appropriate solution for using appropriate investment capital in Vietnam. We continue to research more about the effectiveness of investment in Vietnam as follows in the coming period:

- Deep understanding the impact of income of management board on the effectiveness of investment activities in Vietnam, especially in the model of foreign investment in Vietnam.
- Foreign administrators' gender factor affecting the firm performance in Vietnam.
- Corporate culture, foreign language communication factor affecting firm performance in Vietnam.
- Applied technological factor (production software) affecting firm performance in Vietnam.
- Method of allocating foreign capital brings effective for investment in Vietnam.

In addition to assuming difference in geographic locations, having many heterogeneous results between previous researches on the impact of foreigners in executive board on firm performance may be identified by the critical mass theory. This theory shows that when a certain threshold is reached, the impact of one group becomes apparent. Based on this theory, we look forward to further research to determine the average rate of foreigners to be reached in executive board of a firm to achieve the best performance.

Next researches will be conducted to provide more useful information for improving investment efficiency in Vietnam, developing countries that underutilize foreign investment resources.

**Corresponding Author: Dr Nguyen Hoang Tien
Saigon International University*