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Institutions matter: The case of Vietnam

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ABSTRACT

The paper investigates institutional reforms in Vietnam and their impact on the economic performance of firms. Using the provincial competitiveness index 2006 (PCI06) and firm-level data in Vietnam in 2005, the results show that provincial competitiveness is economically and statistically significant in explaining cross-province differences in firm performance. We find that a 1% point improvement in government practice could increase the daily value-added of an average firm by an amount equivalent to nearly three times per capita GDP per day. The results show that an improvement in providing market information, more secure land tenure and labor training assistance has a positive effect on firm performance. By contrast, weaknesses in the judiciary system and administrative reforms impede growth of non-state firms. The findings indicate that governance is an important obstacle to the development of the non-state sector in Vietnam.

1. Introduction

Institutional economics (North and Thomas, 1973; North, 1991) emphasizes the effects of institutions on economic growth through providing information, more secure property rights and stringent enforcement mechanisms to stimulate cooperation. Empirical investigations using cross-country-data have shown that better institutions are accompanied by higher economic performance (Hall and Jones, 1999; Acemoglu et al., 2001; Rodrik et al., 2002; Grafton et al., 2007). Studies that have used micro- or national-level data to analyze the effects of institutions on economic performance are limited in number and scope and most have focused on ex-communist economies where property rights have recently been transferred from the state to individuals (Besley, 1995; Johnson et al., 2002b).

The literature on the impact of institutions on economic performance within countries has focused on enforcement issues and the administrative quality of the public sector. Berkowitz and DeJong (2003), for example, find that businesses are more likely to establish themselves in regions that have more political support from the local government in Russia, while Laeven and Woodruff (2004) show that more effective jurisdictions are associated with larger firms in Mexico. A critical survey of both theoretical and empirical impacts of institutions on economic performance can be found in Gagliardi (2007a).

In this paper we investigate institutional reforms in Vietnam and the impact on firm economic performance using a provincial competitiveness index for 2006 (PCI06), and firm-level data in Vietnam from 2005. A study of Vietnam is of particular interest because although it has a homogenous political system and government structure, and relatively equal government expenditures in different parts of the country, economic performance is substantially different across provinces (VNCI-VCCI, 2005). Compared to other low-income countries, Vietnam is also characterized by a high level of discretion by local government officials (Fforde and Vylder, 1996, p. 260).

The paper is structured as follows. Section 2 investigates institutional reforms and their implementation in different regions of Vietnam with a particular focus on the second phase of the Vietnamese reform process that began in 2000. An overview of the history and institutions in Vietnam is presented in Section 3 while the data and variables used in our analysis are described in Section 4. Section 5 presents the econometric model and results of

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our investigations into institutional explanations for differences in economic performance across Vietnam. Section 6 offers concluding remarks.

2. Vietnam: institutional reforms and implementation

The economic reform process, called '*Doi moi*' in Vietnam, has recognized the legal existence of the non-state sector since the beginning of the 1990s. Despite this legal landmark, the policy environment remained hostile to private businesses in the 1990s. Consequently, non-state firms faced many constraints to their establishment and growth.

The Asian financial crisis in 1998 led to economic stagnation and thus contributed to the second phase of Vietnamese economic reforms. These stage two reforms have targeted the sustained growth of the non-state sector and were supported by the Enterprise Law of 1999. We investigate these institutional reforms and their implementation and impacts on firm performance through firm surveys. In this section, we focus on three aspects of institutional performance: (i) provision of information; (ii) security of private property rights; and (iii) lower transaction costs that arise from reduced administrative procedures and less discretion by state officials.

2.1. Providing information

Vietnam has been characterized by a lack of transparency and a service sector to support business development (IMF, 2000). For instance, the Economist Intelligence Unit's report on Vietnam in 1997 observed that there were no business services (including information provision) in any of its listed labor categories. A lack of information was also shown through firm surveys. In 1998, a survey on 153 firms in Vietnam conducted by Service-Growth Consultants Inc. (Canada) and Thien Ngan (Galaxy) Co. Ltd. (Vietnam) showed an increasing need for market information. One year later, in 1999, the Mekong Project Development Facility (MPDF) conducted a survey of 95 larger private manufacturers and found that a lack of market information was the second most important constraint to firm growth (Webster and Taussig, 1999, p. 30). Managers often complained about their inability to find information on inputs, outputs, alternative suppliers, buyers, price and price trend (Webster, 1999). Moreover, information about changes in policies and regulations as well as basic business registration such as firm name, address, and other details were not available to public and responsible officials (VNCI-CIEM, 2004).

The business environment has improved with the issuance of the Enterprise Law (1999) that requires firms and business registration bodies to publicize information relating to business registration. However, due to incompatibility among government bodies and the cost of publicizing information in newspapers, the requirement has not been fully implemented and varies across provinces. For example, Da Nang (a central province) and Ho Chi Minh City have a website with basic firm information. These cities also have established a commercial promotion center to provide firms with market information. By contrast, the implementation of the Enterprise Law in other provinces is weak. In some provinces government agencies continue to complain about lack of information on firms and do not know the number of non-state firms under their supervision (GTZ-CIEM-UNDP, 2004, p. 17).

A lack of information persists as a major constraint to the development of non-state firms. A survey of 1200 private enterprises in 2001 carried out by the German Agency for Technical Cooperation (GTZ) and the Swiss Foundation for Technical Cooperation (Swisscontact), in collaboration with InvestConsult Group, revealed a strong demand for information about a variety of business topics (GTZ-Swisscontact, 2002). Another survey implemented in 2001 on 414 private enterprises by MPDF indicated that accessing market information and penetrating markets are the biggest obstacles, followed by lack of capital (Nguyen et al., 2002, p. 7).

Acknowledging difficulties facing non-state firms, the Vietnamese Government issued Decree No. 90/2001/CP-ND in support of the development of small and medium enterprises (SMEs)[1] and Decision No. 94/2002/QD-TTG to reform the mechanisms and policies to stimulate the development of the non-state sector. These decisions led to the formation of the Agency for SME Development (ASMED) in October 2002 that has as one of its key roles to provide a countrywide firm information system on technology, management, markets, promotion and government regulations related to firm operation. To date, ASMED has worked well in undertaking business registration and regulations. Its provision of market information, however, remains weak and implementation varies across provinces, depending on the attitude of local government officials towards the non-state sector (Malesky, 2004).

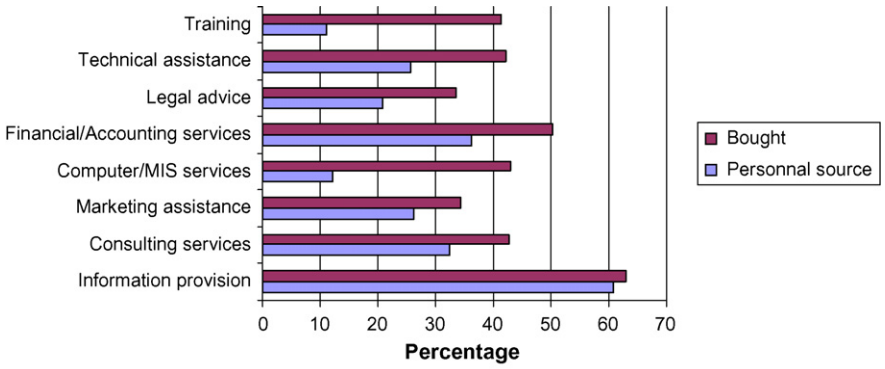
To overcome the shortage of information and promote cooperation among firms, firms have established their own business associations. In 2002, there were around 200 business associations operating throughout the country (Nguyen et al., 2002, p. vii) and the 2001 survey of MPDF shows that business associations perform well in providing information on policies and legal issues to members. Unfortunately, only a few large and well-known business associations provide, at a modest level, market information. For instance, the Vietnam Chamber of Commerce and Industry (VCCI) is equipped with an internet-based information system for SMEs, which is transferred from GTZ (www.smenet.com.vn), and has set up a center to promote cooperation among firms.

Business development services (BDS) have also been encouraged by the provincial and central governments. However, a survey on 746 firms conducted in 2002 by Crawford School of Economics and Government (CSEG) of the Australian National University (CSEG) and Central Institute of Economic Management (CIEM) Of Ministry of Planning and Investment Vitenam shows that firms often complain about the quality of information that they have bought. Consequently, many firms obtain their information informally through friends and relatives (Fig. 1). Firms in the survey also consider that a lack of information on markets and customers weakens their competitiveness, and express their high demand on this type of information (CSEG and CIEM, 2002).

A recent survey conducted by the World Bank in 2004 of 42 enterprises that are contractors and subcontractors reveals that lack of information is the most limiting constraint preventing cooperation. Searching for information about contractors and subcontractors is time-consuming. Consequently, firms, especially SMEs, have to rely on personal sources to advertise their products. Similarly, contractors find it hard to identify an appropriate supplier due to a lack of basic data or items such as catalogues or brochures that also limit cooperation (Carlier and Tran, 2005).

In summary, institutional reforms since 2000 have improved the provision of information relating to regulations. However, weaknesses remain in providing market information and the implementation of the central government's regulations and policies varies across provinces.

[1] SMEs in Vietnam are defined as having up to 300 workers.



Source: Author's calculation based on the data set of CSEG & CIEM

Fig. 1. Proportion of sample firms using each kind of business service.

2.2. More secure property rights

In 2000, the IMF observed that Vietnam did not have secure private property rights. Six years later, the Heritage Foundation 2007 (Kane et al., 2007) gave a score of just 10% to Vietnam in terms of security of its property rights, whereas other measures of institutional performance are rated above 50%. 'Hot' problems that are related to private property rights, and often cited as impeding the private sector performance in Vietnam, are land, contract enforcement and dispute resolution.

2.2.1. Land

According to the Constitution of Vietnam, land belongs to the state. The Land Law 1993, however, recognizes the right to use allocated land parcels. This law also allows holders to transfer and mortgage the land use right (LUR) for a specific period (Section 2 – The Land Law 1993). However, because this law does not define clearly the functions of related government bodies, the implementation of giving land use right certificates (LURC) is very weak. As a result, many non-state firms have their own premises but do not have an LURC as collateral for loans. [For instance, according to the firm survey in 2002 by CSEG and CIEM, among non-state firms having their own premises, only 51.7% hold LURC]. This limits the potential of firms to borrow and to grow their businesses (e.g. Ronnas and Ramamurthy, 2001; Carlier and Tran, 2004a).

A consequence of the planned economy and the Vietnam Constitution is that all utilized land is allocated to individuals and state-owned enterprises (SOEs), and the procedure to apply for land for business purposes is both complicated and costly. Firms incur substantial transaction costs by visiting many government agencies, paying a large amount in terms of informal fees and waiting for around 2–3 years for the final decision (Carlier and Tran, 2004b). Due to a lack of premises, non-state firms have also to rent un-utilized land from SOEs unofficially or from individuals, weakening their competitiveness as the market rent is high compared to the official price stipulated by the government. In addition, the contract term is often of short duration because landlords want to raise rents after short periods to ensure 'catch up' with a rising land price. As a result, non-state firms avoid investing in long-term assets on their rental premises (Carlier and Tran, 2004b). The net result is an increase in both transaction and transformation costs.

To increase the land supply for non-state firms, the government issued the Land Law Amendment 1998 and the Domestic Investment Promotion Amendment 1998. These promote the construction of industrial zones and require provinces to publish information on available land. However, constructing industrial zones take time because it requires compensation to be paid for confiscated land. Moreover, there is no government body in charge of confiscated non-used land and the publication of information on available land depends on local governments (Malesky, 2004).

The new Land Law 2003 may be a turning point for issues associated with land tenure. As stipulated by this law, a subordinate system of Land Use Right Registration agencies is established to take charge of LURC. This creates a 'one-stop shop', saving much money and time for LURC applicants. Further, to increase land supply for the non-state sector, an agency called the Land Fund Development Organization was created. Its function is to confiscate non-used land previously allocated to SOEs and other organizations. Another break-through of the new Land Law 2003 is that it tries to create a clear distinction between formal and informal land prices.[2] However, the implementation of this law, as in the case of providing market and other information, depends on practices of local government authorities (Carlier and Tran, 2004b).

2.2.2. Contract enforcement and dispute resolution

The Vietnamese government has carried out many institutional reforms to stimulate the development of the non-state sector, but reforms of the judiciary system have been often neglected. To date, the sole improvement in this area is the anti-corruption 'voice' of the media towards the judiciary system. When weak contract enforcement has existed as part of 'business culture' (Doan, 1999), the use of the courts to solve disputes is very low. For example, in a survey of 259 managers of non-state firms in Hanoi and Ho Chi Minh City in 1995–97,[3] only 9% said that a court or other government agencies could help to solve their disputes (McMillan and Woodruff, 1999). Although the incidence is much higher in the south than the north of Vietnam (Malesky, 2004), this proportion is much lower than in other transition economies (Johnson et al., 2002a).

Weaknesses in the judiciary system and an attitude that litigation may lead to a negative reputation encourages firms to rely on business associations to solve their disputes. Calculations based on the dataset of the CSEG and CIEM firm survey in 2002 shows that only 7% of firms in the sample had disputes during the period of 5 years. Once disputes arise, however, business associations are the most common method of resolution. The reasons for not using courts include fears about the complications of lawsuits, the possibility of an unfair judge and possible damage of reputation with business partners.

[2] The formal price of land is the price that the state pays for confiscated land. This is much lower than the market (informal) price, generating a huge benefit for those who get LUR from the state and thus induces corruption in this area.

[3] The survey was conducted with support of the Vietnam-Pacific Program and the Academic Senate of the University of California, San Diego.

Table 1
Distribution of contractors

	1996 (%)	2001 (%)
Non-state enterprise in same district/town	65.12	43.02
Non-state enterprise outside district/town	11.63	25.58
State enterprise in same district/town	8.14	13.95
State enterprise outside district/town	6.98	11.63
Foreign company	4.65	1.16
Other	3.49	4.65
Total	100.00	100.00

Source: Author's calculation based on the dataset of MOLISA on SMEs.

A low level of business disputes is not necessarily a positive indication of economic development. Rather, it may reflect too much prudence in selecting partners. The survey on non-state SMEs of the Ministry of Labor, Invalids and Social Affairs (MOLISA) in 1996 and 2001 reveals that cooperation is mostly between non-state SMEs and other domestic private enterprises in the same district/town. Relationships outside of the regions and with SOEs are few, and there is little cooperation with foreign companies (Table 1). Moreover, to get partners to enforce contract agreements, contractors (large firms) often delay their payment until the next delivery. This accumulates financial difficulties for smaller firms (subcontractors) (Carlier and Tran, 2005).

2.3. Reducing administrative procedures and official arbitrariness

A significant change in business costs has arisen from the issuance of the Enterprise Law 1999 in that many barriers preventing the establishment of firms have been reduced. Consequently, the time it takes to establish an enterprise has been reduced from 90 to 7 days, on average. The registration fee has also decreased from VND 10 million to VND 500 thousand. Also importantly, the 'bureaucratic attitude' has diminished thanks to a clearer definition of the functions of each government body (GTZ-CIEM-UNDP, 2004). The Land Law 2003 has also reduced administrative costs in obtaining LURC. Business operations, thus, have become more flexible and secure.

In other areas such as tax reform, unfortunately, red tape and low transparency still remain as major obstacles to the establishment and growth of private firms. In a survey of 300 firms carried out by the MPDF and World Bank in Vietnam in 2002/2003, firms often complain about the discretion and bureaucratic attitude of tax officers. The fact that firms have to pay unofficial fees is common because tax officers usually hide information, making the regulation environment unclear (Carlier and Tran, 2004a).

Other problems also exist. For instance, legal documents in Vietnam require all transactions to be proved by a 'red invoice'[4] that can be bought only at tax offices. Whenever firms come to buy, tax officers sell only one book (containing 50 invoices). This means firms have to come back in two weeks or a month to get more. For some firms, visiting a tax office is costly. According to a recent survey conducted by CIEM on 360 firms in 2007, on average, a firm has to spend 2000 h or 245 days per year, which is equivalent to hiring one staff member to take charge of all tax procedures, while completing the tax regulations only requires about 30 days (http://www.dautuchungkhoan.com/Nganhang-Taichinh/2007/08/23938.OTC). The issuance of the Tax Law in 2006, which was enforced in July 2007, will help as firms are allowed to calculate and pay taxes online. This is a major administrative reform and creates a 'one-stop shop' in terms of business taxation.

[4] This is the official invoice published by the Ministry of Finance. The name comes from its color.

3. Institutional implementation: reasons for differences

The political system and government structures in Vietnam are identical everywhere but the implementation of the central government's laws and regulations varies across regions. In particular, differences are more pronounced between the north and south of the country. History, geography and the complexity of laws and regulations are key factors explaining institutional variation.

3.1. History and geography

Vietnamese culture originated in the north and in the Red River Delta (RRD) in particular. Early in its history, the RRD was characterized by a high population density, almost all in rural areas where there was poor infrastructure that limited communications between districts and provinces (Gourou, 1936). The economy was characterized by wet rice cultivation and village settlements. The village was an autonomous community which collected taxes from its citizens and fulfilled its obligations to the state. Tax obligations of a village were levied on the number of its citizens. Because there was no official birth and death registration system, coupled with the difficult communication, chiefs of villages had incentives to hide the number of new births from the government to keep a proportion of collected taxes for their own benefit. The independence of villages was manifested by the sayings 'phép vua thua lệ làng' – translated as 'the laws of the King yield to the customs of the village'.

The population of the RRD generated little surplus production. Commercial markets were very small. Citizens produced most of their need from food to housing materials, and were inclined toward saving (Gourou, 1936). In summary, a high level of independence of local governments, lack of transparency between local and central governments, and self-sufficiency are the heritage of the north.

The south, with its core area of the Mekong River Delta (MRD), has been settled by people from the north and center of Vietnam since the 17th century. The first migrants to the south from the north and center were those who had lost, or could not find, a place in the villages (Thach Phuong et al., 1992). Difficulties for the first migrants stimulated a cooperative and audacious attitude among these 'pioneers' (Son Nam, 2000).

The contrast between the RRD and MRD is documented by Rambo (1973), Taylor (1983), Jamieson (1993) and Brocheux (1995). As described in these studies, village organizations in the south were much less rigid when compared to the closed political center of villages in the north. Moreover, less diversity in the environment reduced differences in locally adapted agricultural production and the need for systems as in the north. Contrary to the 'closed community' in the north, southern people have also been characterized as being open and less accepting of northern traditional norms. They consume more and this substantial consumption difference between the RRD and MRD remains true today, as shown in Table 2.

More predictable and benign weather in the MRD, coupled with a convenient water transportation system, promoted faster economic development in the south. The south also experienced a greater western influence because the French exercised direct control in the south first and later developed French rule and administered indirectly the north, through local Vietnamese administrators (Jamieson, 1993, p. 5). Moreover, 25 years of exposure to the world market economy until 1975 has made southern Vietnamese more market-minded.

Due to the complexity of law, and also to guide the implementation of laws, a large number of sublaws such as decrees, decisions and regulations are issued. This, in turn, makes the regulatory environment more complicated, and the implementation of laws depends very much on the interpretation of local officials

Table 2
Consumption per capita 1995–2005 (VND[a] million/person)

Year	Whole nation	RRD	North east	North west	North central coast	South central coast	Central highlands	South east	MRD
1995	1.66	1.37	0.72	0.63	0.87	1.70	0.67	4.22	1.54
1996	1.97	1.66	0.99	0.77	1.02	1.95	1.02	4.90	1.75
1997	2.15	1.76	1.08	0.71	1.14	2.20	1.16	5.22	2.00
1998	2.43	1.98	1.23	0.82	1.24	2.44	1.34	5.99	2.22
1999	2.59	2.17	1.19	0.85	1.32	2.62	1.58	6.25	2.39
2000	2.84	2.53	1.27	0.90	1.47	2.59	1.79	6.70	2.66
2001	3.12	2.74	1.72	1.01	1.59	3.07	1.85	7.14	2.86
2002	3.52	3.21	1.95	1.18	1.73	3.24	2.10	8.04	3.23
2003	4.13	3.75	2.25	1.24	1.97	3.96	2.31	9.44	3.79
2004	4.86	4.44	2.74	1.54	2.35	4.54	2.77	10.95	4.47
2005	5.78	5.31	3.18	2.01	2.75	5.31	3.38	12.94	5.36

Source: GSO (www.gso.gov.vn). Based on differences in geography, history and culture, and politics, Vietnam is divided into eight ecological regions: RRD includes 11 provinces in the Red River area; north east contains 11 highland and mountainous provinces north east of Hanoi; north west includes four mountainous provinces north west of Hanoi. North central coast includes six north coast provinces while south central coast includes six south coast provinces. Central highlands contains four highland provinces in the central south. The south east includes Ho Chi Minh City and other developed provinces in the south, while the MRD contains 12 provinces.

[a] The currency of Vietnam.

(Gillespie, 1993; Le et al., 1999; Webster, 1999; GTZ-CIEM-UNDP, 2004; Nguyen et al., 2004). Even when regulations are clear, there are always opportunities for local authorities to apply their own interpretation to central policies (Tenev et al., 2003).

In summary, history, differences in culture and geography, and the complexity of laws, have led to a high level of discretion by local authorities in the implementation of rules and decrees in Vietnam. This is particularly true in the implementation of the central government's regulations and policies towards the non-state sector. An indicator that measures the attitude and the implementation of laws and central government regulations and policies at a provincial level, is the provincial competitiveness index (PCI). Details of this indicator are discussed in the following section.

4. Data and variables

To analyze the impact of institutional changes on firm performance since the second phase of reform in 2000, we combine the use of the PCI in 2006 and countrywide firm-level data by province in 2005.

The first PCI was calculated in 2005 (PCI05) for 42 provinces, based on a firm survey and also on interviews with state officials in 2004. The PCI05 is a weighted index of nine sub-indices: business entry costs; access to land; transparency and access to information; time costs of regulatory compliance; informal charges; implementation and consistency of policies; state sector bias; pro-activity of provincial leadership; and private sector development policies. While each sub-index is scored from 1 to 10, the PCI is marked from 1 to 100 with a higher score indicating better institutional performance.

Following the success of the PCI05, the Vietnam Competitiveness Initiative (VNCI) — a USAID (the United States Agency for International Development) funded project, and the Vietnam Chamber of Commerce and Industry (VCCI) repeated its study in 2006 based on the firm survey in 2005. Both PCI05 and PCI06 reflect the improvement of institutions at a provincial level since the issuance of the Enterprise Law in 1999. Nevertheless, the results from the PCI06 are considered more reliable for several reasons. First, all 64 provinces of the country participated in 2005, thus increasing the number of surveyed firms three-fold (6379 businesses versus 2020 firms in 2004). Second, two new sub-indices, 'labor training' and 'legal institutions', were introduced (VNCI-VCCI, 2006). The 'labor training' index assesses provincial assistance to help overcome skilled labor shortages while the 'legal institutions' index reflects the generalized trust of private businesses in the judiciary system to resolve disputes. Third, the methodology to calculate sub-indices, assigned weight, and the aggregate PCI was improved (VNCI-VCCI, 2006, p. 1).

Overall, the PCI reflects the arbitrariness, red tape and corruption of local government officials in the way they implement legal documents and policies from the central government. As the PCI06 is more reliable in terms of statistics, most of the estimations in this paper use the PCI06 and its sub-indices including 'transparency and access to information', 'private sector development services', 'land access and security of tenure', 'legal institutions', 'business entry costs', 'time costs of regulatory compliance', and 'labor training' indices.

The firm survey was conducted by the General Statistics Office (GSO) of Vietnam in 2005. Although this is the country-wide enterprise survey, information on costs is limited to the sample. As we focus on the effect of institutions on non-state enterprise performance, only the sub-sample of non-state manufacturing firms is used in our analysis. In addition, the exclusion of missing and irrelevant values, including negative value-added (VA), visible outliers, large firms that employ more than 2000 workers, and provinces with a small numbers of enterprises, reduces the sample to 1727 observations.[5] Summary statistics from the firm characteristics of survey data are presented in Table 3.

Currently, the non-state sector in Vietnam includes household firms, cooperative enterprises, sole proprietorships, partnership enterprises, and limited and shareholding companies. However, the survey conducted by the GSO only collects information on formally registered firms. Thus, household enterprises are not included in the survey and because there are only four partnership enterprises included in the sample, we also exclude them from the analysis.

Column 1, Table 3 shows that the majority of non-state enterprises in the sample are limited companies, followed by sole proprietorship firms. Firms at a small and medium size, using from 10 to 300 workers, dominate this sample. Most of the firms in the sample were established at the time the reforms took place in 2000 (column 2). Other indicators including firm size, fixed asset and VA show that large firms and advanced structures, including limited and shareholding companies, have higher VA and fixed assets.

We model the effects of institutional differences by province on firm labor productivity. To control for differences in firm specific characteristics, dummy variables for firm size, including micro,

[5] In accordance with the current dominance of small and medium domestic private firms in Vietnam, few firms (account for 0.8% of the sample) having more than 2000 workers are excluded. Provinces having up to seven firms are also excluded because these numbers of firms are too small to be representative for those provinces.

Table 3
Firm characteristics by ownership type and firm size

	Firm ownership and size distribution (%) (1)	% Of firms established since 2000 (2)	Average firm age (# years) (3)	Average firm size (# workers) (4)	Average fixed asset (VND billion) (5)	Average value-added (VND billion) (6)
Total	100.00	64.97	7.02 (6.84)	131.39 (229.37)	7054.76 (17599.19)	8060.82 (19816.66)
Firm ownership						
• Cooperative	4.52	28.21	14.38 (13.24)	81.55 (153.24)	1661.33 (5611.86)	3400.04 (11581.84)
• Sole proprietorship	25.07	63.74	6.60 (4.09)	50.95 (107.89)	1846.67 (4256.89)	2963.97 (10299.78)
• Limited	55.18	69.25	5.67 (3.33)	142.54 (244.29)	7889.18 (18975.54)	7926.12 (18305.15)
• Shareholding	15.23	62.36	10.45 (12.39)	237.89 (283.48)	14205.28 (24199.47)	18322.59 (31622.33)
Firm size						
• Micro	11.52	71.36	5.71 (4.29)	6.01 (2.09)	459.06 (557.45)	547.70 (2755.08)
• Small	42.04	71.07	6.15 (5.73)	24.25 (10.91)	1656.19 (3496.93)	2468.61 (9109.58)
• Medium	34.11	60.61	7.77 (7.71)	128.72 (70.20)	7987.35 (13270.39)	9631.12 (19195.41)
• Large	12.33	50.23	9.16 (8.72)	620.44 (346.29)	29038.84 (36912.01)	29798.58 (35251.00)

Source: Author's calculation based on the countrywide firm survey 2004 (GSO). *Note*: numbers in parentheses are standard errors.

small, medium and large groups,[6] firm age, capital intensity (as measured as fixed assets per worker) and ownership types are included. The economic environment that affects firm performance, such as the initial endowments of provinces including human capital and market size, is included in the model as a control. Human capital is measured by the percentage of graduates in the total population of each province using the 1999 population census data. Another way of measuring human capital is the proportion of students enrolled in professional high school education as a proportion of the provincial total population in 2001. This variable reflects, to some extent, local needs for skilled workers. This information is extracted from the standard statistical book for 64 provinces of Vietnam (GSO, 2005). Market size is measured by the proportion of population of each province over the total population and per capita GDP. Per capita GDP is calculated as the average value for the period 2001–2004 [market size is included as a control because a large market can support mass production and advanced technologies (Rosenstein-Rodan, 1943; Murphy et al., 1989) that can increase labor productivity (LP)]. The reason to take the economic environment variables at the period that precedes the one studied is due to the lag in the impacts of local markets' characteristics on firm performance. Table 4 provides a more detailed description of variables used in the estimated models while Table 5 presents summary statistics of the economic environment and institutional variables.

5. Econometric model and results

The model we estimate to analyse the impacts of institutions on firm performance in Vietnam is given by Eq. (1).

$$\log(lp_{ij}) = \beta_0 + \beta X_i + \delta Z_j + \gamma \Gamma + \varepsilon_{ij} \quad (1)$$

where lp_{ij} is labor productivity of firm i at province j; β_0 is firm specific effect; X_i is a vector of firm specific characteristics; Z_j is a vector of the provincial initial endowment; Γ is a vector of institution variables; ε_{ij} is the error term.

As often cited in the literature, differences in history and culture are the reasons for differences in economic performance between the north and south of Vietnam. Kim (2006) finds evidence of differences in property rights between the north and south and attributes it to differentials in social norms and politics. To test the hypothesis that differences in history and culture affect firm performance, a *North* dummy variable is used as a proxy for institutions in model (1). Controlling for differences in firm characteristics, human capital and market size, we find the evidence that, overall, firms located in the south perform better than those in the north (column 1 and 2, Table 6).

The argument that the south used to be a market economy and thus has more market-based experience than the northern bureaucracy-rooted economy is a reasonable working hypothesis. However, Nguyen et al. (2004) argue that history is not an important indicator as the reform process began some 15 years ago. During that period the north approached western economies faster

Table 4
Description of variables

Variables	Description
Log(lp)	Log of labor productivity
$K \times L$ ratio	Capital/labor ratio
Firm age	Number of years of operation
Micro	Dummy variable for micro firm
Small	Dummy variable for small firm
Medium	Dummy variable for medium firm
Large	Dummy variable for large firm – excluded from the model as a reference group
Cooperative	Dummy variable for cooperative firm
Private	Dummy variable for private firm – excluded from the model as a base
Limited	Dummy variable for limited companies
Shareholding	Dummy variable for shareholding companies
edus01	Proportion of students enrolled in professional high school education as a proportion of the provincial total population in 2001. This variable is extracted from the 'Socio-economic statistical data of 64 provinces and cities' book
edu99	Percentage of graduates in the total population of each province. This information is pulled out from the Vietnamese population census in 1999
GDPP	Average per capita GDP during 2001–2004
% Of population	Proportion of population of each province over the total population in 2005
North	Regional dummy variable
PCI06	Provincial competitiveness index, 2006
Information 1	'Transparency and access to information' index. This reflects the level of access to the central government regulations and policies at the province level
Information 2	'Private sector development services' index, revealing the availability of market information
Land	'Land access and security of tenure index'
Dispute	'Legal institutions' index
Transaction cost	Weighted index of 'entry costs' and 'time costs of regulatory compliance' indices
Labor training	'Labor training index'

Note: (i) Firm characteristics variables are based on the firm survey of GSO in 2005; (ii) economic environment information including edus01, edu99, GDPP, % of population are at provincial level and can be accessed through GSO website; (iii) the institutional variables are at provincial level and provided by VNCI and VCCI, 2006.

[6] By definition, micro firms employ less than 10 workers while large firms have 300 workers and above.

Table 5
Summary statistics of the economic environment and institutional variables

Variables	Mean	S.D.	Min	Max
edus01	0.39	0.26	0.02	0.85
edu99	4.52	4.42	0.32	12.83
GDPP	7.30	4.55	2.08	34.99
% Of population	3.32	2.31	0.68	7.11
PCI06	58.24	8.90	40.73	76.23
Information 1	6.26	1.16	3.62	8.50
Information 2	6.56	1.50	3.60	9.62
Land	5.54	0.93	4.19	7.98
Dispute	3.89	0.78	2.52	6.38
Transaction cost	5.72	0.74	4.44	7.58
Labor training	6.08	1.36	2.92	9.60

Note: For the description of the variables see Table 4.

than the south as more scholarships to study in western countries were allocated to the north and returned scholars might bring western working styles to the north. They also make a comparison of economic performance among some provinces in the south with some in the north and conclude that differences in economic performance arise from differences in the implementation of legal regulations and policies rather than history.

We argue that history still matters and differences in history and culture define the way institutions are implemented. Our evidence is that when PCI06 is to (1) along with '*North*' dummy variable then the estimated coefficient for PCI06 becomes statistically insignificant at the 10% level of significance from zero and the power of the coefficient for *North* becomes smaller (column 4, Table 6). This is because PCI06 is highly correlated with the north-south dummy (Table 7) and it is likely that the dominant impact of social norms influences the power of the institutional variable.

The relationship between the total PCI06 and its sub-indices with regions are also examined in Fig. 2 where each plotted dot reflects the province rank in implementing the central government institutions and policies. The vertical line divides provinces into northern and southern regions where northern provinces are located on the left of the line. The horizontal line goes through the middle performing points and splits plotted points into lower and higher governance performers (below and above the line, respectively). Overall, southern provinces are often found in the northeast corner of each figure, indicating that southern provinces implement the central government regulations and policies better than those in the north. The judiciary system is the worst performing area as the majority of provinces are located under the horizontal line (Fig. 2e).

Table 6
Impact of history and culture on firm performance

	Dependent variable: log(*lp*)			
	1: North only		2: North and PCI06	
	Coefficient (1)	*t*-values (2)	Coefficient (3)	*t*-values (4)
Constant	2.822	21.68	2.836	9.70
$K \times L$ ratio	0.002	10.8	0.002	10.8
Firm age	0.009	1.97	0.009	1.97
Micro	−0.114	−0.91	−0.114	−0.91
Small	0.090	0.91	0.089	0.91
Medium	0.135	1.40	0.135	1.40
Cooperative	−0.445	−2.92	−0.444	−2.91
Limited	0.163	2.11	0.164	2.09
Shareholding	0.486	4.62	0.486	4.62
edus01	0.448	1.51	0.456	1.38
edu99	0.003	0.14	0.002	0.11
GDPP	0.014	1.61	0.014	1.59
% of population	−0.008	−0.41	−0.008	−0.41
North	−0.290	−3.58	−0.294	−2.79
PCI06			−0.000	−0.05
# Of obs[a]	1727		1727	
F test (Prob)	18.98		17.62	
R^2	0.13		0.13	

[a] Number of observations. Large group and private enterprises are excluded as reference groups.

To investigate the impact of institutional implementation on firm performance, we include PCI06 into model (1) and exclude *North* to reduce multicollinearity. The effects of sub-indices are also investigated by additional specifications presented in Table 8. For instance, the effects of information provision on firm performance are examined in specifications 4 and 5 (Table 8). '*Information 1*' specification (column 4) presents the level of access to the central government regulations and policies at the province level, while '*Information 2*' specification (column 7) reflects the availability of market information. Differences in property rights can be evaluated through an 'access to land' index ('*Land*' specification, column 10) and disputes (column 13). Disputes are measured by the 'legal institutions' index, which indicates the confidence of the private sector in the judiciary system to resolve their disputes. The possible impact of a lowering of transaction costs through simplifying administrative procedures and reducing state officers' arbitrariness on firm performance is analyzed in '*Transaction cost*' specification. This specification of institutional performance is constructed from 'entry cost' and 'time costs of regulatory compliance' indices, respecting their weight in the PCI06. 'Labor training' presented in '*Labor training*' specification (column 19) does not reflect institutional reforms, rather it reflects the supporting attitude of local government to promoting the development of the non-state sector. This index is included in the analysis because unskilled workers and managers may impede growth of non-state enterprises and thus government assistance in this area could be important (see Table 4 for the description of indices used in the estimated models).

To check the robustness of variables included into various specifications, we use a software named PcGets — a general-to-specific modeling approach in Hendry and Krolzig (2001). Once a general unrestricted model (GUM) is formulated, the algorithm of the method checks outliers, defined by its number of σ_{GUM} unit. Impacts of these outliers on the dependant variable are neutralized by creating dummy variables for each outlier. In a second stage, a multiple search path using Monte Carlo simulation is used to evaluate relevant variables to be retained in the simplified model. Principally, the multiple search path removes insignificant variables from the GUM. After obtaining a specific model, the significance of parameters in the final selected model is evaluated in two over-lapping sub-samples (Owen, 2003). Reliability statistics are reported. A higher reliability value indicates higher level of statistical significance of the selected variable in both the full sample and sub-samples. These results are presented in Table 8.

As shown in Table 8, there is no heteroskedasticity in all models studied and the Chow tests at mid-point and 90th percentile breakpoints confirm the constancy of parameters. The results indicate that firm age has a positive effect on labor productivity. One more year of operation makes firms more efficient presumably due to the accumulation of skills and experience, reflecting the 'learning by doing' process. Among different firm sizes, large groups are excluded from the model as a reference group. The Monte Carlo study retains only micro groups in the specific models. Small and medium groups do not satisfy the statistical significance of the 'pre-search' tests and thus, are excluded from the models. This implies that statistical differences in firm performance are only found between micro and large groups. Cooperatives perform less efficiently than sole-proprietorships (excluded from the model as a base) because they have disadvan-

Table 7
Correlation matrix of all independent variables

	$K \times$ L ratio	Firm age	Micro	Small	Medium	Large	Cooperative	Private	Limited	Shareholding	edusp01
$K \times$ L ratio	1.0000										
Firm age	0.0151	1.0000									
Micro	0.0376	−0.0692	1.0000								
Small	0.0147	−0.1087	−0.3073	1.0000							
Medium	−0.0113	0.0784	−0.2596	−0.6127	1.0000						
Large	−0.0424	0.1172	−0.1354	−0.3194	−0.2698	1.0000					
Cooperative	−0.0676	0.2342	0.0001	0.0690	−0.0447	−0.0392	1.0000				
Private	−0.0570	−0.0356	0.2599	0.0974	−0.1569	−0.1723	−0.1258	1.0000			
Limited	0.0638	−0.2202	−0.1488	0.0245	0.0491	0.0370	−0.2413	−0.6419	1.0000		
Shareholding	0.0196	0.2124	−0.1075	−0.1912	0.1472	0.1792	−0.0922	−0.2452	−0.4703	1.0000	
edusp01	−0.0244	0.0579	−0.1561	0.0814	0.0545	−0.0492	−0.0033	−0.2856	0.1626	0.1214	1.0000
edu99	−0.0023	0.0560	−0.1041	0.0648	0.0308	−0.0407	−0.0313	-0.3020	0.2097	0.0922	0.9100
GDPP	0.0654	−0.0304	−0.0320	0.0552	−0.0021	−0.0488	−0.1030	−0.1532	0.2022	−0.0356	0.3125
% Of pop[a]	0.0676	−0.0070	−0.0322	0.0732	−0.0189	−0.0514	−0.0884	−0.2143	0.2325	−0.0122	0.3873
PCI06	0.0654	−0.0839	−0.0773	−0.0382	0.0525	0.0567	−0.0862	0.0025	0.1169	−0.1150	−0.0942
North	−0.0806	0.1007	−0.1088	0.0642	0.0436	−0.0535	0.1387	−0.2365	0.0310	0.1623	0.4726

	edu99	GDPP	% Of pop*	PCI06	North
edu99	1.0000				
GDPP	0.4594	1.0000			
% Of pop[a]	0.5608	0.6198	1.0000		
PCI06	−0.1405	0.2576	0.1125	1.0000	
North	0.3605	−0.2361	−0.1505	−0.6200	1.0000

[a] % of pop is the proportion of the provincial population over the total population in 2005.

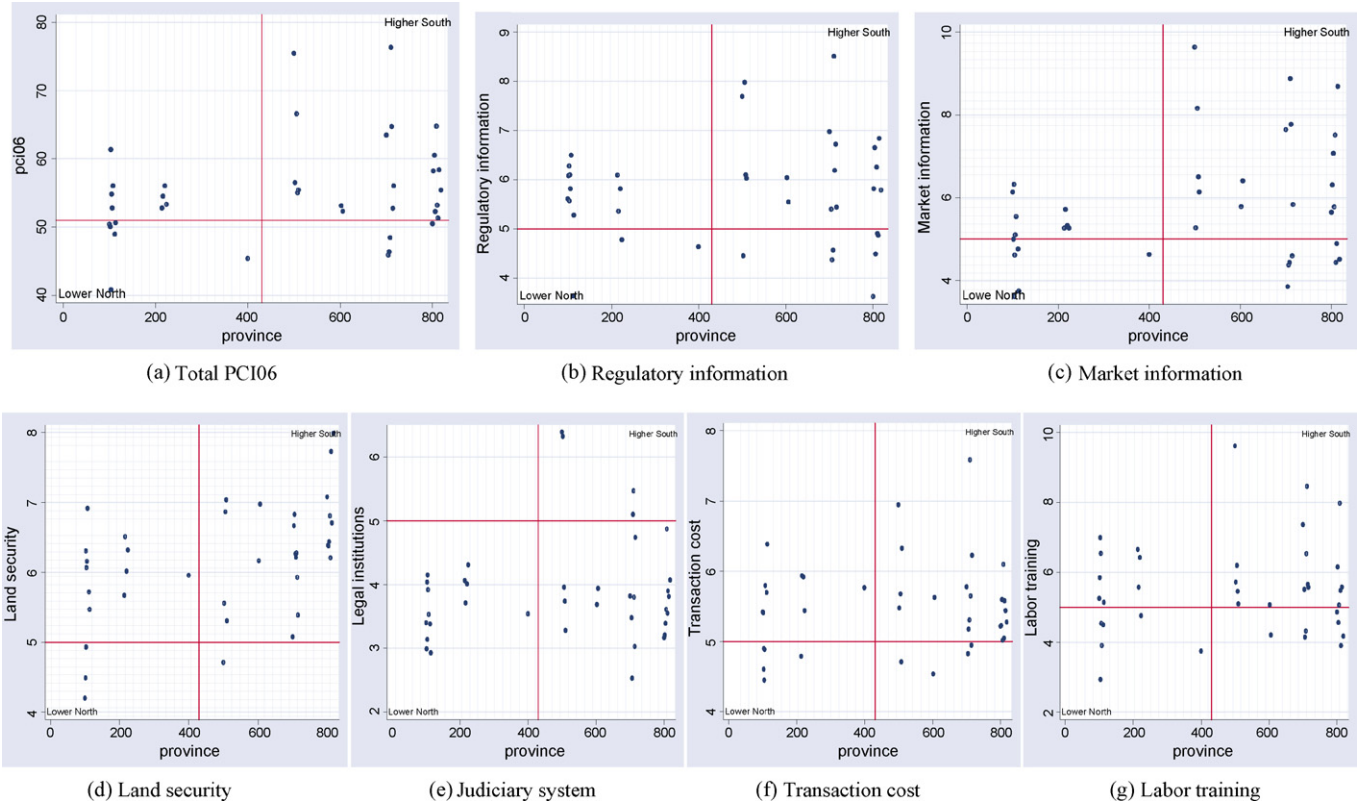


Fig. 2. Plots of institution indicators across provinces.

tages in terms of capital and flexibility in making decisions, and the scare experience of supportive institutions.[7] Limited and shareholding companies are modern establishments with advanced technology and management skills, hence performing better than sole-proprietorships.

The proportion of graduates over total population in 1999 has the expected positive sign, at least in some cases (column 1 and 10, Table 8). The percentage of professional high school students (*edus01*) has an insignificant impact on firm performance and is

[7] The literature has suggested that the economic performance of cooperatives depends highly on the type of institutional context (see Gagliardi, 2007b for more details).

Table 8
Reliability and coefficients of variables in the firm performance model

General model	Specific model – dependent variable: log (labor productivity)								
	3: PCI06			4: Information 1			5: Information 2		
	Coefficient (1)	S.E. (2)	Reliable (3)	Coefficient (4)	S.E. (5)	Reliable (6)	Coefficient (7)	S.E. (8)	Reliable (9)
Constant	2.466***	0.181	1.000	2.843***	0.067	1.000	2.565***	0.122	1.000
$K \times L$ ratio	0.002***	0.000	1.000	0.002***	0.000	1.000	0.002***	0.000	1.000
Firm age	0.008**	0.004	1.000	0.008**	0.004	1.000	0.009**	0.004	1.000
Micro	−0.177**	0.080	1.000	−0.194**	0.079	1.000	−0.168**	0.079	0.700
Small	Exc†			Exc†			Exc†		
Medium	Exc†			Exc†			Exc†		
Cooperative	−0.602***	0.130	1.000	−0.579***	0.130	1.000	−0.615***	0.130	1.000
Limited	0.173**	0.063	1.000	0.222***	0.062	1.000	0.202***	0.061	1.000
Shareholding	0.486***	0.084	1.000	0.525***	0.082	1.000	0.526***	0.081	1.000
edus01	Exc†			Exc†			Exc†		
edu99	0.017**	0.007	0.592	Exc†			Exc†		
GDPP	0.016***	0.006	1.000	0.029***	0.005	1.000	0.020***	0.006	1.000
% of population	Exc†			Exc†			Exc†		
PCI06	0.007**	0.003	0.530						
Information 1				Exc†					
Information 2							0.053***	0.017	0.499
Land									
Dispute									
Transaction cost									
Labor training									
Number of obs	1727			1727			1727		
# Of outliers††	52			51			52		
Chow (864:1)	0.9260			0.9029			0.8973		
Chow (1555:1)	0.6593			0.8827			0.6858		
Hetero test (Prob)	0.5948			0.8460			0.8852		

General model	Specific model – Dependent variable: log (labor productivity)											
	6: Land			7: Dispute			8: Transaction cost			9: Labor training		
	Coefficient (10)	S.E. (11)	Reliable (12)	Coefficient (13)	S.E. (14)	Reliable (15)	Coefficient (16)	S.E. (17)	Reliable (18)	Coefficient (19)	S.E. (20)	Reliable (21)
Constant	2.191***	0.329	1.000	2.843***	0.067	1.000	2.843***	0.067	1.000	2.635***	0.127	1.000
$K \times L$ ratio	0.002***	0.000	1.000	0.002***	0.000	1.000	0.002***	0.000	1.000	0.002***	0.000	1.000
Firm age	0.008**	0.004	1.000	0.008**	0.004	1.000	0.008**	0.004	1.000	0.009**	0.004	1.000
Micro	−0.209***	0.079	1.000	−0.194**	0.079	1.000	−0.194**	0.079	1.000	−0.185**	0.080	1.000
Small	Exc†			Exc†			Exc†			Exc†		
Medium	Exc†			Exc†			Exc†			Exc†		
Cooperative	−0.581***	0.131	1.000	−0.579***	0.130	1.000	−0.579***	0.130	1.000	−0.586***	0.130	1.000
Limited	0.202**	0.064	1.000	0.222***	0.062	1.000	0.222***	0.062	1.000	0.212***	0.062	1.000
Shareholding	0.504***	0.084	1.000	0.525***	0.082	1.000	0.525***	0.082	1.000	0.519***	0.082	1.000
edus01	Exc†			Exc†			Exc†			Exc†		
edu99	0.027***	0.010	0.700	Exc†			Exc†			Exc†		
GDPP	0.027***	0.006	1.000	0.029***	0.005	1.000	0.029***	0.005	1.000	0.024***	0.006	1.000
% Of population	Exc†			Exc†						Exc†		
PCI06												
Information 1												
Information 2												
Land	0.102**	0.049	0.223									
Dispute				Exc†								
Transaction cost							Exc†					
Labor training										0.040**	0.019	0.471
Number of obs	1727			1727			1727			1727		
# Of outliers††	52			51			51			51		
Chow (864:1)	0.9260			0.9029			0.9029			0.9266		
Chow (1555:1)	0.8860			0.8827			0.8827			0.8926		
Hetero test (Prob)	0.6263			0.8460			0.8460			0.7482		

Note: †Exc means the variable is not relevant and excluded from the model by the algorithm simulation. ††These outliers are detected by the algorithm method of PcGets. *** and ** are significant at 1% and 5%, respectively.

excluded from the models by the general to specific modeling procedure. This may be because the number of students is not a good indicator for human capital of provinces as a proportion of students come from other provinces to study and later return to their place of origin. In addition, this variable is highly correlated with the '*edus01*' (Table 4), and thus excluded from the model by the Monte Carlo simulation. Per capita GDP also has the expected positive sign and the reliability of being included into the model of this variable is 100%.

5.1. Institutional effects

The parameter of interest in Eq. (1), γ, reveals an interesting aspect of the institutional reforms in Vietnam. As expected,

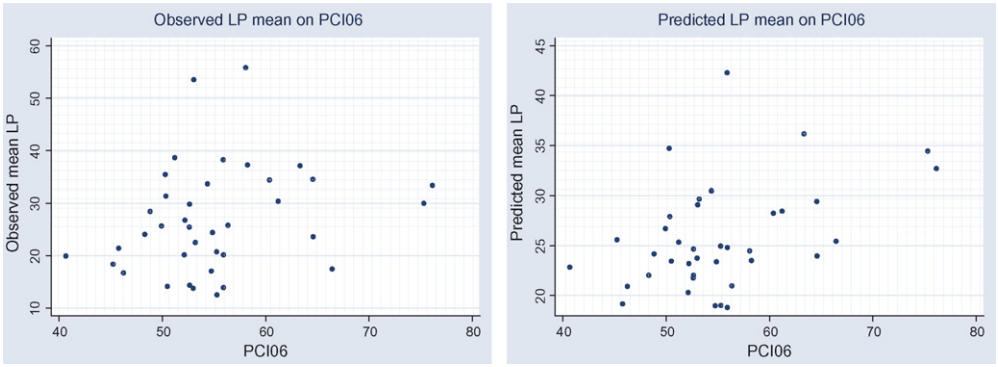


Fig. 3. Rankings of observed and predicted mean LP on PCI06.

the overall institutional index PCI06 has a positive effect on firm performance (column 1, Table 8). The result shows that after controlling for differences in firm characteristics and provincial initial endowments, a one percentage point improvement in government practices increases firm LP by 0.7%. This is equivalent to an increase in the value-added of the sample mean firm by VND 77,496.5 per day that corresponds to a nearly three-fold increase in the Vietnamese daily per capita GDP (VND 28,050.12) in 2005.[8]

'*Information 1*' specification (column 4, Table 8) reflects the impacts of the transparency in government policies and regulations on firm performance. Compared to the period before the enterprise law (1999), the availability of regulatory information has much improved with most provinces rated above the average level (Fig. 2b). However, improvements in this area merely reduce troubles facing non-state firms in terms of acknowledging the macro-economic environment, and thus cannot promote firm performance. In fact, firms need market information to expand their businesses. Although the improvement in providing market information has been moderate, it has a positive effect on firm economic performance as reflected in '*Information 2*' specification (column 7, Table 8). Provinces that have a one percentage point higher level in providing firms with market information can increase firm LP by 5.3%. This is much higher than the increase of LP due to the improvement in the total PCI. The result supports the hypothesis that market information is important to growth of non-state firms in Vietnam.

Institutional reforms related to land issues have positive impacts on firm performance. Results from '*Land*' specification (column 10, Table 8) show a big improvement in firm performance if the governance level is better. For instance, if Hanoi — the region with the highest human capital with per capita GDP almost twice that of Soc Trang (a poor province in the south) — could improve its implementation of land reforms by 3.79 points to catch up Soc Trang, an average firm in Hanoi can increase its LP by 38.66%. This is equivalent to an increase of VA of an average firm in Hanoi by VND 37,603, or 1.34 times of the daily per capita GDP in 2005. The result is, perhaps, a good answer for the puzzle posed in Nguyen et al. (2004) 'why southern provinces grow much faster than those in the north'. However, it should be noted that the statistical reliability of '*land*' reported by PcGets is only 22.3%. That means this variable is significant in the full sample, but not in both sub-samples in the overlapping analysis.

Other aspects of institutional reforms including '*dispute*' and '*transaction cost*' have insignificant effects on firm performance ('*dispute*' and '*transaction cost*' specifications – columns 13 and 16, Table 8), and hence are eliminated from the model by the multiple search path of PcGets. The insignificant effect of 'dispute' can be explained by no reform in this area. On the other hand, 'transaction cost' measures the aggregate effect of diminishing time for firm entry, land acquisition and bureaucratic compliance. Albeit that entry cost has decreased significantly since the second phase reform, this is still more costly than in other countries (Youth Newspaper[9] 12 October 2006) and helps firms in the establishment stage only. Furthermore, red tape and discretion of state officials remain in many areas, causing difficulties for the operation of firms. Government assistance in labor training has a positive impact on firm LP ('*labor training*' specification – column 19). This positive effect indicates that central and local governments have prescribed a correct policy for a persistent problem of unskilled workers in non-state firms. The findings imply that although all governance areas need to be improved, a good reform strategy would be to focus on good governance services, labor training and effective dispute resolution.

To assess the economic significance of the effects of PCI06, we also calculate the average of firm observed LP for each province and graph the mean observed LP on PCI06. We also carry out a simple simulation based on the 'PCI06' specification in Table 8. As all coefficients in this specific model are significantly different from zero, no variable is excluded from the simulation. The predicted log(lp) is then transformed into levels. The mean of firm predicted LP is computed for each province and graphed on PCI06 as well. If the ranking of the mean of the observed and predicted LP on the PCI06 is different, the estimated coefficients are only statistically significant, not economically significant. Fig. 3 presents the rankings of the mean observed and predicted LP of firms in each province.

As shown in Fig. 3, the pattern of the mean observed and predicted LP is not different. Overall, the average firm in provinces with higher PCI06 has higher LP. We also categorize the predicted LP of the average firm for each province into quartiles in ascending order of PCI06. The average of predicted LP of the lowest and highest quartile groups is computed. The ratio of these means is 1.18, indicating that PCI06 is both economically and statistically significant in explaining differences in firm performance. The findings imply that in the short term, provinces can promote the sustainable development of the non-state sector by more effective implementation of central government reforms.

[8] The sample mean firm employs 131.35 workers and has a ln(lp) = 3.427. An increase by 0.7% of labor productivity is equivalent to an increase of VND 590 per day. On average, this increases the VA of the sample mean firm by VND 77,546.5, nearly three times per capita GDP per day (VND 28,050.12).

[9] Translated from Vietnamese 'Báo Thanh Niên' ngày 12/10/2006.

6. Conclusion

The transition period in Vietnam has witnessed much effort by the Vietnamese government in building institutions supporting markets. These institutional reforms, especially since the second phase in 2000, focus on the sustainable development of the non-state sector. The reforms have significantly improved the provision of regulatory information and, to some extent, market information. Land tenure and entry costs have been also improved. However, weaknesses remain in the judiciary system and administration reforms to reduce government officials' discretion.

The prominent feature of the institutional reforms in Vietnam is the difference in the implementation of the central government's regulations and policies in various regions of the country. These differences are more pronounced between the north and the south and the causes for this institutional variation are history, geography and the complexity of laws in Vietnam.

To examine the impact of institutional reforms on firm economic performance, we use firm-level data in Vietnam in 2005 and the provincial competitiveness index in 2006 (PCI06). The results indicate that good governance practices, reflected by PCI06, are both statistically and economically significant in explaining differences in firm economic performance among provinces. Based on the estimated model, we show that a one percentage point improvement in government practices could increase the value-added of the sample mean firm by an amount equal to a nearly three times increase in the Vietnamese daily per capita GDP.

The results indicate that an improvement of institutions in providing firms with market information, securing land tenure and labor training assistance, positively increases firm labor productivity. The implications are that central and local governments should implement policies to improve the quality of institutions that will help non-state firms help overcome the persistent problems of a lack of market information and land and skilled worker shortages. The insignificant impact of transaction costs and dispute resolution implies that attention should be paid to administrative reforms to reduce government officials' discretion and also the weakness of the judiciary system.

Overall, the results show that governance is an important obstacle to the development of the non-state business sector and that institutions matter in terms of private firm economic performance in Vietnam.

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