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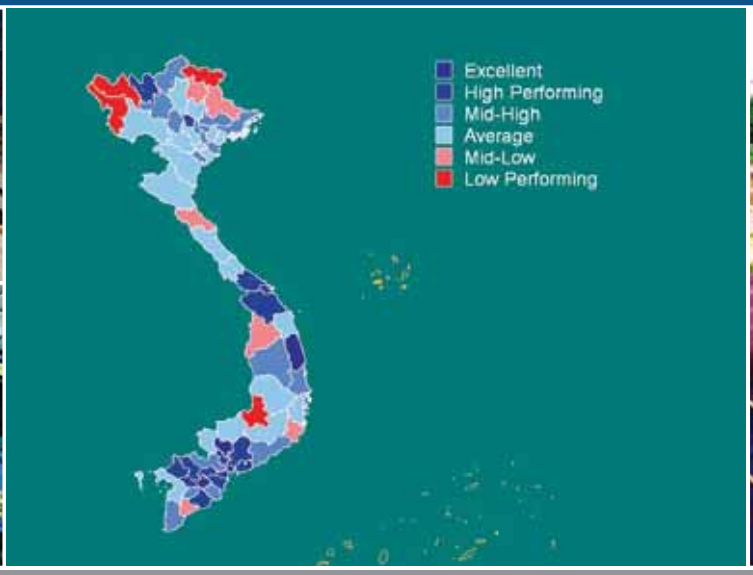
THE VIETNAM PROVINCIAL COMPETITIVENESS INDEX 2007

MEASURING ECONOMIC GOVERNANCE FOR PRIVATE SECTOR DEVELOPMENT



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VIETNAM CHAMBER OF COMMERCE AND INDUSTRY

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VNCI is a USAID-funded project that provides technical assistance to improve the business enabling environment in top priority areas for government and business leaders. VNCI's programs include: (i) policy advocacy using the PCI data and other policy activities that assist the government and business sector to improve decision-making and policy-making to achieve optimal economic performance and promote participation and transparency; (ii) regulatory reform responding to the Prime Minister-led Decision 30 Master Plan to Simplify Administrative Procedures, supporting the Office of the Government to design and implement reform strategies to clean up the existing stock of regulations, apply regulatory quality control, and develop an effective regulatory framework and policy coordination; (iii) infrastructure financing through revenue-backed bonds that leverage financial markets to support the financing of a wide range of infrastructure projects through an effective and transparent financing tool which takes the burden off the Government budget; (iv) TIGER (transformation in governance through economic reform) using performance-based management systems that enable provincial leaders to monitor and improve economic governance reforms; and (v) provincial reform activities that respond to specific requests from reform-minded provinces that aspire to improve economic governance.

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MEASURING ECONOMIC GOVERNANCE FOR PRIVATE SECTOR DEVELOPMENT

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The Asia Foundation

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Accompanying Compact Disc Includes:

1. Detailed descriptions of the indicators used in PCI.
2. Excel Spread Sheets containing provincial aggregate scores on every indicator used in 2006 and 2007.
3. A digital version of the 2006 report with a detailed description of the PCI methodology.

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ABBREVIATIONS AND ACRONYMS

AHBS	Annual Household Business Survey
BOT	Build-Operate-Transfer
BTA	Bilateral Trade Agreement
BRVT	Ba Ria - Vung Tau province
DAF	Development Assistance Fund (now Vietnam Development Bank)
DARD	Department of Agriculture and Rural Development
DOI	Department of Industry
DOLISA	Department of Labor, Invalids, and Social Assistance
DONRE	Department of Natural Resources and Environment
DPI	Department of Planning and Investment
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GSO	General Statistics Office
HCMC	Ho Chi Minh City
IZ	Industrial Zone
LURC	Land Use Rights Certificate
M&A	Merger and acquisition
MONRE	Ministry of Natural Resources and the Environment
MPDF	Mekong Private Sector Development Facility
MSE	Mean Squared Error
ODA	Overseas Development Assistance
OLS	Ordinary Least Squares
PAR	Public Administration Reform
PCI	Provincial Competitiveness Index
PCF	Principal Components Factors
PCOM	People's Committee
PSD	Private Sector Development
SME	Small and Medium-sized Enterprise
SOE	State-Owned Enterprise
SOCB	State-Owned Commercial Bank
TIGER	Transformation in Governance and Economic Reform
VAT	Value-Added Tax
VCCI	Vietnam Chamber of Commerce and Industry
VNCI	Vietnam Competitiveness Initiative
WTO	World Trade Organization

EXECUTIVE SUMMARY

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The Motivation for the PCI

The 2007 iteration of the Provincial Competitiveness Index (PCI) is a continuation of our long-standing goal of measuring and assessing economic governance for private sector development among Vietnam's 64 provinces. The PCI exercise is not intended to be a purely academic exercise, nor to 'point fingers' at individual provinces that rank lowest or highest. Rather, the PCI attempts to provide robust information that can help provinces and municipalities to identify where – and how – they can pursue economic governance reforms to optimal effect.

The Positive Impact of Provincial Good Governance

PCI 2007 once again validates that economic governance matters. Our findings show that as provinces strive to create a better enabling environment, the private sector has flourished, and economic welfare has improved. All else being equal, our statistical analysis shows that a one point improvement in the unweighted PCI index for the average province will yield an estimated: i) eight additional active businesses; ii) 2.5% improvement in new investment per capita in 2006; iii) VND 4.2 million (US$253) in additional profits per active enterprise; and iv) 1% increase in GDP per capita.

PCI Results are Proven a Robust Measure of Provincial Economic Governance

In the past, some analysts speculated that perceived weaknesses in the PCI's methodology would lead to instability in year-to-year rankings. But this has not transpired. In fact, there is an incredibly strong correlation (0.85) between 2006 and 2007 final results with similarly strong correlations across sub-indices. This indicates that the PCI can consistently identify top performers, while allowing room for other provinces to improve and receive higher scores in subsequent years. We can now assert with confidence that the PCI approach offers a robust and accurate measure of provincial economic governance over time.

Trends in Economic Governance: Overall Governance has Improved, but Major Problems Remain

A key new feature of this year's analysis is a slight methodological change that facilitates the tracking of economic governance improvements over time. Comparing the scores of PCI 2007 with those of PCI 2006, it is clear that the overall standard of provincial economic governance in Vietnam has improved over the past year. The aggregate PCI 2007 score for the median province has increased by 3.2 points over the last PCI survey in 2006. Reforms implemented at both the national and provincial level are producing results, and this in turn is resulting in a growing recognition of the benefits of economic governance.

Significant achievements have been made in the area of entry costs, and administrative requirements and inspections. The number of days for registration (20 to 15) and re-registration (10 to 7) in the median province are down significantly in PCI 2007 and are now well within the parameters set by the revised Enterprise Law (2005). The median number of required licenses to commence a business is also down from 4 to 2.5, from PCI 2006 and PCI 2007. The median number of regulatory inspections that firms encounter per year is just one; 48% of firms reported that inspections have declined over the past two years; and only 22% of firms in the median province claimed they spent 10% or more of their time dealing with regulatory compliance issues.

On the other side of the ledger, PCI findings indicate that comparatively little improvement has been made in standards of economic governance for Private Sector Development Policies, Labor Policy, Proactivity, SOE Bias, and Informal Charges. Informal charges appear to be particularly intractable. Tellingly, almost 40% of firms surveyed believe government officials use compliance with local regulations as a means to extract user fees.

Two sub-indices (Transparency and Land Access & Security of Tenure)

reported mixed results, while also showing the most significant achievements over the past year:

Transparency: For firms in the median province, the necessity to negotiate with tax authorities dropped from 75% in 2005 to 45% in 2007.

Land: 76% of firms in the median province now possess full LURCs -- up from 55% in PCI 2006. On a five-point scale, where five represents no expropriation risk at all, the median provincial score climbed from 2.49 in PCI 2006 to 3.76 in PCI 2007.

While provinces' and municipalities' PCI scores have improved generally, there has been noticeably little change in the names at the top and bottom of the rankings. Binh Duong, Da Nang, Vinh Long, Binh Dinh, Lao Cai, An Giang, and Vinh Phuc provinces once again find themselves at the top of the PCI rankings. Low-scoring provinces also remained much the same, with just a few notable exceptions.

Policy Focal Points

Provincial officials and national policy makers have done a solid job of improving market access through reductions in entry costs. Their performance on this first-generation reform is demonstrated both in improving PCI scores and in the striking growth in private sector registrations. Less progress, however, has been made at what we term second-generation reforms, or initiatives that involve enhancing the post-registration business environment.

Four areas warrant particular attention for policy makers, since these continue to be the most important factors explaining private sector outcomes among provinces:

- Transparency
- Private Sector Development Policies
- Proactivity
- Labor Policy

Taking transparency as an example, the positive impact from slight changes in transparency is remarkable. Provincial reformers that can improve their transparency ranking by only one point will reap an estimated 4.3% increase in new enterprises, a 23% increase in new investment, and roughly VND 30 million in predicted profits per firm.

National Policy Implications

In the second chapter, we apply the lessons and data of the PCI to address four on-going national challenges.

1. Provincial Inequalities

This year's PCI identifies a group of poorly endowed and poorly governed provinces that are falling behind their peers. Should this trend continue, it might generate discussions about the distributional policies of the central government. Serious effort will be needed to communicate successful best practices in governance to these provinces, before they fall too far behind.

2. Formalization

We demonstrate that the informal sector (household firms) is responsible for a smaller share of total private sector investment in well-governed provinces. Drilling deeper into firm-level data, we show that the higher the PCI score, the less time household firms wait between commencing operations and registering their business activities at provincial Departments of Planning and Investment (DPIs). As formal firms pay more in taxes and are better placed to expand their businesses, these findings identify one piece of the micro-logic linking PCI scores and economic welfare.

3. Post-Equitization Performance

We find that overall profitability of equitized SOEs is also strongly correlated with PCI performance, particularly transparency and time costs of regulatory compliance. Because of the scale and market niches of equitized firms, they may offer the best opportunity for filling the "missing middle" between large multinationals and Vietnam's relatively small-scale private enterprises, which is critical for success in international markets and sustaining future economic growth.

4. National Economic Reform Progress and WTO/BTA Commitments

We survey the linkages between Vietnam's commitment to foreign firms under the BTA/WTO and the PCI's analysis of the environment for private, domestic firms. Although the PCI is not designed to monitor the implementation of trade agreements, we find that the private sector is not benefiting fully from several key BTA/WTO-related reforms, especially with regard to access to legal information, predictability of enforcement of the law, the use of courts to resolve disputes, and contributions by foreign providers of private sector development services.

PREFACE

PREFACE

The Provincial Competitiveness Index (PCI) was originally developed by the Vietnamese Chamber of Commerce and Industry (VCCI) and the USAID-funded Vietnam Competitiveness Initiative (VNCI) in 2005. The PCI is a tool for measuring and assessing the standards of economic governance in Vietnam's 64 provinces from the perspective of private sector businesses. The exciting and multifaceted ways the two previous iterations of the PCI have been embraced and employed have far surpassed our original expectations.

It has been rewarding to observe the many different individuals and organizations who have found the PCI efficacious in their day-to-day activities. Since its launch, the PCI has been widely utilized by provincial governments to design economic reform interventions, and to benchmark their own efforts and progress against 'star performer' provinces. Private firms have used the index to better inform their investment decisions, and to advocate for local initiatives intended to make their locale more conducive for business. According to our estimates, Vietnamese journalists have cited the index in over 400 investigative articles on provincial business environments. Indeed, because of its impact, VTV 1 ranked the PCI among the ten most important economic events to occur in Vietnam in 2005.

Members of the international donor community – both multilateral and bilateral agencies – have used specific PCI indicators for monitoring and evaluating their own local economic development projects. Former Prime Minister Phan Van Khai quoted PCI statistics in some of his dialogues with the private sector and upon introducing new legislation. Reflecting the extent to which the PCI has entered into wider social awareness, it even found its way into the final question for university students competing in the well-known television game show, *Ring the Golden Bell.*[1]

In short, the PCI has become an important component in Vietnam's policy dialogue relating to economic and administrative reform, as well as business liberalization, both at the provincial and the national level. However, with the increased visibility and application of the PCI index, there have also come increasing responsibilities for the research team. We are obligated to ensure that policymakers and other readers of the PCI report are given the most accurate, carefully analyzed, and unbiased information available. It is a responsibility that we take very seriously. To this end, the PCI 2007 established an extensive set of new quality control safeguards at each level of the research methodology.

We have also implemented a series of changes to make the index more "user friendly". The most important of these was a slight change in the scaling of indicators, which now allows individual provinces to compare their ten PCI 2007 sub-indices scores directly with their earlier performance in the PCI 2006.

Finally, VNCI is hard at work on another initiative to help provincial leaders develop solutions to the private sector concerns raised in PCI. The program, provisionally titled 'Transformation in Governance and Economic Reform' (TIGER), works at both the national and provincial levels to improve the awareness, understanding, and use of good governance concepts (eg. transparency, efficiency, receptivity, and accountability). At the provincial level, TIGER supports a systematic approach to economic governance reforms, emphasizing performance-based management practices coupled with client-friendly services. At the national level, TIGER will bring together the private sector, civil society and government representatives to discuss priorities, concerns, and strategies for economic governance reforms, including more effective dialogue between Provincial- and National-Level Leaders and stakeholders.

1 http://www.vtv.vn/VN/TrangChu/Media/#

CHAPTER 1:

BACKGROUND AND KEY FINDINGS

BACKGROUND AND KEY FINDINGS

Rationale

Despite a minor change in the methodology to enhance comparisons over time, the general rationale of the PCI endeavor remains the same as previous years. First, by separating out the economic growth generated by initial conditions (i.e. the fundamental underlying factors that contribute to economic growth in a province, but that are virtually impossible to address in the short-term, such as location, infrastructure, GDP size and human resources), the PCI is able to determine that good economic governance practices are possible at the provincial level. For each PCI indicator, a "star" or top performing province can be identified.

Further, these good economic governance practices explain why: i) some provinces out-perform others; and ii) why some provinces have similar economic performances, despite having quite different initial conditions for development in terms of infrastructure and human capital endowments. Actual improvements in these economic governance practices are strongly associated with improved economic performance, even without significant changes in the physical and human infrastructure of a particular locale.

Second, by normalizing the scores around best economic governance practices already found in Vietnam, the index encourages provincial governments to improve their performance; not against some ideal and possibly unattainable standard of good governance, but rather against the best performance already practiced by their peers. While the performance scores by province range from 38 to 77, any province could attain a perfect score by adopting all existing best practices already found in Vietnam.

Third, by comparing economic governance practices against actual economic performance, the PCI provides initial estimates of how important governance practices are in attracting investment and generating growth. The research provides a compelling demonstration of the association between: i) business-friendly economic governance practices; ii) business responses to those practices; and iii) importantly, welfare improvements. This last connection is critical, as it makes clear that business-friendly policies and practices benefit not just entrepreneurs, but also the broader society that relies upon private sector dynamism to provide the jobs that raise household living standards.

The 10 Sub-Indices of the PCI

As before, PCI 2007 used a range of indicators, which were grouped together into ten composite sub-indices (also see Table 1). These ten sub-indices included:

1. *Entry Costs:* A measure of: i) the time it takes a firm to register and acquire land; ii) the time to receive all the necessary licenses needed to start a business; iii), the number of licenses required to operate a business; and, iv) the perceived degree of difficulty to obtain all licenses/permits.

2. *Land Access and Security of Tenure:* A measure combining two dimensions of the land problems confronting entrepreneurs: how easy it is to access land and the security of tenure once land is acquired. The first dimension comprises whether firms possess their official land use rights certificate, whether they have enough land for their business expansion requirements, whether they are renting from SOEs and an assessment of land conversion efforts. The second dimension includes perceptions of various tenure security risks (such as expropriation, unfair compensation values, or changes in the lease contract) as well as the duration of tenure.

3. *Transparency and Access to Information:* A measure of whether firms have access to the proper planning and legal documents necessary to run their business, whether those

documents are equitably available, whether new policies and laws are communicated to firms and predictably implemented, and the business utility of the provincial web page.

4. *Time Costs and Regulatory Compliance:* A measure of how much time firms waste on bureaucratic compliance, as well as how often and how long firms must shut their operations down for inspections by local regulatory agencies.

5. *Informal Charges:* A measure of how much firms pay in informal charges, how much of an obstacle those extra fees pose for their business operations, whether payment of those extra fees results in expected results or 'services', and whether provincial officials use compliance with local regulations to extract rents.

6. *SOE Bias (Competition Environment):* A measure focusing on the perceived bias of provincial governments toward state-owned enterprises (SOES) and equitized firms in terms of incentives, policy, and access to capital.

7. *Proactivity of Provincial Leadership:* A measure of the creativity and cleverness of provinces in both implementing central policy, designing their own initiatives for private sector development, and working within sometimes unclear national regulatory frameworks to assist and interpret in favor of local private firms.

8. *Private Sector Development Services:* A measure of provincial services for private sector trade promotion, provision of regulatory information to firms, business partner matchmaking, provision of industrial zones or industrial clusters, and technological services for firms.

9. *Labor and Training.* A measure of the efforts by provincial authorities to promote vocational training and skills development for local industries and to assist in the placement of local labor.

10. *Legal Institutions.* A measure of the confidence of the private sector in provincial legal institutions; whether firms regard provincial legal institutions as an effective vehicle for dispute resolution, or as an avenue for lodging appeals against corrupt official behavior.[2]

Figure 1 below illustrates the performance of every province on each of these sub-indices. It is important to note that while there are provinces that performed generally well, even the very top provinces have particular areas of weakness. Similarly, some low-ranked provinces score below average marks on most sub-indices, but have a few bright spots. .

2 For a more detailed description of the methodology behind the PCI, please see the Methodological Appendix at the end of this report and the detailed descriptions of indicators and datasets in the accompanying CD.

Figure 1: Provincial Scores on 10 Sub-Indices

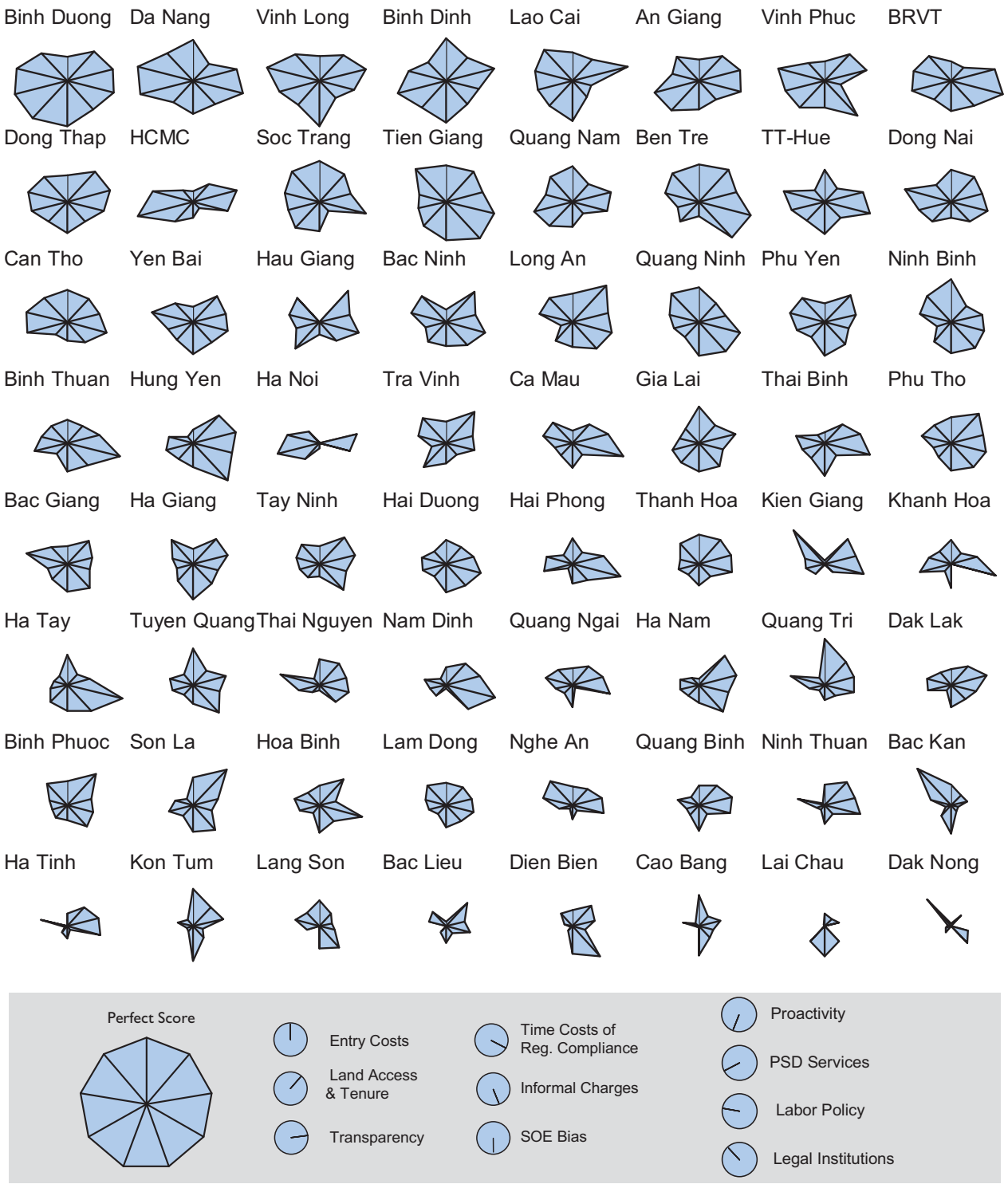


Table 1: Indicators Used in Sub-Indices

1. Entry Costs
• % of firms waiting over a month to complete all steps necessary to start operations
• % of firms waiting over 3 months to complete all steps necessary to start operations
• % of firms having difficulty obtaining all licenses and permits necessary to do business
• Length of business registration in days
• Length of business re-registration in days
• Number of licenses and permits necessary to start operations
• Effective wait for business premises

2. Land Access and Security of Tenure
• % of firms that feel land availability constrains their business expansion
• % of firms in possession of Land Use Rights Certificate (LURC)
• % of firms renting land from State Owned Enterprises (SOEs)
• % of firms rating provincial land conversion policies as good or very good
• % of firms total land in province with formal LURC*
• Firm rating of expropriation risk *(1: Very High to 5: Very Low)*
• If land expropriated, firms receive fair compensation *(% Always or Usually)*
• Firm rating of changes in lease contracts *(1: Very High to 5: Very Low)*
• Perception of fair process for disputing changes in lease contracts *(% Always or Usually)*

3. Transparency
• Transparency of planning documents *(Factor Analysis of 13 Documents)*
• Transparency of normative legal documents *(Factor Analysis of 13 Documents)*
• Importance of relationship for access to provincial documents *(% Important or Very Important)*
• Importance of friends for negotiating with government *(% Important or Very Important)*
• Negotiations with tax authority are an essential part of doing business *(% Agree or Strongly Agree)*
• Predictability of implementation of central laws at the provincial level *(% Usually or Always)*
• Province discussed changes in laws with firms *(% Usually or Always)*
• Services provided by provincial agencies: Consulting on regulatory information *(% Very Good or Good)*
• Openness of provincial web page score*

4. Time Costs of Regulatory Compliance
• % of firms spending over 10% of their time dealing with bureaucracy or bureaucratic regulations
• Days spent on bureaucracy reduced in past two years *(% Decreasing)*
• Median number of inspections (all agencies)
• Inspections have decreased in past two years *(% Decreasing)*
• Median tax inspection hours

5. Informal Charges
• % of firms that believe extra payments are a major obstacle to doing business
• % of firms that felt that enterprises in their line of business were subject to bribe requests from provincial authorities
• % of firms paying over 10% of their revenue in extra payments
• Government uses compliance with local regulations to extract rents *(% Strongly Agree or Agree)*
• Informal charges delivered expected result *(% Usually or Always)*

6. SOE Bias and Competition Environment
• Favoritism toward the state sector is an obstacle to firm's business *(% Strongly Agree or Agree)*
• Perceived attitude of provincial government toward private sector *(% Very Positive and Positive)*
• Attitude has improved in the past two years *(% Improved)*
• Attitude does not depend on contribution to provincial revenue *(% Strongly Agree or Agree)*
• Favoritism toward equitized companies is an obstacle to firm's business *(% Strongly Agree or Agree)*
• Firm rating of provincial equitization policies *(% Very Good or Good)*
• % change in number of locally-managed SOEs since 2000*
• Ratio of local SOE share of liabilities to their share of revenue contribution in previous year*
• Average proportion of state commercial bank loans to SOEs*

7. Proactivity
• Provincial officials know enough about present national law to find opportunities within existing law to solve firm problems *(% Strongly Agree or Agree)*
• Provincial officials work within the national law to solve problems of private sector them *(% Strongly Agree or Agree)*
• All good initiatives come from provincial government, but the center frustrates firms *(% Strongly Agree or Agree)*
• No good initiatives at provincial level; all important policy comes from the central government *(% Strongly Agree or Agree)*

8. Private Sector Development Policies
• Market information provided by provincial agencies *(% Very Good or Good)*
• Matchmaking for business partners provided by provincial agencies *(% Very Good or Good)*
• Export promotion and trade fairs provided by provincial agencies *(% Very Good or Good)*
• Industrial zones and SME concentrations provided by provincial agencies *(% Very Good or Good)*
• Technology and technology related services provided by provincial agencies *(% Very Good or Good)*
• Trade fairs held by province in previous year and registered for present year* *(% Very Good or Good)*

9. Labor Policies
• General education provided by provincial agencies *(% Very Good or Good)*
• Labor vocational training provided by provincial agencies *(% Very Good or Good)*
• Labor exchange services provided by provincial agencies *(% Very Good or Good)*
• Number of locally managed vocational schools per 10,000 citizens* *(% Very Good or Good)*
• Number of labor exchange bureaus per 10,000 citizens* *(% Very Good or Good)*

10. Legal Institutions
• Legal system provided mechanism for firms to appeal officials' corrupt behavior *(% Always or Usually)*
• Firms confident that legal system will uphold property rights and contracts *(% Strongly Agree or Agree)*
• Use of legal institutions as primary mode of dispute resolution *(% of Firm)*
• Cases filed by non-state entities at Provincial Economic Court per 100 firms*
• Cases filed by non-state entities as % of total cases filed at Provincial Economic Court*

*Notes: * Denotes component uses only hard data*
Detailed description of indicators can be found on accompanying CD

The Final 2007 Provincial Competitiveness Index

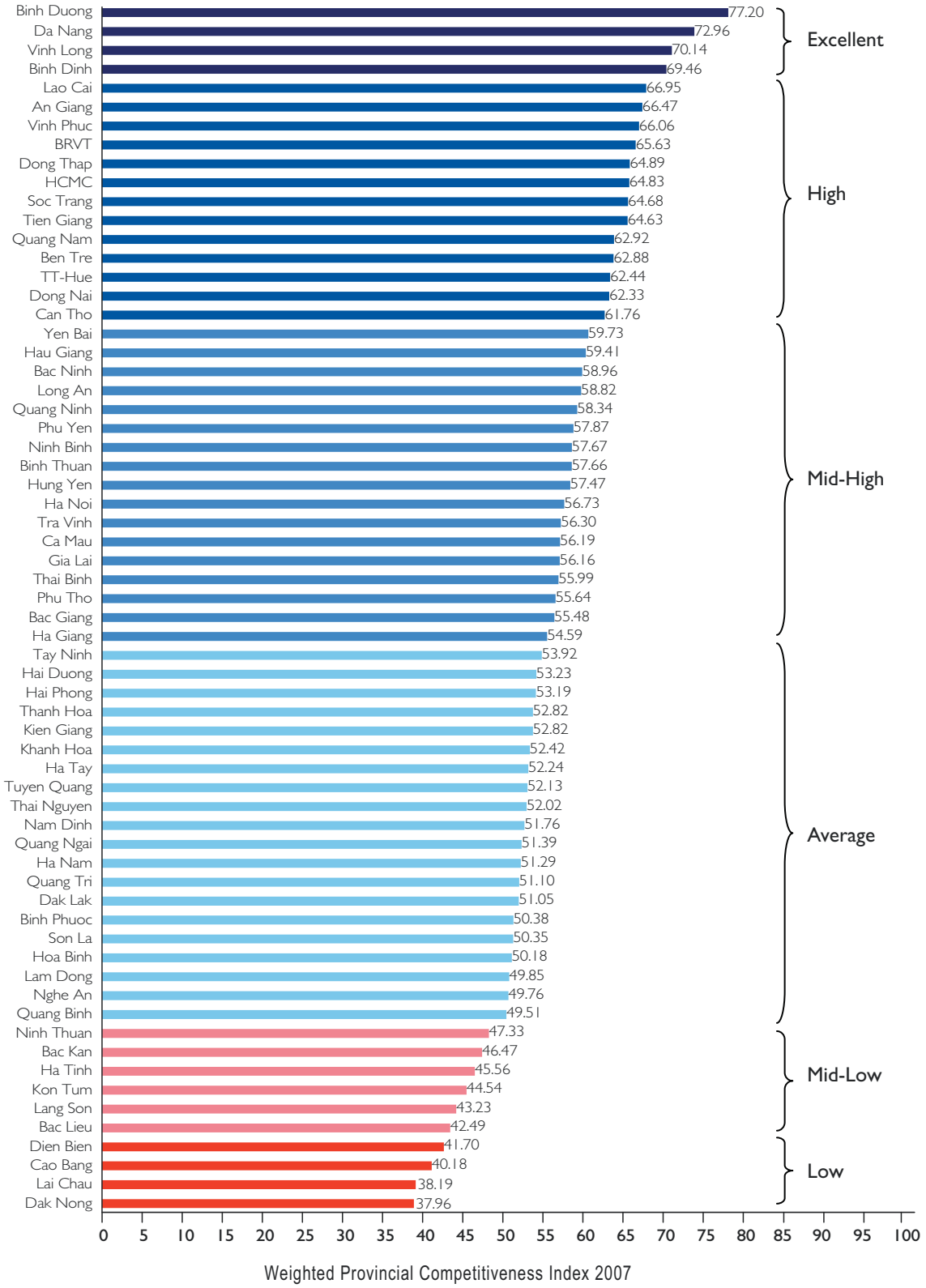
PCI 2007 is the weighted sum of the scores of the ten sub-indices, based on the weights shown in Table 2. In 2006, weights were calculated using a three-step statistical procedure, which is explained in the Methodological Appendix of this report and detailed extensively in Section 3.3 of the 2006 Final PCI Report. The ultimate goal of weighting is to ensure that PCI scores are calibrated to private sector performance and therefore that the PCI relates the most policy-relevant information to provincial officials regarding the impact of their policies on private sector activity. Sub-Indices that were shown to have the largest association with private sector growth, investment, and profitability received the highest weight class of 15%. Correspondingly, those where performance on indices was not strongly correlated with private sector development outcomes received the lowest weight class of 5%. Medium weights of 10% were reserved for average correlations across the three outcome variables or a large substantive effect on one outcome (i.e. profitability), but a minimal relationship with the other two. The 2007 PCI employs the 2006 weights to allow for longitudinal comparison. In future versions of the PCI, however, weights will need to be re-calibrated to capture the dynamic nature of the Vietnamese economic reform agenda.

Table 2: Sub-Index Weightings

Sub-Index	Rounded Weights	Weight Class
PSD services	15%	High
Transparency	15%	High
Labor training	15%	High
Proactivity	15%	High
Time costs of regulatory compliance	10%	Medium
Legal institutions	10%	Medium
SOE bias (competition environment)	5%	Low
Informal charges	5%	Low
Land access and security	5%	Low
Entry costs	5%	Low
	100%	

The weighted PCI 2007 index is shown in Figure 2 below. Once again, to facilitate comparisons with previous years, we pegged the six performance tiers (or groups: Excellent, High, Mid-High, Average, Mid-Low, and Low) to the break-points set in the 2006 analysis. For instance, this year both Binh Dinh and Vinh Long moved above the break-point at 69, which differentiates Excellent (shaded in dark blue) and High Performers (shaded in blue). Similarly, this year eight provinces graduated above the 60-point threshold distinguishing High and Mid-High performances. Looking forward to future years, we intend to use these same benchmarks to gauge progress over time.

Figure 2: Final 2007 PCI Rankings



Robustness of the PCI Rankings

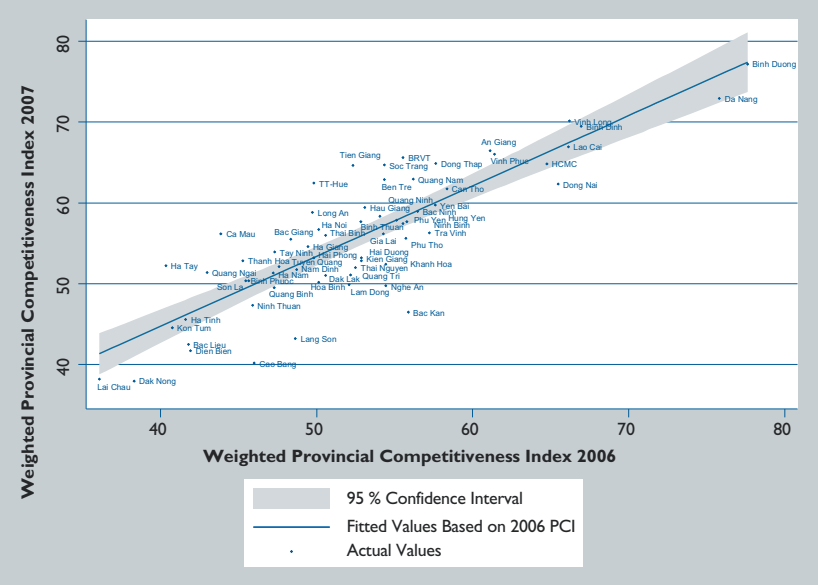
Comparing the results of PCI 2006 with those of PCI 2007, we can say definitively that the standard of provincial economic governance in Vietnam has improved over the past year. Specifically, the final PCI 2007 score for the median province has increased by 3.2 points since PCI 2006, a statistically significant difference.

While PCI scores have improved generally, there has been noticeably little change at the top and bottom of the rankings (see Figure 2). Binh Duong, Da Nang, Vinh Long, Binh Dinh, Lao Cai, An Giang, and Vinh Phuc provinces once again find themselves at the top. Low scoring provinces also remained much the same, with a few notable exceptions. There was a bit more mobility among provinces ranked in the middle sections of the rankings, but no major leaps up or down. As a consequence, the provinces comprising the six tiers remain broadly the same.

This consistency in the provincial rankings has important methodological and policy implications. Methodologically, the strong 0.85 bivariate correlation between the PCI 2006 and PCI 2007 results indicate that the indexing approach works quite well (see Figure 3). The index can consistently identify top performers, while allowing room for other provinces to improve and receive higher scores in subsequent years. We can now assert with confidence that the PCI approach offers a consistent and accurate measure of provincial economic governance over time.

In terms of policy, however, the stability of the PCI results may warrant some concern. When we began the PCI exercise in 2005, the hope was that good economic governance would help poorly endowed provinces to escape – or at least mitigate – the confines of their initial conditions. It now appears that good economic governance, like infrastructure and human capital, is highly concentrated amongst a handful of provinces. But without an effort to identify and chronicle the specific factors underlying their excellence, and communicate this effectively to laggard provinces, it is quite possible that current provincial inequalities will persist, or even be exacerbated. More will be said about the potential for worsening income inequality among provinces in Chapter 2.

Figure 3: Correlation between PCI 2006 and PCI 2007 Scores



Impact of Economic Governance on Private Sector Development and Economic Welfare

As in previous years, economic governance (measured by the PCI) is strongly associated with private sector performance and general economic welfare. If we use regression analysis to control for initial conditions – notably infrastructure, human capital, and proximity from major markets – All else equal, our statical analysis shows that a one point improvement in the unweighted PCI index for the average province will yield an estimated: i) eight additional active businesses; ii) 2.5% improvement in new investment per capita in 2006; iii) VND 4.2 million (US$253) in additional profits per active enterprise; and iv) 1% increase in GDP per capita.[3]

More tangibly, it helps to use statistical simulation to compare pairs of provinces. For instance, in 1990, Nghia Binh province in the South Central Coast was divided into Quang Ngai and Binh Dinh provinces. Since that time, the provinces have taken radically

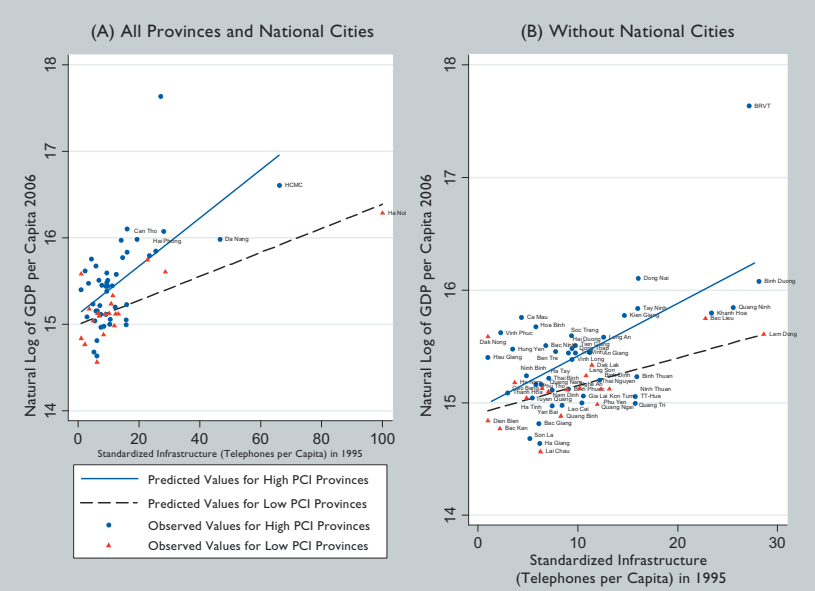
3 Those interested in the statistical calculations underlying these results, please see the regression tables in Methodological Appendix 3.

different reform paths, despite their quite similar initial conditions, and shared history and cultures. Binh Dinh, of course, ranks consistently as being among the top five provinces in the country. Quang Ngai, on the other hand, ranked 45th in the 2007 survey despite the impressively large Dung Quat oil refinery and economic zone.

Given Quang Ngai province's innate endowments, if it could simply raise its level of transparency from its current 5.75 to its sister's score of 7.72, Quang Ngai could anticipate: i) an expected eleven additional private businesses; ii) 6.4% more new investment per capita; and iii) its firms would likely accrue VND 8.7 million per year in additional profits. If Quang Ngai could improve its standard of economic governance across the board to match Binh Dinh's level of 70.2 (an increase in Quang Ngai's unweighted PCI from 54.75 to 70.2), the estimated impact would be even more impressive: i) 80 new businesses; ii) 50% higher private investment per capita; and iii) VND 68 million higher profits per firm. Quang Ngai has already made some progress at reducing its gap with Binh Dinh by making a marked improvement in its economic governance between PCI 2006 and 2007.

Figure 4 takes this analysis a step further by charting the interaction between initial conditions and economic governance. Initial conditions certainly matter; more well-endowed provinces have much higher GDPs per capita than their less endowed peers. However, at every level of initial endowments, better governed provinces (ie. those with PCI scores above the 2006 median) out-perform less well governed localities. This is true, whether we include the six national-level cities in the analysis (see Panel A) or focus our attention solely on the fifty-nine provinces (see Panel B).

Figure 4: PCI Performance and Economic Welfare



The gap between the solid blue line (the predicted values for high PCI provinces) and the dashed red line (predictions for low PCI provinces) is what we term the 'economic governance premium'. It indicates that at each level of initial conditions, better governed provinces are able to use their endowments more efficiently and achieve higher levels of economic welfare.

Disaggregating the PCI into its sub-indices, we once again find that i) Transparency, ii) Private Sector Development Policies, iii) Proactivity, and iv) Labor Policy continue to be the most important factors in explaining private sector outcomes across provinces. Individual contributions to key private sector outcomes are shown in Table 3. The consistency and size of the predicted effects of slight changes in Transparency are remarkable. Improving the equity and access to provincial documentation just one point takes relatively little work, but would yield immediate returns for provincial leaderships; specifically, a 4.3% estimated increase in new enterprises, a 23% increase in new investment, and roughly VND 30 million in predicted profits per firm. The substantive effects of increases in PSD are similarly large, but require more effort and coordination on the part of local officials.

Table 3: Economic Impact of Individual Sub-Indices
(Estimated Effects of One-Point Change in Sub-Indices on Dependent Variables)

Sub-Index	Enterprises per 1000 Citizens (% Change)†	New Investment per Capita (% Change)†	Profit per Enterprise (Millions of VND)	GDP per Capita (% Change)†
1. Entry Costs	2.65 (0.020)	12.52 (0.099)	2.225 (9.63)	4.14 (0.046)
2. Land Acces & Security of Tenure	3.24 (0.028)	1.39 (0.099)	17.87 (12.6)	9.41 (0.070)
3. Transparency	4.30 (0.016)**	23.24 (0.071)***	30.07 (8.61)***	4.47 (0.043)
4. Time Costs of Regulatory Compliance	3.49 (0.016)**	8.90 (0.063)	14.10 (9.96)	11.52 (0.035)***
5. Informal Charges	2.80 (0.035)	23.12 (0.17)	8.776 (18.0)	6.47 (0.071)
6. Bias toward State Owned Enterprises	3.93 (0.029)	32.98 (0.12)**	13.31 (9.64)	-1.53 (0.051)
7. Proactivity	3.16 (0.013)**	14.57 (0.067)**	20.57 (6.53)***	4.01 (0.019)**
8. Private Sector Development Policies	3.19 (0.013)**	19.24 (0.062)***	23.84 (7.61)***	7.34 (0.024)**
9. Labor Policies	3.70 (0.013)***	12.64 (0.070)*	19.6 (8.51)**	6.43 (0.034)*
10. Legal Institutions	4.77 (0.011)***	7.21 (0.065)	13.53 (6.51)**	7.13 (0.037)*

OLS Regression; Robust standard errors in parentheses. All dependent variables are from General Statistical Office 2006

*** p<0.01, **<0.05; *<0.1

All are results of mutiple regression countrolling for National City Dummy, Distance from Hanoi and HCMC (km), Telephones per Capita (1995), and Percentage of Secondary School Graduates.

+ Regression coefficients (ß) with natural logs are converted to percentages using the following formula (e-1)*100.

The one noticeable change in the contributions of individual sub-indices between 2006 and 2007 is SOE Bias, due to its large contribution to private sector investment. A one-point improvement on that sub-index, implying a reduction in regulatory obstacles to free and fair competition between SOEs and the private sector, would yield an astonishing 32% increase in estimated investment. The increased prominence of the SOE Bias measure results from the fact that while some provinces have taken advantage of decentralization and new legislation to promote private sector development, other provinces have become even more reliant on the state sector as their primary source of revenue. Their motivations stem from a financial mechanism of shared-revenue with the central government that encourages provinces to cater to their dominant sector. [4]

Trends over Time

Among the most important contributions of the 2007 PCI is its new ability to compare changes in economic governance over time and garner policy lessons from

4 For more detail on the financial incentives that underlie this divergence see Malesky 2006.

observed advances or back-sliding. This can be done in two ways. First, we can observe changes in the median province between the two years (shown in Table 4). This allows observations of general shifts on sub-index and indicators scores and consequently changes in the national policy environment. Secondly, we can take a close look at provinces that made substantial improvements in economic governance over the past year. This second analysis is particularly useful for identifying where to look for specific policy innovations that under-gird major leaps in PCI rankings.

National Trends and Policy Implications

As discussed briefly above, economic governance has improved generally in Vietnam over the past two years, demonstrated by the three-point shift in the PCI score of the median province this year (52.4 to 55.6, shown in row 2) compared to 2006. While the improvement is not dramatic, it is statistically significant, and represents the incremental improvements in the national policy arena.

Drilling down deeper into changes in individual sub-indices, we find similar motivation for optimism. Positive shifts in the median provincial score were recorded for all but two sub-indices. And the exceptions, PSD and Labor Policies, have plateaued but did not decline significantly. The largest improvements were achieved in expediting the entry of private firms into the market (sub-index 1), and decreasing the amount of time Vietnamese firms spent fulfilling administrative requirements and complying with inspections (sub-index 4).

That said, there is still a great deal of room for improvement. On the transparency, land, and legal dimensions, small improvements were registered. On many other indicators, however, there is still much work to be done. Scores on Proactivity, SOE Bias, and Informal Charges have not changed much among all provinces. These areas, along with PSD and labor, represent focal areas for future reform initiatives.

Provincial official and national policy makers have done a solid job of improving market access through reductions in entry costs. Their performance on this first-generation reform is demonstrated both in improving PCI scores and striking private sector growth. Less progress, however, has been made at what we termed second-generation reforms in the 2006 report. Second-generation reforms involve enhancing the post-registration business environment through enhanced transparency and reductions in informal charges, thereby reducing the costs and risks faced by existing business, allowing them to improve productivity and expand their operations.

The rest of this section is sub-divided into descriptions of sub-indices with clear improvements across the board, sub-indices with decidedly mixed-results across indicators, and policies where reform efforts have stagnated.

Clear Improvement: Entry Costs & Time Costs of Regulatory Compliance.

Looking specifically at sub-index 1, the median number of days for registration (20 to 15) and re-registration (10 to 7) are down significantly in PCI 207, and are now well within the parameters set by the revised Enterprise Law (2005). The median number of required licenses also declined from 4 in 2006 to 2.5 in 2007. A recent announcement that company registration and tax/customs codes may now be unified under a one-stop-shop is a welcome sign that Vietnamese officials continue to plan improvements (Saigon Times 2007).

The median number of days that it takes to obtain business premises – the sum of the wait for LURCs and the time spent on negotiations with previous owners - declined from a median of 231 days in PCI 2006 to 90 days in PCI 2007. While this improvement is substantial, 90 days is still a long time for a business to wait. Provinces need help to determine the best way to limit the time firms spend in their negotiations with previous owners, while providing fair compensation to the farmers who had their land converted to business usage.

The observed improvement on Entry Costs is especially noteworthy because it directly contradicts the World Bank's 2008 *Doing Business* Report on Vietnam.[5] Vietnam slipped in the *Doing Business* rankings of Entry Costs (90 to 97) and Dealing with Licenses (62 to 63) over the

5 www.doingbusiness.org

same period covered by the PCI. Why does the World Bank view Vietnam as performing worse, when the PCI sees significant and sustained improvements? First, it is important to note that Vietnam's *Doing Business* rankings changed, while its actual scores did not. The actual number of entry procedures (11), days required to fulfill those procedures (50), the cost of registering (20% of income), and number of licenses (13), all remained exactly the same going back as far as PCI 2005. Therefore, Vietnam apparently dropped in the *Doing Business* rankings because other economies registered improvements, not because the Vietnam environment worsened considerably. Non-improvement over three consecutive years on these key measures, given Vietnam's low ranking, should signal that there is important room for regulatory reform, but it does not indicate a worsening business climate, as some journalists have suggested.

Secondly, *Doing Business* focuses directly on actual policies, asking lawyers and business consultants to map out the official procedures, whether or not these procedures are faithfully implemented. The PCI focuses directly on implementation of national policies by provincial authorities, thereby capturing either when provinces help facilitate rapid legal entry, or through negligence or intention, provincial officials slow business start-up.

Finally, *Doing Business* and the PCI, despite similar goals, actually analyze different populations of firms.[6] To facilitate international comparisons, *Doing Business* limits its analysis to a specific business form. But this ideal type is actually quite rare in Vietnam. Applying only the *Doing Business* assumptions about legal form and employee size to the PCI sample, for example, would eliminate 76% of the respondents and nearly all of the firms in the Mekong Delta, which are predominantly sole proprietorships. By contrast, the PCI uses a stratified sampling procedure to mirror the actual structure of the business population in each province. *Doing Business* researchers state their assumptions clearly, which is critical for generating meaningful international comparisons, but the key result is that their analysis applies to only a tiny segment of Vietnam's private businesses, whereas the PCI is designed to reflect the business climate faced by the overall population of enterprises.

Large improvements in the PCI 2007 were also experienced in the time costs of regulatory compliance sub-index, as more and more provinces who had poor scores improved in 2007, while the provinces with already high scores maintained their success (thus, the variance among all provinces declined substantially). On the other hand, the median score among provinces changed little for three critical indicators in Sub-Index 4. In Sub-Index 4, the percentage of firms spending over 10% of their activities on bureaucratic procedures remained 21%, inspections in the median province stabilized at 1, and the average time to complete the most frequent inspection (tax compliance) remained 8 hours. In terms of the Government's continued emphasis on reducing unnecessary regulatory burdens, these scores represent both a sign of success in that the scores remain relatively low, but at the same time represent a challenge to show more improvement and to protect against any backsliding.

Mixed Results: Transparency, Land Access, & Legal Institutions. Less dramatic, but nonetheless notable, achievements were also made in the transparency of regulatory information (Sub-Index 3). Large numbers of firms indicate that special relationships with provincial authorities have declined in importance. Specifically, the median percentage of firms that believe relationships with governmental officials are necessary to access legal documents was down six points in PCI 2007, to 56.6%, and firms that feel friends are important for negotiating with government declined 2.5% in PCI 2007, to 54.7%.

6 The "standardized" *Doing Business* entity has the following characteristics: it performs general industrial or commercial activities, it operates in the largest city (by population), it is exempt from industry-specific requirements (including environmental ones), it does not participate in foreign trade and does not trade in goods that are subject to excise taxes (e.g., liquor, tobacco, gas), it is a domestically owned limited liability company, its capital is subscribed in cash (not in-kind contributions) and is the higher of (i) 10 times GDP per capita in 1999 or (ii) the minimum capital requirement for the particular type of business entity, it rents (i.e., does not own) land and business premises, it has between 5 and 50 employees one month after the commencement of operations all of whom are nationals, it has turnover of up to 10 times its start-up capital, and it does not qualify for investment incentives (Djankov, La Porta, Lopez de Silanes, Shleifer 2002: 7).

The greatest improvement in transparency was the number of firms that feel obligated to negotiate with local tax authorities. In 2005, 75% of firms in the median province answered that negotiations were an essential part of doing business. By PCI 2006, only 61% of firms in the median province admitted to negotiations. And in PCI 2007, only 45% of firms responded that negotiations with tax authorities were necessary. Given the traditional complaints by businesses of difficulties involving interactions with tax authorities, this consistent decline is a strong sign that Vietnam's regulatory environment is improving. Web page scores also demonstrated improvement in PCI 2007. For this Sub-Index, the median province improved its score by four points and only two provinces had no web pages, compared to nine in PCI 2006.

More work is still necessary to improve overall transparency in Vietnam. Respondents record limited progress in accessing planning and legal documents necessary to operate their businesses. Some provinces, such as Binh Duong, Lao Cai, Binh Dinh, and Vinh Phuc, have excelled at finding innovative ways to make such documentation available, but in the median province, 25% of firms believe getting access to a provincial budget is impossible, while a further 37% believe that it is possible, but difficult. Similar numbers are recorded regarding the ease of accessing provincial master socio-economic plans and infrastructure development initiatives. In such an environment with such information gaps, it is much more difficult for entrepreneurs to make long-term strategic decisions about their investments. Transparency is a critical element of economic governance for the private sector -- the more firms know about their business environment, the better they can assess the costs and risk of subsequent investment decisions, and the more comfortable they feel about risking their hard-earned capital.

Improvements in the PCI 2007 regarding Land Access and Security of Property Rights (Sub-Index 2) are less widespread than for transparency, but two indicators show important gains. First, 76% of firms, which operate on household or purchased land in the median province, now possess full LURCs -- up from 55% in PCI 2006. This quite positive result suggests that provincial departments of the Ministry of Natural Resources and Environment (MONRE) have substantially improved the allocation of land rights. Secondly, with regard to the risk of expropriation, on a five-point scale where five represents no expropriation risk at all, the median provincial score climbed from 2.49 in PCI 2006 to 3.76 in PCI 2007. These improvements in the security of land rights provide a fundamentally stronger business environment for private sector growth and investment, as studies in other countries have shown that firms with more secure property rights are far more likely to expand their businesses (De Soto 2000, Galiani and Schargrodsky 2006).

As with transparency, the good news about improvements in land access must be tempered by remaining, important problems. Although there has been a reduction in the number of days it takes to get LURCs, the length is still a burdensome 60 days for the median firm. Just under two-thirds of firms surveyed still say that a scarcity of land constrains their ability to expand business operations, which reflects only a 6% improvement on the survey results for 2005. And, critically, over half of the surveyed firms do not believe that those who have their land expropriated receive fair compensation. This is potentially a major deterrent to investment.

Confidence in legal institutions (Sub-Index 10) remains a serious problem. Although the PCI indicator for legal institutions shows some gain, increasing by about 0.7 points, it remains at a quite low level relative to the other indices. One area of substantial improvement is that 10% more firms (33%) in the median province believe the legal system offers a suitable mechanism for appealing against corrupt behavior. This is also reflected in the hard data, where private actors filed 5.8 cases in Provincial Economic Courts per 1,000 firms in 2006. A year earlier, only 4.2 cases per 1,000 firms were filed. These numbers are all extremely low by international standards. Moreover, the number of firms who cite the legal system as their primary, secondary, or tertiary means of dispute resolution has actually dropped to only 11.8% in the median province. Even in the province citing the highest confidence in courts, only 29% of firms choose the legal system among their top three forms of dispute resolution.

Despite minor improvements in legal institutions, systematic legal reform must remain at the top of Vietnam's development agenda. The lack of credible legal institutions and respect for the rule of law is a critical weakness as the country moves forward on two reform fronts. First, increasing global integration (exemplified by WTO membership) will bring Vietnamese firms into business relationships with an increasing array of actors who they do not know personally. Hence, they cannot use social or family networks to enforce contracts and settle disputes, as they have tended to do in the past. Fair and timely legal arbitration will become necessary for adjudicating contract disputes. Second, one key innovation of the original Enterprise Law was that it moved Vietnam from a permission-based certification system to a simple registration and regulatory system. Most entrepreneurs, with the exception of large firms or enterprises operating in strategic industries, no longer need permission to do business; they simply need to formalize their activities so they can be properly regulated by local agencies. In such a system, courts play a critical role, as they provide the means by which private firms can appeal the administrative decisions of local regulatory agencies and state officials.[7] As a result of these two trends, courts need be strengthened and judges better trained in business and administrative law to increase the capacity of the courts to handle business disputes, and thereby improve the perception of the courts as credible institutions.

Sub-Indices with Minimal Improvement. Overall, there was a minimum of backsliding between PCI 2006 and PCI 2007. Private Sector Development and Labor Policies are the only two sub-indices with lower scores, but these changes were negligible. Proactivity, SOE Bias, and Informal Charges showed no significant change in 2007. Much more work by government authorities is needed to push forward policy reforms in these areas.

Labor skills continue to be a major challenge for many private firms. PCI survey results show that the quality of training and other supporting labor services have not met the increasing needs of businesses. Both in 2006 and 2007, only 56% businesses in the median province are satisfied with vocational training, while 52% were happy with labor exchange bureaus. Both these numbers are lower than firm perception of general high school education quality (73% say they are satisfied). While large companies may be able to provide expensive on-the-job training for their employees, SMEs simply do not have the resources to do so on a systematic basis. Even though SMEs do train their new staff, they cannot afford the cost of developing the same type of training programs that large SOE and foreign firms carry out. Moreover, when they do invest in training, they are at risk of having their valuable employees poached by other businesses, particularly in provinces close to major cities. This is a problem for all companies and in many ways a quite healthy sign that Vietnamese workers are finding new opportunities as economic growth advances; at the same time, it can have a relatively negative impact on smaller firms. Stronger vocational training provides better trained workers to both smaller and larger firms equally, and thus reduces an important market failure facing investments in training by smaller firms. In Tien Giang during our survey, for example, many seafood exporting companies mentioned that after receiving training, many of their employees left for HCMC, where there were more and opportunities.[8]

The practical quality of training, however, varies significantly among provinces. Firms often find that vocational training schools and centers do not teach the disciplines that match the practical needs of firms. Most state vocational schools have obsolete, central planning-era curriculums. These schools do not have the budget or incentive to upgrade syllabi to catch up with new technologies or new industries. In addition, there is weak training on work ethics and attitude. Firms, therefore, often experience a mismatch between their needs/expectations and the skills a new recruit can offer. As a result, most firms must re-train their staff even if they are hired directly out of vocational programs. This in-firm training is typically provided by more experienced staff in the firm, taking their time

7. Plans are in place by the Government and National Assembly to develop a range of important new national laws to improve government administration and the effectiveness of complaints against government decisions, including development of a new Administrative Procedure Code, a new Law on Complaints, and improvements in the procedures to appeal complaints against administrative actions to the courts.

8. Tien Giang firm survey, August 2007

away from their job and thereby further increasing operational costs. For example, during a diagnostic workshop in Quang Ninh, a businessman from a wood-carving firm said that even though he was willing to pay a competitive salary, he could not find someone who knew how to turn lathe.[9]

Vietnam is experiencing rapid private sector growth in a number of sectors, including seafood, garments, and footwear. Even though the skills needed in many processing sectors are not considered highly technical, the basic skilled workers needed are increasingly hard to find for these firms. For example, seafood companies report that workers usually cannot distinguish between different kinds of shrimp. Some companies even classified workers into unskilled and skilled; unskilled being workers who can remove the shrimp's head, and skilled being those who can peel it and remove the vein (Chesier and Penrose 2007). This example indicates that minimal improvements in labor training should pay big dividends in firm-level productivity improvements. Furthermore, as these firms upgrade their production processes to become more competitive, and as real wages for workers increase (a key socio-economic objective for Vietnam), they will need even higher skilled workers.

SOE Bias remains a problem as well. Despite a strong equitization push by the Vietnamese government, 42% of private firms in the median province feel that bias toward SOEs is an obstacle to their business. Positively, this percentage is down from 59% in 2005, but it is still a quite high figure that indicates lingering concerns among private entrepreneurs that the playing field is not balanced relative to SOEs. Along these same lines, only 45% of respondents in the median province believe official attitudes toward the private sector are positive (down 3% from 2006). To some extent, attitudes toward the private sector should continue to improve, as the private sector plays an ever increasing role in generating employment and tax revenues. Yet, it remains a serious challenge for government leaders that bias toward SOEs appears to remain strong in some provinces, reflecting a higher likelihood of discrimination against private firms.

Most worrisome, informal charges appear to be particularly intractable, despite the Government's stated mission to target corruption in the wake of the PMU-18 Scandal. No improvement was registered from 2006 to 2007 with regard to the percentage of firms (70%) in the median province who believe that firms in their line of business were subject to bribes. Furthermore, an almost identical number of firms (12%) admitted to paying over 10% of their annual revenue in informal charges; and a consistent 39% believe government officials use compliance with local regulations to extract rents.

One area of considerable improvement is that far fewer firms view informal charges as an obstacle to their business in the median province – 26% in PCI 2007 as opposed to 43% in PCI 2006. This result may reflect that such informal charges are being made in a more predictable and possibly less intrusive way, such that firms can better "manage" the costs of informal charges. In fact, 48% of firms claimed that paying informal charges delivered the expected result, which implies they received their desired, expedited service or favored treatment.

9. Quang Ninh Diagnostic Workshop, December 1, 2006

Table 4: Comparison of Overall Scores and Sub-Indices in PCI 2006 and PCI 2007

Index	Measure	2006		2007	
		Score	Province	Score	Province
Final Weighted Provincial Competitiveness Index	Min	36.07	Lai Chau	37.96	Dak Nong
	Median	52.41	Lam Dong/Thai Nguyen	55.56	Bac Giang/Phu Tho
	Max	77.61	Binh Duong	77.2	Binh Duong
	Correlation w/ Previous Year	NA		0.85*	
Unweighted Total Index	Min	42.51	Lai Chau	43.93	Dak Nong
	Median	55.23	Hoa Binh/Lam Dong	58.49	Thai Binh/Ha Giang
	Max	74.87	Binh Duong	76.02	Binh Duong
	Correlation w/ Previous Year	NA		0.82*	
Entry Costs	Min	4.96	Binh Phuoc	6.23	Hau Giang
	Median	7.4	Ha Tinh/BRVT	7.87	Hai Duong/Lam Dong
	Max	9.17	Da Nang	9.49	Quang Tri
	Correlation w/ Previous Year	NA		0.33*	
Land Access & Security of Tenure	Min	3.84	Lai Chau	4.32	Ha Noi
	Median	6	Quang Ngai/Bac Kan	6.27	Lao Cai/Thai Nguyen
	Max	7.98	Soc Trang	7.71	Long An
	Correlation w/ Previous Year	NA		0.68*	
Transparency	Min	2.15	Dak Nong	2.24	Dak Nong
	Median	5.43	TT-Hue/BRVT	5.83	Ha Tinh/Phu Tho
	Max	8.5	Binh Duong	8.56	Lao Cai
	Correlation w/ Previous Year	NA		0.6*	
Time Costs of Regulatory Compliance	Min	2.64	Phu Yen	2.99	Lai Chau
	Median	4.42	Quang Ngai/Kien Giang	6.21	Vinh Long/Phu Tho
	Max	7.12	Binh Duong	8.18	Ha Tay
	Correlation w/ Previous Year	NA		0.36*	

Index	Measure	2006		2007	
Informal Charges	Min	5.05	Ha Tinh	5.35	Ha Noi
	Median	6.33	Bac Kan/Bac Lieu	6.58	An Giang/Ha Giang
	Max	8.35	Ben Tre	7.71	Hung Yen
	Correlation w/ Previous Year			0.33*	
Bias toward State Owned Enterprises	Min	4.7	Ha Noi	4.79	Dak Nong
	Median	6.49	Da Nang/Lang Son	6.72	Quang Binh/Quang Nam
	Max	8.4	Lao Cai	8.29	Binh Duong
	Correlation w/ Previous Year	NA		0.56*	
Proactivity	Min	1.54	Quang Ngai	2.3	Cao Bang
	Median	4.83	Tuyen Quang/Thai Binh	4.95	Phu Tho/Thai Binh
	Max	10	Binh Duong	9.2	Binh Duong
	Correlation w/ Previous Year	NA		0.79*	
Private Sector Development Policies	Min	2.4	Dak Nong	2.26	Bac Lieu
	Median	4.88	Ha Giang/Kien Giang	4.71	Ben Tre/Tuyen Quang
	Max	9.62	Da Nang	8.73	HCMC
	Correlation w/ Previous Year	NA		0.79*	
Labor Policies	Min	1.99	Lai Chau	1.92	Lai Chau
	Median	5.1	Lang Son/Quang Nam	5.02	Quang Nam/Quang Ngai
	Max	9.6	Da Nang	8.34	Da Nang
	Correlation w/ Previous Year	NA		0.81*	
Legal Institutions	Min	2.13	Quang Ngai	2.24	Ha Tinh
	Median	3.63	Son La/Ninh Binh	4.33	Phu Tho/Vinh Phuc
	Max	6.55	Bac Giang	6.56	Bac Kan
	Correlation w/ Previous Year			0.37*	

* Significant at 5% Level; NA = Not Applicable

All values are at the provincial level.

Data include only firms registered within two calendar years preceding the survey.

2005 data only include 42 provinces and do not include the full set of indicators used in subsequent years, reflecting changes in survey questions and ordering in 2006.

Extraordinary Provincial Improvement over Time

A second way to draw out ideas for policy innovation is to look specifically at the provinces that registered large improvements between 2006 and 2007. Economic governance for private firms is improving generally throughout Vietnam, with improvements relatively consistent all the way through the rankings. However, a few provinces made large improvements over the past two years, as shown in Table 5. Tien Giang, Ca Mau, and Ha Tay all claimed that they had not received due credit for the substantial recent improvements they made.[10] It now appears that it took around two years for their policy reforms to be reflected in better PCI ratings. The lesson from this is that provinces should not worry unduly if their economic governance initiatives fail to bear fruit immediately; implementation by subordinate officials and widespread knowledge by stakeholders both take time to occur, and to be captured by the PCI survey.

A second key finding is that improvements in Transparency and Time Costs of Regulatory Compliance were the primary reasons why provinces made the greatest progress in 2007. One reason may be that these reforms – the 'low hanging fruit' – are relatively easier to implement. Reducing bureaucratic procedures is simply a matter of state withdrawal from the economy, and transparency, while sometimes involving extensive coordination among local agencies, can be as easy and simple as re-designing the DPI foyer so that firms can more easily find regulatory information affecting their business. As with all reform processes, there is a need to sequence and prioritize what is often an extensive array of initiatives. This result shows that, all things being equal, it makes sense to first tackle those reforms that can be achieved most rapidly, building upon positive demonstration effects that create momentum and confidence for provincial officials to take on more challenging reform initiatives over time.

A third notable finding is that five of the ten greatest improvements in overall PCI rankings were recorded by provinces located in the Mekong Delta. It may be possible that competition among Mekong Delta provinces for scarce labor and capital is leading to competition and diffusion of policy initiatives, although we can only speculate on this. Nonetheless, something quite positive appears to be taking place in the Mekong Delta, as already three provinces (Vinh Long, An Giang, and Dong Thap) are ranked in the top 10.

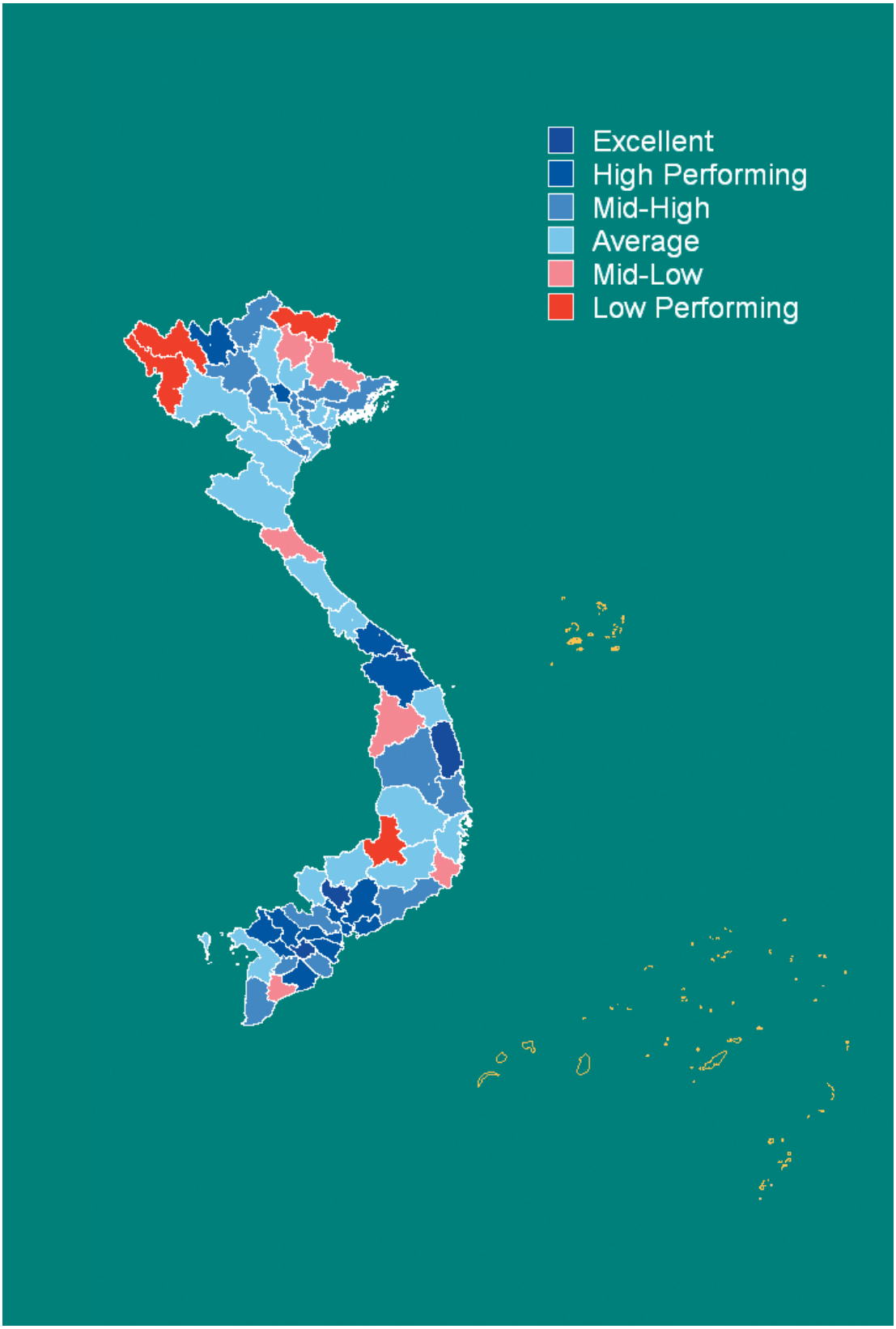
Finally, though conclusive evidence will not be available until the next GSO Enterprise Census, when concrete data for firm activity are analyzed, it appears that provinces that improved their PCI scores also appear to be the most attractive locations for new investors. Seven out of the ten provinces that earned the greatest improvements in their PCI index had new firm registrations that were well above the national median. Ha Tay, Thanh Hoa, BRVT and Long An, in particular, were among the ten provinces and national cities with the highest growth in business registration this year.

10. http://www.vnmedia.vn/NewsDetail.asp?Catid=26&NewsId=53621

Table 5: Provinces with the Greatest Single-Year Improvements

Province	Change Since 2006	PCI 2007	Tier 2007	PCI 2006	Tier 2006	Region	Largest Improvements (Sub-Indices)	# of New Private Sector Registrations in 2006 (Capital in Billion VND)
Thua-Thien Hue	12.61	62.44	High	49.83	Average	South Central Coast	Entry, Time	416 (956)
Ca Mau	12.33	56.19	Mid-High	43.87	Mid-Low	Mekong Delta	Transparency, Time	324 (1,273)
Tien Giang	12.31	64.63	High	52.32	Average	Mekong Delta	Transparency, Time	332 (496)
Ha Tay	11.91	52.24	Average	40.34	Low	Red River Delta	Time, Proactivity	648 (1,603)
Soc Trang	10.35	64.68	High	54.34	Mid-High	Mekong Delta	Time, Labor	191 (570)
Ba Ria- Vung Tau	10.09	65.63	High	55.54	Mid-High	North Southeast	Transparency, Time	492 (3,502)
Long An	9.08	58.82	Mid-High	49.73	Average	Mekong Delta	Transparency, Time	476 (1,597)
Ben Tre	8.55	62.88	High	54.33	Average	Mekong Delta	Transparency, Time	148 (254)
Quang Ngai	8.41	51.39	Average	42.98	Mid-Low	South Central Coast	Entry, Time	242 (335)
Thanh Hoa	7.53	52.82	Average	45.29	Mid-Low	North Central Coast	Transparency, Time	562 (1,969)
Median Province	2.90	55.26	Mid-High	52.41	Average			244 (650)

Figure 5: The 2007 PCI Map of Vietnam



Regional Disparities

Each year, when the PCI Map of provincial scores is released, there is speculation as to whether regional influences on economic governance cut across provincial boundaries. This is because there appears to be fundamental differences between the effectiveness of economic governance by provinces in different regions within Vietnam. In this context, it is important to keep in mind that regions are not administrative units; there are no over-arching regional authorities on economic policy, and there are surprisingly few concrete examples of provincial cooperation on economic governance (That said, regional cooperation on infrastructure development, often directed from Hanoi, is becoming more widespread and is particularly welcome when it can eliminate wasteful duplication of expenditures by provincial authorities). Consequently, it is difficult to understand what truly drives differences in economic governance among provinces. Speculation about long-standing cultural differences in attitudes toward private enterprise can be overblown, as they imply that today's provincial leaders are prisoners of their cultural legacy and incapable of pursuing new and innovative private sector development strategies.

Yet, those clusters of dark blue and blue patches on the PCI map are indeed intriguing, and the statistical correlations with region are too strong to be explained away by random variation in the data. Table 6 lays out mean scores and significance tests for three provincial groupings: i) a possible North/South divide; ii) urban/rural differences, between provinces and highly urbanized national-level cities; and iii) differences across Vietnam's seven major regions.

Urban versus Rural

Urban/Rural divergences are perhaps the easiest to understand. Cities tend to attract the best-educated and talented citizenry from neighboring provinces, including officials in the provincial bureaucracy. Cities also have more active and influential business associations, leading to greater cross-fertilization of ideas between the public and private sector. In general, cities outperform provinces by about six points. The key advantages registered by cities rest in PSD and Labor Policies. This makes sense; cities simply have more resources to expend on business match-making, trade fairs, vocational schools, and labor exchanges. The density of private sector activity also allows such interventions to be monitored more effectively and to have greater impact on a number of firms.

On the other hand, provinces score significantly better on Land Access and Security of Tenure. Here, population density works against urban centers. Land is more expensive and competition for the best plots are far more intense. In addition, population growth due to migration puts enormous pressure on pre-existing infrastructure. Cities are forced to repossess land more often, for example, in order to expand roads and zone off areas for new residential developments.

North versus South

The second dichotomy is between northern and southern provinces (shown in more detail in Figure 8). Overall, southern provinces score 4.5 points higher than northern provinces in their PCI 2007 ratings, a value that is statistically significant at the .01 level. As is evident in Table 6, southern provinces perform significantly better on eight sub-indices, specifically: Land Access and Security of Tenure, Transparency, Time Costs, Proactivity, Private Sector Development Policies, Labor Policies, and Legal Institutions.

Historical factors appear to provide an explanation for higher scores among southern provinces. Because strict central planning was only implemented in provinces south of the 17th parallel for 11 years (1975-1986), as opposed to 32 years (1954-1986) in northern provinces, and because key components of central planning such as the collectivization of land and agriculture were never fully implemented in the South (Trung 2006, Do and Iyer 2003), southern provinces had an enormous head-start at developing streamlined economic governance for a market economy at the on-set of the Doi Moi era.

PCI 2007 results show that although these historical factors may remain relevant, there is nevertheless considerable dynamism (or lack of dynamism) in both regions. Within the southern and northern region, there remains considerable differences among provinces in both regions. Some southern provinces rank at the lowest levels of the PCI index while some northern provinces are among the strongest performers (e.g. Lao Cai and Vinh Phuc).

Table 6: Comparison by Key Geographic Divisions

		North/South		Urban/Rural		Regions						
Index	Measure	North	South	Province	City	Red River	Northern Uplands	North Central Coast	South Central Coast	Central Highlands	North Southeast	Mekong Delta
	Provinces	30	34	59	5	11	15	5	7	5	9	12
Final Weighted Provincial Competitiveness Index	Mean	52.58	58.26	55.06	61.89	55.87	51.01	49.75	61.35	47.91	59.79	60.22
	Standard Error	1.22	1.51	1.07	3.42	1.30	2.06	1.20	3.07	3.10	3.01	2.15
	T-Statistic	−2.87***		−1.79*			−1.96*	−3.53***	1.67*	−2.47**	1.19	1.71*
Unweighted Total Index	Mean	56.34	60.83	58.44	62.12	58.57	55.49	53.84	63.07	52.64	61.92	62.56
	Standard Error	0.97	1.23	0.87	3.08	1.07	1.64	1.29	2.54	2.58	2.31	1.85
	T-Statistic	−2.82***		−1.18			-1.54	−2.91***	1.65	−2.22**	1.31	1.84*
Entry Costs	Mean	7.74	7.97	7.86	7.81	7.54	7.90	8.02	8.37	7.86	7.82	7.77
	Standard Error	0.12	0.15	0.10	0.52	0.25	0.13	0.41	0.28	0.46	0.15	0.29
	T-Statistic	−1.21		0.15			1.25	1.02	2.21**	0.62	0.93	0.59
Land Access & Security of Tenure	Mean	6.12	6.41	6.33	5.58	6.05	6.17	6.17	5.98	5.84	6.56	6.78
	Standard Error	0.13	0.10	0.08	0.36	0.26	0.19	0.12	0.20	0.14	0.23	0.11
	T-Statistic	−1.74*		2.5**			0.35	0.41	-0.23	-0.72	1.44	2.57**
Transparency	Mean	5.63	6.08	5.82	6.52	6.09	5.22	5.82	6.40	5.15	6.31	6.15
	Standard Error	0.19	0.18	0.14	0.29	0.20	0.32	0.08	0.34	0.76	0.27	0.25
	T-Statistic	−1.75*		−1.44			−2.27**	-1.26	0.77	-1.25	0.63	0.18
Time Costs of Regulatory Compliance	Mean	5.78	6.39	6.05	6.80	6.56	5.15	5.96	6.56	4.94	6.63	6.76
	Standard Error	0.22	0.17	0.15	0.35	0.31	0.30	0.07	0.31	0.31	0.30	0.23
	T-Statistic	−2.19**		−1.44			−3.22***	−1.85*	0	−3.76**	0.14	0.5
Informal Charges	Mean	6.58	6.47	6.55	6.20	6.79	6.63	5.87	6.27	6.41	6.66	6.50
	Standard Error	0.11	0.09	0.07	0.27	0.20	0.11	0.12	0.23	0.12	0.17	0.18
	T-Statistic	0.82		1.35			-0.7	−4.04***	−1.74*	−1.69*	-0.5	-1.1

		North/South		Urban/Rural		Regions						
Index	Measure	North	South	Province	City	Red River	Northern Uplands	North Central Coast	South Central Coast	Central Highlands	North Southeast	Mekong Delta
	Provinces	30	34	59	5	11	15	5	7	5	9	12
Bias toward State Owned Enterprises	Mean	6.64	6.64	6.68	6.19	6.46	6.89	6.16	7.11	6.43	6.54	6.58
	Standard Error	0.12	0.14	0.10	0.33	0.22	0.15	0.19	0.19	0.45	0.27	0.27
	T-Statistic	−0.02		1.34			1.57	-1.06	2.25**	-0.06	0.25	0.35
Proactivity	Mean	4.58	5.36	4.99	5.05	5.14	4.42	3.60	5.53	3.95	5.49	5.92
	Standard Error	0.22	0.27	0.19	0.54	0.32	0.32	0.26	0.54	0.49	0.57	0.40
	T-Statistic	−2.23**		-0.09			-1.52	−3.76***	0.63	−2.1**	0.53	1.5
Private Sector Development Policies	Mean	4.46	5.43	4.78	7.33	5.12	4.19	3.72	6.40	4.12	5.72	5.31
	Standard Error	0.22	0.29	0.18	0.57	0.32	0.30	0.35	0.54	0.49	0.67	0.43
	T-Statistic	−2.66***		−3.98***			−2.09**	−3.02***	2.06**	−1.77*	0.81	0.35
Labor Policies	Mean	4.88	5.46	5.09	6.43	5.08	4.80	4.90	5.97	3.85	5.80	5.55
	Standard Error	0.21	0.23	0.16	0.58	0.32	0.36	0.33	0.49	0.41	0.43	0.33
	T-Statistic	−1.86*		−2.34**			-0.59	-0.41	1.53	−2.46**	1.34	1.02
Legal Institutions	Mean	3.93	4.62	4.30	4.21	3.72	4.13	3.62	4.47	4.09	4.38	5.24
	Standard Error	0.20	0.16	0.14	0.44	0.26	0.31	0.52	0.29	0.41	0.31	0.18
	T-Statistic	−2.76***		0.19			0.97	-0.18	1.94*	0.78	1.63	4.73***

Statistical significance of differences based on two-tailed T-test: *** p<0.01, ** p<0.05, * p<0.1

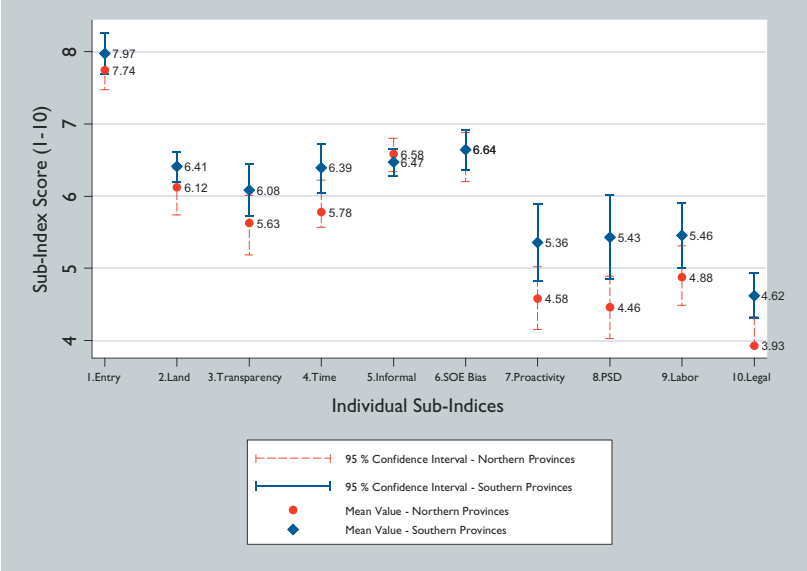
North/South based on 17th Parallel

Region based on General Statistical Office Units with Northwest and Northeast merged into Northern Uplands

T-Statistics for 17th Parallel and Rural/Urban calculated by two-tailed t-test.

T-Statistics for region calculated using multiple regression with Red River Delta as the unexpressed dummy variable. All regional t-statistics should be interpreted as the statistical significance of differences with the Red River Delta.

Figure 6: Sub-Index Scores of Northern and Southern Provinces



Notice that not all sub-indices are significantly different between the North and South. Entry Costs, Informal Charges, and SOE Bias are almost identical in both halves of the country. Historical legacy helps explain why southern provinces score significantly better on Land Access & Security of Tenure. Provincial leaders' greater familiarity with the needs of the private sector may also account for differences in Proactivity and PSD Policies. Yet, some other differences are harder to explain. For example, why do southern provinces appear to excel at Transparency and firms' confidence in Legal Institutions, as there is little variance in the structure of local government institutions and courts across the two regions ?[11]

One answer may be policy diffusion (Simmons and Elkins 2004). Simply put, policy ideas should spread more rapidly to neighboring provinces. Part of this has to do with competition for scarce labor and capital. In order to attract the most talented labor and entrepreneurs within the region, provinces may borrow ideas from their more successful neighbors (Tiebout 1956). Alternatively, policy innovations may be carried across provincial borders by various actors, such as private firms, foreign investors, and even members of the international donor community, as they expand their operations into new provinces.

Because southern provinces had a head-start on economic reforms at the beginning of the "Doi Moi" era, and because a few of these provinces – such as HCMC, Dong Nai, and Song Be – were especially attractive investment locations in the early years, diffusion may have been more widespread in the South. Some of these innovations may only now be reaching northern provinces on a more widespread basis (Cung et al, 2004), as seen with improvements in Entry Costs and SOE Bias throughout much of the North. For these indicators, national legislation such as the 2005 Enterprise Law, 2005 Investment Law, and 2004 Competition Law, amongst others, may have played some role in eliminating regional variations by legislating uniform policies across the country. On the other hand, similar national reforms with regard to transparency in the revision of the "Law on Laws" and the development of a new "Law on Local Laws" should induce similar national-wide improvements.

Region versus Region

If the diffusion hypothesis is correct, we should also see it on a more localized basis. The third panel of Table 5 tracks this by looking at economic governance across seven sub-regions in Vietnam, measuring each sub-region relative to the Red River Delta's score. In this breakdown, the Mekong Delta and South Central Coast have mean, weighted-PCI scores that are significantly greater than the Red River Delta, while the Northern Uplands, North Central Coast, and Central Highlands rank significantly lower.

Probing deeper, we find that provinces in the South Central Coast perform significantly better on Entry Costs, while the Mekong Delta out performs other regions on Land Access and Security of Tenure, and Legal Institutions. These are the only cases of regions attaining significantly better marks than the Red River Delta provinces.

11 It is also important to note that while southern provinces have out-performed the North in all three iterations of the PCI, the magnitude of the differences is increasing over time. More testing is necessary, but it appears that diffusion of policy ideas is taking place more rapidly in the South. This also tentatively indicates that historical factors are not of primary importance in explaining better economic governance among Southern provinces.

There are several areas, however, where regions perform significantly worse. Noticeably: i) the Northern Uplands on Transparency, Time Costs, and Private Sector Development; ii) the North Central Coast provinces on Informal Charges, Proactivity, and PSD; and iii) the Central Highlands on Time Costs, Proactivity, and Labor Policies. These scores are all outside the range of random variation, and thus we know that region-specific factors are responsible for these scores. More research, however, is necessary to discover exactly what factors may cause these differences.

To facilitate potential future diffusion initiatives, Table 7 identifies provincial role models within each region. Provinces with the highest score on the weighted index, as well as provinces with the highest pace of improvement, are provided. These can be considered "best-practice" provinces within each sub-region, by which other neighboring and presumably somewhat similarly endowed provinces can refer to and learn from. For example, attaining the level of a Binh Duong or Vinh Long may be beyond the reach of most provinces in the North Central Coast right now, but attaining the level of Thanh Hoa province is certainly feasible.

Table 7: Regional Role Models

Measure/Region	City	Red River	Northern Uplands
Number of Provinces	5	9	15
High Score	Da Nang (72.96)	Vinh Phuc (66.06)	Lao Cai (66.94)
Low Score	Hai Phong (53.19)	Ha Nam (51.29)	Lai Chau (38.19)
Biggest Improvement over 2006	Ha Noi (5.57)	Ha Tay (12.37)	Quang Ninh (6.22)
Measure/Region	**North Central Coast**	**South Central Coast**	**Central Highlands**
Number of Provinces	5	6	5
High Score	Thanh Hoa (52.82)	Binh Dinh (69.46)	Gia Lai (56.16)
Low Score	Ha Tinh (45.56)	Quang Ngai (51.39)	Dak Nong (37.96)
Biggest Improvement over 2006	Thanh Hoa (6.89)	TT-Hue (11.47)	Kon Tum (4.8)
Measure/Region	**North Southeast**	**Mekong Delta**	
Number of Provinces	8	11	
High Score	Binh Duong (77.2)	Vinh Long (70.14)	
Low Score	Ninh Thuan (47.33)	Bac Lieu (42.49)	
Biggest Improvement over 2006	BRVT (9.41)	Tien Giang (13.47)	
Region based on General Statistical Office Units with Northwest and Northeast merged into Northern Uplands			

CHAPTER II:

NATIONAL POLICY IMPLICATIONS

NATIONAL POLICY IMPLICATIONS

Lowering the Costs and Risks of Regulation to Meet Future Challenges

These are exciting times for the Vietnamese private sector. The overall economy is booming, and the burgeoning activity of the formal private sector is among the chief reasons for this phenomenon. Both Vietnamese policy-makers, who created the platform for these developments, and Vietnamese entrepreneurs, who embraced the new business opportunities, are responsible for the remarkable accomplishments.

In the past year, i) Vietnam joined the World Trade Organization (WTO); ii) overall GDP grew by 8.2% between 2005 and 2006; iii) the gross capitalization of the Vietnamese stock market expanded 25% to $17.5 billion (roughly 28.8% of GDP in July 2007); and iv) nearly 40,000 new private firms formally registered their business activities by the end of 2006. At the same time, another 41,000 existing enterprises changed their registration to allow for additional investment. Adding together new and expanded private sector investment, the registered capital of the private sector in 2006 was US$15.3 billion. By way of comparison, foreign direct investment (FDI) over the same period was US$8.3 billion.

Private sector investment has also had discernable labor market effects. According to the GSO Enterprise Census, the formal private sector now accounts for three million Vietnamese jobs, just slightly less than employment in the foreign- and state-owned sectors combined. More productive per unit of labor than their state-owned counterparts, and given the right regulatory environment, the private sector should continue to increase its share of total employment, and continue to be the primary means of absorbing Vietnam's ever growing labor force (Dapice 2006).

PCI survey findings suggest that rapid private-sector growth should continue. Of the 6,700 firms surveyed for PCI 2007, a full 71% intend to expand the size of their operations over the next two years. Among exporting firms, 83% plan to expand; a result that almost certainly derives in part from the optimism surrounding WTO accession and increasingly broad-based and rapidly growing exports (MPI/STAR Report 2005: 23-63).

Although our analysis in Chapter 1 shows that most provinces in Vietnam have made important improvements in economic governance, which have contributed to the recent boom in growth, the PCI 2007 also highlights a number of issues that continue to constrain private sector development. It is during these times of relative prosperity, when it is easiest and most necessary to tackle the remaining issues on the reform agenda and prepare the Vietnamese economy for increasing international competition.

Due in part to the landmark Enterprise Law (1999/2000), provinces have made considerable progress in facilitating market entry, yet comparable successes in the post-entry business environment lag behind. Key areas for these second-generation reform initiatives include the following (see page 20 for discussion of second generation reforms):

1) Improving government transparency by further lowering the costs of information gathering and enhancing the ability of enterprises to successfully gauge the risks of business expansion;

2) Supplying firms with more suitably trained/skilled labor, as entrepreneurs steadily move into more sophisticated production processes, service sectors, and product niches; and,

3) Enhancing the confidence of entrepreneurs in legal institutions, as fora for settling contractual disputes, protecting property rights, and appealing corrupt or over-zealous behavior by government officials.

A simple conceptual framework for thinking about the challenges that face the Vietnamese government is through the lens of cost and

risk. Public Administration Reform (PAR), streamlining of Vietnam's national regulatory frame work, and institutional reform all can be seen more clearly this way; and, of course, all of the PCI reform indicators can be slotted easily into one or both of these over-arching concepts of enterprise competitiveness. Take Sub-Index 2 on Land for instance. Its first dimension probes the costs (in time and money) firms face in acquiring suitable business premises, but the second dimension looks at difficulties in obtaining clear legal rights to their premises, thereby reducing the implicit risk of investing on their property. As entrepreneurs consider mobilizing their hard earned capital for business expansion or exploration into new product lines, they implicitly calculate costs and risks due to economic governance into their business plans.

Vietnamese policymakers and legislative drafting committees would be well-served to adopt this same calculation in evaluating existing regulations and developing new ones. Regarding costs, regulators might ask, "Is the regulation necessary to protect the public's interest?" If so, "is it applied as effectively as possible in practice so that it minimizes compliance costs by businesses and citizens?' Regulation clearly plays a legitimate role in protecting the interests of consumers, the environment, the health and safety of citizens, and other public interests. Nevertheless, it is critical that regulation be done in a way that minimizes direct compliance costs and the opportunities for regulators to extract informal charges from law-abiding businesses. Advancing Vietnam's movement away from administrative regulation to control private sector actions and toward an enabling approach through "arms-length" regulatory procedures is a critical step both for meeting BTA/WTO commitments and sustaining present rates of economic growth.

Next, policymakers could ask whether a particular regulation affects the risk faced by entrepreneurs, who are considering a new venture or expanding/ upgrading existing operations. Obviously, it is impossible to reduce all risk inherent in the Vietnamese business environment. High-risk ventures are often associated with high profit and may be the reason entrepreneurs are interested in the venture in the first place. The reform goal for Vietnamese authorities should be to improve the regulatory framework in such a way that risks are transparent, predictable and thus more easily calculable by entrepreneurs. Efforts should be made to assure that regulatory procedures are openly available and as easy to understand as possible, and that hidden, non-business related risks, which are inherent in firms' interactions with national and provincial bureaucracy, be minimized or eliminated completely.

Better information about regulations and administrative procedures is not only critical for businesses to make strategic decisions, it also allows government officials to more effectively carry out their duties and for courts and other authorities to rule on complaints against administrative rulings by businesses and citizens. Regarding such access to information about legal normative documents ("the law of the land"), substantial efforts are already being made at the national and provincial levels with improvements in the national Official Gazette, including planned development of an electronic, searchable national Official Gazette, and the development of Provincial Official Gazettes in almost every province. The VCCI's "vibonline" webpage provides businesses with the opportunity to comment on drafts of many proposed legal documents while they are still in development.

Applying the Cost and Risk Conceptual Framework to Key Policy Challenges

In this chapter, we employ PCI data and the conceptual framework of costs and risks to take an in-depth look at four areas of national policy concern: 1) emerging provincial inequality; 2) progress in the formalization of the household sector; 3) equitization (privatization) of SOEs; and 4) compliance by Vietnam with its WTO commitments.

First, we study emerging inequality among Vietnamese provinces. Our analysis demonstrates that, whereas in earlier years when poorly endowed provinces were able to rely on governance improvements to promote private sector growth and to narrow the gap with richer provinces, this year's PCI identifies a group of poorly endowed and poorly governed provinces that are falling behind their peers. Should this trend continue, it will surely raise important concerns about the

distributional policies of the central government and the distributional impact of economic growth, akin to those presently taking place in China (Mishra 2006, Kahn 2006).

Second, we return to the oft-discussed issue of formalization of Vietnam's private sector. Specifically, we look at the factors underlying the decision of millions of household entrepreneurs to either formalize their business activities through registration at provincial DPIs or remain unregistered. As with business expansion, the decision to formalize involves a forward-looking calculation by individual entrepreneurs of the costs and risks of making their business activities more visible and subject to government scrutiny. In aggregate, however, these decisions have important financial and economic welfare implications. Formal firms generate more tax revenue for central and provincial coffers. Furthermore, formal firms are better positioned to expand and generate jobs for Vietnam's rapidly expanding labor force (about 1.4 million entrants per year) than their household counterparts. Using PCI data, we find that formalization is strongly associated with many of the measures of good governance discussed above.

Third, we study how the performance of recently equitized SOEs is associated with economic governance as measured by the PCI. Our results show that equitized firms perform better in provinces with higher PCI scores, a finding of critical development implications for Vietnamese policymakers. There is a strong consensus among analysts of the Vietnamese economy that the corporate sector is characterized by a "missing middle," implying there are noticeably few domestic businesses in the medium/large range between the big multinationals and the relatively small-scale Vietnamese private sector (World Bank 2006: 14, Freeman 2005: 349).[12] The absence of this dynamic sector, which has served as the engine of growth, innovation, and employment in other developing economies, has caused some consternation among Vietnamese policy makers, as they prepare for the effects of deeper international integration. The scale of most Vietnamese private manufacturing firms, while increasing, is still too small to compete in international markets. Only 3% of private manufacturers in the PCI 2007 sample have total assets larger than VND 50 billion (equivalent to around $3.1 million), and only 7% have over 200 employees. One hope has been that equitized Vietnamese firms could expand to fill this void, as they are generally of a larger scale than other private firms (ADB 2006). Moreover, many SOEs possess assets and market niches that could quickly attract foreign investment capital, technology and managerial expertise, fueling their expansion. But which of these newly equitized SOEs will rise to fill this void remains a mystery. While enormous research effort has gone into illustrating higher profitability of equitized firms compared with SOEs, relative little study has been made of the variance in profitability within the group of equitized SOEs and its relation to provincial governance.

Fourth, the discussion of a level-playing field for equitized firms leads us to the discussion of a level playing field for all enterprises competing in the Vietnamese economy. Our discussions with foreign enterprises have made it clear that they face many of the same obstacles that the PCI demonstrates hamper the domestic private sector (MPI/STAR Report 2005: 78-81). Because the BTA/WTO commitments along with corresponding Vietnamese domestic legislation were aimed at creating a uniform, non-discriminatory business environment among ownership types, we take a close look at the relationship between the PCI measures and WTO commitments. Our analysis offers one method for monitoring how reforms resulting from Vietnam's international trade commitments have contributed to improvements in the business environment for domestic private-sector firms. Such a monitoring process is critical for taking full advantage of the multi-faceted reform efforts.

Emerging Provincial Inequalities

Despite the commendable economic successes at the national level cited above, it is becoming increasingly apparent that the benefits of private sector growth are not being shared equally across the country. Indeed, the ADB (2007) report on Asian inequality attributed much of the increasing inequality in Vietnam to regional differences. GSO

12 Missing middle is a term of art more than a perfectly accurate depiction of the dilemma. In fact, Vietnam lacks a significant population of both medium size and large domestic firms.

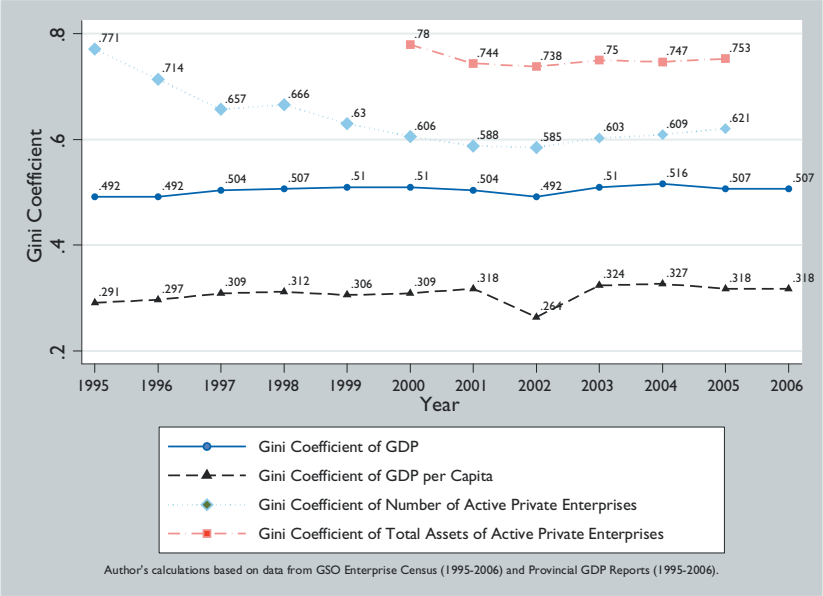
data offer some confirmation for this; ten provinces account for 70% of company registrations and 64% of registered capital in 2006. These same ten provinces account for 42% of GDP and 60% of the pre-existing active private enterprises. Of course, economic concentration is a hallmark of development; entrepreneurs typically (and understandably) want to locate their operations near large, wealthy markets and suppliers. Nevertheless, sustained divergences of this kind could have lasting distributional and political consequences that will need to be addressed.

One way to illustrate regional disparities is by calculating a provincial *Gini Coefficient*. The Gini Coefficient is the most common metric used to assess income inequality, where 0 implies perfect equality and 1 denotes a complete concentration of wealth.[13] A reasonable distribution of wealth is thought to be in the 0.24 to 0.4 range – highly unequal societies, such as Mexico and Brazil, score between 0.55 and 0.6. While the formula was originally developed to measure inequality among individuals in a society, it is a relatively straightforward operation to apply the same metric to sub-national units within a country –one must simply substitute provinces for individuals.

To gauge inequality among Vietnam's 64 municipalities and provinces, we created Gini

Figure 7: Provincial Gini Coefficients for Key Development Indicators

(0 is Perfect Equality; 1 is Perfect Inequality)[14]



coefficients for four important indicators of economic development between 1995 and 2006. The findings reveal sustained provincial inequality since 1995. The Gini for GDP (the blue line in Figure 7) has remained relatively constant, at around 0.5. GDP per capita (in purple) is lower (at around 0.3) and more volatile, probably owing to labor migration away from poorer areas. Most strikingly, we find substantial inequality in private sector activity across provinces. While early economic reforms spurred rural private sector activity in the mid-1990s, driving the Gini down from 0.77 to 0.58 by 2000, the metric has recently started to climb back up again, to 0.62 by 2006. Total investment is even more unequal among the provinces, at about 0.72.

Initial structural conditions – as measured by human capital in 1995, infrastructure in 1995, and distance (in kilometers) from the two major metropolises – are certainly important in partly explaining the economic concentrations. Using regression analysis, they account for 46% of the variation in GDP per capita, 52% of the variation in GDP, 84% of the variation in active private enterprises, and 55% of the variation in investment. But endowments are far from the only determinant of economic disparities, as can be seen in Figure 8 below, where provinces above the solid line out-performed the historical trajectory set forth for them by their initial conditions. Among the notable performers are: i) HCM City (at a high level of structural endowment); ii) Binh Duong and Da Nang (in a middle range of endowment); iii) and Binh Dinh, Ca Mau, and Quang Nam (at low endowment levels).

13 Gini= $\frac{\sum_{i=1}^{n}\sum_{j=1}^{n}|x_i - x_j|}{2n^2\bar{x}}$, where x is an observed provincial value, n is the number of values observed and x is the mean value, i and j are individual province scores.

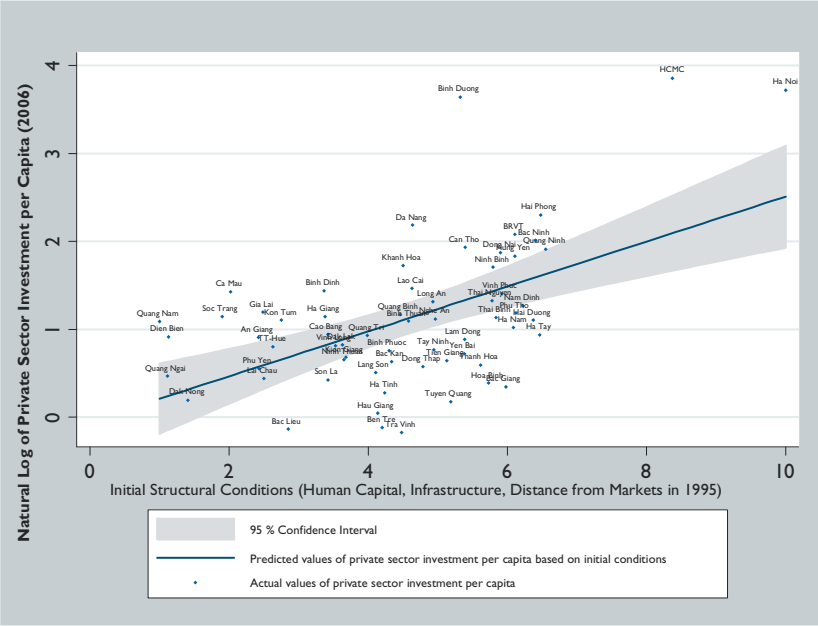
14. Perfect inequality means that one unit (in this case a province) is responsible for all output or private investment in the country.

So what accounts for the diversity in investment performance that remains after structural endowments are taken into account? As we have demonstrated over three PCI surveys, the key factor allowing provinces to escape the legacy of initial conditions is economic governance. Figure 4 in Chapter 1 shows that at each level of initial conditions, provinces with high economic governance out-performed their proximate peers. We used the discussion of Quang Ngai and Binh Dinh to illustrate this point, but other pairs of provinces with similar initial endowments but vastly different performance are easy to identify (i.e., Vinh Phuc versus Phu Tho, Dak Lak versus Dak Nong, Vinh Long versus Tra Vinh).

In general, signs seem to be positive that continued economic governance improvements will generate economic growth throughout the country. The median province improved its PCI score by over three points, and thirteen additional provinces increased their weighted scores above the 2006 median. Moreover, the 'convergence coefficient', a handy indicator derived from regressing changes in the weighted PCI between 2006 and 2007 on the 2006 baseline score is negative, suggesting that lower-ranked provinces are improving their standard of economic governance faster than higher-ranked entities.

When one looks a bit closer, however, there is less comforting news. To avoid increasing inequality, economic governance improvements at lower tiers of the PCI need to be greater than those above them. Table 8 checks to see if

Figure 8: Predicted Private Investment Due to Initial Conditions



this is true by dividing provinces into their governance tiers from PCI 2006, and we find that the median governance improvements were highest among the Average and Mid-Low ranked provinces in 2006. (This is to be expected, as lower ranked provinces have more room for improvement.) And yet we can also see that provinces in the High tier are improving faster than provinces in the Mid-High category (This can be seen both in the higher median improvement and in the more negative convergence coefficient). Put another way, High-ranked provinces are narrowing the gap with – and even joining the ranks of – the Excellent provinces, at a rate that is faster than Mid-High provinces catching-up with High-ranked provinces.

This is leading to some clustering among the best governed provinces, which in itself is quite a positive finding. But, disturbingly, the provinces in the Low-ranked category in 2006 have made the least median improvement of all categories, other than Excellent. And, their convergence coefficient is significant and positive, indicating that the governance gap between these low-performing provinces and their peers is actually increasing.

Should this trend continue, and if the strong relationship between economic governance and economic performance remains, we can expect that the provincial Gini Coefficients will worsen steadily into the future. A certain group of better governed provinces will contribute increasingly larger portions of output and achieve higher levels of economic welfare, while a small handful of poorly governed and poorly endowed provinces will continue to fall behind. Transfers and labor migration may mollify this problem somewhat, as they have already (World Bank 2006), but fundamentally, poorer provinces

Table 8: Indicators of Governance Improvement by 2006 Tier

Tier in 2006	Number of Provinces	Median Improvement on Weighed PCI	Standard Deviation of Improvement	Convergence Coefficient
Excellent	2	-1.64	1.72	NA
High	7	2.50	2.99	-0.34
Mid-High	18	2.31	5.05	-0.08
Average	19	3.37	4.85	-0.35
Mid-Low	11	4.69	4.60	-1.41
Low	7	2.12	4.25	0.14

Convergence Coefficients are equal to β_{ci} in the following specification $=\Delta PCI_{2007\text{-}2006} = \beta_1 PCI_{2006} + \beta_2 T_i + \beta_{ci} T_i * PCI_{2006}$, Where T is equal to the tier of the province in 2006, indexed by i. Excellent and High are considered to be a single tier.

will need to substantially improve their economic governance and performance over time to achieve sustained improvements in their citizens' livelihoods. Furthermore, reliance on transfers may eventually lead to conflicts between net providers and net recipients.

Getting to the root of slow improvements in economic governance at the bottom end of the PCI scale will be critical in resolving this issue. One clear factor emerging from the PCI data is that low-tier provinces have kept up with their peers in terms of entry costs and land access. Their weaknesses are almost entirely with second-generation reforms. Specifically, their scores are significantly below the provincial median on transparency, time-costs, proactivity, private sector development policies, labor, and legal institutions.

In sum, entrepreneurs have little difficulty beginning operations in low tier provinces, but their potential is handicapped by high, non-business related costs and hidden risks in the post-registration environment. To minimize this trend toward increasing inequality among provinces, it will be critical to help low-performing provinces learn from the successes of higher-performing peers, especially close-by, higher-performing provinces in their region who may face similar socio-economic and locational conditions.

From Household to Formal Enterprise

In July 2006, a World Bank report authored by Wim Vijverberg studied the differences between the Annual Household Business Survey (AHBS) and Vietnam Living Standard Survey (VLSS). He found that the household business sector is approximately 7% higher than the 2.9 million households estimated by GSO. The same report found a low correlation between the PCI 2005 survey scores and the growth of household enterprises, attributing this finding to the fact that household and formal enterprises have different needs. This may be only part of the answer.

Household enterprises are not required by any legislation to remain in this relatively informal sector, and can always 'formalize' their activities. Formalization usually entails registering as a company at the provincial DPI. Such registration offers substantial benefits for the enterprise in terms of the ability to receive VAT receipts, gain access to equity capital and loans, and apply for central investment incentives. So, when a successful firm chooses not to take this relatively easy bureaucratic step, it says something important about either the ambitions of the entrepreneur or the specific business context in which they operate (Taussig and Pham 2004). As the World Bank study only included household enterprises, it missed firms that have selected out of the sample by formalizing their operations. It omits, therefore, the most successful household firms that elected to become formal companies, and leaves in the sample only

either: i) relatively un-ambitious entrepreneurs; or ii) those that chose to remain informal for other reasons.

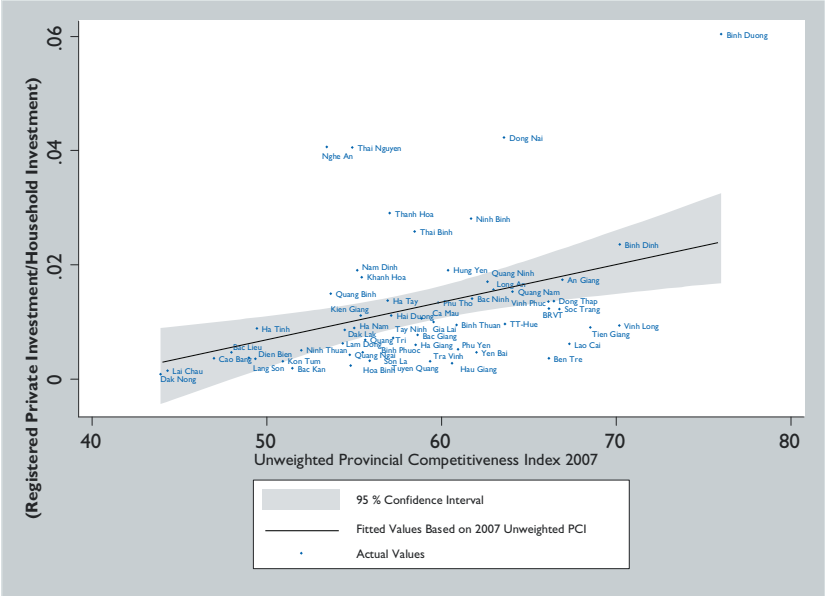
Why do some household firms avoid registration? Many firms probably choose not to formalize as a method of minimizing their tax burdens. While technically they are obligated to apply for the same tax code and pay the same taxes, household enterprises appear to pay relatively lower taxes than formalized firms because of the lack of transparency around their operations and more limited oversight of household businesses by provincial officials (CIEM, 2004). A second factor, common in transitional economies, is that firms may choose to avoid formalization when economic governance is poor, because: i) the costs of compliance with regulations, such as registration fees and inspections, may be too high (Kaufman and Kaliberda 1996, Johnson, Kaufmann, Shleifer 1997); and/or ii) informality keeps firms under the radar of rent-seeking officials, who might target them for illicit fees if they knew the true extent of their operations (UNIDO 1998: 49).

Although data limitations have prevented rigorous testing of these various hypotheses on formalization, PCI data provide a basis for such analysis. The PCI survey includes approximately 3,600 firms that began their operations as household enterprises, allowing us to test directly the impact of economic governance on an entrepreneur's decision to formalize or not.

Figure 9 studies the relationship between governance and formalization at the provincial level. On the Y-axis is the percentage of total non-state business activity in a province that has been formalized (Total Assets from the GSO Enterprise Census/Total Assets from the Annual Household Business Survey), while the X-axis records the unweighted PCI scores. Cities are dropped from this analysis, because of their outlier status – formalization of business activity in Hanoi and HCMC is around 20% as opposed to a maximum for 6% for other provinces. Analyzing Figure 9, it is obvious that a higher percentage of business activity takes place in the formal sector in well-governed provinces. As a direct result of their decisions, well-governed provinces benefit from higher tax revenue to allocate for social services and infrastructure.

Figure 9: Correlation between Formalization and Economic Governance

(National-level cities omitted)



Using province-level scatter plots to analyze this phenomenon, however, is not refined enough to capture the multiple factors that influence individual firm decisions. Entrepreneurs will differ in their assessment of the relative risk of formalization based on the size of the firm and the sector in which they operate, in addition to other individual determinants. Multiple regression analysis on firm level decisions, therefore, should be used to sort out the true micro-logic of formalization. Appendix 3 depicts a series of regression models analyzing the formalization decisions of individual entrepreneurs, taking advantage of the statistically ample 3,600 observations in the PCI (surveyed enterprises that began operations as household firms).

Two dependent variables are employed for the test. First, we study how long (in months) household firms took to formally register after beginning operations,

controlling for province-level and firm characteristics, such as age, size, sector, and whether or not they possess an LURC. Holding all other factors constant, the unweighted PCI score was consistently significant and robust to a number of specifications. Thus, firms in better governed provinces (assuming that good governance pre-dated the PCI analysis) spent significantly less time in the informal sector. Table 9 illustrates this in more detail by simulating the estimated amount of time firms spent as household enterprises before registration. While the time enterprises have spent in the informal sector has decreased over time, at every level, firms in Excellent and High provinces were much more likely to formalize their activities early. A second, similar dependent variable is also evaluated in Appendix 4– the years since household firms formalized their activities. The result of this second approach reinforces the first analysis; household firms registered almost 1.5 years earlier on average in well-governed provinces.

Multiple regression analysis further demonstrates the specific elements of governance that are most important for formalization. As is to be expected, improving Entry Costs and Access to Land have significant and robust results. These two measures quite straightforwardly lower the costs of formalization and the barrier to obtain new land for business expansion. Improving tenure rights also reduces the risk that entrepreneurs face, lowering the chances that a firm will lose a major investment in the premises on which it operates. Lowering SOE Bias increases formalization by offering a more balanced playing field for new entrants. Proactivity is highly significant, as it indicates provincial leadership in tune with the needs of private firms, lowering hidden risks in the business environment. Finally, scores on Labor Policy and Legal Institutions are negatively correlated with the amount of time an entrepreneur elects to stay in the informal sector. The Legal Institutions coefficient is quite large and highly significant, indicating that confidence by firms in the court system translates into lower risk. Entrepreneurs in provinces with more frequently utilized legal institutions believe that they can operate in a formal sector without undue harassment; or that they can appeal harassment if it is encountered. Surprisingly, the informal charge sub-index was not associated with decisions to formalize in any specification.

Table 9: Formalization by 2007 PCI Ranking Tier
(Estimated Months Between Establishment and Registration)

Tier in 2007	Total Age of Firm (Years Since Establishment)			
	15 Years	10 Years	7 Years	2 Years
Excellent	5.08	0.69	0.21	0.03
High	6.27	0.85	0.26	0.04
Mid-High	7.80	1.05	0.32	0.04
Average	9.79	1.32	0.40	0.05
Mid-Low	12.38	1.66	0.50	0.09
Low	15.78	2.11	0.62	0.11

Simulated results based on regressions in Appendix 3. Simulations performed in STATA using Clarify. For details on the program, see King, Gary, Michael Tomz, Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation," American Journal of Political Science 44(2): 347-361.

Performance of Equitized Enterprises

In this section, we evaluate the impact of good governance on the performance of equitized firms. The performance of equitized firms in Vietnam is important for many reasons. How equitized firms fare under international competition has important implications for economic development in Vietnam, because of their relatively large contribution to Vietnamese employment, their concentration in a number of important Vietnamese export industries, and the fact that a majority of firms available on the stock market are former SOEs. In fact, Mekong Capital, one of Vietnam's most successful venture capital firms, is on the verge of establishing a fund entirely comprised of equitized companies.[15] As a result, an enormous amount of attention has been paid to post-equitization

15. http://www.mekongcapital.com/vaf.htm

performance in recent years (Vu 2005, Gainsborough 2003, Painter 2005, Sjoholm 2006, Nguyen Van Huy 2006).

By the end of 2006, the Vietnamese government had equitized nearly 3,500 enterprises. According to Vu (2005), equitization can take one of four forms: (1) keeping state shares intact and issuing new shares; (2) selling part of the existing state shares; (3) detaching and then selling parts of an SOE; and (4) selling off all state shares to workers and private shareholders (a method mostly applied to loss-making SOEs).

In general, the results of equitization have been quite positive, although the pace of equitization has been slower than pronounced in a number of government announcements. The World Bank and CIEM have both concluded that equitization has been generally beneficial for firm performance. 93% of equitized firms believe their performance has increased post-equitization (Vu 2005: 33), and the World Bank (2006) has found that the turnover of equitized companies is 13% greater and pre-tax profits 9% higher than non-equitized SOEs (World Bank 2007: 63).

To date, analysis of equitization has focused on comparing equitized firms to existing SOEs. This endeavor has been fruitful, but limited. First of all, the comparison is somewhat artificial without a preliminary assessment of the factors that drove selection of SOEs for equitization in the first place. Because part of the original selection of SOEs for equitization depended on their potential profitability and ability to expand under market competition (after all, early success was important for winning approval for future sell-offs), it is reasonable to suspect that the factors driving the original selection continue to operate in the post-equitization environment. In these cases, which appear to be prevalent, the firms selected for equitization would have outperformed other SOEs, whether or not they had been equitized.

Secondly, previous studies do not typically capitalize on the significant variation in performance among equitized firms, often collapsing them into a single aggregate category. As Table 10 shows, there is a quite large distribution in the performance of equitized firms. Among the sample of firms in the PCI study, the self-reported profitability of the 333 equitized firms (spread throughout 58 provinces) is higher than private firms as a whole. 48% percent of equitized firms report profits over five percent of total investment

Table 10: Distribution of Performance among Total and Equitized Firms

PCI Q11_3: Which statement best characterizes your firm's overall performance in 2006 (Net profit or losses after taxes and operating expenditures/total investment). Please check only one box.	**1. Large Losses**	**2. Small Losses**	**3. Broke Even**	**4. Profits up to 2.5% of total investment**
Distribution among Total Sample of 6700 Firms (%) Distribution among 333 Equitized Firms (%)	1.07 0.6	8.84 6.31	10.28 6.91	36.79 21.92
PCI Q11_3: Which statement best characterizes your firm's overall performance in 2006 (Net profit or losses after taxes and operating enpenditures/total investment). Please check only one box.	**5. Profits between 2.6% and 5% of total investment**	**6. Profits between 5.1% and 10% of total investment**	**7. Profits between 10.1% and 20% of total investment**	**8. Above 20% of total investment**
Distribution among Total Sample of 6700 Firms (%) Distribution among 333 Equitized Firms (%)	23.27 16.52	12.1 21.02	5.2 19.52	2.45 7.21

as opposed to only 20% of the total sample. Nevertheless, 38% of equitized firms report relatively low profits and 14% claim to have not been profitable at all during the boom year of 2006. What factors account for this remarkable variance?

Using the PCI 2007 data in Appendix 5, we regress the self-reported profitability of equitized firms in 2006 on a range of firm and province-level factors. Three firm-level factors prove significant and robust. Larger firms (based on asset size in 2005) report higher levels of profitability. An optimistic interpretation of this correlation is that larger firms have the scale to better compete in the global market place. But it is important to keep in mind that firm size may have resulted from previous periods of profitability. Other significant factors in Appendix 5 have to do with the previous occupation of the managers. Former SOE managers, who most likely retained their position in the equitized company, are shown to be more successful than managers without any former state connection, by a factor of 0.5 on the eight-point profit scale above. Former government officials, who moved to equitized companies later in their careers, on the other hand, seem to make highly inefficient managers. They perform half a profit level worse than those without government experience.

Interestingly, none of the province-level indicators of structural conditions prove significant in any specification. PCI measures, however, prove highly significant determinants. A ten point increase of the unweighted PCI would boost estimated profitability by about half a profit level. To illustrate the differences in the performance of equitized companies between PCI levels, Figure 10 tracks the predicted profit level of firms (with 90% confidence intervals) based on the governance tier as ranked by the PCI 2007. Equitized firms in Excellent provinces can expect a profitability level of about 6 (between 5-10% of 2006 investment), while Mid-Low provinces are almost a full profit level below (between 0 and 5% of 2006 investment).

Entry Costs, Transparency, Time Costs, SOE Bias, and Private Sector Development Policies play important roles in explaining post-equitization performance and are all significant at the .01 level.[16]

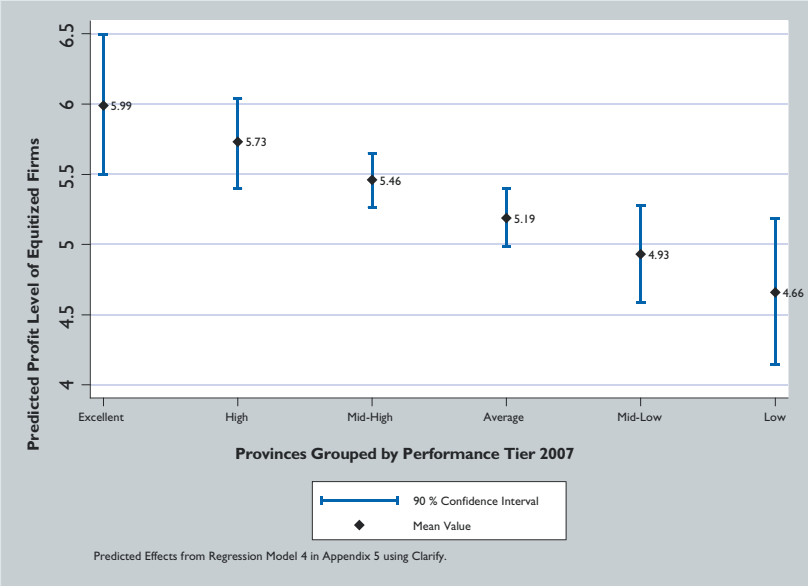
16. Note that the strong correlation between SOE Bias and equitization performance may be partially the result of endogeneity among indicators comprising the sub-index, particularly the number of local SOEs that have been divested. More testing is needed to sort out the impact of each individual indicator.

The Link Between BTA/ WTO Requirements and PCI Indicators

By ratifying the landmark BTA and WTO trade agreements, Vietnam has reinforced its commitment to create a more modern, well-regulated, market-driven business environment to enhance Vietnam's competitiveness in global markets. Vietnamese leadership has astutely used the many reforms required to meet extensive commitments in the BTA and WTO as a catalyst for modernizing, systematizing and deepening its national legal and regulatory environment for all commercial activity in Vietnam – foreign and domestic; private and state-owned.

The more than 100 new or revised legal normative documents developed by Vietnam over the last six years accomplished two fundamental objectives – they met the requirements to comply

Figure 10: Estimated Profit Levels of Equitized Firms by PCI Tier in 2007



successfully with the BTA and to accede to the WTO; and in parallel and by design, they contributed to develop the domestic basis for more effective government facilitation and regulation of a market-driven economy with a growing and prosperous private sector. These two objectives are integrally linked. Without the continual, strong development of private sector capabilities in Vietnam, the socio-economic goals –- inherent in the decision to sign the trade agreements—of broad-based growth, sustained increases in employment, and rising real wages and income, will not be met.

A key question for policymakers regarding the link between the BTA/WTO and private sector development is: What effect are key BTA/WTO-related reforms actually having on business activity at provincial and local levels, where businesses interact most directly with government officials? Although the PCI is not designed to directly monitor the impact of the trade agreements, its wealth of information on how private sector firms are affected by provincial governance can provide a range of useful insights to evaluate the "real world" impact of several key BTA/WTO-related reforms. These insights can provide policymakers with direct, concrete feedback on how deeply and effectively reforms related to the BTA/WTO – such as transparency, regulatory streamlining, business services provision, and limits on subsidies to SOEs – are supporting the development of Vietnam's private sector at the grass roots level.

This section will first review the linkages between the trade agreements and private sector development, and then evaluate more deeply how PCI indicators can shed light on the implementation of several important BTA/WTO-related reforms.

The Link between the BTA/WTO and the PCI. The BTA and WTO are structured around several core principles. Most fundamentally, countries should not discriminate in policy among their trading partners (most-favored-national treatment) nor between foreign and domestic businesses (national treatment). And, countries should strive over time to increase market access for foreign competitors, by lowering formal barriers to trade and investment, and by refraining from using informal, non-tariff-barriers to offset the effects of lower tariffs and quotas. Although the BTA and WTO dig amazingly deeply into Vietnam's legal, regulatory and governance system, and expand market access for foreign competitors, at their most basic level, they require only that foreign entities be treated at least as well as their national counterparts, and that domestic laws and regulations do not inhibit foreign trade and investment.

The PCI, on the other hand, targets economic governance among provinces, with a focus on the business enabling environment for domestic, private-sector firms. It does not include foreign-invested firms or foreign trade. As such, there is a relatively limited direct, formal link between the BTA/WTO and the PCI. The trade agreements focus on the rights of foreign traders and investors; the PCI focuses on Vietnam's private sector.

It would make little sense, however, to apply the improved laws and regulations required by the trade agreements to only foreign firms. As noted above, Vietnam has taken a systematic, forward-looking approach to reform over the last six years that in large part has consistently extended the many reforms required in the WTO/BTA to domestic private and state-owned firms. For example, the new Enterprise Law (2005) and Investment Law (2005) strive to develop a non-discriminatory business environment where firms of all legal types are treated uniformly.

Recent revisions to the Law on Legal Normative Documents (the Law on Laws) and the development of the new Law on the Promulgation of Legal Documents of People's Councils and People's Committees (the Law on Local Laws) require that information on Vietnam's legal system be made more readily available to both domestic and foreign firms, at both the national and provincial/local levels. The development of a new Law on Intellectual Property Rights, a new Civil Procedure Code, a new Ordinance on Commercial Arbitration, and key revisions to the Law on Complaints and Denunciations and the Ordinance on Procedures for Settling Administrative Disputes, meet key requirements in the trade agreements.

These legislative initiatives (protection of intellectual property

rights, effective alternative dispute resolution mechanisms, modern civil court procedures with greater judicial independence, and the right to seek review of government decisions) go far beyond the specific requirements in the trade agreements to provide fundamental improvements in the procedures and capacity of Vietnam's judicial system to better resolve commercial and administrative disputes and to protect intellectual property, benefiting both domestic and foreign elements.

As a result of this strategic approach to policy reform by Vietnam, we should expect improvements in the business enabling environment for private sector activity at the provincial and local levels in areas directly related to BTA/WTO requirements, or equally importantly, we should identify where BTA/WTO-related reforms are not yielding expected improvements in practice. As Table 11 illustrates, in a number of cases, these improvements (or non-improvements) in the business enabling environment related to BTA/WTO reforms are captured by existing PCI indicators.

Table 11: PCI Indicators and Related BTA/WTO Commitments*

PCI Indicator	WTO-BTA References	WTO-BTA Related Requirements
Entry Costs	BTA Chapter IV, Art. 2 (national treatment in establishment, management, operation etc., of investments), Side Letters regarding investment procedures	Specific requirements to streamline the procedures for establishing foreign firms and investment projects, but limited requirements for establishing Vietnamese firms. The goal was to give foreign firms the same treatment as private firms received through the Enterprise Law, since the procedures established in the Enterprise Law were widely perceived by foreign businesses as quite effective and efficient.
Transparency and Access to Data	BTA Chapter VI, Art. 1, 2, 3, 4, 6; BTA Chapter IV, Art. 5 (laws, regs, admin procedures regarding investment) WTO GATT Art. X. Also an expressly stated principle in the substantive WTO Agreements (i.e., TBT, SPS, GATS)	Laws, regulations and administrative procedures, as well as economic data, must be published and accessible to foreign businesses and governments. Recent reforms to the Law on Promulgation of Legal Normative Documents and the Law on Promulgation of Legal Documents of People's Councils and People's Committees have greatly increased legal and data availability through the greatly expanded national Official Gazette and the establishment of Provincial Gazettes.
Informal Charges	BTA Chapter VI and WTO GATT Art. X (transparency)	No formal requirements on informal charges. Presumption is that the many transparency requirements and the right to appeal government decisions would reduce informal charges.
SOE Bias, Competitive Environment	BTA Chapter I, Art. 8 (trade in goods); Chapter IV, Art. 2 (investment) WTO GATT Art. XVII (trade in goods)	The WTO Accession Protocol requires that subsidies that distort trade cannot be applied, including to state enterprises. SOEs should operate on a commercial basis and should not discriminate against foreign suppliers and buyers.

PCI Indicator	WTO-BTA References	WTO-BTA Related Requirements
Private Sector Development Services	BTA Chapter III, Annex G (right to provide services) WTO GATS and VN's services schedule BTA Chapter V BTA Chapter IV, Art. 11 and Annex I (TRIMS/illegal subsidy) WTO GATT Art. XVI (subsidies) WTO TRIMS Agreement, Agreement on Subsidies and Countervailing Duties	Requires that foreign-service providers be allowed to provide business services either directly by establishing a commercial presence in Vietnam or by providing cross-border services. BTA guarantees business facilitation rights for firms to promote trade and investment, including the ability to attend trade fairs and to move trade samples across borders to promote products. No specific requirement relating to "government programs" supporting private sector development, except by prohibiting government subsidies that distort trade.
Labor Training	BTA Chapter IV, Art. 11 and Annex I (TRIMS/illegal subsidy) WTO GATT Art. XVI (subsidies) WTO TRIMS Agreement, Agreement on Subsidies and Countervailing Duties	Foreign firms can provide education and labor training services. No direct requirements on government programs relating to labor training. However, if such programs discriminate against foreign firms, then a trade dispute could arise.
Legal Institutions	BTA Chapter VI, Art. 7 (general); BTA Chapter II, Art. 11, 12, 13, 14 (intellectual property rights) WTO GATT, Art. X BTA Chapter I, Art. 7 (arbitration, trade in goods)	Specific requirements that courts provide effective commercial dispute resolution mechanisms and protection for foreign intellectual property right holders, including criminal actions against intellectual property infringers operating at commercial levels. (Including the power to use provisional measures to impound potential evidence at the beginning of a case, before infringers have time to destroy evidence.) BTA/WTO require transparency in judicial systems, including written decisions. BTA requires that U.S. firms trading and operating in Vietnam have access to best practice arbitration procedures. Necessitate substantial improvements in Vietnam's legal and judiciary system for foreign entities, with the presumption that such improvements would be available to domestic firms as well.

** There are no BTA/WTO requirements that deal directly with the following PCI sub-index indicators – access to land, time costs and regulatory compliance, and proactivity of provincial leadership. The BTA/WTO does require broadly for all the PCI related areas, however, that provincial officials do not discriminate against foreign entities, and that measures of general application should be administered in a reasonable, objective, transparent and impartial manner.*

Using PCI Indicators to Analyze the Impact of BTA/WTO-Related Reforms on Vietnam's Private Sector. The PCI allows us to assess how BTA/WTO-related reforms are affecting private sector activity at provincial levels. In line with the discussion above, our examination does not provide a formal monitoring of trade agreement compliance, but rather it examines how effectively Vietnam has applied various international best practices contained in the trade agreements to domestic private firms. The PCI's focus on provincial and local level policy implementation offers an important perspective that is often missed when assessing the impact of national-level reforms, providing a multi-tier approach for assessing the impact of trade agreements.

As identified in Table 11, the following six PCI indicators provide some insight into how the private sector has been affected by BTA/WTO-related reforms over the last several years.

Entry Costs. With regard to market entry, Vietnam's landmark Enterprise Law (1999) established an effective process for private firms to establish and operate their businesses. As noted in Chapter 1, the PCI data show that steady improvements have been made in almost every province in Vietnam with regard to the time and cost involved with registering a firm. Registration and re-registration waiting periods are now within the 15 and 7 day official benchmarks of the Enterprise Law in the median province. In addition, firms need only 2.5 licenses in the median province to start up a business and less than 28% of firms waited over a month to have all the documentation necessary for fully legal business activity. The BTA/WTO in large part aims to provide foreign firms with these same benefits.

Transparency. Revisions to the Law on Laws and the development of the new "Law on Local Laws", both of which met key BTA/WTO transparency requirements, should be expected to significantly improve access by the private sector to legal normative documents at the national and provincial levels, as well as to other provincial planning documents and data.[17] PCI 2007 data show that around 70% to 75% of private sector firms can gain access to national-level legal documents relatively easily, with a slight decline in the ease of accessibility compared to 2006. Private firms were able to more easily gain access to provincial planning documents in 2007. And, increasingly fewer firms have to use relationships to access government information. While the quality and quantity of legal information available on provincial web sites has greatly increased, however, there remains much room for improvement. Whereas HCMC has an on-line legal database of the highest international quality (many scholars in the U.S. rely on it), some provinces still have websites with sparse legal documents, while in others documents are hard to find. Two provinces have not yet established any web pages.

Strikingly, PCI data show that only around 10% of private firms find that the implementation of laws and regulations is predictable, and this result worsened slightly in 2007. As many as 25% of private firms still find it difficult to access legal and planning documents at the national and provincial levels, and less than 10% find it "easy" to access such information. The analysis in Chapter 1 stresses the importance placed by private firms on greater transparency and access to legal and other government documents, which is strongly reinforced by requirements in the BTA and WTO. Looking more deeply, therefore, the PCI data show that Vietnam faces a number of major challenges to further improve access to legal information, and, more profoundly, to ensure that laws and regulations are implemented in a predictable manner.

Informal Charges. As noted in Table 11, while the BTA and WTO do not provide direct requirements regarding corruption, there is a strong presumption that transparency and enhanced appeals procedures will lead to reductions in informal charges. The PCI tends to support this presumption. Between 2006 and 2007, the number of firms in the median province that believe that the legal system provides an effective mechanism for appealing the corrupt behavior of officials increased from 23% to 33%. The

17. Using hard data collected outside the PCI, transparency appears to have improved substantially. With the requirement instituted in the revised "Law on Laws" that legal normative documents must be published for 15 days in the Official Gazette before coming into legal effect, the number of pages of laws and regulations published in the national Official Gazette Journal have surged by 16-fold from 2001 to the present – increasing from 6 to 98 journals a month. Furthermore, in response to requirements in the new "Law on Local Laws", almost every province has established a provincial level Official Gazette over the last several years. Efforts are being made to link the national and provincial Gazettes, and to develop web-based versions of the Gazettes in addition to hard copies.

number of firms claiming that they must negotiate their final tax returns with the local tax authority has declined remarkably (from 61% to 45%), which should reduce "unofficial" tax payments and surely reduces the tax compliance burden. Finally, far fewer firms cite informal charges as an obstacle in 2007 (26%) than in 2006 (45%), implying a more predictable business environment. That said, overall levels of informal charges have not declined much. On average, the same percentage of firms in 2007 as 2006 claim that bribes are a normal part of doing business (70%), that they pay over 10% of their annual revenue in informal charges (12%), and that they believe local officials use regulations to extract rents (38%).

SOE Bias. The BTA and WTO require that SOEs operate on a commercial basis, without trade-distorting subsidies and without discrimination relative to foreign firms, and, by extension through Vietnamese policy, relative to domestic private firms. About 42% of the private firms in the median province believe that there is overt bias toward the SOE sector in terms of favored access to land and capital. Variance on this indicator, furthermore, is quite high. In some provinces, perceived SOE Bias is as low as 28%, while in some heavily SOE-dependent locations, perceived bias is as high as 60%. Because of increasing differences among provinces in this regard, the SOE Bias sub-index is accounting for a higher proportion of the variance of key private sector outcome variables in the PCI regression models. In other words, perceived SOE Bias increasingly affects private sector performance. Hard data used in the PCI also provides mixed results. On the one hand, equitization of local SOEs is increasing in every province, with the median province selling-off or liquidating nearly 47% of the local SOEs that existed in 2000. Moreover, only three provinces have created new SOEs in the past year. Remaining SOEs, however, still receive a disproportionate share of bank capital. The ratio of SOE liabilities to revenue in the median province is 1.29, indicating that SOEs receive more in bank capital (usually from State Owned Banks) than they provide in taxes. This liability/revenue ratio of remaining SOEs climbs to as high as 10 in some provinces. Lingering SOE bias, in summary, is still perceived as a major constraint to private sector business activity in many provinces, reflecting a policy challenge to remove such bias, both to stimulate private sector development and to meet the expectations in the trade agreements that the distorting role of state-owned enterprises be reduced if not eliminated.

Private Sector Development and Labor Training. With requirements in the trade agreements to provide greater access to foreign providers of business, education and labor training services, it would be expected that private sector firms should benefit from a greater selection of quality service providers. PCI data, however, show that firms remain dissatisfied with the provision of these services. Firms clearly are not fully satisfied with provincial government provision of these services. In the median province, only a minority of firms are satisfied with provincial provision of market information (44%), business partner match-making services (31%), and consulting on technological upgrading (44%). Slightly more than half claim they are satisfied with export promotion and trade fairs (56%), vocational training centers (56%), and labor exchange services (50%). In just about every province, these services are provided entirely by provincial agencies. Few private firms surveyed by the PCI used business services and labor training provided by foreign (or other private) firms. One of the quickest and most responsive ways to improve business and labor training services available to private firms is to facilitate the development of foreign and private suppliers of these services, adding competition and synergy to government-led programs.

Legal Institutions. The BTA and WTO provide a number of requirements for improving the effectiveness of legal and judicial institutions to resolve commercial and administrative disputes and to protect property rights. The PCI shows, however, that private firms recognize little progress in strengthening legal institutions in practice. The number of firms that cite the legal system as their primary, secondary, or tertiary means of dispute resolution has actually dropped to only 12% in the median province. Even in the province citing the highest confidence in courts, only 29% of firms choose the legal system among their top three forms of dispute resolution. Low confidence

in courts is also reflected in the hard data, where private actors filed 5.8 cases in Provincial Economic Courts for every 1,000 firms, during 2006. Improving the credibility of the court system in practice remains a challenge for Vietnam.

In sum, through its lens of provincial economic governance, the PCI yields a number of important insights as to how BTA/WTO-related reforms are affecting Vietnam's private sector. In some cases the news is good – the ease of establishing firms is improving throughout Vietnam, and most firms can find legal and government planning information that is important for decision making. But, the PCI data reveal many remaining challenges where BTA/WTO-related reforms need to be implemented more effectively to support private sector growth. Most importantly, private firms have little confidence that laws and regulations will be implemented in a predictable manner, and few believe that the courts offer a credible means by which to resolve business disputes. Many private firms perceive a bias toward SOEs that seriously hinder their business options, and few use business and labor training services provided by foreign or private providers.

Although much has been accomplished over the last six years, our analysis shows that Vietnam faces an immediate need to strengthen further its institutions and administrative procedures, human resources and its commitment to the rule of law in order to more effectively implement recent reforms at provincial and local levels. The Government and National Assembly are developing a number of new initiatives to meet this challenge. For example, the recently promulgated Prime Minister Decision 30 develops a systematic approach to reduce red tape and other types of unnecessary regulatory burden (See Box below). The legislative calendar for the new National Assembly will include major new laws such as an Administrative Procedure Code to improve how government officials, judges and prosecutors implement laws and regulations. These should help Vietnam reduce its "implementation gap" between the vastly improved "letter of the law" and the application and enforcement of the new laws in practice. Subsequent versions of the PCI can continue to ground-truth the actual impacts of these new initiatives on Vietnam's private sector.

Decision 30 - The Master Plan to Simplify Administrative Procedures
A Systematic Approach to Achieving a Low-Cost, Low-Risk Regulatory System

On January 10, 2007, the Prime Minister issued Decision 30, The Master Plan to Simplify Administrative Procedures from 2007 – 2010, as part of the larger Public Administration Reform Plan. The objective is to simplify administrative procedures to ensure consistency, simplicity, transparency, create easy access for individuals, organizations and businesses, and increase efficiency, socio-economic development, and anti-corruption. Simplification of administrative procedures is carried out in all aspects of state governance, including all ministries, ministerial agencies, centrally managed cities, and all provinces, in the relationship between the government and individuals, organizations and businesses, and between government agencies.

The government implemented a series of actions to improve administrative procedures: Decision 181 on April 5, 2005 on one-stop shops in provinces to improve business registration; Decision 23 on January 26, 2005 to create an inter-disciplinary group to address difficulties and complaints from businesses regarding business procedures; Decision 22 on January 24, 2006 on assigning responsibility to address concerns and complaints from people, organizations and businesses; and other actions to improve the relationship between the state and citizens and businesses, and make administrative procedures public, transparent, and simplified.

In order to support the successful implementation of the 5-year economic plan (2006-2010), especially with Vietnam's entry in the WTO, and in order to build an administration that is democratic, clean, steady, professional, efficient and effective, citizens and businesses centered, the Government put forward a Public Administration Reform plan for 2006-2010. One of the main tasks of this Plan is to build and implement the proposal to simplify administrative procedures in governance

The Master Plan has 4 sub-programs: 1) simplify administrative procedures on all aspects of governance; 2) simplify business requirements; 3) simplify forms in administration procedure application; and 4) develop mechanism for receiving and processing of feedbacks, petitions from individuals, organizations and businesses on policies and administrative procedures that are not appropriate.

This Plan, combined with other new laws and institutions, will clean the existing stock of regulations and create the foundation for the permanent on-going process of policy coordination and regulatory impact assessments of proposed new laws and regulations across government to ensure a low cost, low risk business environment in Vietnam.

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APPENDICES

APPENDICES

Methodological Appendix 1: A Peek under the Engine Hood

Each annual announcement of the PCI rankings has been followed by widespread discussion in both the media and policy circles over the methodology used to generate the scores. These debates are healthy and we strongly encourage them. Understanding how the scores were derived is critical for designing policies that can help solve governance deficiencies identified by the index. Clarity about the methodology is also only fair. At its most basic level, the PCI is an annual report card of the job performance of thousands of bureaucrats across Vietnam's sixty-four provinces. Those receiving low marks deserve to know in detail why they received them and what they can do to improve their performance. Finally, methodological transparency is crucial for the research team. Feedback on our approach helps us ensure that the index is relevant to the specific issues faced by Vietnam's ever expanding private sector. In this light, we present this brief, user-friendly summary of the creation of the PCI.

What's New in the PCI in 2007?

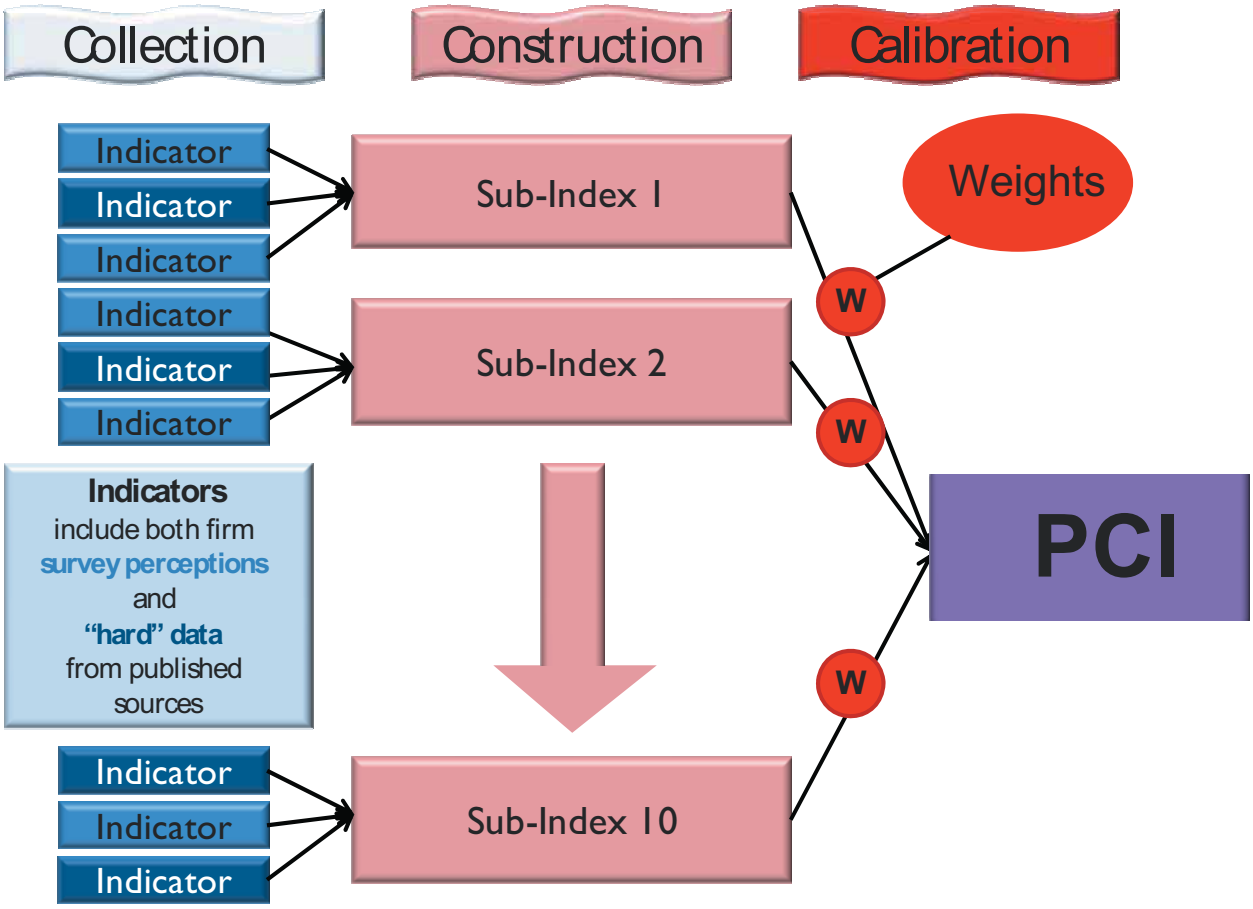
1. As much as possible, we maintained the 2006 methodology in order to allow for direct comparability between years. All indicators, sub-indices, and weights are exactly the same as last year with only one exception (percentage of state bank lending to SOEs had to be dropped from Sub-Index 6 due to the on-going privatization of some banks).
2. To allow for comparison between years, one small alteration was made in the data scaling procedures. In past years, questions were re-scaled using the following formula:

$$9 * \left[\frac{\text{Province}_i - \text{Minimum}}{\text{Maximum} - \text{Minimum}} \right] + 1$$

   If a positive value has a negative implication for governance (i.e. number of inspections). We subtract the above quantity from 11 to reverse the ten-point scale. This year, rather than taking maximum and minimum values from a single year, we took them from either 2006 or 2007. As a result, the new scaling immediately accounts for improvements or declines over time.
3. New safeguards were added to the data collection process to ensure the most reliable data possible. These included team entry of data with a designated quality inspector, an automated database to prevent mistaken or out-of-range entries, and rigorous automated data cleaning procedures.
4. 2500 of this year's respondents were randomly selected from the 2006 database. This allows us to assess changes in individual firm responses over time in addition to changes at the provincial level.

Figure A1: The Three Cs of the Provincial Competitiveness Index Methodology

The creation of the PCI is divided into three major components:
1) Collection of Survey and Hard Data
2) Construction of the Sub-Indices
3) Calibration of the Sub-Indices, so that the relative weight of each sub-index represents its contribution to private sector growth, investment, and profitability in Vietnam.



Collection of Survey and Hard Data

The PCI approach does not take a stand on the methodology debate between: i) those advocating the importance of perceptions-based data;[18] and ii) those employing hard data in their analysis.[19] Instead, we employ a strategy that seeks to maximize the benefits and minimizes the disadvantages of both data sources.

A purely survey-based approach captures firm opinions about the business environment, which is critical to our objective, but can be prone to perception biases, as many firms do not operate outside of their provincial borders, and therefore lack the ability to compare their province with others accurately. Conversely, using just hard data or legal regulations, avoids firm perception biases, but limits analysts to particular sets of data, which may omit critical elements of economic governance (eg. informal charges or the pro-activity of leadership). Moreover, as we have learned on a number of occasions in constructing the PCI, using hard data does not eliminate biases. Measurement errors in hard data are often related to the collection process, and relatively under-developed provinces are more likely to have under-staffed and poorly trained officers in their statistical agencies.[20]

Equally, expert interpretations of business regulations are also prone to measurement error, based on individual experts' interpretations of often opaque and contradictory legal codes. Further, there are very few, if any, experts who can speak authoritatively about differences in local business regulations across all of Vietnam's provinces. By combining perceptions-based data with hard-objective measures, we are able to cover wider ground than hard measures alone, while still accounting for perception biases in survey questions. Moreover, the composite approach ameliorates the impact of any measurement error in published data.

To collect data on firm perceptions, researchers surveyed 6,700 businesses in all of Vietnam's 64 provinces, followed by wide-scale collection of published resources in order to assemble the "hard" data used alongside the perceptions of firms in the assembly of the index.

The Survey Questionnaire

The questionnaire was an updated version of the original 2005 PCI Survey. It asked questions about basic business performance data as well as economic governance within eighteen pages and seventy questions. Some of the questions were modified from the World Bank's Investment Climate Assessment but most questions were written specifically for the Vietnamese context. After the survey was written, it was translated into Vietnamese and then circularly translated into English to make sure the original meaning of the questions was retained.

Stratified Random Sampling

Researchers began their study by obtaining a list of tax-paying firms in every province from the National Tax Authority. This list was considered preferable to similar lists from the provincial DPI for two reasons. First, most observers tend to believe that the DPI lists are inflated. DPI lists often are slow to drop operations after they are inactive. Moreover, firms themselves have an incentive to register without actually beginning operations. While illegal activities through "ghost firms" plays a small role in this problem, the major gap between registrations and activities consists of firms that simply took care of the paperwork early while they went about preparing more difficult preliminary business activities, such as obtaining necessary licenses and business premises and researching potential suppliers and customers. Second, addresses and phone numbers obtained from the Tax Authority were deemed to be more reliable as these came from the same data used by provincial tax officers to contact firms regarding payment.

The Tax Authority supplied a list of 177,815 firms for the 64 provinces in which the research team originally expected to conduct the survey. Population sizes ranged from 52,482 firms in HCMC to 197 in the Lai Chau Province. The median province had 1,246 firms. Addresses and telephone numbers of all firms were verified by VCCI's branch offices. Because researchers wanted to compare provinces, it was necessary to construct 64 separate provincial-level stratifications rather than one large national-level survey

18. Kaufmann et. al. (2007). "Governance Matters VI: Governance Indicators for 1996-2006". World Bank Policy Research Working Paper No. 4280.
19. World Bank. 2007. Doing Business: Benchmarking Business Regulations. World Bank: Washington, DC.
20. For example, the sum of the provincial GDPs in 2006 is 12% higher than the nationally reported amount. Obviously, some provinces may have over-reported their output, but which ones and why is unclear.

which would have sampled most heavily in HCMC and Ha Noi.

To stratify, researchers used the Tax Authority lists to group firms by type of enterprise (Sole Proprietorship, LLC and Joint-Stock Company), economic segment (manufacturing, natural resource exploitation, service and commerce, and agriculture) and firm age (measured by whether the firm was registered before or after the Enterprise Law). Note that firm size was not used in the stratification, because it correlated too closely with type of firm. After verifying phone numbers and addresses, mail-out surveys were sent to firms based on their proportional representation in the twenty-four strata created by these divisions.

The benefit of the stratified random sampling is it yields a sample of firms that mirrors as closely as possible the structure of the provincial population[21]. This can be seen in Table A1 below where we take a close look at the structure of the Binh Dinh provincial economy. In the top panel is the true population breakdown from the National Tax Authority Data. In the bottom panel, we list the breakdown of firms in the PCI dataset. As can be seen, the numbers are nearly identical. The only area with sampling error above the estimated 3% is percentage of firms registered before and after the Enterprise Law but even here the dominance of new firms is clear in both panels. Binh Dinh is not a special exception; we could have provided the same analysis for any of the sixty-four provinces. Consequently, it is not necessary to speak to every firm; as we have a representative cross-section of the population.

The bottom line is that random sampling yields a picture of the province very much like the true picture. Provincial leaders can consequently feel very comfortable that the data derived from the PCI is an accurate depiction of firm beliefs about their economic governance.

21. We say as closely as possible, because no sampling strategy is perfect. Sampling error for this particular approach is 3%, meaning the true population numbers may be anywhere between 3% above or below the sample percentages.

Table A1: Binh Dinh Population and Sampling Distribution

Population Distribution Based on National Tax Authority Data		
Joint-Stock	**Limited Liability Companies**	**Sole Proprietorships**
5.14%	44.88%	49.98%
Manufacturing/Construction	**Services/Commerce**	**Agriculture/Natural Resources**
38.84%	55.07%	6.09%
Registered before Enterprise Law		**Registered after Enterprise Law**
13.78%		86.22%
Sample Distribution Derived from PCI Sampling		
Joint-Stock	**Limited Liability Companies**	**Sole Proprietorships**
7.3%	44.53%	48.16%
Manufacturing/Construction	**Services/Commerce**	**Agriculture/Natural Resources**
42.34%	51.09%	4.38%
Registered before Enterprise Law		**Registered after Enterprise Law**
9.51%		90.49%

The Mail-Out Survey Approach

The PCI employed a mail-out survey for three reasons. First, sending complete research teams to all provinces would have been prohibitively expensive, limiting the amount of provinces which could be covered and eliminating the ease of surveying smaller firms based in rural localities. Second, door-to-door surveys would have eliminated the anonymity of respondents and reduced their openness. In most provinces, the research goals of the team would need to be articulated to provincial officials in a letter of introduction prior to the onset of the research. While they may not attend the interview and directly influence answers (though this has been known to happen on occasion), firms would still worry that they could be identified and punished for critical answers. Finally, a project of this scale would have required hiring dozens of different interviewers, who even with excellent training may introduce new "treatment effects" through their interview techniques or personalities. These treatment effects would have been non-systematic across provinces and therefore difficult to account for. Moreover, it was not clear that response rates actually differed very much between the two techniques when researchers properly account for non-responses in the door-to-door survey from incorrect addresses and entry refusals.

Thus, the research team chose to use a mail-out survey, but introduced several precautions to limit the impact of non-response bias. The survey was printed on high quality paper and mailed in an eye-catching envelope the week after Tet, when respondents were most likely to be at their listed addresses. VCCI included a letter explaining in detail the importance of this survey for improving the business environment and enhancing VCCI's ability to promote positive changes in the business environment. Respondents also had the option of receiving a free selection from VCCI's list of extensive publications. Finally, phone calls were made to a random sample of firms in every province that had not yet responded to the mailed survey. A prepared narrative was read during the phone call once again detailing the importance of the survey and reminding firms to complete and return the volume to the Ha Noi office of VCCI. Firms that had trouble responding to specific questions on the survey could also receive assistance if they requested it. Follow-up calls were implemented by a team of university students, who were specifically selected to provide a representative proportion of regional accents. Analysis of the response rates in the 2005 PCI concluded that firms in southern Vietnam were less likely to respond to callers with Hanoi accents.

The cumulative response rate for PCI 2007 was 21%, compared with 20% for PCI 2006. Both are considered reasonable for mail-out surveys in developing countries. Most importantly, the standard deviation of response rates across provinces was a minimal 5%, and this small variation proved to have no impact on provincial scores in repeated robustness tests.[22] Every province had over 50 respondents with only one exception. Lai Chau, the newly created province in northwest Vietnam with a very small firm population, had 37 respondents, representing over 1/3 of its total business activity.

Hard Data Collection

There were three primary reasons for the collection of hard data from published sources and third parties. First, researchers intended to use hard data to offset the anchoring problem in survey research. This issue, which is discussed in more depth in the TAF-VCCI Economic Governance Report Volume I (Malesky 2005) can pose dangers for an exercise like the PCI. Put simply, firms (often of small- or medium-scale) that have operations only in one province do not know much about the administrative quality of their neighbors, much less provinces on the far side of the country. Therefore, on questions where they must rank a policy of their province along a scale, they may rank their province lower or higher than an objective observer with knowledge of all provinces would. As their reference point is only one province over time, they do not know how a specific policy may differ slightly in another

22. Two diagnostic tests were employed. First, provincial sub-index scores were regressed on response rates to ensure that differential response rates did not impact the rankings. Second, survey data was compared to easily verifiable objective data to ascertain whether firms had answered correctly. For instance, firm perceptions of the extent of trade fairs, labor exchange services, industrial zones, and FDI attractiveness in their provinces were strongly correlated with the number of actual trade fairs held, number of labor exchange centers, quantity and occupation rates of industrial zones, and the amount of implemented FDI.

province. Moreover, researchers have no concept of the ideal model that is being used by these firms as their comparative reference point. To address this problem, researchers collected as much data as possible from published sources and third parties, and included these along with the perceptions data in the index under the assumption that the averaging of firms' perceptions with hard data would yield more reliable scores than perceptions alone.

The second reason for the hard data collection effort was to build measures of structural endowments to be used in weighting the index. Researchers wanted to disentangle private sector performance related to good governance from performance caused by infrastructure, proximity to markets and human capital. As the PCI seeks to inform policy, a narrow focus on initial structural conditions is problematic. Equalizing differences in structural conditions is at best a long-term project and at worst an impossible goal. No matter how creative and clever the leadership and no matter how innovative the policies, Quang Binh's borders are unlikely to move any closer to the large retail markets and foreign buyers of HCMC. Infrastructure projects are also expensive endeavors that must be carefully considered on a national basis. It makes little sense to build a port in each harbor, as international shipping companies are unlikely to make more than one or two calls in Vietnam on any trip. As a result, the national government must choose carefully the infrastructure projects that are likely to have the largest effect on the country as a whole, so an index that rewarded provinces for having more or higher quality ports is unfair and misleading. The standard technique for holding certain variables constant (known as controlling for them) in order to see the direct impact of a key factor (in this case, economic governance) is multiple regression. We used hard data for these purposes, controlling for:

- *Proximity to Market*, proxied by the distance from markets measured by the distance in kilometers from the provincial capital to Ha Noi or Ho Chi Minh City;
- *Quality of Human Capital*, measured by the secondary school graduates as a percentage of the population in 2000 to account for the relevant labor force private firms would draw upon; and
- *Initial Infrastructure Endowment*, measured by telephones per capita in 1995 to determine their relative contributions (or 'weights') to the sub-indices[23].

The third reason for the hard data collection effort was to measure the relative contribution of sub-indices in order to weight the index (see the final section of this appendix for a detailed discussion of this process). The goal of the research team was to weight the index by the impact each dimension of governance had on important private sector outcomes (i.e. number of active firms, investment and profit). Whenever possible, these outcome variables (or "dependent variables" in statistics terminology) should be collected by a third party and therefore not subject to the same methodological process as the survey data.

Data sources for hard data included the GSO Enterprise Census, datasets collected by MONRE, Ministry of Planning and Investment (MPI), Ministry of Trade (MOT), People's Supreme Court, and the General Department of Labor and Training, as well as other information collected directly by the research team, such as our evaluation of the openness of provincial web pages.

Construction of the Sub-Indices

Once all the perceptions and hard indicators were collected, we began the construction of the index. Unlike some other indexing approaches, we do not group indicators according to statistical correlations. Indices were originally selected in 2005 and refined in 2006 to reflect the most appropriate measurements of key theoretical concepts in economic governance and specific Vietnamese policy debates. The baskets of variables comprising the concepts became our sub-indices. Sometimes baskets of variables were too general to capture nuanced concepts. In these cases, we further divided the sub-indices into dimensions. For instance, Sub-Index 2 on Land Policy was sub-divided into access to land and the security of land tenure in order to capture these two distinct elements of the policy debate. Sub-Index 3 regarding Transparency is the most comprehensive, as it is sub-divided into four separate dimensions. For interested readers, detailed

23. Please note that results hold in the regression results even if we use 2004 data for structural conditions or other measures of infrastructure.

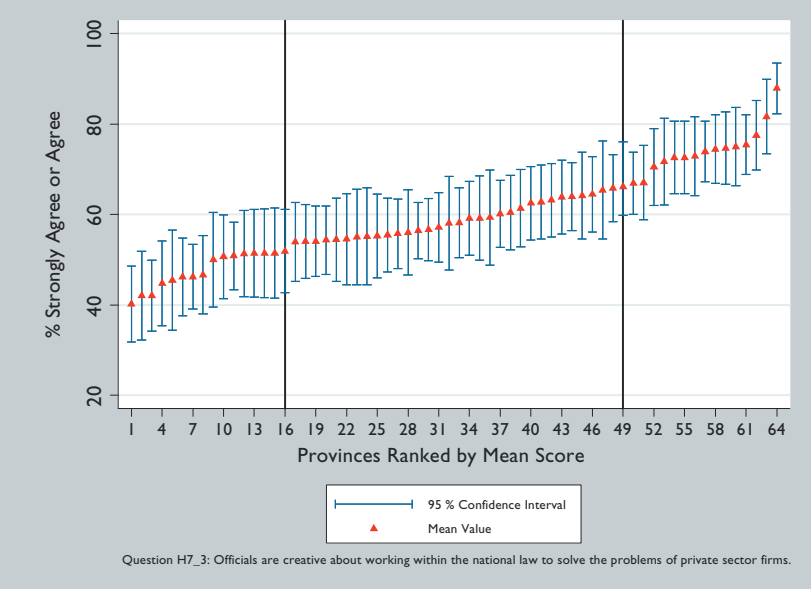
descriptions of the theoretical foundations for each sub-index as well as the dimensions and indicators comprising them can be found in the CD accompanying this report.

Diagnostics Tests

In addition to theoretical fit, indicators were only used in the index if they passed two additional tests. First, the standard errors around provincial aggregates had to be small enough, so that scores of provinces at the 75th percentile of a particular indicator were significantly different from provinces at the 25th percentile. That is, the confidence intervals around those two scores could not overlap. This check is important, as it means that if the PCI were to be replicated on a 100 separate samples of firms, 95 of those times, the same provinces would be at the top end and low ends of a particular score. This process is shown in more detail in Figure A2 below, where we show the confidence intervals around the percentage of firms, who agreed or strongly agreed with the statement that provincial officials were cleaver about resolving firm problems. Red lines show the 25th and 75th percentiles respectively. Responses above and below these ranges are statistically distinct. The lower bounds of the confidence intervals in the highly ranked provinces do not overlap with the upper bounds in the lower ranked provinces.

In 2006, indicators that did not pass this test were eliminated. Our commitment to only choosing statistically significant indicators is a key reason for the robustness of the rankings year after year, as it

Figure A2: Confidence Intervals around Indicator Scores
(Red Lines Denote 25th and 75th Percentile)



eliminates the possibility that a new random sample could generate different provincial orderings.

Scaling

Once indicators were selected for each sub-index, we standardized them around a ten-point scale. Doing this allows us to take the simple average of indicators to calculate sub-index scores, confident that differences in measurement have no impact on final PCI scores. To re-scale, we used the following formula:

$$9 * \left[\frac{\text{Province}_i - \text{Minimum}}{\text{Maximum} - \text{Minimum}} \right] + 1$$

where Province_i is the individual provincial value, minimum is the smallest provincial value in either 2006 or 2007, and maximum is the largest provincial value in either 2006 or 2007. An example of such an indicator would be the percentage of firms who agreed the province had a positive attitude toward private business.

On some items, a large number has a negative interpretation. In these cases, we reverse the index by subtracting the entire quantity from 11. Such a negative indicator would be the number of total inspections experienced by each firm:

$$9 * \left[\frac{\text{Province}_i - \text{Minimum}}{\text{Maximum} - \text{Minimum}} \right] + 1$$

Finally, sub-index scores were calculated by taking the simple average of indicators. If an indicator contained multiple dimensions, the average of the dimensions was used instead, so that dimensions received equal weight.[24]

24. When hard data was used in a sub-index, our rule was that the indicator must account for 40% of the total sub-index. If hard data was used in a sub-index that had multiple dimensions, however, the rule was adapted so that the hard indicators accounted for only 40% of the particular dimension, so as not to distort the overall meaning of the index.

Calibration of the Sub-Indices to Reflect Contribution of Private Sector Development

Among the most important innovations of the PCI is that care is taken to make sure that the final scores offer the most policy relevant information to provincial officials. This is done through the weighting of the sub-indices. As with PCI 2006, weightings applied to each of the ten sub-indices (see table 2) and were determined using a three-step statistical approach. This technique allowed us to isolate the partial contribution of each sub-index to improvements on three critical measures of private sector performance (ie. the number of enterprises, the total investment per capita of these enterprises, and average firm profitability). Together the three variables offered a comprehensive picture of provincial private sector development goals. The individual contributions of sub-indices to these three outcome variables became the weights in the final index. The approach means that policy makers can be certain that the final aggregate PCI scores and provincial rankings are calibrated to private sector performance.

The specific description of the weighting procedure can be found in the 2006 PCI Final Report (Section 3.3). In sum, the three steps are as follows. First, factor analysis was used to divide the sub-indices into three uncorrelated factors (baskets of variables). In addition, this procedure provided us with "factor loadings," which are the bivariate correlation between each sub-index and these uncorrelated factors. Secondly, we regressed the three dependent variables (number of enterprises, new investment per capita, and profit per firm) on the three factors, controlling for provincial differences in infrastructure, human capital, and proximity to markets. Third, by multiplying the regression coefficients for each factor by the factor loading of each sub-index, we were able to isolate the individual contribution of each sub-index to each dependent variable. For instance, Sub-Index 8 (PSD) was responsible for about 17.3% of the explained variance in the number of enterprises, 17.8% of the explained variance in investment, and 16.4% of the explained variance in profitability.

Averaging these together, we learned that PSD was responsible for over 17.2% of total variance in all three dependent variables. To simplify, we grouped the sub-indices into three levels (High, Medium, and Low). High contributors received 15% weights, medium contributors received 10%, and low contributors received a 5% share of the final weighted PCI. The 2007 is simply the weighted sum of all ten sub-indices, using these rounded weights.

Maintaining the exact same weightings for PCI 2006 and PCI 2007 was necessary to compare improvement on performance between the two years. Nevertheless, SOE bias is slightly under-weighted this year. In future years, weights will need to be re-calibrated to account for changes in the policy environment.

Methodological Appendix 2: Comparative Tables (2005-2007)

Table A2.1: Comparison of Entry Costs Sub-Index (2005-2007)

Indicator	Source	Measure	2005	2006	2007
Percentage of firms waiting over a month to complete all steps necessary to start operations.	PCI Survey Question: C4	Min	9.76	3.23	5.18
		Median	33.33	25.81	27.21
		Max	63.41	44	53.8
		Correlation w/ Previous Year	NA	0.24	0.26*
Percentage of firms waiting over three months to complete all steps necessary to start operations.	PCI Survey Question: C4	Min	0	0	0
		Median	5.9	5.78	6.78
		Max	21.95	25.64	27.27
		Correlation w/ Previous Year		0.02	0.15
Percentage of firms having difficulty obtaining all licenses and permits necessary to do business.	PCI Survey Question: C6	Min		0	0
		Median		12.4	11.1
		Max		27.27	36.8
		Correlation w/ Previous Year		NA	0.30*
Length of business registration in days (Median).	PCI Survey Question: C1	Min		12	7
		Median		20	15
		Max		58	22.5
		Correlation w/ Previous Year		NA	0.27*
Length of business re-registration in days (Median).	PCI Survey Question: C2	Min		6	3
		Median		10	7
		Max		35	15
		Correlation w/ Previous Year		NA	0.24*
Number of licenses and permits necessary to start operations (Median).	PCI Survey Question: C3	Min		2	1
		Median		4	2.5
		Max		7.5	5
		Correlation w/ Previous Year		NA	0.15

Indicator	Source	Measure	2005	2006	2007
Effective Wait for Business Premises (Median).	PCI Survey Questions: B4.1.2 (Wait for Land Use Rights Certificate) + B4.1.3 (Negotiations with Holders before Conversion)	Min		65	45
		Median		231	90
		Max		1318	450
		Correlation w/ Previous Year		NA	0.05

* Significant at 5% Level; NA = Not Applicable

All values are at the provincial-level.

Data include only firms registered within two calendar years preceding the survey.

2005 data only include 42 provinces and do not include the full set of indicators used in subsequent years, reflecting changes in survey questions and ordering in 2006.

Table A2.2: Comparison of Land Access & Tenure Security Sub-Index (2005-2007)

Indicator	Source	Measure	2005	2006	2007
Percentage of firms that feel land availability constrains their business expansion.	PCI Survey Question: B3.1	Min	48.48	48.57	47.06
		Median	71.31	64.27	64.77
		Max	81.08	78.38	81.16
		Correlation w/ Previous Year	NA	0.28	0.51*
Percentage of firms in possession of Land Use Rights Certificate (LURC).	PCI Survey Question: B4.1	Min		23.29	51.35
		Median		55.28	75.57
		Max		77.78	92.45
		Correlation w/ Previous Year			0.76*
Percentage of firms renting land from State Owned Enterprises (SOEs).	PCI Survey Question: B5.1.3	Min		0	0
		Median		10.73	12.5
		Max		36.06	50
		Correlation w/ Previous Year			0.29*

Indicator	Source	Measure	2005	2006	2007
Percentage of firms rating provincial land conversion policies as good of very good.	PCI Survey Question: E1.8	Min		33.73	23.53
		Median		52.45	56.83
		Max		82.14	81.25
		Correlation w/ Previous Year			0.78*
Total land in province with official Land Use Rights Certificates	Ministry of Natural Resources and the Environment 2003 & 2007 Datasets†	Min		11.3	13.28
		Median		69.2	63.13
		Max		96.5	97.46
		Correlation w/ Previous Year			0.85*
Firm rating of expropriation risk (1: Very High to 5: Very Low)	PCI Survey Question: B4.1.4	Min		1.95	3.43
		Median		2.49	3.76
		Max		3.05	4.26
		Correlation w/ Previous Year			0.28*
If land expropriated, firs receive fair compensation (% Always or Usually).	PCI Survey Question: B4.1.5	Min		21.43	22.22
		Median		40	40.76
		Max		58.33	57.14
		Correlation w/ Previous Year			.37*
Firm rating of changes in lease contracts (1: Very High to 5: Very Low)	PCI Survey Question: B5.2	Min		2.55	2.59
		Median		3.09	3.1
		Max		4	3.59
		Correlation w/ Previous Year			0.15
If changes in leases contracts, is there a fair process for disputing them (% Always or Usually).	PCI Survey Question: B5.3	Min		0	17.65
		Median		44.44	40
		Max		69.7	60.71
		Correlation w/ Previous Year			0.24

* Significant at 5% Level; NA = Not Applicable

All values are at the provincial level.

2005 data only include 42 provinces and do not include the full set of indicators used in subsequent years, reflecting changes in survey questions and ordering in 2006.

† MONRE changed the calculation of LURCs between 2003 and 2007 in the 5 national-level cities, leading to major reductions. To address this, the old calculation was applied to cities.

Table A2.3: Comparison of Transparency Sub-Index (2005-2007)

Indicator	Source	Measure	2005	2006	2007
Transparency of planning documents	PCI Survey Question: F1.1-F1.13 (Factor 1)†	Min	-0.79	-0.4	-0.39
		Median	-0.04	-0.02	-0.002
		Max	1.49	0.68	0.57
		Correlation w/ Previous Year	NA	0.40*	0.63*
Transparency of legal decisions and decrees	PCI Survey Question: F1.1-F1.13 (Factor 2)†	Min	-0.49	-0.45	-0.4
		Median	0.04	0.01	0.02
		Max	0.48	0.35	0.34
		Correlation w/ Previous Year	NA	0.46*	0.55*
Relationship important or very important to get access to provincial documents (% Important or Very Important)	PCI Survey Question: F2	Min	50	31.48	38.4
		Median	72.11	62.5	56.6
		Max	100	77.14	73.4
		Correlation w/ Previous Year	NA	0.27	0.38*
Friends important for negotiating with government (% Important or Very Important)	PCI Survey Question: F7	Min	34.35	37.74	38.7
		Median	56.07	57.21	54.7
		Max	80	82.35	65.1
		Correlation w/ Previous Year	NA	0.22	0.45*
Negotiations with tax authority are an essential part of doing business (% Agree or Strongly Agree)	PCI Survey Question: G9.4	Min	52.17	47.17	24.1
		Median	75.22	61.05	44.7
		Max	96.15	86.96	73.2
		Correlation w/ Previous Year	NA	-0.16	0.52*
Predictability of implementation of Central laws at the provincial level (% Usually or Always)	PCI Survey Question: F6	Min	4.35	2.76	1.89
		Median	14.91	9.49	7.96
		Max	60.38	37.88	18.3
		Correlation w/ Previous Year	NA	0.38*	0.46*
Province discussed changes in laws with you (% Usually or Always)	PCI Survey Question: F3	Min	0	0	0.9
		Median	12.16	8.84	7.57
		Max	61.54	20.9	21.62
		Correlation w/ Previous Year	NA	-0.29	0.45*

Indicator	Source	Measure	2005	2006	2007
Services Provided by Provincial Agencies: Consulting on National and Provincial Regulations (% Very Good or Good).	PCI Survey Question: E.15	Min		24.49	30.3
		Median		48.05	48.28
		Max		60.94	72.84
		Correlation w/ Previous Year		NA	0.63*
Openness of Provincial Web Page Score	Analysis by VNCI Research Team (For Scorecard See Section)ψ	Min	0	0	0
		Median	10	9	13.75
		Max	21	18	20
		Correlation w/ Previous Year	NA	0.36*	0.51*

* Significant at 5% Level; NA = Not Applicable

All values are at the provincial level.

2005 data only include 42 provinces.

† Indicators result from factor analysis of a battery of 13 documents. See accompanying CD with detailed descriptions of indicators.

ψ In 2007, 0.5 values were allowed to denote provinces that provided the relevant information, but not in a sufficient manner to be useful.

Table A2.4: Comparison of Time Costs of Regulatory Compliance (2005-2007)

Indicator	Source	Measure	2005	2006	2007
Percentage of firms spending over 10% of their time dealing with bureaucracy or bureaucratic regulations.	PCI Survey Question: G1	Min	3.64	6.52	10.94
		Median	13.67	21.24	21.87
		Max	30.43	39.39	43.75
		Correlation w/ Previous Year	NA	0.44*	0.62*
Days spent on bureacracy reduced in past two years (%)†	PCI Survey Question: G2	Min	18.18	23.94	13.75
		Median	40	41.72	22.86
		Max	78.57	60.87	35.04
		Correlation w/ Previous Year	NA	0.18	0.21
Median number of inspections (all agencies)	PCI Survey Question: D1	Min	1	0	1
		Median	1	1	1
		Max	3	2	2
		Correlation w/ Previous Year	NA	0.35*	0.30*
Median Tax Inspection hours	PCI Survey Question: D4	Min	1	1	2
		Median	7.5	8	8
		Max	24	40	40
		Correlation w/ Previous Year	NA	0.62*	0.86*

* Significant at 5% Level; NA = Not Applicable

All values are at the provincial-level.

2005 data only include 42 provinces.

† In 2005 and 2006, provinces were asked to compare changes to before Enterprise Law not the past two years. Pre-testing for 2007, however, revealed many firms could not remember the pre-Enterprise period sufficiently enough. This small wording change is the reason behind the lower percentages.

Table A2.5: Comparison of Informal Charges (2005-2007)

Indicator	Source	Measure	2005	2006	2007
Percentage of firms that believe that extra payments are a major obstacle to doing business.	PCI Survey Question: G6	Min	5	22.73	13.95
		Median	26.42	42.59	26.03
		Max	60.61	65.09	44.4
		Correlation w/ Previous Year	NA	-0.48*	0.47*
Percentage of firms that felt that enterprises in their line of business were subject to bribe requests from provincial authorities.	PCI Survey Question: G3	Min	6.67	53.57	40
		Median	26.57	70	68.25
		Max	48.28	84.62	82.72
		Correlation w/ Previous Year	NA	0.05	0.56*
Percentage of firms paying over 10% of their revenue in extra payments.	PCI Survey Question: G4	Min	0	4.35	1.39
		Median	9.6	12.99	11.54
		Max	29.41	34.38	26.19
		Correlation w/ Previous Year	NA	0.21	0.45*
Government uses compliance with local regulations to extract rents (% Strongly Agree or Agree)	PCI Survey Question: G9.2	Min		22.86	17.44
		Median		39.76	38.21
		Max		76.74	79.41
		Correlation w/ Previous Year		NA	0.78*
Informal Charges Delivered Expected Result (% Usually or Always)	PCI Survey Question: D4	Min		20.83	29.03
		Median		47.89	48.28
		Max		65.93	59.8
		Correlation w/ Previous Year		NA	0.2

* Significant at 5% Level; NA = Not Applicable

All values are at the provincial-level.

2005 data only include 42 provinces and do not include the full set of indicators used in subsequent years.

Table A2.6: Comparison of SOE Bias & Competition Environment (2005-2007)

Indicator	Source	Measure	2005	2006	2007
Favoritism toward the state sector is an obstacle to firm's business (% Strongly Agree or Agree).	PCI Survey Question: H7.10	Min	33.33	30	27.38
		Median	59.4	44.35	42.16
		Max	78.95	63.59	59.33
		Correlation w/ Previous Year	NA	0.25	0.25*
Perceived attitude of provincial government toward private sector (% Very Positive or Very Positive).	PCI Survey Question: H1	Min	20.59	30.21	24.5
		Median	47.83	48.28	44.97
		Max	78.26	71.56	67.37
		Correlation w/ Previous Year	NA	0.63*	0.67*
Attitude has improved in the past two years (%).†	PCI Survey Question: H2	Min	53.85	46.15	36.23
		Median	71.34	68.34	63.41
		Max	95.45	83.08	80.91
		Correlation w/ Previous Year	NA	0.31*	0.61*
Attitude does not depend on contribution to provincial revenue (% Strongly Agree or Agree).	PCI Survey Question: G9.1	Min	29.09	18.28	22.22
		Median	52.17	36.56	35.1
		Max	78.57	50	50.75
		Correlation w/ Previous Year	NA	0.23	0.17
Favoritism toward equitized companies is an obstacle to firm's business (% Strongly Agree or Agree).	PCI Survey Question: H7.12	Min	18.18	11.29	12.7
		Median	31.87	29.45	29.68
		Max	50	41.67	42.72
		Correlation w/ Previous Year	NA	0.14	0.35*
Firm rating of provincial equitization policies (% Very Good or Good).	PCI Survey Question: E1.9	Min		25	25.53
		Median		57.28	59.5
		Max		74.55	87.67
		Correlation w/ Previous Year		NA	0.58*

Indicator	Source	Measure	2005	2006	2007
Percentage change in number of locally-managed state owned enterprises since 2000.	GSO Enterprise Census 2000-2006 (Author's Calculation)	Min		-66.67	-71.11
		Median		-30.72	-41.65
		Max		60	24
		Correlation w/ Previous Year		NA	0.89*
Ratio of Local SOE share of liabilities to their share of revenue contribution in previous year.	GSO Enterprise Census 2005 & 2006 (Author's Calculation)	Min		0.49	0.4
		Median		1.27	1.29
		Max		4.13	10.33
		Correlation w/ Previous Year		NA	0.25*
Average proportion of State Commercial Bank Loans to SOEs[ψ]	Directly from State Commercial Banks	Min		1.5	
		Median		16.2	
		Max		71.1	
		Correlation w/ Previous Year			

* Significant at 5% Level; NA = Not Applicable

All values are at the provincial-level.

2005 data only include 42 provinces.

[†] In 2005 and 2006, provinces were asked to compare changes to before Enterprise Law not the past two years. Pre-testing for 2007, however, revealed many firms could not remember the pre-Enterprise period sufficiently enough. This small wording change is the reason behind the lower percentages.

[ψ] Due to proprietary concerns related to State Commercial Bank Equitization, this data was not made available in 2007.

Table A2.7: Comparison of Pro-activity (2005-2007)

Indicator	Source	Measure	2005	2006	2007
Provincial officials are knowledgeable enough about present national law to find opportunities within existing law to solve firm problems (% Strongly Agree or Agree)	PCI Survey Question: H7.2	Min	43.75	51.61	53.68
		Median	76.93	74.44	71.74
		Max	94.29	93.48	92.47
		Correlation w/ Previous Year	NA	0.60*	0.68*
Provincial officials are creative and clever about working within the national law to solve the problems of private sector firms (% Strongly Agree or Agree).	PCI Survey Question: H7.3	Min	31.25	40	40.22
		Median	63.27	61.88	58.12
		Max	85.71	88.64	87.91
		Correlation w/ Previous Year	NA	0.69*	0.76*
All good initiatives come from the provincial government, but the center frustrates them (% Strongly Agree or Agree).	PCI Survey Question: H7.5	Min	4.76	16.04	16.67
		Median	31.35	29.07	30.95
		Max	60	61.54	56.63
		Correlation w/ Previous Year	NA	0.40*	0.47*
There are no good initiatives at the provincial level; all important policy comes from the central government (% Strongly Agree or Agree).	PCI Survey Question: H7.8	Min	7.89	14.63	12.2
		Median	33.33	32.88	33.33
		Max	60.42	48.84	58.33
		Correlation w/ Previous Year	NA	0.59*	0.55*

* Significant at 5% Level; NA = Not Applicable

All values are at the provincial-level.

2005 data only include 42 provinces.

Table A2.8: Comparison of Private Sector Development Policies (2005-2007)

Indicator	Source	Measure	2005	2006	2007
Services Provided by Provincial Agencies: Provision of market information (% Very Good or Good)	PCI Survey Question: E1.4	Min	0	30.43	23.52
		Median	21.99	49.72	44.19
		Max	41.54	64.89	66.93
		Correlation w/ Previous Year		0.17	0.18
Services Provided by Provincial Agencies: Matchmaking for business partners (% Very Good or Good).	PCI Survey Question: E1.10	Min	0	24.49	15
		Median	13.36	48.05	31.52
		Max	26.19	60.94	62.96
		Correlation w/ Previous Year		0.18	0.46*
Services Provided by Provincial Agencies: Export Promotion and Trade Fairs (% Very Good or Good).	PCI Survey Question: E1.14	Min		27.03	29.17
		Median		50.68	56.22
		Max		79.03	79.55
		Correlation w/ Previous Year		NA	0.76*
Services Provided by Provincial Agencies: Industrial Zones and SME Concentrations (% Very Good or Good).	PCI Survey Question: E1.17	Min		11.91	6.67
		Median		45.8	50.84
		Max		81.36	83.48
		Correlation w/ Previous Year		NA	0.84*
Services Provided by Provincial Agencies: Technology and Technology Related Services (% Very Good or Good).	PCI Survey Question: E.15	Min		18.92	14.29
		Median		41.73	43.88
		Max		72.34	79.55
		Correlation w/ Previous Year		NA	0.32*
Trade fairs held by province in previous year and registered for present year.	Data provided by Viet Trade of the Ministry of Trade	Min		0	0
		Median		0	0
		Max		6	12
		Correlation w/ Previous Year		NA	0.18

* Significant at 5% Level; NA = Not Applicable

All values are at the provincial-level.

2005 data only include 42 provinces and do not include the full set of indicators used in subsequent years.

Table A2.9: Comparison of Labor Policies (2006-2007)

Indicator	Source	Measure	2006	2007
Legal system provided mechanism for firms to appeal officials' corrupt behavior (% Always or Usually)	PCI Survey Question: G8	Min	11.25	20
		Median	23.22	33.74
		Max	41.46	52.3
		Correlation w/ Previous Year	NA	-0.26(*)
Firm confident that legal system will uphold property rights and contracts (%Strongly Agree or Agree)	PCI Survey Question: H7.9	Min	67.03	66.67
		Median	83.99	81.2
		Max	94.32	94.19
		Correlation w/ Previous Year		0.68*
Use of Legal Institutions as Primary Modes of Dispute Resolution	PCI Survey Questions: [6*F10.1(if Court) + 4*F10.2(if Court) + 2*F10.3(if Court) + 3*F10.1(if Provincial Gov.)+2*F10.2(if Provincial Gov.)+1*F10.3(if Provincial Gov.)]	Min	47.51	30.58
		Median	94.82	64.4
		Max	208.87	138.89
		Correlation w/ Previous Year		0.56*
Cases filed by by non-state entities at Provincial Economic Court per 100 firms.	People's Supreme Court	Min	0	0
		Median	0.41	0.58
		Max	9.49	8.12
		Correlation w/ Previous Year		0.84*
Cases filed by by non-state entities as a percentage of total cases filed at Provincial Economic Court	People's Supreme Court	Min	0	0
		Median	54.7	50
		Max	100	100
		Correlation w/ Previous Year		0.49*

Table A2.10: Comparison of Legal Institutions (2006-2007)

Indicator	Source	Measure	2006	2007
Services Provided by Provincial Agencies: General Education (% Very Good or Good)	PCI Survey Question: E1.3	Min	50.00	51.51
		Median	72.72	73.29
		Max	88.52	87.34
		Correlation w/ Previous Year	NA	0.21
Services Provided by Provincial Agencies: Labor Vocational Training (% Very Good or Good)	PCI Survey Question: E1.12	Min	31.25	24
		Median	55.43	55.9
		Max	73.17	79.49
		Correlation w/ Previous Year	NA	0.66*
Services Provided by Provincial Agencies: Labor Exchange Services(% Very Good or Good)	PCI Survey Question: E1.13	Min	16.67	21.88
		Median	48.62	49.43
		Max	74.68	78.05
		Correlation w/ Previous Year	NA	0.76*
Number of locally managed vocational schools per 10,000 citizens.	General Department of Vocational Training	Min	0.103	0.14
		Median	0.705	0.81
		Max	2.09	2.19
		Correlation w/ Previous Year	NA	0.92*
Number of labor exchange bureaus per 10,000 citizens.	Ministry of Labor, Invalids and Socal Affairs: General Labor Department	Min		0
		Median		0.136
		Max		0.683
		Correlation w/ Previous Year	NA	NA

* Significant at 5% Level; NA = Not Applicable

All values are at the provincial-level.

Labor Sub-Index did not exist in 2005

Methodological Appendix 3: Multiple Regression Tables

Appendix 3.1: Multiple Regression Analysis of Governance and Key Private Sector Outcome Variables

Independent Variables/ Dependent Variables	Enterprises per 1000 Citizens 2006 (ln)				Investment per Capita 2006 (ln)				Profit per Enterprise 2006			
	OLS	OLS	Robust	IV-2SLS	OLS	OLS	Robust	IV-2SLS	OLS	OLS	Robust	IV-2SLS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
National City Dummy	0.298***	0.284***	0.342*	0.276***	0.597*	0.540*	0.501	0.594*	58.54	50.92	45.15	51.25
	(0.068)	(0.057)	(0.19)	(0.056)	(0.31)	(0.32)	(0.49)	(0.30)	(38.1)	(37.5)	(31.4)	(35.6)
Distance from Hanoi or HCMC (km)	-0.0000411	-0.0000144	-0.0000388	-0.000000363	-0.000314	-0.000207	-0.000245	-0.000309	-0.0759*	-0.0616	-0.0605	-0.0622*
	(0.000066)	(0.000057)	(0.000091)	(0.000065)	(0.00032)	(0.00030)	(0.00039)	(0.00029)	(0.039)	(0.040)	(0.039)	(0.038)
Telephones per 1000 Citizens (1995)	2.551***	2.493***		2.463***	4.861***	4.632***		4.850***	-58.27	-89.00		-87.67
	(0.39)	(0.29)		(0.24)	(1.36)	(0.99)		(1.28)	(109)	(104)		(97.7)
% Secondary School Graduates	0.000442	0.000168	-0.00190	0.0000255	0.0243*	0.0232**	0.0191	0.0243*	-4.118**	-4.265**	-4.199**	-4.259**
	(0.0026)	(0.0026)	(0.0025)	(0.0027)	(0.013)	(0.011)	(0.012)	(0.013)	(1.94)	(1.84)	(1.86)	(1.76)
Unweighted Provincial Competitiveness Index (2007)		0.00811***	0.00481*	0.0124***		0.0324**	0.0248*	0.00153		4.354***	4.436***	4.166**
		(0.0025)	(0.0029)	(0.0045)		(0.014)	(0.013)	(0.019)		(1.32)	(1.40)	(1.88)
Telephones per 1000 Citizens (2004)			2.821***				6.091***				-79.53	
			(0.53)				(2.03)				(166)	
Constant	0.309	-0.144	0.195	-0.381	-1.464	-3.273***	-2.593*	-1.549	474.9**	232.0	221.1	242.4
	(0.25)	(0.24)	(0.30)	(0.38)	(1.24)	(1.16)	(1.32)	(1.48)	(184)	(200)	(205)	(191)
Observations	64	64	64	64	64	64	64	64	64	64	64	64
R-squared	0.84	0.87	0.78	0.86	0.55	0.62	0.60	0.56	0.13	0.27	0.27	0.27
Root Mean Squared Error	0.127	0.115	0.151	0.113	0.570	0.530	0.543	0.543	72.35	66.63	66.78	63.44
Cragg-Donald F-Statistics of Instrument Strength				17.8***				17.8***				17.8***
Anderson Cannonical Correlation LR Statistic				17.2***				17.2***				17.2***

OLS Regression; Robust standard errors in parentheses; Robust models replace Telephones per 1000 Citizens from 1995 with the 2004 value.

*** p<0.01, ** p<0.05, * p<0.1; ln indicates natural log taken.; Dummy denotes dichotomous dependent variables.

IV-2SLS denotes an Instrumental Variables - Two Staged Least Squared procedures, instrumenting using whether the province is South of the 17th Parallel.

Cragg-Donald F Statistic is a test of weak identification. 17.18>16.38, the critical value for one endogenous repressor, one instrumental variable, and a 10% maximal size of a 5% Wald Test. Therefore, the null hypothesis that =0 can be rejected and we can be confident that South is a strong instrument for FDI (Stock and Yogo 2004).

The Anderson (1984) canonical correlations test is a likelihood-ratio test of whether the equation is identified, i.e., that the excluded instruments are "relevant", meaning correlated with the endogenous repressors. The null hypothesis is that the equation is under-identified and is rejected by the test.

Appendix 3.2: Multiple Regression Analysis of Governance and Provincial Welfare

Independent Variables/Dependent Variables	GDP per Capita 2006 (ln)						
	OLS	OLS	BRVT	Robust	IV-2SLS	Structural	Interaction
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
National City Dummy	0.267 (0.29)	0.235 (0.28)	0.453*** (0.14)	0.370* (0.20)	0.365* (0.21)	0.696*** (0.13)	0.309* (0.16)
Distance from Hanoi or HCMC (km)	-0.000827*** (0.00018)	-0.000766*** (0.00015)	-0.000678*** (0.00012)	-0.000701*** (0.00013)	-0.000574*** (0.00019)		-0.000712*** (0.00013)
Telephones per 1000 Citizens (1995)	2.800** (1.36)	2.671** (1.18)	1.945** (0.74)		1.789*** (0.58)		
% Secondary School Graduates	-0.0140*** (0.0050)	-0.0146** (0.0061)	-0.0151*** (0.0057)	-0.0170*** (0.0052)	-0.0162* (0.0097)		-0.0152*** (0.0051)
Unweighted Provincial Competitiveness Index (2007)		0.0183** (0.0070)	0.0137*** (0.0051)	0.0104* (0.0055)	0.0491*** (0.013)	0.0136** (0.0065)	
Telephones per 1000 Citizens (2004)				2.907*** (0.87)			
Ba Ria-Vung Tau Dummy			1.953*** (0.090)	1.765*** (0.12)	1.713*** (0.13)	2.160*** (0.078)	1.840*** (0.10)
Standardized Initial Structural Conditions in 2006						0.00404** (0.0019)	
High PCI Dummy (Score above 2006 PCI Median (55.1))							0.0536 (0.094)
Standardized Telephones per Capita in 1995							0.00953*** (0.0025)
Interaction between High PCI*Standardized Infrastructure							0.0110** (0.0045)
Constant	16.64*** (0.48)	15.62*** (0.77)	15.92*** (0.69)	16.21*** (0.69)	13.94*** (1.24)	14.31*** (0.42)	16.65*** (0.50)
Observations R-squared	64 0.46	64 0.52	64 0.74	64 0.74	64 0.53	64 0.62	64 0.76
Root Mean Squared Error	0.382	0.364	0.271	0.271	0.343	0.322	0.261
Cragg-Donald F-Statistics of Instrument Strength					17.8***		
Anderson Cannonical Correlation LR Statistic					17.2***		

OLS Regression; Robust standard errors in parentheses; Robust models replace Telephones per 1000 Citizens from 1995 with the 2004 value.

*** p<0.01, ** p<0.05, * p<0.1; ln indicates natural log taken.; Dummy denotes dichotomous dependent variables.

IV-2SLS denotes an Instrumental Variables - Two Staged Least Squared procedures, instrumenting using whether the province is South of the 17th Parallel.

Cragg-Donald F Statistic is a test of weak identification. 17.18>16.38, the critical value for one endogenous repressor, one instrumental variable, and a 10% maximal size of a 5% Wald Test. Therefore, the null hypothesis that =0 can be rejected and we can be confident that South is a strong instrument for FDI (Stock and Yogo 2004).

The Anderson (1984) canonical correlations test is a likelihood-ratio test of whether the equation is identified, i.e., that the excluded instruments are "relevant", meaning correlated with the endogenous repressors. The null hypothesis is that the equation is under-identified and is rejected by the test.

Appendix 3.3: Multiple Regression Analysis of Formalization of Household Enterprises I

(Dependent Variable: Time in Months Between Establishment of Household Firm (PCI QA_1) and Formal Registration (PCI QA_2))

Specification	NBREG	NBREG	NBREG	IV-2SLS	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG
Model Number	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**
Economic Governance Measures														
Unweighted Provincial Competitiveness Index (2007)	–0.0161* (0.010)	-0.0275** (0.011)	-0.0277** (0.012)	–0.305* (0.19)										
Entry Costs					-0.295* (0.16)									
Land Access & Security of Tenure						-0.304* (0.16)								
Transparency							-0.0462 (0.089)							
Time Costs of Regulatory Compliance								0.0853 (0.11)						
Informal Charges									-0.0910 (0.18)					
Bias toward State Owned Enterprises										-0.282* (0.15)				
Proactivity											-0.115** (0.052)			
Private Sector Development Policies												-0.0585 (0.055)		

Specification	NBREG	NBREG	NBREG	IV-2SLS	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG
Model Number	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**
Labor Policies													-0.184*** (0.068)	
Legal Institutions														-0.231** (0.11)
Province-Level Control Variables														
Telephones per 1000 Citizens (1995)	-0.0160 (0.79)	-0.247 (1.14)	-0.128 (1.17)	3.876 (6.12)	-1.057 (1.26)	-1.445 (1.11)	-0.454 (1.13)	-0.718 (0.95)	-0.857 (1.15)	-0.425 (1.21)	-0.170 (0.99)	-0.164 (1.07)	0.196 (1.17)	-0.445 (1.17)
Distance from Hanoi or HCMC (km)	-0.000292 (0.00033)	-0.000450 (0.00040)	-0.000426 (0.00041)	0.000775 (0.0026)	-0.0000254 (0.00047)	-0.000555 (0.00042)	-0.000325 (0.00045)	-0.000220 (0.00046)	-0.000406 (0.00045)	-0.000184 (0.00043)	-0.000487 (0.00041)	-0.000343 (0.00044)	-0.000326 (0.00043)	-0.000520 (0.00041)
% Secondary School Graduates	-0.00956 (0.016)	0.00510 (0.018)	0.00643 (0.018)	-0.0370 (0.12)	0.0118 (0.018)	0.00300 (0.018)	0.00824 (0.020)	0.00136 (0.018)	0.00656 (0.018)	0.00430 (0.016)	0.00230 (0.018)	0.00570 (0.018)	0.0106 (0.017)	-0.00919 (0.017)
National City Dummy	-0.218 (0.18)	-0.144 (0.28)	-0.175 (0.28)	-0.0147 (1.85)	-0.0992 (0.30)	-0.211 (0.26)	-0.189 (0.32)	-0.196 (0.31)	-0.172 (0.31)	-0.289 (0.34)	-0.265 (0.28)	-0.125 (0.30)	-0.126 (0.26)	-0.172 (0.27)
Firm-Level Variables														
Age (Years Since Establishment)	0.242*** (0.023)	0.286*** (0.021)	0.285*** (0.022)	3.329*** (0.62)	0.283*** (0.022)	0.279*** (0.022)	0.279*** (0.022)	0.274*** (0.024)	0.278*** (0.022)	0.287*** (0.022)	0.284*** (0.021)	0.280*** (0.021)	0.279*** (0.021)	0.280*** (0.022)
Percentage of Firm Business in Manufacturing (PCI QA6_1)		0.000808 (0.0040)	0.000409 (0.0041)	0.00985 (0.013)	0.00231 (0.0041)	0.0000948 (0.0043)	0.000949 (0.0042)	0.00177 (0.0040)	0.00102 (0.0040)	0.00170 (0.0039)	0.000400 (0.0041)	0.00105 (0.0041)	0.000964 (0.0040)	0.000660 (0.0041)
Percentage of Firm Business in Service/ Commerce (PCI QA6_2)		0.00756*** (0.0028)	0.00725** (0.0029)	0.0112 (0.0092)	0.00741** (0.0029)	0.00721** (0.0029)	0.00682** (0.0029)	0.00699** (0.0028)	0.00678** (0.0029)	0.00779*** (0.0027)	0.00691** (0.0029)	0.00702** (0.0029)	0.00734** (0.0029)	0.00753*** (0.0027)
Size of Firm at Time of Establishment (PCI QA8_1)		-0.0470 (0.11)	-0.0495 (0.11)	1.449* (0.74)	-0.0473 (0.12)	-0.0843 (0.12)	-0.0715 (0.11)	-0.0809 (0.12)	-0.0670 (0.12)	-0.0132 (0.11)	-0.0577 (0.11)	-0.0664 (0.11)	-0.0524 (0.11)	-0.0687 (0.11)

Specification	NBREG	NBREG	NBREG	IV-2SLS	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG
Model Number	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**
Firm Engages in Direct or Indirect Export (Dummy) (PCI QA_13)		0.0786	0.105	3.739**	0.108	0.158	0.108	0.120	0.127	0.135	0.0911	0.101	0.106	0.114
		(0.33)	(0.33)	(1.56)	(0.33)	(0.35)	(0.35)	(0.37)	(0.36)	(0.37)	(0.33)	(0.34)	(0.33)	(0.33)
Firm Operate on Household Land (Dummy) (PCI QB_2)			-0.0614	-1.820*	-0.0654	-0.0170	-0.0697	-0.0656	-0.0756	-0.0507	-0.0569	-0.0709	-0.0569	-0.0669
			(0.20)	(1.03)	(0.20)	(0.21)	(0.21)	(0.21)	(0.21)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)
Firm Possessed LURC before Establisment (Dummy)			0.217	2.032**	0.187	0.259*	0.212	0.210	0.209	0.192	0.235*	0.207	0.242*	0.228
(PCI QB_4_1_1<=PCIQA_1)			(0.14)	(0.89)	(0.14)	(0.14)	(0.14)	(0.15)	(0.14)	(0.14)	(0.14)	(0.14)	(0.15)	(0.15)
Constant	1.053	-0.401	-0.552	0.786	-0.421	0.249	-1.981	-2.132	-1.454	-0.295	-1.168	-1.770	-1.653	0.331
	(1.50)	(1.47)	(1.48)	(18.1)	(1.75)	(1.87)	(1.48)	(1.53)	(1.93)	(1.68)	(1.52)	(1.51)	(1.38)	(1.76)
lnalpha	3.803***	3.725***	3.722***		3.722***	3.723***	3.727***	3.726***	3.727***	3.721***	3.723***	3.726***	3.720***	3.720***
	(0.074)	(0.089)	(0.089)		(0.089)	(0.090)	(0.090)	(0.090)	(0.090)	(0.089)	(0.089)	(0.090)	(0.089)	(0.089)
Observations	3507	2909	2907	2907	2907	2907	2907	2907	2907	2907	2907	2907	2907	2907
Provincial Clusters	64	64	64	64	64	64	64	64	64	64	64	64	64	64
Log-Likelihood	-2678	-2284	-2284	-13071	-2284	-2284	-2285	-2284	-2285	-2283	-2284	-2284	-2283	-2283
Log-Likelihood	-2678	-2284	-2284	-13071	-2284	-2284	-2285	-2284	-2285	-2283	-2284	-2284	-2283	-2283
Chi Squared	290.6	351.0	366.9		358.6	405.5	345.7	358.1	359.3	313.7	376.4	342.5	380.4	381.3
P-Value	0	0	0		0	0	0	0	0	0	0	0	0	0
R-Squared				0.31										
Root Mean Squared Error				21.72										

NBREG: Negative Binomial Regression used to account for the fact variable is a count measure.

Robust standard errors (clustered at province level) in parentheses. Analysis restricted to firms which began operations as unregistered household businesses (PCI QH5_3=1)

*** p<0.01, ** p<0.05, * p<0.1; ln indicates natural log taken.; Dummy denotes dichotomous dependent variables.

IV-2SLS denotes an Instrumental Variables - Two Staged Least Squared procedures, instrumenting using whether the province is South of the 17th Parallel.

PCI Q is the question on Provincial Competitiveness survey from which variable was drawn.

Appendix 3.4: Multiple Regression Analysis of Formalization of Household Enterprises II

(Dependent Variable: Number of Years Since Firm's Formal Registration (2008-(PCI QA_2))

Specification	NBREG	NBREG	NBREG	IV-2SLS	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG
Model Number	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**
Economic Governance Measures														
Unweighted Provincial Competitiveness Index (2007)	0.0117*** (0.0035)	0.0103*** (0.0029)	0.0103*** (0.0029)	0.138*** (0.038)										
Entry Costs					0.0734** (0.031)									
Land Access & Security of Tenure						0.0961*** (0.036)								
Transparency							0.0694*** (0.017)							
Time Costs of Regulatory Compliance								0.0646*** (0.019)						
Informal Charges									0.0402 (0.050)					
Bias toward State Owned Enterprises										0.0284 (0.030)				
Proactivity											0.0307*** (0.011)			
Private Sector Development Policies												0.0229* (0.012)		

Specification	NBREG	NBREG	NBREG	IV-2SLS	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG
Model Number	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**
Labor Policies													0.0348**	
													(0.016)	
Legal Institutions														0.0455***
														(0.016)
Province-Level Control Variables														
Telephones per 1000 Citizens (1995)	0.0504	0.176	0.138	0.107	0.349**	0.460**	0.0209	0.195	0.299	0.207	0.134	0.0753	0.138	0.229
	(0.24)	(0.19)	(0.19)	(1.50)	(0.18)	(0.19)	(0.23)	(0.21)	(0.21)	(0.21)	(0.23)	(0.21)	(0.20)	(0.21)
Distance from Hanoi or HCMC (km)	-0.000229**	-0.000182**	-0.000173**	-0.000990	-0.000272***	-0.000118	-0.000220***	-0.000139**	-0.000162**	-0.000213**	-0.000169**	-0.000198**	-0.000185**	-0.000161**
	(0.000090)	(0.000079)	(0.000075)	(0.00061)	(0.000099)	(0.000074)	(0.000084)	(0.000068)	(0.000073)	(0.000087)	(0.000083)	(0.000089)	(0.000078)	(0.000077)
% Secondary School Graduates	-0.00825**	-0.00611*	-0.00586*	-0.0417*	-0.00804**	-0.00496	-0.00756**	-0.00659*	-0.00693*	-0.00674*	-0.00534	-0.00624	-0.00683*	-0.00379
	(0.0037)	(0.0033)	(0.0033)	(0.023)	(0.0038)	(0.0033)	(0.0031)	(0.0036)	(0.0041)	(0.0037)	(0.0037)	(0.0038)	(0.0035)	(0.0037)
National City Dummy	0.000669	-0.0366	-0.0293	-0.312	-0.0249	-0.00330	-0.00843	-0.0377	-0.00550	0.00710	0.00550	-0.0378	-0.0352	-0.0145
	(0.057)	(0.043)	(0.045)	(0.43)	(0.043)	(0.038)	(0.055)	(0.063)	(0.050)	(0.051)	(0.051)	(0.052)	(0.045)	(0.042)
Firm-Level Variables														
Percentage of Firm Business in Manufacturing (PCI QA6_1)		0.000184	0.000149	0.000906	0.000201	0.000231	0.000200	0.0000264	0.000198	0.000228	0.000166	0.000185	0.000210	0.000258
		(0.00036)	(0.00036)	(0.0023)	(0.00037)	(0.00037)	(0.00037)	(0.00038)	(0.00037)	(0.00037)	(0.00036)	(0.00037)	(0.00037)	(0.00037)
Percentage of Firm Business in Service/ Commerce (PCI QA6_2)		-0.000472*	-0.000398	-0.00260	-0.000420	-0.000367	-0.000312	-0.000479*	-0.000383	-0.000327	-0.000361	-0.000366	-0.000358	-0.000379
		(0.00027)	(0.00026)	(0.0016)	(0.00027)	(0.00027)	(0.00026)	(0.00027)	(0.00026)	(0.00027)	(0.00027)	(0.00028)	(0.00027)	(0.00027)
Size of Firm at Time of Establishment (PCI QA8_1)		-0.123***	-0.125***	-0.695***	-0.127***	-0.126***	-0.125***	-0.123***	-0.131***	-0.131***	-0.128***	-0.129***	-0.128***	-0.128***
		(0.012)	(0.012)	(0.066)	(0.013)	(0.012)	(0.013)	(0.012)	(0.013)	(0.014)	(0.013)	(0.013)	(0.013)	(0.013)
Firm Engages in Direct or Indirect Export (Dummy) (PCI QA_13)		-0.00905	-0.0195	-0.194	-0.0156	-0.0132	-0.0134	-0.0146	-0.0143	-0.0177	-0.0208	-0.0172	-0.0154	-0.0192
		(0.032)	(0.032)	(0.20)	(0.032)	(0.032)	(0.032)	(0.030)	(0.031)	(0.031)	(0.032)	(0.031)	(0.032)	(0.031)

Specification	NBREG	NBREG	NBREG	IV-2SLS	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG	NBREG
Model Number	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**
Firm Operate on Household Land (Dummy) (PCI QB_2)			0.131***	0.854***	0.129***	0.125***	0.131***	0.129***	0.133***	0.131***	0.132***	0.134***	0.133***	0.129***
			(0.023)	(0.16)	(0.023)	(0.022)	(0.023)	(0.023)	(0.024)	(0.024)	(0.024)	(0.024)	(0.024)	(0.023)
Firm Possessed LURC before Establisment (Dummy)			-0.0999***	-0.649***	-0.0994***	-0.108***	-0.0978***	-0.0982***	-0.0982***	-0.0975***	-0.100***	-0.0980***	-0.101***	-0.0992***
(PCI QB_4_1_1 <=PCIQA_1)			(0.025)	(0.16)	(0.024)	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)
Constant	1.850***	2.030***	2.011***	3.412	2.255***	1.899***	2.379***	2.277***	2.449***	2.523***	2.419***	2.558***	2.534***	2.226***
	(0.35)	(0.34)	(0.35)	(3.01)	(0.35)	(0.40)	(0.30)	(0.35)	(0.36)	(0.49)	(0.38)	(0.41)	(0.36)	(0.36)
lnalpha	-1.882***	-2.110***	-2.148***		-2.136***	-2.137***	-2.150***	-2.145***	-2.118***	-2.118***	-2.129***	-2.121***	-2.127***	-2.129***
	(0.086)	(0.11)	(0.11)		(0.10)	(0.11)	(0.11)	(0.11)	(0.10)	(0.11)	(0.11)	(0.11)	(0.11)	(0.10)
Observations	3664	3033	3031	3031	3031	3031	3031	3031	3031	3031	3031	3031	3031	3031
Provincial Clusters	64	64	64	64	64	64	64	64	64	64	64	64	64	64
Log-Likelihood	-9147	-7565	-7536	-8129	-7543	-7542	-7533	-7535	-7555	-7555	-7548	-7553	-7549	-7548
Chi Squared	16.44	118.4	149.2		140.9	148.3	141.6	148.2	156.5	128.6	139.4	135.5	140.9	133.1
P-Value	0.00569	0	0		0	0	0	0	0	0	0	0	0	0
R-Squared				0.0626										
Root Mean Squared Error				3.536										

NBREG: Negative Binomial Regression used to account for the fact variable is a count measure.

Robust standard errors (clustered at province level) in parentheses. Analysis restricted to firms which began operations as unregistered household businesses (PCI QH5_3=1)

*** p<0.01, ** p<0.05, * p<0.1; ln indicates natural log taken.; Dummy denotes dichotomous dependent variables.

IV-2SLS denotes an Instrumental Variables - Two Staged Least Squared procedures, instrumenting using whether the province is South of the 17th Parallel.

PCI Q is the question on Provincial Competitiveness survey from which variable was drawn.

Appendix 3.5: Multiple Regression Analysis of Performance of Equitized State Owned Enterprises

(Dependent Variable: Profit in 2006 - PCI Q11_3)

Specification	OLS	OLS	OLS	IV-2SLS	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT
Model Number	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**
Economic Governance Measures															
Unweighted Provincial Competitiveness Index (2007)	0.0559** (0.021)	0.0542** (0.021)	0.0547** (0.022)	0.127*** (0.041)	0.0380*** (0.015)										
Entry Costs						0.251*** (0.085)									
Land Access & Security of Tenure							0.161 (0.13)								
Transparency								0.149* (0.088)							
Time Costs of Regulatory Compliance									0.199** (0.079)						
Informal Charges										0.210 (0.14)					
Bias toward State Owned Enterprises											0.284*** (0.079)				
Proactivity												0.0881 (0.055)			
Private Sector Development Policies													0.131* (0.072)		
Labor Policies														0.0775 (0.073)	

Specification	OLS	OLS	OLS	IV-2SLS	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT
Model Number	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**
Legal Institutions															0.0170
															(0.080)
Province-Level Control Variables															
Telephones per 1000 Citizens (1995)	-0.329	-1.380	-1.134	-1.976	-0.819	-0.407	-0.0324	-0.478	-0.495	-0.215	-0.344	-0.650	-0.979	-0.592	-0.406
	(2.10)	(2.07)	(2.13)	(2.21)	(1.40)	(1.27)	(1.52)	(1.52)	(1.21)	(1.33)	(1.36)	(1.49)	(1.42)	(1.42)	(1.47)
Distance from Hanoi or HCMC (km)	-0.0000735	0.000486	0.000443	0.000539	0.000297	-0.000183	0.000332	0.0000732	0.000441	0.000407	0.000245	0.000318	0.000218	0.000246	0.000257
	(0.00054)	(0.00052)	(0.00056)	(0.00061)	(0.00037)	(0.00041)	(0.00040)	(0.00039)	(0.00038)	(0.00044)	(0.00039)	(0.00040)	(0.00038)	(0.00039)	(0.00040)
% Secondary School Graduates	-0.0247	-0.0274	-0.0285	-0.0274	-0.0218	-0.0245	-0.0207	-0.0263	-0.0280	-0.0236	-0.0161	-0.0195	-0.0221	-0.0228	-0.0210
	(0.022)	(0.024)	(0.024)	(0.023)	(0.016)	(0.017)	(0.017)	(0.017)	(0.019)	(0.018)	(0.017)	(0.017)	(0.017)	(0.018)	(0.017)
National City Dummy	0.335	0.672	0.684	0.757	0.528	0.467	0.577	0.451	0.383	0.548	0.604	0.583	0.347	0.479	0.492
	(0.78)	(0.78)	(0.80)	(0.89)	(0.54)	(0.46)	(0.52)	(0.52)	(0.43)	(0.48)	(0.48)	(0.52)	(0.56)	(0.52)	(0.49)
Firm-Level Variables															
Age (Years Since Establishment)		-0.0171	-0.0131	-0.0146	-0.00962	-0.00753	-0.0102	-0.00923	-0.00873	-0.00963	-0.00775	-0.00932	-0.0109	-0.00945	-0.00840
		(0.023)	(0.024)	(0.023)	(0.015)	(0.015)	(0.014)	(0.014)	(0.014)	(0.014)	(0.015)	(0.015)	(0.015)	(0.015)	(0.014)
Percentage of Firm Business in Manufacturing (PCI QA6_1)		-0.000400	-0.000475	0.000137	-0.000500	-0.000280	-0.000678	-0.000833	-0.00121	-0.000826	-0.000469	-0.000691	-0.000516	-0.000751	-0.000801
		(0.0029)	(0.0028)	(0.0027)	(0.0017)	(0.0017)	(0.0017)	(0.0017)	(0.0018)	(0.0018)	(0.0017)	(0.0017)	(0.0018)	(0.0018)	(0.0018)
Percentage of Firm Business in Service/ Commerce (PCI QA6_2)		0.000653	0.000315	-0.000242	0.000268	0.000487	0.000576	0.000521	-0.00000263	0.000409	0.000376	0.000389	0.000562	0.000528	0.000530
		(0.0027)	(0.0028)	(0.0027)	(0.0017)	(0.0018)	(0.0017)	(0.0017)	(0.0018)	(0.0017)	(0.0017)	(0.0017)	(0.0017)	(0.0018)	(0.0018)
Size of Firm in 2005 (PCI QA8_1)		0.182*	0.198*	0.186*	0.128*	0.121*	0.126*	0.128*	0.137**	0.129*	0.146**	0.131*	0.129*	0.131*	0.132*
		(0.10)	(0.11)	(0.11)	(0.069)	(0.070)	(0.070)	(0.070)	(0.069)	(0.069)	(0.070)	(0.070)	(0.070)	(0.071)	(0.071)

Specification	OLS	OLS	OLS	IV-2SLS	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT
Model Number	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**
Firm Engages in Direct or Indirect Export (Dummy) (PCI QA_13)		0.102	0.148	0.0107	0.0802	0.138	0.122	0.112	0.101	0.135	0.140	0.121	0.100	0.139	0.147
		(0.23)	(0.23)	(0.25)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)
Owner Characteristics															
Former Government Official (PCI QH5_4) (Dummy)			-0.518	-0.294	-0.339*	-0.525***	-0.413**	-0.419**	-0.459***	-0.445***	-0.235	-0.365**	-0.394**	-0.428**	-0.443**
			(0.33)	(0.37)	(0.18)	(0.17)	(0.18)	(0.17)	(0.17)	(0.17)	(0.20)	(0.18)	(0.17)	(0.18)	(0.18)
Former Military Officer (PCI QH5_5) (Dummy)			-0.733	-0.594	-0.450	-0.377	-0.468	-0.559	-0.738	-0.441	-0.457	-0.492	-0.457	-0.502	-0.499
			(0.78)	(0.74)	(0.45)	(0.44)	(0.45)	(0.46)	(0.47)	(0.43)	(0.44)	(0.44)	(0.43)	(0.46)	(0.47)
Former SOE Manager (PCI QH5_6) (Dummy)			0.436**	0.500**	0.304**	0.275*	0.264*	0.290**	0.331**	0.296**	0.272*	0.291**	0.275**	0.276*	0.261*
			(0.21)	(0.20)	(0.14)	(0.15)	(0.15)	(0.13)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Former SOE Employee (PCI QH5_7) (Dummy)			0.576	0.605	0.331	0.318	0.315	0.296	0.422*	0.284	0.351	0.314	0.328	0.322	0.307
			(0.41)	(0.40)	(0.23)	(0.22)	(0.24)	(0.23)	(0.24)	(0.23)	(0.23)	(0.23)	(0.23)	(0.24)	(0.24)
Constant	4.332*	38.27	30.12	28.97											
	(2.55)	(46.6)	(48.5)	(48.1)											
Cut Point 1					-21.06	-17.42	-23.27	-22.05	-20.78	-21.99	-17.00	-21.97	-25.28	-22.57	-20.60
					(30.6)	(30.1)	(29.3)	(29.2)	(28.4)	(29.7)	(30.6)	(30.7)	(30.0)	(30.1)	(29.0)
Cut Point 2					-20.05	-16.43	-22.28	-21.05	-19.77	-20.99	-15.99	-20.97	-24.29	-21.58	-19.61
					(30.6)	(30.1)	(29.3)	(29.2)	(28.4)	(29.7)	(30.6)	(30.7)	(30.0)	(30.1)	(29.0)
Cut Point 3					-19.71	-16.09	-21.93	-20.71	-19.42	-20.65	-15.65	-20.62	-23.95	-21.24	-19.27
					(30.6)	(30.1)	(29.3)	(29.2)	(28.4)	(29.7)	(30.5)	(30.7)	(30.0)	(30.1)	(29.0)
Cut Point 4					-19.02	-15.41	-21.25	-20.03	-18.74	-19.97	-14.96	-19.94	-23.27	-20.56	-18.59
					(30.6)	(30.1)	(29.3)	(29.2)	(28.4)	(29.7)	(30.6)	(30.7)	(30.0)	(30.1)	(29.0)

Specification	OLS	OLS	OLS	IV-2SLS	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT	OPROBIT
Model Number	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**
Cut Point 5					-18.55	-14.94	-20.78	-19.57	-18.26	-19.50	-14.49	-19.48	-22.80	-20.09	-18.13
					(30.6)	(30.1)	(29.3)	(29.2)	(28.4)	(29.7)	(30.6)	(30.7)	(30.0)	(30.1)	(29.0)
Cut Point 6					-17.91	-14.30	-20.15	-18.93	-17.62	-18.87	-13.85	-18.85	-22.16	-19.46	-17.50
					(30.6)	(30.1)	(29.3)	(29.3)	(28.4)	(29.7)	(30.6)	(30.7)	(30.0)	(30.1)	(29.0)
Cut Point 7					-17.00	-13.40	-19.27	-18.04	-16.72	-17.98	-12.95	-17.96	-21.27	-18.58	-16.62
					(30.6)	(30.1)	(29.3)	(29.2)	(28.4)	(29.7)	(30.5)	(30.7)	(30.0)	(30.1)	(29.0)
Observations	333	289	289	289	289	289	289	289	289	289	289	289	289	289	289
Provincial Clusters	58	56	56	56	56	56	56	56	56	56	56	56	56	56	56
R-Squared/Pseudo R-Squared	0.04	0.08	0.10	0.05	0.0307	0.0268	0.0233	0.0254	0.0312	0.0240	0.0290	0.0245	0.0262	0.0227	0.0214
Log-Likelihood	-2678	-2284	-2284	-2284	-13071	-2284	-2284	-2285	-2284	-2285	-2283	-2284	-2284	-2283	-2283
Chi Squared	290.6	351.0	366.9	366.9		358.6	405.5	345.7	358.1	359.3	313.7	376.4	342.5	380.4	381.3
P-Value	0	0	0	0		0	0	0	0	0	0	0	0	0	0

OLS is Ordinary Least Squares; OPROBIT is an Ordinal Probabilistic Regression used to account for the scaled nature of the dependent variable.

Robust standard errors (clustered at province level) in parentheses. Analysis restricted to firms which began operations as equitized companies (PCI QH5_1=1 & PCI QH5_2=1)

*** p<0.01, ** p<0.05, * p<0.1; ln indicates natural log taken.; Dummy denotes dichotomous dependent variables.

IV-2SLS denotes an Instrumental Variables - Two Staged Least Squared procedures, instrumenting using whether the province is South of the 17th Parallel.

PCI Q is the question on Provincial Competitiveness survey from which variable was drawn.

Disclaimer

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