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ORIGINAL ARTICLE



Corruption and the business environment in Vietnam: Implications from an empirical study

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Abstract

This paper examines the effect of corruption on the business environment in Vietnam. Our survey of firms conducted in Vietnam suggests that corruption is perceived as the most impactful business obstacle for their operation. It was also found that corruption has a significant negative association with the overall satisfaction of the business environment in Vietnam, which supports the hypothesis that corruption has a "sand the wheel" effect on firms' business activities. Given these results. it is urgent that the Vietnamese public authorities accelerate efforts in mitigating this issue. Although this paper sheds light on the importance of corruption, it would be useful to conduct follow-up studies examining corruption and its impact in more detail. Such studies could be conducted in segments that most severely suffer from corruption according to our survey, that is, mediumsized enterprises in the hotel/restaurant and construction sectors, Hanoi based, and Vietnamese owned firms.

KEYWORDS

business environment, business obstacle, corruption, firm perception, Vietnam

JEL CLASSIFICATION

H11; L20

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1 | INTRODUCTION

Vietnam's dynamic economy has been on a stable growth path, driven by robust domestic demand and export-oriented manufacturing (International Monetary Fund, 2017). The country is a member of the Association of Southeast Asian Nations and the Greater Mekong Subregion; a dynamic driving force in the development and integration of the region. Because of several economic reforms and growing openness in Vietnam, the poverty rate has declined rapidly, living standards have improved, and trade, tourism, and foreign investment have all increased. PricewaterhouseCoopers (2017) estimates that Vietnam will be the fastest growing economy in the world with an average annual Gross Domestic Product (GDP) growth rate of 5.1% during 2016–2050. This rapid economic growth will bring Vietnam up to the 20th largest economy in the world by 2050 from 32nd in 2016.

In past years, the Vietnamese Government has paid considerable attention in improving the business environment to address challenges from both global and domestic economies. The business environment will be defined as "the aggregate of all conditions, events and influences that surround and affect [the business community" (Davis, 1975, p. 116). In 2014, the Vietnamese Government issued Resolution No. 19/NQ-CP—Major Tasks and Solutions for Improving the Business Environment and National Competitiveness, which aims to improve the business environment and enhance national competitiveness (Ministry of Planning and Investment, 2015). At the same time, the Government instructed on the intensive and consolidated implementation of various reforms in the administrative processes, such as taxation, customs, social insurance, construction license, land registration, electrical access, corporate establishment and dissolution, and investment procedures (Ministry of Planning and Investment, 2015).

Despite rapid economic growth and Government efforts, the business environment of Vietnam does not seem to support the business community fully. First, the World Bank's ease of doing business ranking of Vietnam in 2017 was 86th out of 190 countries (World Bank, 2017a). When it comes to ease of starting a business, the ranking remains particularly low at 121st out of 190. Second, the Index of Economic Freedom by the Heritage Foundation (2017) also underpins this point by showing that Vietnam ranks 147th out of 180 countries and categorizes Vietnam as a "mostly unfree" economy. Finally, the Economist (2014) ranks Vietnam's business environment at 59th out of 82 countries surveyed for the 2014–2018 period. The present status of the business environment in Vietnam is far from ideal and shows urgency for further reforms.

Corruption is an important issue in Vietnam even though it is not among the targets of the 2014 reforms. Despite improvement over the past years, corruption is still considered wide-spread throughout the country, and Vietnam still lags behind other Asian countries regarding corruption control and most governance indicators (Transparency International, 2012). The business sector is also affected by cumbersome legislation, providing incentives and opportunities for corruption (Transparency International, 2012). However, relatively little literature has been published on corruption in Vietnam, especially with respect to its effect on the business environment. International studies suggest that corruption affects the business environment both positively and negatively (e.g., Dang, 2016; Méon & Weill, 2010; Nguyen, Doan, Nguyen, & Tran-Nam, 2016; Welter & Smallbone, 2014). Tackling corruption is essential to improving governance, which has been identified as one of the most important components to channelling

¹World Bank's ease of doing business ranking measures the quality of the overall business environment and its dimensions at the national level.

trade and investment into sustainable development (Economic and Social Commission for Asia and the Pacific [ESCAP], 2017).

The primary objective of this study is to analyse the present status of the business environment in Vietnam and identify specific business obstacles for further intervention. This study intends to complement and enrich previous studies and allow policymakers to identify key issues around the business environment in Vietnam. Among the existing business obstacles in Vietnam, special attention is paid to corruption, its importance and effect often controversial. Other obstacles will also be covered such as shortage of skilled labour, access to finance, and government-related activities. This paper also serves as a policy guide for the future improvement of the Vietnamese business environment.

For this study, a survey of 79 firms in three different cities of Vietnam, namely, Hanoi, Hung Yen, and Vinh, is conducted. The fundamental questions are designed to identify firms' evaluation of the overall business environment in Vietnam and the severity of specific business obstacles firms are facing. The responses collected are utilized for econometric analysis to present key findings.

2 | LITERATURE REVIEW

The business environment contains external factors that create opportunities and threats to the business such as socio-economic conditions, technology, and political conditions (Jauch & Glueck, 1988). The World Bank Enterprise Survey (2015) lists 15 obstacles in business environment, namely, access to finance; access to land; business licenses and permits; corruption; legal enforcement; crime, theft, and disorder; customs and trade regulations; access to electricity; inadequately educated workforce; labour regulations; political instability; practices of the informal sector; tax administration; tax rates; and transportation. The World Economic Forum (2016), for the purpose of identifying the most problematic factors of doing business, uses 16 indicators, namely, an inadequately educated workforce, policy instability, tax regulations, tax rates, access to financing, poor work ethic in national labour force, corruption, inefficient government bureaucracy, inadequate supply of infrastructure, inflation, foreign currency regulations, crime and theft, restrictive labour regulations, government instability, insufficient capacity to innovate, and poor public health. The Economist (2014), for its business environment ranking, also examines 10 categories: political environment, macroeconomic environment, market opportunities, policy towards free enterprise and competition, policy towards foreign investment, foreign trade and exchange controls, taxes, financing, labour market, and infrastructure.

The important role that the business environment plays in promoting growth, employment, and well-being has been well documented (Abe, Troilo, Juneja, & Narain, 2012). Some studies have also attempted to reveal the relationships between the business environment and business performance. Gani (2011) finds that a better business environment enhances trade activities. The World Bank (2015) claims that a friendly business environment encourages firms to innovate and to increase productivity. The World Bank (2017a) also concludes that governmental action to create a sound, predictable regulatory environment is central to firm performance and performance sustainability in the long run.

Among the components of the business environment, this study takes a close look at corruption, which is defined as the abuse of entrusted power for private gain (Transparency International, 2016a). Corruption takes forms of shady deals, weak enforcement of rules, and other

illicit practices that undermine good governance, ethical business, and positive social norm at large. It also undermines people's trust in political and economic systems, institutions, and leaders and is considered one of the most severe obstacles to conducting business (Abe et al., 2012; Transparency International, 2016a).

Other elements of the business environment are also included in the study as serious obstacles for doing business in Vietnam. The surveys conducted by the World Bank (2015) and the World Economic Forum (2016) find shortage of skilled labour and access to finance as two major business constraints in Vietnam; hence, we examine these constraints in this study. In addition, according to the World Bank's indicators on government effectiveness (World Bank, 2017b), Vietnam is at 55 percentile rank, which is relatively lower than two of its neighbours, Malaysia and Thailand, which position themselves at 77 and 66 percentile ranks, respectively. Therefore, various activities related to government effectiveness, namely, supply of electricity, supply of water, business registration, licensing and permit, tax collection process, and relationships with public authorities, are also included in the study for close inspection.

2.1 | Corruption

Corruption affects an economy in a number of ways. The cost of providing public goods and services increases due to leakage for private gain or through the provision of substandard goods (such as roads and telecommunications) that should be replaced frequently (Bardhan, 1997; Reinikka & Svensson, 2004). It also undermines the rule-of-law and the government's ability to correct externalities such as pollution (Olken & Pande, 2012). Corruption reduces investment and lowers growth rates while it negatively impacts efficiency (Campos, Lien, & Pradhan, 1999; Mauro, 1995; Swaleheen, 2007). Additionally, corruption hinders development through diverting resources away from productive sectors and reducing human capital (Lambsdorff, 2003; Rady, 2016). In this line, Rady (2016) suggests that corruption is shown to decrease the productivity of a nation and reduces the effectiveness of foreign aid. Transparency International (2014) also points out that the lack of transparency, accountability, and oversight in government and business interactions undermines fair competition and stifles economic growth. Corruption also associates with inefficient bureaucracies that offer more leverage for corrupt public officials: Longer queues for public services result in more incentives for citizens to bribe officials to get what they want (Organisation for Economic Co-operation and Development [OECD], 2014). Researchers often call these adverse effects of corruption on economic development as the "sand the wheel" effect (Méon & Sekkat, 2005; Wei, 2001). Both anecdotal and empirical evidence suggest that corruption is more prevalent in developing countries than in developed ones (Olken & Pande, 2012).

At the firm level, corruption increasingly absorbs the returns from business activities and distorts entrepreneurial spirit and behaviour (De Jong, Tu, & Ees, 2012; De Jong, Tu, & Ees, 2014; Van Dut, 2015). Firms involved in corruption report higher costs and greater uncertainty that ultimately impact their strategic or investment decisions (Olken & Pande, 2012). It is estimated that corruption increases the cost of business undertaking by 10% on average (OECD, 2014). Corruption is also negatively correlated with firm's innovation and growth (Asiedu & Freeman, 2009; Chadee & Roxas, 2013; Fisman & Svensson, 2007). Regarding foreign direct investment (FDI), corruption impacts foreign firms' decision to choose an investment destination and thus reduces FDI flows (Egger & Winner, 2006; Javorcik & Wei, 2009). FDI in countries that are

perceived as corrupt is almost 5% lower than in countries that are relatively corruption-free (OECD, 2014).

On the contrary, researchers also argue that in some cases, corruption could facilitate business activities, development, and economic growth (e.g., Dreher & Gassebner, 2013; Méon & Weill, 2010; Welter & Smallbone, 2014). This is often referred to as the "grease the wheel" effect. Lui (1985) suggests that most efficient firms pay the highest price to get served by the authorities, making the economy more efficient. Scholars further argue that corruption can speed up the wheels of commerce and has a positive impact on a firm's development by providing the possibility of overcoming bureaucratic barriers and burdensome processes (Kaufmann & Wei, 1999; Méon & Sekkat, 2005; Welter & Smallbone, 2014). Corruption also facilitates firm entry in highly regulated economies, which may not happen otherwise (Dreher & Gassebner, 2013; Leff, 1964; Méon & Weill, 2010). Given exogenously determined suboptimal bureaucratic rules and regulations, corruption may counteract government failure and promote economic growth, both in the short and long run (Akai, Horiuchi, & Sakata, 2005).

Several studies examine the determinants of corruption. Democratic systems and press freedom reduce the level of corruption (Brunetti & Weder, 2003; Chowdhury, 2004; Lederman, Loayza, & Soares, 2005; Treisman, 2000). Also, trade openness and ensuing competition are associated with reduced corruption (Ades & Di Tella, 1997; Krueger, 1974; Treisman, 2000). Moreover, institutional structure is found to be important as more decentralized states have a lower level of corruption (Arikan, 2004; Fisman & Gatti, 2002). Additionally, social norms and culture are expectedly important determinants of corruption although they can be hard to measure (Soans & Abe, 2016).

In Vietnam, corruption also causes negative effects on its economy and businesses. Nguyen, Nguyen, and Tran-Nam (2016) suggest that corruption undermines Vietnam's economic performance. Nguyen and Dijk (2012), analysing a sample of Vietnamese firms, point out that corruption hampers the growth of private enterprises but not the state-owned ones. Rand and Tarp (2012), drawing on a survey of small and medium-sized enterprises for the 2005–2007 period, find that bribery hurts firm performance, whereas CIEM, et al. (2012) show that bribe-paying small and medium-sized enterprises do not grow significantly faster or slower than their law-abiding counterparts but are significantly more likely to exit the market. Corruption has a negative impact on private investment, employment, and per capita income at the provincial level (Dang, 2016). It also has harmful effects on Vietnamese firms strategic capability by eroding cultural integrity, demotivating innovation, and risking firm reputation (Nguyen, Ho, Le, & Nguyen, 2016).

On the other hand, Nguyen, Ho, et al. (2016) suggest that informal payments made by Vietnamese firms encourage overall innovation and product improvement. However, according to them, commonly accepted benefits of corruption such as transactional benefits or access to business opportunities, that is, "greasing the wheel," hold true only for a small number of firms. De Jong et al. (2012) also uncover that in Vietnam, corruption has an inverse U-shaped relationship with firm performance as measured by revenue and argue that a firm may gain benefits when they pay a bribe, but the benefits of paying a bribe are subject to diminishing returns.

Finally, corruption in Vietnam is perceived differently from survey to survey. Transparency International's Corruption Perception Index, which measures the corruption level of 176 countries worldwide, ranks Vietnam 113th out of 176, indicating a relatively high level of corruption (Transparency International, 2016b). The World Economic Forum also points out corruption as the seventh most problematic factor out of 16 of doing business in Vietnam in their Executive Opinion Survey in 2016 (World Economic Forum [WEF], 2016). However, corruption does not appear as a crucial business constraint in Vietnam in the World Bank Enterprise Survey, as only

2.6% of sampled Vietnamese firms responded that corruption is the largest of all business obstacles, placing it near the bottom of all the 15 obstacles listed in the survey (World Bank, 2015).

2.2 | Shortage of skilled labour

Another key business obstacle in Vietnam is shortage of skilled labour. The World Bank Enterprise Survey has ranked the shortage of skilled labour as the third most problematic obstacle in Vietnam (World Bank, 2015). Skilled labour refers to highly educated individuals having graduated at the tertiary level of education and/or experienced individuals employed in an occupation for which a high qualification is normally required (World Bank and OECD, 2013). Skilled labour can contribute to firm growth and development by generating new knowledge, developing incremental innovations, identifying new business opportunities, and transferring knowledge to coworkers (World Bank and OECD, 2013). In Vietnam, shortage of skilled labour increasingly constrains growth in productivity and employment (Manning, 2010). In fact, Vietnamese businesses recognize the importance of education and training for their young workers to solve the shortage of skilled labour, and additional support from the Government and business associations is considered necessary (Goodwin, O'Connor, & Quinn, 2014).

2.3 | Access to finance (access to capital, interest rate, and access to external finance)

In Vietnam, access to finance appears as the most significant business obstacle (World Bank, 2015). Financial services to firms are provided in various areas such as payment facilitation, deposit management, short-term loans for working capital, and long-term loans for fixed assets (World Bank, 2015). Insufficient access to finance hinders business growth (Ayyagari, Demirgu¨c¸-Kunt, & Maksimovic, 2005; Khan, 2001). In both developing and developed countries, smaller firms have less access to institutional finance and more constraints in their operation and growth (Berger & Udell, 1998; Galindo & Schiantarelli, 2003). In Vietnam, cumbersome procedures, long appraisal times, large physical distances to banks, strict requirements of collaterals, and administrative documents are some of the reasons many firms do not apply for loans (Lainez, 2014). Because the term "finance" deals with various financial services, this study investigates three key finance-related variables, namely, access to capital, interest rate, and access to external finance.

2.4 | Government-related activities (supply of water; supply of electricity; business registration, licensing, and permit; tax collection process; and relationship with public authorities)

In this study, government-related activities are defined as a set of business obstacles that compose of public services and administrative procedures in which a government is engaged. The efficiency of government-related activities has been regarded as a key component of the business environment (e.g., World Bank, 2017a). For example, extreme bureaucracy imposes

²Access to finance is one of the largest business obstacles in many business surveys in Asia-Pacific developing countries (and beyond; cf. Asian Development Bank and Asian Development Bank Institute, 2015; Soans & Abe, 2015; World Bank, 2015).

disproportionate bureaucratic burdens on firms and creates both incentives and opportunities for bribery and corruption (Aristovnik & Obadić, 2015). Specific government-related activities variables that appear in this study include supply of water; supply of electricity; business regulations, licensing, and permits; tax collection processes; and relationships with public authorities.

Overall, the literature clearly suggests that business obstacles such as shortage of skilled labour, access to finance, and government-related activities have a negative impact on the business environment. On the other hand, the empirical evidence of the economic consequences of corruption is not as straightforward as other business obstacles (Svensson, 2005). It is still unclear whether corruption brings positive or negative consequences to the business environment in specific settings. In addition, the significance of corruption in business environment appears to vary by study (Transparency International, 2016b; WEF, 2016; World Bank, 2015). Therefore, this study focuses specifically on investigating the impact of corruption on the business environment, while examining the relationships with other business obstacles, namely, shortage of skilled labour, access to finance, and government-related activities.

3 | CONCEPTUAL FRAMEWORK AND DATA COLLECTION

This study aims to identify the business obstacles, which policymakers should recognize and prioritize to improve the overall business environment in Vietnam. It examines sampled firms' perceptions of both the overall business environment and severity of selected business obstacles together with their associations. Ten business obstacles of interest in this study are, as appeared in the literature review, corruption; shortage of skilled labour; access to capital; interest rate; access to external finance; supply of electricity; supply of water; business registration, licensing, and permits; tax collection processes; and relationships with public authorities.

For this study, the following null and alternative hypotheses are tested:

- 1. **Null hypothesis (Ho):** There is no significant difference in the overall business environment as the business constraints become more severe.
- 2. **Alternative hypothesis (Ha):** There is a significant difference in the overall business environment as the business constraints become more severe.

If the null hypothesis can be rejected, the degree of severity in a business constraint is considered to be associated with the overall business environment.

In developing a structured survey questionnaire, the procedure followed Dillman's (1978) total design method for surveys to make them appear "easy to complete" and "professional" to enhance the quality of the data while also increasing the response rate. A number of industrial and country experts were consulted, and many existing business survey questionnaires, which were previously conducted by international and bilateral agencies and academics in Vietnam and Southeast Asia, were reviewed (e.g., Organisation for Economic Co-operation and Development (OECD) undated; Japan External Trade Organization, 2009, 2012; Soans & Abe, 2015; World Bank, 2013).

In the questionnaire, the business environment is measured as the sampled firms' perceptions of the overall business conditions in Vietnam. Responses are recorded on a 6-point Likert scale, which ranges from "very unfavourable" to "very favourable." The 10 business obstacles are also measured on a 6-point Likert scale, which ranges from "no obstacle" to "very severe obstacle." In addition, this study outlined a specific question anticipating to figure out the

amount of "unofficial charges" that firms are typically required to pay in order to obtain a business registration, license, or permit. Thus, the final questionnaire contained 12 questions covering overall business conditions and obstacles. Appendix A provides variable names, definitions, and measures, whereas Appendix B outlines the English questionnaire form that was distributed to the participants. This questionnaire was initially developed by the United Nations ESCAP in English and subsequently translated by the Vietnam Chamber of Commerce and Industry (VCCI) to the Vietnamese language.

The data collection was conducted by ESCAP with the support of VCCI. Seminar sampling, a nonprobability sampling method, was used to minimize the cost of the survey while maximizing the number of responses and the accuracy of the survey. Questionnaires in the Vietnamese language were distributed at three business seminars entitled "Financial Solutions to Strengthen the Participation of Business into Global Value Chains," which were conducted by VCCI in Hanoi, Hung Yen, and Vinh, resulted in 79 responses from the participated businesses. During the data cleaning process, responses that were not logical were either omitted or modified.

4 | RESULTS

This study first presents a profile of 79 respondents, followed by a descriptive analysis demonstrating how sampled firms evaluate the current overall business environment, corruption, and unofficial charge to the authority. Then, the study conducts nonparametric analysis to review the associations between the overall business environment and corruption, together with other business obstacles.

4.1 | Sample profile

The characteristics of firms surveyed are illustrated below in Figures 1, 2, 3, 4, and 5. Figure 1 shows that manufacturing accounts for the largest share of the firms surveyed. Other sectors with relatively large sample size are hotels and restaurants; agriculture, hunting, and forestry; and construction. The share of each industrial sector in this study may not reflect the actual sectoral distributions in Vietnam.

Figure 2 presents the size of firms surveyed. For classification, we specify firms with 1–19 employees as small, firms with 20–99 employees as medium, and firms with more than 100

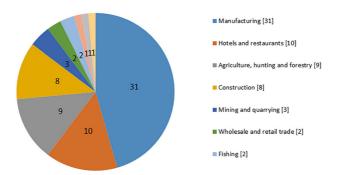


FIGURE 1 Sampled firms by industrial sector

Note: The numbers in square brackets suggest the numbers of sampled firms in an industrial sector. *Source*: Authors.

FIGURE 2 Sampled firms by size

Note: The numbers in square brackets suggest the numbers of sampled firms in a size group. Source: Authors.

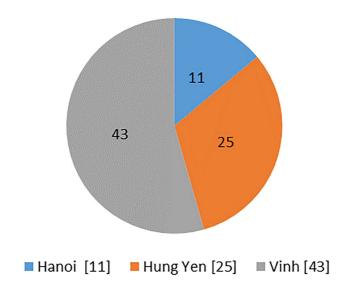


FIGURE 3 Location of sampled firms

Note: Hanoi includes one sample from its neighbouring city, Thái Nguyên.

Source: Authors.

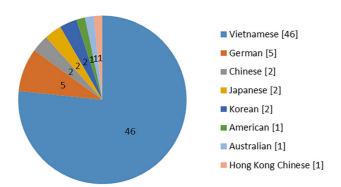


FIGURE 4 The nationality of ownership

Note: The numbers in square brackets suggest the numbers of sampled firms in a nationality group. Source: Authors.

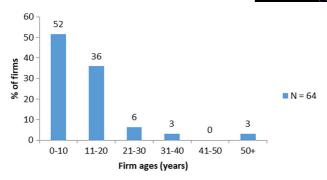


FIGURE 5 Distribution of the years of firms' operations (percentage of firms) *Source*: Authors.

employees as large. We have almost equal representation from small-, medium-, and large-sized firms.

Figure 3 shows the location of firms surveyed. Hanoi, the capital of Vietnam, accounts for a relatively small percentage of all the firms surveyed. More than half of the firms are from Vinh, the largest city and economic and cultural centre of the north central coast of Vietnam. Hung Yen, the capital city of the Hung Yen Province near Hanoi, also has a relatively large representation in this study.

Figure 4 presents the nationality of sampled firms. More than 75% of the firms surveyed are Vietnamese owned. Other salient nationalities are German (five), Chinese (two), Japanese (two), and Korean (two).

Figure 5 shows the years of firms' operations. More than 50% of firms surveyed were established within the past 10 years; 36% of all the firms surveyed have an age between 11 and 20 years. These two groups account for nearly 90% of the firms in the survey.

It should be noted, however, that the distribution of sampled firms is not identical to that of the target population (e.g., firm size, industrial sector, location, and nationality of ownership). The sample size is also relatively small, and the rate of missing values remains high at a range between 22% and 46%. These facts are likely to put a limitation on this study's findings and its key implications.

4.2 | Descriptive analyses

This subsection presents the descriptive analyses of the business environment and business obstacles. First, the analyses are undertaken with a focus on overall business conditions ratings, corruption, and the unofficial charge paid by firms. Then, cross-sectional analyses of corruption and firm size, sector, city, and nationality are conducted to closely inspect how corruption differently behaves in each category.

From the descriptive analyses, it becomes apparent that most of the sampled firms consider the overall business conditions in Vietnam somewhat unfavourable (Figure 6). About 65% of firms in the survey respond either very unfavourable, unfavourable, or somewhat unfavourable.

Most of the sampled firms (approximately 80%) report that they pay unofficial charge to authorities to obtain a business registration, license, or permit (Figure 7). This result is larger than a similar business survey conducted in Myanmar in which only 60% of firms were reported to pay unofficial charge (Soans & Abe, 2015). In particular, 23% of the firms surveyed paid up to

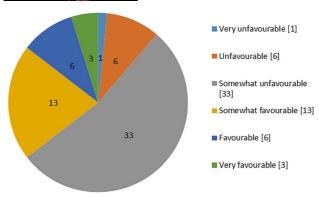


FIGURE 6 Overall business conditions

Note: N = 62. *Source*: Authors.

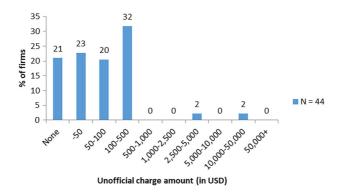


FIGURE 7 Unofficial charge to authorities (percentage of firms) *Source*: Authors.

USD 50 of unofficial charge, 20% paid between USD 50 and 100, and 32% paid somewhere between USD 100 and 500. On the higher end, 2% of firms paid between USD 2,500 and 5,000 and additional 2% of firms paid between USD 10,000 and 50,000.

Corruption affects medium-sized enterprises the most, both in terms of severity and payments of unofficial charges (Figures 8 and 9). Also, medium-sized enterprises are more likely to pay unofficial charge than small and large enterprises (Figure 10). The difference in the

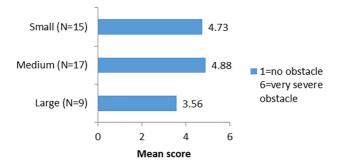


FIGURE 8 Corruption by firm size *Source*: Authors.

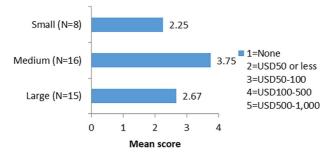


FIGURE 9 Unofficial charge by firm size *Source*: Authors.

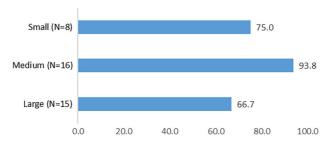


FIGURE 10 Firms paying unofficial charge by firm size (percentage of sampled firms) *Source*: Authors.

unofficial charge paid by medium-sized enterprises and large-sized enterprises is statistically significant by the Mann–Whitney U-test (p=.0127). This is in contradiction with an argument by Rand and Tarp (2012) that large enterprises are more likely to pay bribes in Vietnam. This could indicate that, as Svensson (2003) argues, medium-sized firms in Vietnam might have a higher "ability to pay" and less "refusal power" than smaller- or larger-sized firms.

In this survey, as shown in Figures 11 and 12, corruption affects the hotel and restaurant sector the most, both in terms of severity and unofficial charge amount. These are followed by the construction, agriculture, and manufacturing sectors. As the hotel/restaurant and construction sectors are more likely to have contact with public authorities than other sectors, this result seems to be well explained by Svensson (2003) who argues that firms with frequent contact to government officials are more prone to corruption.

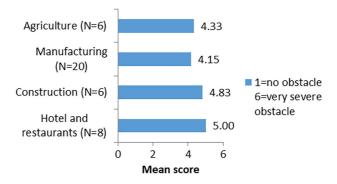


FIGURE 11 Corruption by sector *Source*: Authors.

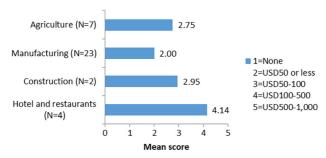


FIGURE 12 Unofficial charge by sector *Source*: Authors.

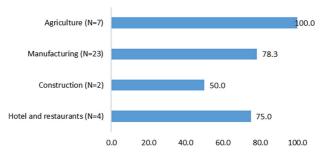


FIGURE 13 Firms paying unofficial charge by sector (percentage of respondents) *Source*: Authors.

Figure 13, however, suggests that the percentage of firms paying unofficial charge is higher in the agriculture and manufacturing sectors, while they place less severity on corruption than the construction and hotel/restaurant sectors. The construction sector, which is highly exposed to bureaucrats and officials, has the lowest number of firms paying unofficial charges, although the sample sizes of those sectors are limited. A possible explanation for this finding may be that unofficial charge is so prevalent and common in the agriculture and manufacturing sectors that firms do not view this as a severe constraint. Also, the amount of unofficial charge these sectors typically pay is smaller than the amount paid by the construction and hotels/restaurants sectors. It should also be noted that the number of firms responded from the construction and

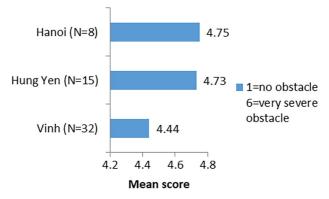


FIGURE 14 Corruption by city *Source*: Authors.

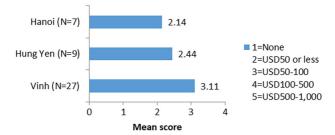


FIGURE 15 Unofficial charge by city

Source: Authors.

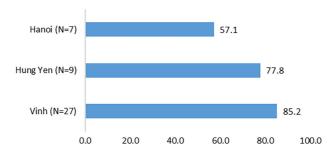


FIGURE 16 Firms paying unofficial charge by city (percentage of respondents) *Source*: Authors.

hotel/restaurant sectors is relatively small and may not reflect the tendency of the target population in Vietnam.

The extent of corruption varies by city. As shown in Figure 14, among the three cities surveyed, Hanoi-based firms perceive corruption most severely. As for the amount of unofficial charge and the proportion of firms paying, Vinh and Hung Yen exceed Hanoi (see Figures 15 and 16). These may be because corruption is relatively common in Vinh as more than 85% of firms pay some amount of unofficial charge, and therefore may not consider corruption as a serious issue but more commonly as part of their daily life. The opposite case may be true for Hanoi. The differences in corruption among cities may exist because some regions have more pressing concerns such as basic infrastructure or public services. Therefore, the firms rate the level of corruption relating to those public services as higher (Soans & Abe, 2016).

Vietnamese-owned firms are the main ones to be affected by corruption, in both severity and actual amount (Figures 17 and 18). They are also more likely to pay unofficial charge than foreign-owned firms (Figure 19). This seems to be against Gaviria (2002) who argues that no statistical difference is found on the corruption perceptions between domestic-owned and foreign-

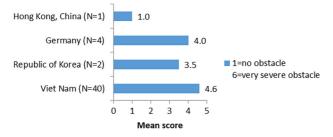


FIGURE 17 Severity of corruption perceived by nationality

Source: Authors.

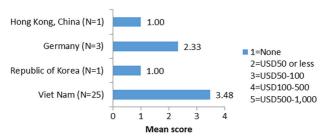


FIGURE 18 Unofficial charge by nationality *Source*: Authors.

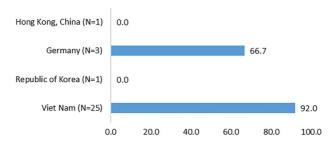


FIGURE 19 Firms paying unofficial charge by nationality (percentage of respondents) *Source*: Authors.

owned firms. It should be noted again, however, that the sample size of firms with foreign ownership is small in this survey, and further investigation is required for this topic.

Descriptive analyses disclose that most of the firms surveyed are not satisfied with the current business environment in Vietnam. Corruption appears as the largest business obstacle in the three cities explored, and the overwhelming majority of firms pay an unofficial charge to public authorities to facilitate their business. Moreover, corruption turns out to be most problematic for firms that are medium sized, in the hotel/restaurant and construction sectors, Hanoi based, and Vietnamese owned.

4.3 | Association between the overall business environment and business constraints

As the present study has a relatively small sample size (79 respondents), and there is a group whose number of respondents falls below 15 (i.e., the high score group on inadequate access to external finance; see Table 1 below), parametric tests are not appropriate for the econometric analysis of this study (Frost, 2015). Instead, a nonparametric test, that is, the Mann–Whitney U-test, between overall business rating (a numerical variable) and 10 business obstacles (dummy variables between a high score group and a low score group) was conducted. The authors specifically follow a Mann–Whitney U-test model used by Machado, Gazola, Fabricio, and Anez (2016).

Within each business obstacle, a high-score group and a low-score group are divided so that the two groups have a similar number of respondents. For example, respondents to corruption are grouped into two with one group consisting of 31 respondents that scored between one and four on a 6-point Likert scale for the severity of corruption (low-score group) whereas the other group consists of 25 respondents that scored either five or six (high-score group). Dummy variables for each business obstacle are created to distinguish these two groups: low score and high

TABLE 1 The results of the Mann-Whitney U-test on the associations between overall business environment and business obstacles

Business obstacles	High score group (mean)	Low score group (mean)	P value
Corruption	3.00	3.57	.0231**
Shortage of skilled labour	3.25	3.34	.3935
Access to capital	3.17	3.50	.2922
Interest rate	3.13	3.41	.3791
Inadequate access to external finance	3.15	3.52	.1929
Supply of electricity	3.00	3.81	.0077***
Supply of water	3.00	3.89	.0020***
Business registration, licensing and permit	2.95	3.67	.0043***
Tax collection process	3.12	3.47	.1995
Relationships with public authorities	3.18	3.69	.0175**

p < .05.**p < .025. ***p < .01.

score. Also, the mean scores of the overall business environments for both high group and low group are compared with examine the vector of differences (Machado et al., 2016).

The results of the Mann–Whitney U-test that present the associations between the overall business environment and business constraints are summarized in Table 1. The first column of the table displays business obstacles. The second column shows the mean scores of the overall business environment for the high-score group in each business obstacle, whereas the third column presents the mean scores of the overall business environment for the low-score group in each business obstacle. The fourth column lists the p values resulted from the Mann–Whitney U-test that is conducted to verify if the two groups are significantly different.

Table 1 indicates that the ratings of the high- and low-score groups on the overall business environment are significantly different for six business obstacles, namely, corruption; supply of electricity; supply of water; business registration, licensing, and permit; and relationships with public authorities. For these six business obstacles, the high-score groups rate significantly lower in the overall business environment. This study, therefore, confirms that some business obstacles are negatively associated with the overall business environment in the three cities of Vietnam.

On the other hand, some of the business obstacles that are conceived as most severe by literature such as shortage of skilled labour and access to finance show no significant impact on the business environment. This indicates that business obstacles related to governmental activities are more closely associated with the perceptions of the overall business environment in Hanoi, Hung Yen, and Vinh.

Subsequently, the mean scores of the 10 business obstacles are compared and found. Corruption (4.59), shortage of skilled labour (4.15), access to capital (4.13), interest rate (4.08), and inadequate access to external finance (3.95) are the five most severe business obstacles for firms surveyed (Figure 20). Although shortage of skilled labour and access to finance (including access to capital, interest rate, and inadequate access to external finance) correspond with the results of the World Bank Enterprise Survey, the findings are different because corruption appears as the most severe business obstacle in this survey (World Bank, 2015). It should also be noted that the severity of government-related activities is relatively small compared with some of the other business obstacles (see Figure 20 again). This finding strongly suggests that

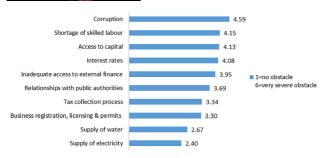


FIGURE 20 Severity of business constraints

Source: Authors.

firms are generally less concerned about these government-related activities than they are about other major business obstacles such as corruption, shortage of skilled labour, and access to finance. However, some sampled firms face severe circumstances due to governmental activities, as supported by the Mann–Whitney U-test (see Table 1 again). Government-related activities have a more significant influence on the perceptions of the overall business environment, and interventions to these issues may require a tailor-made approach to meet individual firms' needs. Otherwise, putting extra efforts to reduce the government-related obstacles may have a limited impact on firm operations.

Finally, the Mann–Whitney U-test also suggests that there is a significant difference between Vietnamese firms (N=46) and non-Vietnamese firms (N=14) in their perceptions of corruption (p=.0336). Vietnamese firms perceive the severity of corruption more than non-Vietnamese firms do (also refer Figure 17 again). One possible explanation is that officials are focusing requests for bribes to local firms as opposed to foreign-owned firms, as they perceive higher risks in dealing with foreign-owned firms. Soans and Abe (2016) argue that foreign-owned firms have a higher concern for breaking bribery laws in the host country and thus avoid any involvement in corruption cases with the officials. Again, the number of respondents is relatively small, especially for foreign-owned firms and therefore the validity of the results could be limited.

This nonparametric analysis shows that high levels of severity in corruption; supply of electricity; supply of water; business registration, licensing, and permit; and relationships with public authorities are associated with low satisfaction with the overall business environment. Interestingly, the severity of major business obstacles found in this survey including shortage of skilled labour, access to capital, interest rate, and access to external finance is found to be not significantly associated with the overall business environment. At the same time, it becomes clear that firms are relatively satisfied with government-related business obstacles. This series of results lead us to the conclusion that corruption is the sole business obstacle that is both closely associated with the overall business environment and perceived as a very severe obstacle for business.

5 | DISCUSSION

The results of this empirical study revealed interesting relationships between the overall business environment and business obstacles in Vietnam that have important implications for policymakers in facilitating business operations in the country.

Corruption and government-related activities, such as supply of electricity; supply of water; business registration, licensing and permit; and relationships with public authorities, have negative associations with the level of the overall business environment. In other words, the more

severe the obstacles, the less firms tend to be satisfied with the overall business environment. However, it is also found that firms are not as concerned about governmental activities (i.e., supply of electricity; supply of water; business registration, licensing, and permit; and relationships with public authorities) as other major business obstacles such as corruption, shortage of skilled labour, and access to finance.

This study differs from previous studies in a few key ways. The study's most important finding is that corruption plays a significant role in the Vietnamese business environment, which was not fully supported by previous studies (cf. Transparency International, 2016b; WEF, 2016; World Bank, 2015). One possible explanation for the notable difference in the impact of corruption is that most previous studies were conducted jointly with the local authorities although this study did not involve their engagements. With the participation of the authorities in a survey, it is likely that firms hesitate to report their candid opinion on the level of corruption with the officials.

Implications 5.1

Given the fact that corruption is the only business obstacle in this survey that is both associated significantly with the overall business environment and viewed most crucial to business with its "sand the wheel" effect, the Vietnamese public authorities should set the tackling of corruption among its top priorities. Although Vietnam's 2005 Anti-Corruption Law requires government officials to declare their assets and sets strict penalties for corrupt practices, enforcement remains problematic (U.S. Department of State, 2014). Vietnam ratified the United Nations Convention on Anti-Corruption in 2009 but has not signed the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, and anticorruption efforts in Vietnam so far have a limited impact on corruption (U.S. Department of State, 2014). Considering the significance of corruption in the Vietnamese business community, it is necessary for the Vietnamese Government to accelerate the anti-corruption campaign and action at the national level.

The shortage of skilled labour and access to finance, the two most frequently mentioned business constraints in Vietnam, are also critical in this survey. However, their associations with the overall satisfaction of firms with the business environment are limited and statistically not significant. Yet, it is still important that the Government continues its efforts to mitigate the negative consequences of these business constraints.

It is apparent that firms in the survey are not very concerned about governmental activities or services such as quality of utilities compared with other issues: corruption, shortage of skilled labour, and access to finance. However, the quality of those government's activities and services is linked with the perceptions of business conditions in Vietnam and does not allow the Government to ignore the importance of these issues. These implications further suggest that the Government should undertake tailor-made approaches to improve its activities and services according to the needs of individual firms and industries.

Limitations and future studies

This study succeeds in raising awareness of the importance of corruption in the Vietnamese business community. However, the study presents some limitations. The sample size of this survey is relatively small, and the rate of missing values for the questions of concern remains relatively high within the range of 22% to 46%. The sample of firms does not accurately represent the target population in terms of sector, size, location, or nationality of firms. In this survey,

more than 40% of firms are from the manufacturing sector, whereas only a few come from the services sector, which accounts for 40% of annual output in Vietnam (Breu, Dobbs, Remes, Skilling, & Kim, 2012). Due to these constraints on data size and quality, the validity of the analyses is limited. The results should, therefore, be confirmed by future studies, with a larger sample size and broader geographical coverage.

Moreover, it would be useful to conduct follow-up surveys to examine the details of corruption. Firms that most severely suffer from corruption are medium-sized enterprises, in the hotel/restaurant and construction sectors, Hanoi based, and Vietnamese owned. Although this study neither closely inspects these subcategories nor finds the root cause of high-level corruption, a future study may examine, for example, why medium-sized enterprises or the hotel/restaurant and construction sectors are struggling much more with public corruption than other sectors. A survey may also be conducted among major commercial centres throughout the nation to examine geographical deviations on corruption to provide more practical recommendations to the public sector. It is our sincere hope that more research is conducted to identify the problems and find solutions to eradicate corruption and other business obstacles in Vietnam.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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APPENDIX A.

VARIABLE NAMES, MEASURES, AND DEFINITIONS

Variable name	Measure/Definition
Overall business conditions	Rating from 1 (very unfavourable) to 6 (very favourable) on whether overall business conditions in Vietnam is favourable to the current operations of the firm
Corruption	Rating from 1 (no obstacle) to 6 (very severe obstacle) on whether corruption is an obstacle to the current operations of the firm
Shortage of skilled labour	Rating from 1 (no obstacle) to 6 (very severe obstacle) on whether shortage of skilled labour is an obstacle to the current operations of the firm
Access to capital	Rating from 1 (no obstacle) to 6 (very severe obstacle) on whether access to capital is an obstacle to the current operations of the firm
Interest rate	Rating from 1 (no obstacle) to 6 (very severe obstacle) on whether interest rate is an obstacle to the current operations of the firm $\frac{1}{2}$
Inadequate access to external finance	Rating from 1 (no obstacle) to 6 (very severe obstacle) on whether inadequate access to external finance is an obstacle to the current operations of the firm
Supply of electricity	Rating from 1 (no obstacle) to 6 (very severe obstacle) on whether supply of electricity is an obstacle to the current operations of the firm
Supply of water	Rating from 1 (no obstacle) to 6 (very severe obstacle) on whether supply of water is an obstacle to the current operations of the firm
Business registration, licensing, and permits	Rating from 1 (no obstacle) to 6 (very severe obstacle) on whether business registration, licensing and permit are an obstacle to the current operations of the firm
Tax collection process	Rating from 1 (no obstacle) to 6 (very severe obstacle) on whether tax collection process is an obstacle to the current operations of the firm
Relationships with public authorities	Rating from 1 (no obstacle) to 6 (very severe obstacle) on whether relationships with public authorities is an obstacle to the current operations of the firm

APPENDIX B.

QUESTIONNAIRE FORM

1. How would you rate the overall business conditions in Vietnam? Circle the most appropriate.

Very unfavourable			Very favourable					
1	2	3	4	5	6			



2. To what degree does each of the following issues present an obstacle to the current operations of your firm? Circle the most appropriate.

		No obstacle				Very severe obstacle		
a	Supply of electricity	1	2	3	4	5	6	
b	Supply of water	1	2	3	4	5	6	
c	Business registration, licensing & permits		2	3	4	5	6	
d	Tax collection process	1	2	3	4	5	6	
e	Access to capital	1	2	3	4	5	6	
f	Interest rates		2	3	4	5	6	
g	Corruption		2	3	4	5	6	
h	Inadequate access to external finance	1	2	3	4	5	6	
i	Shortage of skilled labour		2	3	4	5	6	
j	Relationships with public authorities	1	2	3	4	5	6	

3. How much would a firm like yours have to offer, in addition to official charges to the authorities, to obtain a business registration, license or permit? Circle the most appropriate range (US dollars).

None	50 USD or less	50-100 USD	100-500 USD	500- 1,000 USD	1,000- 2,500 USD	2,500- 5,000 USD	5,000- 10,000 USD	10,000- 50,000 USD	Over 50,000 USD
1	2	3	4	5	6	7	8	9	10

Note. This questionnaire form was distributed in the Vietnamese language.