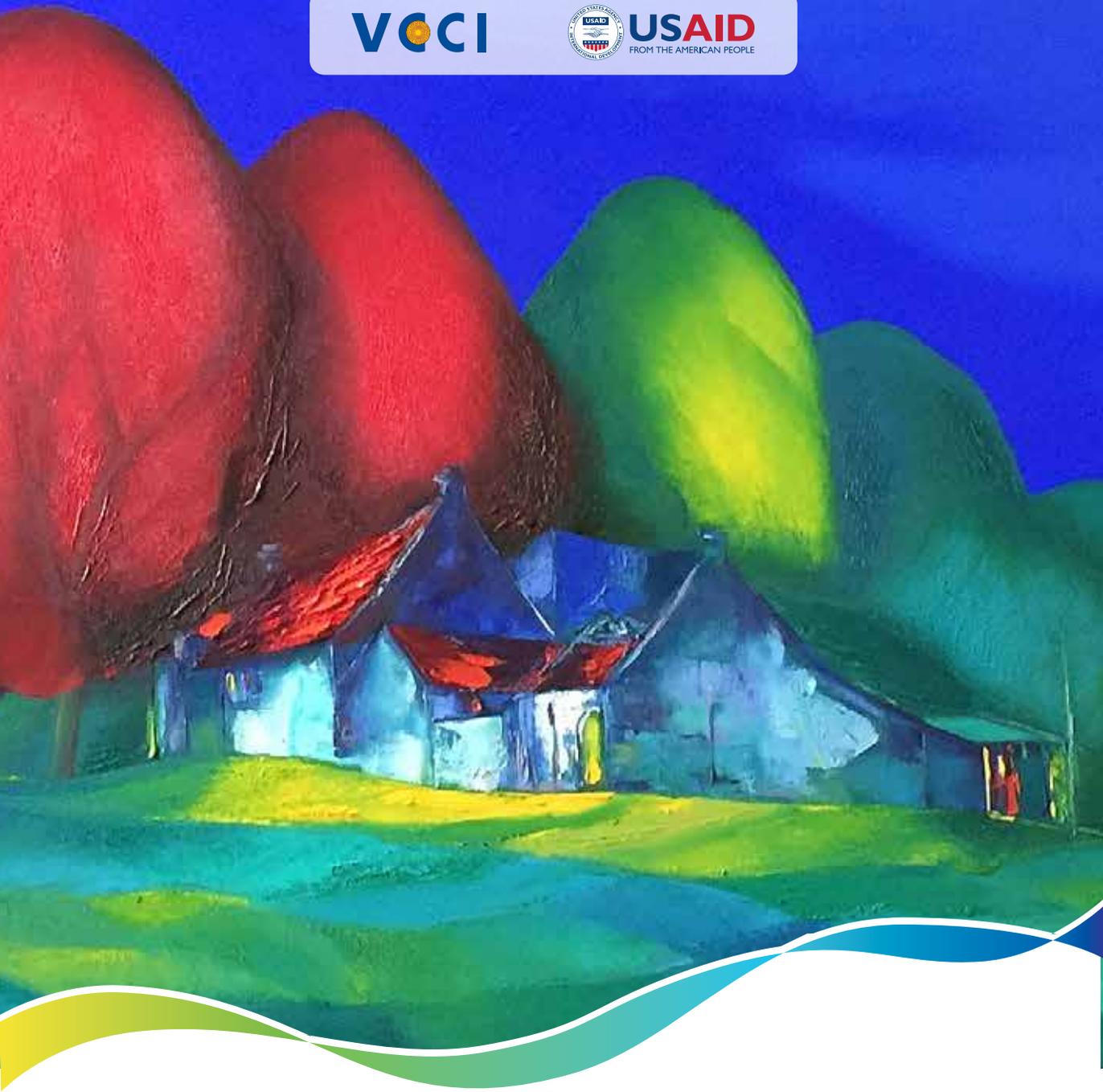


VOCI



USAID
FROM THE AMERICAN PEOPLE



**THE VIETNAM PROVINCIAL
COMPETITIVENESS INDEX**

*Measuring economic governance
for business development*

**PCI
2021**



"New Life 2"

Artist: Dao Hai Phong

**THE VIETNAM PROVINCIAL
COMPETITIVENESS INDEX**

*Measuring economic governance
for business development*

**PCI
2021**

Primary Author and Lead Researcher

Prof. Dr. Edmund J. Malesky

Research Team

Dau Anh Tuan

Pham Ngoc Thach

Truong Duc Trong

Le Thanh Ha

Tran Minh Thu

Nguyen Thi Le Nghia

Nguyen Le Ha

FOREWORD

The 2021 Provincial Competitiveness Index report, the seventeenth edition, presents business perceptions of provincial economic governance and reform efforts in Vietnam's 63 provinces and centrally run cities.

Provincial governments have contributed tremendously to Vietnam's reform achievements over the past two decades. Effective implementation of central policies and proactively addressing needs on the ground have proven to promote business development. Moreover, provincial governments have played an increasingly critical role in the devastating COVID-19 crisis these past two years, commendably implementing crisis response measures while at the same time helping firms to navigate the pandemic waves with the least disruptive effects.

To accelerate Vietnam's economic recovery firmly back to its high growth trajectory, action programs and implementation efforts at the provincial level will be vital, alongside key policies adopted by the National Assembly and the Government, such as the National Assembly Resolution 43 and the Government Resolution 11. Provincial governments will be instrumental in ensuring the speed and thoroughness of policy rollouts on the ground and the responsiveness of vaccination coverage programs and pandemic control policies, while ensuring accelerated execution of major infrastructure projects and public investments.

Despite a year made very difficult by the pandemic, the currents of reform at the provincial level in Vietnam remain powerful. The median score in the PCI 2021 boasts a continued rise thanks to strong commitments to administrative procedures reform and impressive declines in informal charges, although worrying signs remain in accessing land and post-registration procedures.

The health crisis has created huge challenges to the business community, slowing down the growth momentum over the last two years, but we remain confident that with the proactivity of provincial leaderships, the dynamics of reform programs at the grassroots level will continue at pace. Over the last few decades Vietnam's economic dynamics are the clear outgrowth of provincial proactivity.

This year's report cover is graced by the painting "New Life," created by Vietnamese artist Dao Hai Phong, which closely visualizes the message the PCI research team hopes to convey. Having overcome the worst moments of crisis to rise again, Vietnam is looking to the new development path ahead with full confidence – towards a bright and sustainable path, symbolized by the shades of blue in the painting.



Pham Tan Cong
Chairman and President
The Vietnam Chamber of Commerce and
Industry

ACKNOWLEDGEMENTS

The Provincial Competitiveness Index (PCI) is the result of a major ongoing, collaborative effort between the Viet Nam Chamber of Commerce and Industry (VCCI) and the U.S. Agency for International Development (USAID) to enhance provincial economic governance to create a business-enabling environment for private sector development in Vietnam.

The PCI 2021 Report was developed under the overall direction of Pham Tan Cong, Chairman and President of VCCI, Vice Chairman of the Prime Minister's Administrative Procedures Reform Advisory Council, Head of the Steering Committee of the PCI Program, and Dau Anh Tuan, General Director of VCCI's Legal Department, PCI Program Director, and benefited from important support by Ann Marie Yastishock, USAID Viet Nam Mission Director. Gregory Leon, Director of the Office of Governance and Economic Growth, USAID/Viet Nam and Nguyen Thi Cam Binh, Program Management Specialist, USAID/Viet Nam, provided strong managerial support for the program.

Edmund Malesky, Professor of Political Economy at Duke University and Director of Duke's Center for International Development, led the development of the PCI research methodology and was the primary author for the presentation of its analytical findings. Pham Ngoc Thach, Deputy Director of VCCI's Legal Department led the data collection, index construction and data analysis, and authored the initial versions of Chapters 1 and 2. Truong Duc Trong, expert from the Legal Department, co-authored the initial version of Chapter 1 and supported the entire data processing and index construction.

The entire process of the PCI survey and research would not be possible without the support and coordination by a competent PCI research team. Le Thanh Ha, Division Head, VCCI's Legal Department and Tran Minh Thu, PCI Project Coordinator, managed the PCI research and report schedule and outputs. Renate Kwon, Communication Coordinator at the Asia and Pacific Institute, Duke University, improved the report with excellent copyediting. The PCI 2021 report was based on a high quality survey, implemented by fifty students under the management and coordination of Nguyen Le Ha, Luu Ngoc Anh, and Ngo Khanh Huyen at VCCI. The survey process and report development was effectively supported by Nguyen Thi Le Nghia, Bui Linh Chi, Vu Ngoc Thuy, and Nguyen Thi Thu Thuong from VCCI.

This year, we would like to express our gratitude to Dao Hai Phong, a Vietnamese painter, for his great support to the PCI project. He helped us select his painting "New Life" as the theme for the report design from a number of his artworks, which reflects the spirit of this year's report.

Special thanks go to our team whose contributions have been very important to the development and refinement of the PCI over the years, and who have made efforts to spread the PCI findings. These experts included Madam Pham Chi Lan, Senior Economist, former member of the Prime Minister's Advisory Board; Dr. Le Dang Doanh, Senior Economist, former member of the Prime Minister's Advisory Board; Dr. Nguyen Dinh Cung, member of the Prime Minister's Economic Advisory Panel, former Director, Central Institute for Economic Development (CIEM), Ministry of Planning and Investment; Prof. Dr. Tran Dinh Thien, member of the Prime Minister's Economic Advisory Panel, former Director, Vietnam Institute of Economics, Vietnam Social Sciences Academy; Tran Huu Huynh, Chairman, Vietnam International Arbitration; Phan Duc Hieu, Standing Member, Economic Committee, 15th National Assembly; Dr. Nguyen Minh Phong, Vice Director, Communication and Theory Committee, People's Newspaper; Hoang Thi Lan Anh, Deputy Director, Modernization and Reform Committee, General Tax Department, Ministry of Finance; Nguyen Duc Lam, Department Director, Training Center for Elected Representatives, Deputies' Affairs Committee, Standing Committee of the National Assembly; Prof. Dr. Nguyen Van Thang, Sustainable Development Institute, National Economics University; Dr. Doan Hong Quang, Senior Economist, The World Bank Viet Nam; Nguyen Thi Cuc, former Deputy Director of the General Tax Department, Ministry of Finance, Chairman of Vietnam Association of Tax Consultants; Nguyen Cao Cuong, Chief Editor, TheLeader [Online Magazine]; Tran Thi Lan Anh, Vice Secretary-General cum Director General of Bureau for Employers' Activities, VCCI; Dr. Luong Minh Huan, Director, Business Development Institute, VCCI; Pham Hoang Tien, Director, VCCI's Small and Medium Enterprise Support Center; Tran Ngoc Liem, Deputy Director, VCCI Hochiminh City; Phi Van Duc, Director, VCCI Hai Phong; Nguyen Tien Quang, Director, VCCI Da Nang; Nguyen Dien, former Deputy Director, VCCI Da Nang; Nguyen Phuong Lam, Director, VCCI Can Tho; Do Dinh Hieu, Director, VCCI Thanh Hoa; Dao Thi Kim Hoa, Deputy Director, VCCI Nghe An; Dang Thi Thu Nguyet, Chief Representative, VCCI Khanh Hoa; Nguyen Huu Truong, Chief Representative, VCCI Binh Thuan; Nguyen Huu Thap, Chairman, Tuyen Quang Province Business Association; Nguyen Van Thoi, Chairman, Thai Nguyen Province Business Association; Duong Trong Khang, Standing Vice Chairman, Vinh Phuc Province Business Association; Vu Thi Kim Chi, Vice Director, Quang Ninh Investment Promotion Agency; Dr. Nguyen Phuong Bac, Director, Bac Ninh Institute of Socio-economic Studies; Dr. Le Duy Binh, Director, Economica Vietnam; Nguyen Minh Nhut, Hochiminh City Development Research Institute; Nguyen Viet Quoc, Da Nang Socioeconomic Development Research Institute; Dinh Tuan Minh, Economist, and many other experts from provinces, cities, research institutes, associations, and businesses that we cannot list here.

In the conception and development of the Provincial Green Index, a new VCCI initiative, we received valuable support from our partners and experts, who provided important inputs to the index methodology research (a full text of which is presented in Annex 2 of this report). Special thanks go to USAID/Vietnam for their great support to this initiative, and Nhu-An Tran, Economic Competitiveness Advisor, Office of Economic Growth, USAID/Vietnam, the

team members of the USAID INVEST project implemented by Development Alternatives Inc., Dr. Michael R. DiGregorio, Chief Representative, and Nguyen Tri Thanh, Senior Expert, both from The Asia Foundation Vietnam, and Dr. Markus Taussig, Professor at Rutgers Business School.

We would like to express our acknowledgements to the United Nations Development Program in Viet Nam for their collaboration in the survey modules on public procurement, with a focus on procurement in public health.

Our sincere thanks to Coca-Cola Viet Nam and Pharmacity for their partnerships with the PCI program in 2021.

Last but not least, we would like to thank businesses for spending their valuable time to answer the PCI 2021 survey in a complete, candid, and objective way. Your inputs are crucial to the PCI report, as they help us capture the business environment to a broad spectrum to inform policy making, thereby bringing about benefits for the development of the business community.

The opinions expressed herein are the authors' own and do not necessarily reflect the views of the Viet Nam Chamber of Commerce and Industry (VCCI) and the U.S. Agency for International Development, the United States Government, the aforementioned individuals, or their agencies.

Please use this suggested citation when referencing report or data: Malesky, Edmund, Pham Ngoc Thach, and Truong Duc Trong, 2022. *The Vietnam Provincial Competitiveness Index: Measuring Economic Governance for Private Sector Development*, 2021 Final Report, Vietnam Chamber of Commerce and Industry and United States Agency for International Development: Hanoi, Vietnam.



TABLE OF CONTENTS

CHAPTER 1

The Domestic Survey and the Provincial Competitiveness Index

- 35** Introduction
- 37** Changes in the Business Landscape
- 41** Provincial Competitiveness Index 2021
- 48** Key Features in Provincial Economic Governance Quality Over Time
- 72** Main Challenges Faced by Businesses
- 76** The Infrastructure Index 2021
- 79** Business Confidence
- 81** Conclusion

CHAPTER 2

The Foreign Investment Survey

- 83** Introduction
- 85** Performance
- 88** Characteristics
- 93** Regulatory Burden
- 97** Corruption
- 100** Labor Quality
- 105** Infrastructure
- 111** Conclusion



CHAPTER 3

ANNEXES

Chapter 3 COVID-19 Impact on Business Environment and Performance

- 113** Introduction
- 120** Differentiating Impact by Origin and Orientation
- 129** Four Measures of COVID Business Performance
- 136** Evaluation of Government Response
- 144** Firm-Level Protective Measures
- 152** Tying Everything Together: Machine Learning Analysis of Business Durability
- 156** Policy Implications
- 158** Appendix

- 161** Annex 1 Revised 2021 Methodology
- 197** Annex 2 Provincial Green Index Methodology

LIST OF FIGURES

Figure 1.1	Assessment of Reforms in Policy Areas Specified in Government's Resolution 19 and Resolution 02.....	39
Figure 1.2	Box Plots of the PCI and Core Index over Time (2006-2021).....	40
Figure 1.3	Weighted Provincial Competitiveness Index 2021.....	41
Figure 1.4	PCI 2021 Map	42
Figure 1.5	Relationship between 2020 and 2021 PCI	47
Figure 1.6	A Sample of Indicators on Proactive Leadership over Time.....	49
Figure 1.7	The Correlation between Province's GRDP Growth Rate in 2021 and Firm's Assessment of Local Government's Response to COVID-19.....	50
Figure 1.8	A Sample of Provincial-Level Indicators on Informal Charges over Time	52
Figure 1.9	Breakdown of Indicators on Informal Charges.....	53
Figure 1.10	Areas Where Informal Charges Remain Prevalent.....	54
Figure 1.11	A Sample of Provincial-Level Indicators on Regulatory Burden over Time.....	56
Figure 1.12	Firms' Assessments of Online Administrative Procedures	57
Figure 1.13	Troublesome Administrative Procedures.....	59
Figure 1.14	Traceplot of Time Spent on Bureaucratic Procedures, 2006-2021.....	60
Figure 1.15	Firms Assessments of Processes for Obtaining a Sublicense.....	62
Figure 1.16	Traceplot of Consistent Land Access and Security over Time	63
Figure 1.17	Core Indicators of Land Access and Security of Tenure over Time	64
Figure 1.18	Land-related Obstacles of Vietnamese Enterprises	65
Figure 1.19	Business Assessments on Key Features of the SME Support Law	67

Figure 1.20 Level of Familiarity with Different FTAs.....	69
Figure 1.21 Share of Firms Encountering Difficulty with Legal Documents Issued for Implementation of FTAs	71
Figure 1.22 Major Challenges Faced by Firms	73
Figure 1.23 Key Features of Credit Access in Vietnam.....	75
Figure 1.24 The Infrastructure Index 2021.....	77
Figure 1.25 The Correlation between the 2021 Infrastructure Index and the PCI Index	78
Figure 1.26 PCI Business Thermometer over Time.....	80
Figure 2.1 PCI-FDI Business Thermometer (2011-2021).....	86
Figure 2.2 PCI-FDI Business Thermometer, by Province.....	87
Figure 2.3 Size of Foreign Firms.....	88
Figure 2.4 FIEs by Sub-sector	89
Figure 2.5 Country of Origin of FIEs.....	92
Figure 2.6 Most Burdensome Administrative Procedures	95
Figure 2.7 Difficulties in Construction-Related Projects (2020-2021).....	96
Figure 2.8 FIE Assessment of Provincial Labor Quality	100
Figure 2.9 Quality of General and Vocational Training.....	101
Figure 2.10 Ease in Recruitment by Labor Type.....	102
Figure 2.11 Difficulty in Recruiting Workers.....	103
Figure 2.12 Trained Workforce Retention	105
Figure 2.13 FIE Assessment of Vietnamese Infrastructure Quality (2017-2021)	106
Figure 2.14 Firms' Assessment of Infrastructure Quality, by Sector	107
Figure 2.15 Rating of Infrastructure Quality by Manufacturers.....	108

Figure 2.16 Infrastructure Quality, Business Environment, and Confidence in Local Government	109
Figure 2.17 Infrastructure Quality, Business Environment Quality and Business Confidence	110
Figure 3.1 Industrial Sector Distribution by Firm Type	124
Figure 3.2 Location of Main Operation by Firm Type	125
Figure 3.3 Country of Origin by Investor Orientation	126
Figure 3.4 COVID-19 Disruptive for All Businesses but Slightly Worse for Domestic Investors	127
Figure 3.5 Dramatic Differences in COVID-19 Impact by Business Origin and Orientation.....	128
Figure 3.6 Foreign Firms Less Likely to Lay off Workers, but Share of Layoffs Quite Similar.....	130
Figure 3.7 Revenue Performance in 2020 and 2021	131
Figure 3.8 Forty Percent of All Operations Remain Profitable.....	132
Figure 3.9 Survival Probability by Business Type.....	133
Figure 3.10 Business Plans over Next Two Years.....	134
Figure 3.11 PCI Business Thermometer by Firm Type.....	135
Figure 3.12 General Satisfaction with Provincial Guidance.....	137
Figure 3.13 Difference in Quality Assessment between Foreign and Domestic Investors	138
Figure 3.14 Foreign Investors More Negative about Performance of Central and Especially Local Governments	140
Figure 3.15 Assessment of Provincial Government COVID Performance	141
Figure 3.16 Foreign and Export-oriented Investors Less Supportive of Restrictions on Business Activity during COVID-19.....	143

Figure 3.17 Foreign and Export-oriented Businesses More Likely to Take Preventive Measures within Their Operations.....	145
Figure 3.18 Vietnamese Domestic-oriented Businesses Much Less Likely to Take Preventative Measures to Protect Workers	147
Figure 3.19 Limited Efforts at Firm-Level Continuation Policies.....	149
Figure 3.20 Foreign Investors More Likely to Believe Productivity Improved as a Result of Automation	151
Figure 3.21 Covariates of Business Survival after COVID-19.....	154
Figure 3.22 Covariates of Business Expansion after COVID-19.....	155
Figure 3.23 Lasso Model Selection and Regularization.....	158

LIST OF TABLES

Table 2.1	Performance of Foreign Firms over Time.....	85
Table 2.2	Customers of FIEs (percent with at least one vendor).....	90
Table 2.3	Suppliers of FIEs (percent with at least one vendor).....	91
Table 2.4	Post-Entry Regulations for Foreign Firms.....	94
Table 2.5	Cost of Informal Charges (Amount/Annual Income).....	98
Table 2.6	Questions on Corruption in the PCI-FDI Survey.....	99
Table 2.7	Average Labor Training Cost of Firms (Percentage of Total Operation Cost).....	104
Table 3.1	Differences in Average Firm Characteristics by Origin and Orientation.....	122

ABBREVIATIONS AND ACRONYMS

AMCHAM	The American Chamber of Commerce
ASEAN	Association of Southeast Asian Nations
BRVT	Ba Ria - Vung Tau
CIT	Corporate Income Tax
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CPV	Communist Party of Vietnam
DDCI	Departmental and District Competitiveness Index
EVFTA	The European Union-Vietnam Free Trade Agreement
FDI	Foreign Direct Investment
FIE	Foreign Invested Enterprise
FTA	Free trade agreement
GDP	Gross Domestic Product
GRDP	Gross Regional Domestic Product
GSO	General Statistics Office
HCMC	Ho Chi Minh City
LURC	Land use right certificates
PACs	Public administration centers
PCI	Provincial Competitiveness Index
PCOM	The Provincial People's Committee
SBV	State Bank of Vietnam
SME	Small- and Medium-Sized Enterprises
UKVFTA	The UK-Vietnam Free Trade Agreement
UNDP	United Nations Development Program
USD	U.S. dollar
VAT	Value Added Tax
VCCI	Vietnam Chamber of Commerce and Industry
VND	Vietnam Dong
WTO	World Trade Organization



EXECUTIVE SUMMARY



THE 17TH PROVINCIAL COMPETITIVENESS INDEX (PCI) REPORT

The PCI is designed to assess the ease of doing business, quality of economic governance, and the results of administrative reform efforts by local governments in Vietnam's 63 provinces and cities to promote private sector development. The 2021 PCI report is the seventeenth iteration of the project. Based on a rigorous survey of the perceptions of domestic and foreign firms, the PCI report amplifies the collective voice of private entrepreneurs in Vietnam regarding economic governance in provinces where they invest and in the country as a whole.

This Executive Summary is divided into two main sections. In the first section, we describe the seven surveys and datasets which we use to create the index and analyze governance reforms in Vietnam. As the PCI has grown, we have added more precise research tools. While examining the report, readers often conflate these very different sources of information. Below, we step back and delineate our data sources and the purposes for which we use them.

In the second section, we present our primary research products. Over time, the PCI research has diversified beyond our signature index of economic governance for private firms. Each year, we also survey foreign investors, measure business confidence, rank provincial infrastructure improvements, and pursue one particular and critical research topic. In this year's special Chapter 3, we revisit a survey module from 2020 that was specially designed to measure the impact of the COVID-19 crisis on firms and assess how businesses have strived to maintain continuity.

I. PCI SURVEY AND DATASETS USED IN RESEARCH

Analysis in the report is based on seven datasets that the PCI collects and adds to each year as part of its research enterprise:

- *Annual survey of over 8,000 existing domestic private businesses.* In 2021, 8,036 domestic private firms in all 63 provinces answered the full survey. Firms are selected using random sampling to mirror provincial populations. Stratification is used to make sure that firm age, size, legal type, and sector are accurately represented. The adjusted response rate for the survey is 36.7 percent. Moreover, the Chief Executive Officer (CEO) or General Director filled out 45.7 of all surveys. Throughout the report, we refer to these data as the “PCI survey.”
- *Annual survey of over 2,000 newly established enterprises.* This year, we identified 18,680 businesses in all 63 provinces that started operations in 2020 and 2021. Among these new entrants, enumerators were able to verify the locations and contact information of 9,960 firms. From this subgroup, 2,091 responded, leading to an overall response rate of 21 percent. The research teams use these answers exclusively to calculate the first PCI subindex on experiences with business registration and licensing. In the report, we call this the “New Business Survey.”
- *Annual survey of 1,185 foreign-invested enterprises (FIEs).* This section reports on data collected from the 22 provinces and cities with the highest concentration of foreign direct investment (FDI). These firms are also selected using stratified random sampling. The adjusted PCI-FDI response rate is 28.2 percent, which is extremely high for research published in high quality refereed management journals.¹ The survey includes FIEs from 47 different countries and territories. The highest concentration is businesses from Asia, especially South Korea (399), Japan (250), China (126), Taiwan (113). We refer to this throughout as the “PCI-FDI survey.”
- *Provincial-level panel data on 63 provinces between 2006 and 2021.*² This dataset records average levels on 360 measures of economic governance and business performance since the beginning of the PCI for each province. The research teams use these data to track progress over time on governance reforms and the economic outcomes of those endeavors. We refer to this throughout as “PCI panel data.”

¹ Anseel, F., Lievens, F., Schollaert, E., & Choragwicka, B. (2010). Response rates in organizational science, 1995–2008: A meta-analytic review and guidelines for survey researchers. *Journal of Business and Psychology*, 25(3), 335–349; Mellahi, K., & Harris, L. C. (2016). Response rates in business and management research: An overview of current practice and suggestions for future direction. *British Journal of Management*, 27(2), 426–437.

² In statistics and econometrics, panel data or longitudinal data are multi-dimensional data involving measurements over time. Panel data contain observations of multiple phenomena obtained over multiple time periods for the same provinces or respondents.

- *Core PCI dataset.* These are data collected for each respondent of the PCI domestic survey between 2006 and 2021. These data contain 143,929 individual responses to questions asked in the annual PCI survey. Over 1,078 unique variables are covered.
- *Core PCI-FDI dataset.* This covers data for each respondent of the PCI-FDI survey between 2010 and 2021. These data contain 18,172 individual FIEs' answers to over 160 questions asked in the annual PCI-FDI survey.
- *Panel data on domestic, private firms.* Panel data are taken from a small sample of Vietnamese firms that have answered the PCI every year since 2006.

II. RESEARCH OUTPUTS

This year, the PCI research report delivers seven intellectual products to assist Vietnamese businesses, policy-makers, local government officials, development practitioners, and academic researchers. Below, we describe each of the outputs and the key findings for 2021.

- i. *The Signature Provincial Competitiveness Index (PCI).* Since 2005, this index has ranked Vietnam's 63 provinces based on economic governance areas that affect private sector development [see Figure 1.3 in Chapter 1].
 - o What does the index measure? The overall PCI index score comprises ten subindices. A province that is considered as performing well on the PCI is one that has: 1) low entry costs for business start-ups; 2) easy access to land and security of business premises; 3) a transparent business environment and equitable business information; 4) minimal informal charges; 5) limited time requirements for bureaucratic procedures and inspections; 6) minimal crowding out of private activity from policy biases toward state, foreign, or connected firms; 7) proactive and creative provincial leadership in solving problems for enterprises; 8) high-quality business support services; 9) sound labor training policies; and 10) fair and effective legal procedures for dispute resolution and maintaining law and order.
 - o How is the index created? The index is produced in a three-step sequence, referred to as the "three Cs": 1) **c**ollect business survey data and published data sources, 2) **c**alculate ten subindices and standardize them on a 10-point scale, and 3) **c**alibrate the composite PCI as the weighted mean of ten subindices with a maximum score of 100 points [see Annex 1 in this year's report for a full discussion of the methodology and the 2021 adjustment exercise].
 - o How does the index address changes in economic reform policies? To ensure the PCI reflects recent changes in the business environment of Vietnam as perceived by businesses and provides a useful tool for policy makers, every four years, the PCI re-evaluates its methodology and recalibrates the index. As we did in 2009,

2013, and 2017, we conducted an extensive review process in 2021, beginning with engaging our advisory board and local governments, though it did not rise to the level of a full recalibration this time for reasons discussed in Annex 1. While updating the methodology poses problems for measuring improvements over time, the dynamic nature of the Vietnamese economy and ongoing reform efforts require these periodic adjustments. See Annex 1 for all changes made to this year's methodology.

- o Which are the top provinces according to this year's PCI? Quang Ninh Province maintains the top ranking with 73.02 points for the fifth year in succession. Second in this year's ranking is Hai Phong (70.61 points), making its debut at this position. Coming in third and fourth place, respectively, are Dong Thap (70.53 points) and Da Nang (70.42 points). The remaining members of the Top 10 are Vinh Phuc (69.69 points), Binh Duong (69.61 points), Bac Ninh (69.45 points), Thua Thien-Hue (69.24 points), Ba Ria-Vung Tau (69.03 points), and Ha Noi (68.60 points).
- ii. *The Core PCI.* To measure economic governance over time, the PCI has developed a second tool, which we call the *Core PCI*,³ constructed from a smaller set of 35 indicators that have remained fixed for 16 years (2006-2021). The Core PCI follows the 2006 PCI methodology in its entirety and is never recalibrated, so each indicator and subindex remain comparable over the entire PCI.

Improvement over time. According to the Core PCI, this is the fifth year in a row that the median province has scored above 60 points on the 100-point scale. The 2021 score landed at 65.3 points, which is 1.6 points higher than the Core Index in 2020 (63.7 points), continuing a generally upward trend between 2017 and 2021.

Key governance trends to watch. Beyond these broader changes (described in Section 1.4, Chapter 1), we also highlight seven critical trends that reflect relative progress on governance initiatives:

1. Local governments continue to promote proactivity and private sector support. In three key areas measured by the Proactivity subindex, firms rate their provincial governments at the highest levels since the PCI started tracking these numbers in 2006. Eighty-six percent of firms agreed that provincial governments were creating positive business environments, 74 percent indicated their provincial leaders solved problems when regulations were unclear, and 62 percent of firms agreed that provincial governments had positive attitudes toward private businesses.
2. Informal charges continue to decline in most business-government interactions. Anticorruption has been a central mission of the Party and government at all levels in recent years. Since 2013, the Central Anti-Corruption Steering Committee has

³ For the List of Indicators of the Core PCI, see Annex 2, e-version of the 2017 PCI report.

achieved notable accomplishments in terms of investigations, legal proceedings, and convictions for corrupt acts. These benchmarks are mirrored in the PCI data. Businesses reporting that they had to pay for general informal charges dropped to 41.4 percent in 2021 from 44.9 percent in 2020, marking a record low in 16 years of PCI surveys (it was 70 percent in 2006). The size of informal charges has also declined considerably over time. The share of firms having to set aside more than 10 percent of their income to pay this cost dropped to 4.1 percent, less than half the level recorded in 2016 (9.1 percent).

However, more must be done to reduce corruption in provision of services and business inspections. Firms most often pay informal charges for public service delivery and procedures that should be provided to them anyway, such as accessing land, registering businesses, or obtaining utilities like electricity and water. Firms also pay during regulatory inspections to avoid work stoppages and potential fines, such as those for market management, environment, taxation, fire and safety, and land, especially in construction inspections (67.22 percent) and conditional business sublicensing (61.36 percent).

3. Administrative procedures settlement efficiency improved, but further reform efforts are needed. The 2021 PCI survey findings reaffirm that efforts to reduce and simplify administrative procedures are bearing fruit. Specifically, 87 percent of firms believe “officials are friendly,” and 75 percent of firms agreed that firms do not have to make multiple visits to agencies for administrative procedures. Similar percentages of firms said “paperwork is simple” (74 percent) and that “time spent on administrative procedures is less than regulations specified” (80 percent).

One element of this remarkable success in reforming administrative procedures is the stronger application of information technology to public service delivery. Online public services are increasingly popular for handling administrative procedures at all levels. Nearly 57.3 percent of firms agreed that public online services made transactions easier. Around 57 percent agreed online administrative procedures took less time and cost less than submitting paper documents at state agencies.

However, limitations remain. Procedures related to taxes, fees, land, social insurance, and construction continue to be troublesome. Businesses perceived the level of obstacles in complying with administrative procedures related to taxes and construction to be significantly higher in 2021 than in 2020. This may be due to limited regulatory capacity and increased attention to enforcement and revenue generation during the COVID-19 pandemic.

4. Compliance with conditional business sublicensing procedures remains burdensome. Conditional business sublicensing has become a government reform priority since 2018 and was re-emphasized in the Master Program of Public Administration in 2021 – 2030. This area has seen some small improvement, but levels of firm approval regarding the ease of implementation are never more than 60 percent. In other words, a sizeable share of firms was dissatisfied with the way the procedure was handled. Only 38.9 percent agreed that they did not encounter difficulties when fulfilling conditional business license procedures; 43.4 percent agreed that the time to implement the procedure was not longer than published; and only 39.1 percent said the fee was not higher than formally specified. Troubles in registering sublicenses caused 21.7 percent of domestic firms to delay or cancel their business plans.

5. Land access is becoming more challenging. In the PCI 2021, the most concerning trend is the continued decline in the Land Access & Security of Tenure subindex. While one positive sign is that the share of firms reporting no difficulty with land procedures rose to an all-time high in 2021 (55 percent), the share of firms agreeing that compensation for expropriation is appropriate remains low at 29 percent, significantly declining from 40 percent in 2013. Worryingly, the share of firms that reported possessing land use right certificates (LURCs) fell to the lowest level since 2006. This is a severe concern for long-term investment prospects, LURCs secure a business' property and provide confidence that their investments on that land will be safe for the foreseeable future.

Among key constraints in firms accessing land or seeking to expand their business premises, the biggest challenge is complicated procedures for land rental and purchase (42.5 percent). Next is provincial land use planning which does not match firms' development needs (39.3 percent). About 30.5 percent of firms reported that land information and data were not provided rapidly and conveniently. Over one fifth of firms complained about insufficiency of available land. Other major concerns include high land prices set by the government, fast-increasing government land prices, slow land clearance, and longer than published processing times for land dossiers. Challenges related to land procedures are also top deterrents, leading to 53.8 percent of firms delaying or cancelling business plans in 2021.

6. The Law on Support for Small and Medium Enterprises, effective January 1, 2018, has had only modest tangible effects on business performance. In a new analysis for 2021, the PCI research team assessed implementation of this critical effort to bolster the performance of the SME sector, especially during the difficult COVID-19 recovery period. Disappointingly, fewer than eight percent of firms benefitted from individual programs. Only seven percent of firms actually accessed the most popular support program: credit from the SME Credit Guarantee Fund. The least popular program offered subsidies for rentals in industrial parks, high-tech parks,

and industrial complexes, where a mere 4.75 percent of firms indicated they benefitted from this opportunity.

On the bright side, in each program category, over 80 percent of firms that accessed relief programs indicated eligibility procedures were easy to complete. However, one note of caution is that only firms completing the entire procedure gave these assessments. In fact, around 51.3 percent of PCI 2021 respondents said they did not hear about the SME Support Law. Among those that knew about the law, only 36.8 percent reported benefitting from at least one program. Given the high rate of firms unfamiliar with the law, the level of difficulty in complying with eligibility procedures may be larger than perceived by firms that accessed such support programs.

7. Local governments should enhance information dissemination and guidance to firms seeking international economic integration. By end of 2021, Vietnam has entered fifteen FTAs with key partners. Among these agreements, the most notable are the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the European Union-Vietnam Free Trade Agreement (EVFTA), and the UK-Vietnam Free Trade Agreement (UKVFTA). These agreements are new generation FTAs, boasting extensive and comprehensive commitments in trade, investment, and related areas such as labor, environment, state enterprises, government procurement, transparency, and investment dispute resolution mechanisms. In the 2021 PCI, the research team explored how accessible FTA-related information was to businesses, how firms benefitted from support programs to help them take advantage of FTA opportunities, and what constraints firms faced.

Familiarity with free trade agreements is at a modest level among domestic firms. The CPTPP is the most known treaty, with just over 30 percent of firms claiming awareness. Familiarity with EVFTA and UKVFTA was nearly 29 percent and 14 percent, respectively. Interest in the agreements, however, is considerably higher among Vietnamese SMEs with interest in exporting their goods or services.

The ability of Vietnamese businesses to benefit from FTAs has been hampered by lack of information about formal requirements and confusing and contradictory implementing documents. About 49 percent of firms reported difficulty complying with legal documents which are issued by Vietnamese government agencies to implement commitments made under FTAs. These difficulties were experienced quite evenly by different types of firms, regardless of market orientation, size of investment, size of employment, years in operation, or industrial sectors. These results point to the need to enhance the effectiveness of information dissemination and guidance to firms to take best advantages from FTAs.

- iii. **The PCI Infrastructure Index** ranks the quality of infrastructure and connectivity in each province. The infrastructure index is not included in the calculation of the PCI scores. However, it serves as a useful reference for businesses as well as policy-makers (see Figure 1.24, Chapter 1).
- o Why is infrastructure not included in the signature PCI? The PCI research team has determined it is unfair to include infrastructure in the overall PCI ranking for three reasons: i) initial endowments were dramatically different across provinces, making it very difficult for some rural provinces to catch up; ii) provinces are not solely responsible for infrastructure within their borders, as many investments are funded through central government initiatives; and iii) the team strongly believes improvement of infrastructure is best achieved through regional cooperation and does not want to encourage duplicative and damaging competition in such areas as port or airport construction.
 - o What does the infrastructure index measure? This index is built upon the survey results of firms' perceptions about infrastructure quality across provinces and cities and published data from government sources. It includes four subindices, measuring: 1) industrial zones/clusters; 2) roads and transportation; 3) basic utilities; 4) telecommunication, and 5) other infrastructure.
 - o Which provinces have the best infrastructure? Binh Duong, Quang Ninh, and Da Nang comprised the Top 3 in the Infrastructure Index. These provinces have frequented the top rankings for many years.
 - o The relationship between governance and infrastructure. This year's findings again show the strong, positive correlation between the quality of governance and infrastructure in 2020. There remains a close correlation across the 63 provinces. Consistent with the findings of the previous PCI surveys, PCI 2021 finds that provinces performing well in governance indicators tend to have higher quality infrastructure. Provinces that outperform the median in terms of infrastructure but do not perform as well in governance appear to be burdened by a structural advantage trap where they have not pursued governance vigorously because they were confident that investment would come regardless of their efforts. Meanwhile, provinces that perform better than the median in terms of their governance but face the obstacle of limited infrastructure must "conquer hardships" through dedicated reforms to overcome their limited endowments.
- iv. **Challenges to Business Operations in 2021.** This year, the PCI repeated a module asking businesses about the greatest obstacles to business success. A large number of businesses pointed to non-governance issues as their key concerns.
- o Key challenges. The top five obstacles are finding customers (69 percent), accessing banks or other forms of credit (47 percent), market downturn (32

- percent), finding suitable personnel (27 percent), and finding business partners (24 percent).
- v. ***PCI Business Thermometer.*** Each year, respondents to the PCI survey answer a question about their investment plans for the next year. We then record and plot the share of respondents planning to “increase the size of their operations.” The measure has become an elegant indicator of optimism and confidence felt by the business community regarding its economic prospects, and it serves as an excellent leading measure of per capita GDP growth (see Figure 1.26, Chapter 1).
- o Optimism has declined. This year, the thermometer demonstrates that business confidence was hit even harder by the COVID-19 pandemic with only 34 percent of respondents planning to expand their operations in the following two years. This is the lowest level of business confidence recorded in Vietnam since the 2012-2013 hyperinflation crisis.
 - o Business outlook varies greatly by sector. Firms that were able to export manufactured products, such as furniture (64 percent), motor vehicles (55 percent), and chemicals (52 percent) remained optimistic about expansion, as did businesses in the finance and insurance industry. However, other sectors appeared to have been more injured by the pandemic and were less confident about their prospects. Businesses in mining (30 percent) and information/communication (32 percent) were particularly negative.
- vi. ***Analysis of the PCI- FDI Survey.*** Each year in Chapter 2 of the report, we present the findings from the PCI-FDI survey regarding governance improvements and challenges that influence the performance of foreign-invested enterprises (FIEs) in Vietnam. Despite unavoidably negative effects from the global COVID-19 pandemic, Vietnam remains one of the top destinations for foreign investment and its investment climate was positively rated by foreign investors. The burden of inspections has decreased, and administrative procedure reform has made positive progress in many areas. The burden of informal charges continues its downward trend. Labor quality and infrastructure quality have also improved significantly over time.
- o Characteristics of foreign investors. Large majorities of foreign firms in Vietnam were SMEs. Most foreign firms are exporters, either sending goods back to their home country (27.3 percent) or to a third country (31.2 percent). Manufacturers remain the largest group among the PCI-FDI 2021 respondents, accounting for 57.4 percent of the total, spread out across several leading subcategories of fabricated metals, computers, electronic products, rubber and plastics products. There is a gradual increase in the share of firms moving into more technologically sophisticated industries over the last three years.

- o Clear evidence of the adverse impact of COVID-19. The pandemic left clear negative effects on FIEs' performance. The share of FIEs reporting profit was at an all-time low in this decade (38.7 percent). The share of foreign firms reporting losses also hit a record high since 2012 at 47.9 percent, an increase from 47.1 percent in 2020.
- o Optimism for the future remains strong. In contrast to domestic businesses during this uncertain economic environment, a surprisingly large share of foreign firms considered or planned expansions in the next two years (47.7 percent). This was an improvement from 2020 when only 40.8 percent projected expansion after their operations recorded big declines. Renewed business confidence was observable across most sectors, regardless of firms' orientation towards exports or the domestic market.
- o Results of the government's anticorruption campaign are visible. The new leadership remains dedicated to anticorruption. Data from PCI-FDI 2021 revealed the effect of these efforts with most indicators of informal charges on a decline.
 - The share of firms not paying any informal charges at all reached 41.9 percent, the highest since 2010. However, 1.7 percent of firms still reported paying more than 10 percent of business revenue in bribes in 2021, marginally increasing from 1.2 percent the preceding year. Similarly, 5 percent of firms in 2021 spent five to ten percent of revenue to pay informal charges while only 2.1 percent did so in 2020.
- o Labor quality remains satisfactory but not stellar. More FIEs expressed satisfaction with local labor quality, general education and vocational training. Foreign firms still encountered difficulties recruiting several categories of high skilled employees.
 - Fifteen percent of surveyed FIEs reported that local workers' skill level "completely meets" their needs and 43 percent believed that it "considerably meets" the firm needs. The share of firms rating labor quality as "moderately" meeting their needs was 37 percent.
 - The fractions of firms finding it easy to recruit technicians and managers are 25 percent and 20 percent, respectively.
- o Firms report mixed experiences about post-entry regulations.
 - COVID-19 disrupted progress on the streamlining of administrative procedures in ways that are still being felt across the economy, but particularly for FIEs.
 - The median number of inspections dropped to zero in 2021, down from one visit in 2020 and two visits in 2019. The share of firms undergoing harassment (five inspection visits or more) drastically declined from 6.3 percent in 2020 to just

3.2 percent in 2021, thanks to the government instruction to forego all planned inspections except in special cases or in cases with evidence of violations during the COVID-19 crisis.

- Despite the central government's emphasis on promoting economic activity, a large proportion of foreign firms reported an increased regulatory burden in 2021. The share of firms spending more than five percent of executives' time to ensure bureaucratic compliance leaped sharply from 32.9 percent in the previous year to 60.6 percent. The median time for export clearance increased from one day in 2020 to two days in 2021. Similarly, the median number of days for imports to clear customs rose significantly from 2 days in prior years to 3 days in 2021.
 - Procedures for investment registration, social insurance, import/export, environment, market regulation, and food safety were rated more positively than in 2020. However, certain types of administrative procedures proved equally or more troublesome to FIEs as in prior years; namely, taxes (25 percent), fire prevention (24 percent), land (17 percent), construction (12 percent), and labor (15 percent).
 - o Foreign perceptions of infrastructure are improving. The 2020 PCI report pointed out that Vietnam's infrastructure was not a comparative advantage when foreign firms were considering an investment location. However, infrastructure development is a priority for policymakers and, as we document in this year's report, its quality has improved incrementally in recent years.
 - Foreign investors are more satisfied with most major forms of Vietnamese infrastructure, including roads, electricity, telephone, internet, water, and industrial zones.
 - Infrastructure priorities differ by sector. Services and commercial sector firms expressed greatest approval for electricity provision and access. FIEs in the government priority manufacturing sectors recorded improvements in most infrastructure types between 2017 to 2021, especially enterprises in the more technologically sophisticated electronics industry.
 - FIEs' ratings of infrastructure quality, business environment and confidence in local governments are highly correlated and generally positive.
- vii. ***A Special Investigation of the Impact of COVID-19 on Business Environment and Performance in Vietnam.*** In this year's special investigation for Chapter 3, we analyze data from a special module dedicated to analyzing the impact of the pandemic on business operations and performance, the perceived effectiveness of the government response policy and firms' response policy. Several critical findings emerge:

- o COVID-19 was extremely disruptive for all businesses but the effects were diverse for different categories of firms. On average, 92 percent of surveyed enterprises reported that their COVID-19 experience in the past year was either negative or completely negative (94 percent of domestic firms versus 86 percent of foreign investors).
 - Export-oriented firms reported greater difficulties managing and engaging with supply chains and accessing international customers. Export-oriented firms also were more likely to complain about the availability of employees. This concern was most vocally expressed by foreign exporters. Nearly three-quarters cited it as their most crucial issue.
 - Domestic-oriented foreign firms were predominantly concerned with accessing domestic customers. Sixty-one percent of domestic-oriented foreign companies and 52 percent of domestic-oriented Vietnamese businesses indicated this was a problem in 2021.
 - A final problem was cash flow shortages, which were widespread but more heavily concentrated among Vietnamese firms. Foreign firms were less susceptible than their domestic counterparts due to higher sales volumes, more diversified customer bases, and access to alternative sources of capital and financing.
- o COVID-19 Impact on Employment
 - Thirty-three percent of domestic firms and 18 percent of foreign firms laid off at least one worker in 2021. Domestic-oriented Vietnamese firms released a median of 4 workers; their export-oriented counterparts reduced their laborers by 5 employees at the median. In the average Vietnamese firm, about 50 percent of the workforce was let go.
 - About 18 percent of foreign firms laid off workers as well, with the median layoff size being four employees, accounting for seventeen percent of the workforce in the average firm. However, foreign exporters laid off about 10 workers per operation. In total, this implies that close to half the domestic-oriented and export-oriented workers were let go. This is a 20-percentage point increase over 2020. A small concentration of exporters, particularly in electronics and garment manufacturing, laid off vast numbers of employees. Forty-two foreign firms (2.6 percent) laid off at least 100 workers, and four firms released 400 or more employees.
- o COVID-19 Impact on Sales/Revenue
 - Export-oriented foreign firms suffered the highest decline in sales revenue

between 2020 and 2021, reflecting the impact of the global supply chain disruption. At the same time, however, their sales remained substantially larger than other groups. Their quicker recovery, greater resources, and more sizable financial assets played a tremendous role in these businesses' assessments of their future.

- In 2021, the greatest losses were recorded by foreign exporters with roughly 56 percent claiming large or small losses. Domestic-oriented FIEs also demonstrated performance challenges with slightly less than half (49 percent) reporting losses. Domestic enterprises struggled but fared slightly better. Slightly less than 40 percent of both types of domestic firms reported losses in 2021, marginally higher than in 2020.
- Nearly half of foreign firms believe that they can operate indefinitely in Vietnam if current economic and COVID-19 conditions remain, compared to one-third of Vietnamese businesses.
 - Among firms concerned about closure, foreign firms anticipate survival durations of nearly a year, compared to 7 months for Vietnamese businesses. The biggest differences appear in optimism about the future.
 - A majority of export-oriented foreign companies indicated a willingness to expand. This is followed by 45 percent of domestic-oriented foreign businesses and 42 percent of export-oriented Vietnamese firms. The least optimistic group is domestic-oriented Vietnamese firms, predominantly in the retail and service sectors, where only 29 percent of businesses see expansion as a possibility in the near future.
- o Government policy and firm-level initiatives play critical roles in firm durability. Despite their slightly better sales performance and profitability in 2021 compared with foreign investors, Vietnamese firms are not well-positioned to survive another difficult year. Only 35 percent of domestic-facing companies and 29 percent of export-oriented companies believed they were capable of survival, compared to nearly half of all foreign firms.
 - Supermajorities of all businesses expressed support for government responses at both the central and local levels. Vietnamese firms were significantly more positive about provincial guidance and transparency on COVID-19 regulations and policies. However, foreign firms were more likely to say they received help accessing government relief programs from local authorities.
 - When we drill down into the differences between foreign and domestic investors within individual provinces, we find substantial gaps. Foreign firms in Khanh Hoa, for instance, were 49 percentage points more favorable about

government policies than domestic firms in the same province. Quang Nam province illustrated the opposite bias on behalf of domestic firms. In the middle are provinces such as Binh Duong, where domestic and foreign investors were equally dissatisfied. Bac Ninh stood out with high levels of support from both sectors.

- Overall, foreign investors are more negative about both provincial and central government performance than domestic investors. On average, 72 percent of domestic investors were satisfied with the central government versus 64 percent of foreign investors. Views of provincial government were slightly lower; 70 percent of domestic investors were satisfied compared with 61 percent of foreign investors. The lowest ratings overall were expressed by domestic-oriented foreign investors.
- Surviving businesses used a wide range of approaches to navigate the effects of COVID-19. Foreign exporters were more likely than other businesses to engage in all activities related to safeguarding firm operations, especially hiring a response coordinator, auditing critical activities, and checking government information.
- Large majorities of businesses in the three most internationally engaged types were more engaged in efforts to aid and protect workers. Foreign businesses were slightly more active than Vietnamese firms with little difference between exporters and those targeting the domestic market.
- Automation may have been the most consequential choice, as 62 percent of foreign exporters answered that automation helped productivity.
- Using a machine learning approach, we brought all the different factors together to identify the drivers of business durability and optimism. We find that domestic firms feel significantly more threatened than their foreign counterparts. Exporters appear to be recovering more quickly and are more optimistic about the future. However, exporting Vietnamese firms may require more tailored support programs to navigate difficult COVID-19 waves. Government policies and attitudes matter. Firms that rated government responses more highly believe they can endure and are more likely to plan expansion. Finally, firms can take their own steps to enhance their opportunities. Most individual steps matter, but firms that were proactive about renegotiating vending contracts and protecting worker hygiene have better business prospects. Finally, among all types of firms, those that engaged in automation are much more optimistic about the success of their future business.

o Policy Recommendations

- *Domestic-facing Vietnamese firms are hurting and are in urgent need of support.* Their number one concern is cash flow shortages. As they struggle, they have laid off workers and lowered salaries through direct contractual changes and working hour reductions.
- *Many of these were underserved by tax relief programs because they had little profit or sales to begin with,* so Corporate Income Tax (CIT) and Value Added Tax (VAT) relief was less successful. Direct subsidies, guaranteed loans, and labor support programs are urgently needed.
- *These companies would also benefit from restructuring support* to help them expand their market and sales through e-commerce and internet activities, which could address their second largest concern: reaching domestic consumers.
- *Export-oriented firms could benefit from greater assistance subsidizing medium-term adjustments to international supply chains either through sales to foreign buyers in Vietnam or to external buyers.* Targeted business partner matchmaking may be helpful. Additional medium-term support can be directed to assist automation of business tasks. In particular, digitalization of services, industrial robots, and machine learning in data analysis can generate large productivity improvements.
- *Foreign firms have greater resources to draw upon and were better able to self-insulate to protect workers and business operations as well as re-tool to address new challenges.* That said, there are policy changes that could help them. Ensuring safe international reopening through less restrictive entry policies for tourists and business travelers, while still maintaining requirements for vaccines and rapid testing, should enhance sales opportunities for foreign service companies while minimizing the danger of another outbreak and subsequent lockdown.
- *Finally, export-oriented foreign firms need greater support to maintain their output levels and meet international shipping deadlines.* Less restrictive lockdowns and regulations, especially in the industrial clusters where these businesses operate, have already had some positive effects. Additional benefits will be gained from policies facilitating the movement of migrant labor into these locations, as will better and safer housing, and support for providing essential medical and other services when they arrive.



CHAPTER 1

01

The Domestic Survey and the Provincial Competitiveness Index



1.1. INTRODUCTION

The 2021 Provincial Competitiveness Index (PCI) report conveys the collective voice of the business community in Vietnam, encouraging all levels of government to foster an enabling business climate. Operations across Vietnam faced tremendous hardships associated with COVID-19, but the business response to the PCI survey remained strong: 11,312 firms took the survey, a 31.35 percent response rate.¹ On average, one in every five firms in Vietnam has answered the PCI survey since its inception in 2005, for a total of 164,624 respondents. These numbers demonstrate that the PCI is considered an effective channel to help firms share their opinions about their local business environment.

Over its seventeen-year history, the annual PCI report has become a trusted, evidence-based source of reference for both central and provincial governments to develop and implement policies that assist stakeholders, improving the business environment while at the same time offering an important reference for investors considering locations in Vietnam.

Typically, the PCI recalibrates the survey and sub-index weights every four years to ensure greater accuracy and confidence in the results. Prior recalibrations took place in 2009, 2013, and 2017. However, the PCI team opted for an adjustment rather than a full recalibration in 2021 due to continued global disruptions from COVID-19. The key

¹ Including 10,127 domestic firms and 1,185 foreign invested firms who responded to the 2021 survey.

concern is that a period of immediate recovery from this unique shock requires a different set of priorities for central and local policy-makers than more normal periods where more stable economic managements is required. Given the importance of sub-index weights for setting governance priorities and for tracking progress overtime, we determined that it would be best to generate the weights once the country is more firmly on track to a healthy and sustainable recovery. Until then, we will maintain the 2017 weights, which were generated during the last period of pre-pandemic economic stability. The recalibration of the sub-index weights will be postponed until 2023.

In this year's edition of the PCI report, we present findings from our interim adjustments to the PCI indicators, reflecting changes and developments in the business and regulatory environment. These adjustments enable comprehensive and valuable insights into the business environment and economic governance to state agencies at all levels, especially provincial governments, to promote private sector development.

Another reason for adjusting the PCI in 2021 was to begin capturing data on emerging challenges and economic development priorities. For example, while recent PCI reports show bias towards state owned enterprises (SOEs) declined significantly in recent years, favoritism toward "backyard" firms that have close connections with local officials remained relatively widespread. This required adjustments to indicators on policy bias. Provincial administrations also became increasingly interested in subjects such as international economic integration and green growth. Therefore, the PCI needed to make changes to begin recording this information at the provincial level.

In the 2021 revision, we took three steps. First, we dropped indicators obviated by reforms or that lost their original meaning. Second, we added new indicators to capture emerging challenges in the business landscape and major obstacles facing private firms. Third, we reorganized the subindices so that each indicator can best measure dimensions of economic governance and reflects the reform spirit to which we aspire. Usually after each recalibration, we maintain the methodology for the next four years. Since we opted for an adjustment rather than full recalibration in 2021 to avoid setting weights based on the historically unique COVID-19 period, we plan to maintain the full new calibration forward from 2022-2027. Direct comparison of performance over time on the full PCI will be possible over the full period of 2017-2021, just as it was during the prior iterations: 2005-2008; 2009-2012; and 2013-2016. We discuss the adjusted methodology in detail in the appendix of this report. Longitudinal comparisons from 2005 to 2021 are always possible using the Core index, which is made up of a smaller subset of questions that are never changed.

Enhanced by these modifications, the 2021 PCI maintained the consistent goal of measuring economic governance and efforts by provincial governments to reform administrative procedures and create an enabling business environment that promotes domestic private sector development. A province that is considered as performing well on the PCI is one

that has: 1) low entry costs for business start-ups; 2) easy access to land and security of business premises; 3) a transparent business environment and equitable distribution of information to businesses; 4) minimal informal charges; 5) limited time requirements for bureaucratic procedures and inspections; 6) minimal crowding out of private activity from policy biases toward state, foreign, or connected firms; 7) provincial leadership that is proactive and creative in solving problems for enterprises; 8) high-quality business support services; 9) sound labor training policies; and 10) fair and effective legal procedures for dispute resolution and maintaining law and order.

The index is produced in a three-step sequence, referred to as the “three Cs”: 1) **c**ollect business survey data and published data sources, 2) **c**alculate ten subindices and standardize them on a 10-point scale, and 3) **c**alibrate the composite PCI as the weighted mean of the ten subindices with a maximum score of 100 points.

Chapter 1 consists of six sections. First, we review changes in Vietnam’s business landscape from the 2021 PCI respondents’ perspective. Second, we present the 2021 PCI ranking and analyze important issues in economic governance. Third, we explore some essential measures of provincial economic governance quality. Fourth, we highlight key challenges facing private businesses during the year. The infrastructure index and its findings, another critical part of the PCI survey, are discussed in the fifth section. The last section provides an update of the PCI Thermometer as a composite measure of business confidence in Vietnam.

1.2. CHANGES IN THE BUSINESS LANDSCAPE

A facilitating environment fosters stable business operations and promotes growth while attracting new investors, thereby creating more jobs and contributing to the socioeconomic development and national competitiveness of a country. Since 2005, the PCI has made diligent efforts to encourage governments at all levels to build a business-enabling environment. Since 2014, the national government has made improving the business environment a top economic policy priority, institutionalized by Government Resolution 19 (renewed every year between 2014 and 2018) and its successor, Resolution 02, issued in 2019, specifying tasks and measures to improve the business environment. Resolution 02 was renewed on January 10, 2022, setting objectives for 2022 and a vision towards 2025.² The actions set forth in this resolution are expected to contribute to a successful implementation of the policy specified in the National Assembly Resolution 43/2022/QH15 regarding fiscal and monetary policies that support the government’s program of socioeconomic recovery and

² *The Vietnamese Government, 2022, “Resolution 02/NQ-CP regarding the key tasks and solutions to improve business environment and national competitiveness in 2022”, <https://vanban.chinhphu.vn/?pageid=27160&docid=205075&classid=509>*

development³ according to details stipulated in Resolution 11/NQ-CP.⁴ These were intended to “prioritize improving the consistency and quality of the regulatory system while effectively organizing and implementing the regulatory system, creating an investment and business environment that facilitates business operation, promotes equality towards all economic actors, and fosters innovation...”⁵ articulated in the 13th National Party Congress resolution. In Resolutions 19 and 02, the Vietnam Chamber of Commerce and Industry (VCCI) was given the mandate to “provide independent monitoring and assessment on a regular basis of the implementation of the Resolution.”⁶

To explore and timely reflect changes in the business environment across Vietnam, since the 2017 PCI survey, we have asked firms to assess changes in various fields under Resolutions 19 and 02. Observations from the past five years indicate that the government reform endeavours positively influenced firms’ perception of the business climate in Vietnam. Figure 1.1 depicts firms’ ratings across specific policy areas between 2017 and 2021. Business registration was rated positively by 76.8 percent of firms, maintaining its lead. Access to electricity is second, with 72.4 percent of firms favorably assessing this area. Procedures related to social insurance, property registration, contact enforcement and paying tax are also highly rated at 66.7 percent, 65.8 percent, 64.3 percent and 64.2 percent, respectively. One area that shows tremendous progress while still having a long way to go is bankruptcy procedures. Reaching 51.5 percent favorability in 2021, bankruptcy settlement is nevertheless much better rated than in 2017 when only 34 percent of firms positively perceived this area.

All these results point to improvements in the business environment over the last five years. However, strong reform efforts are still necessary. Changes are unevenly distributed across policy areas and improvements are not yet perceived by a considerable proportion of firms. Areas with the greatest need for further attention include bankruptcy procedures, import/export, access to loans and credits, and investor protection. Reform efforts must be ongoing at all government levels to maintain the achievements so far and to further improve the business environment in Vietnam.

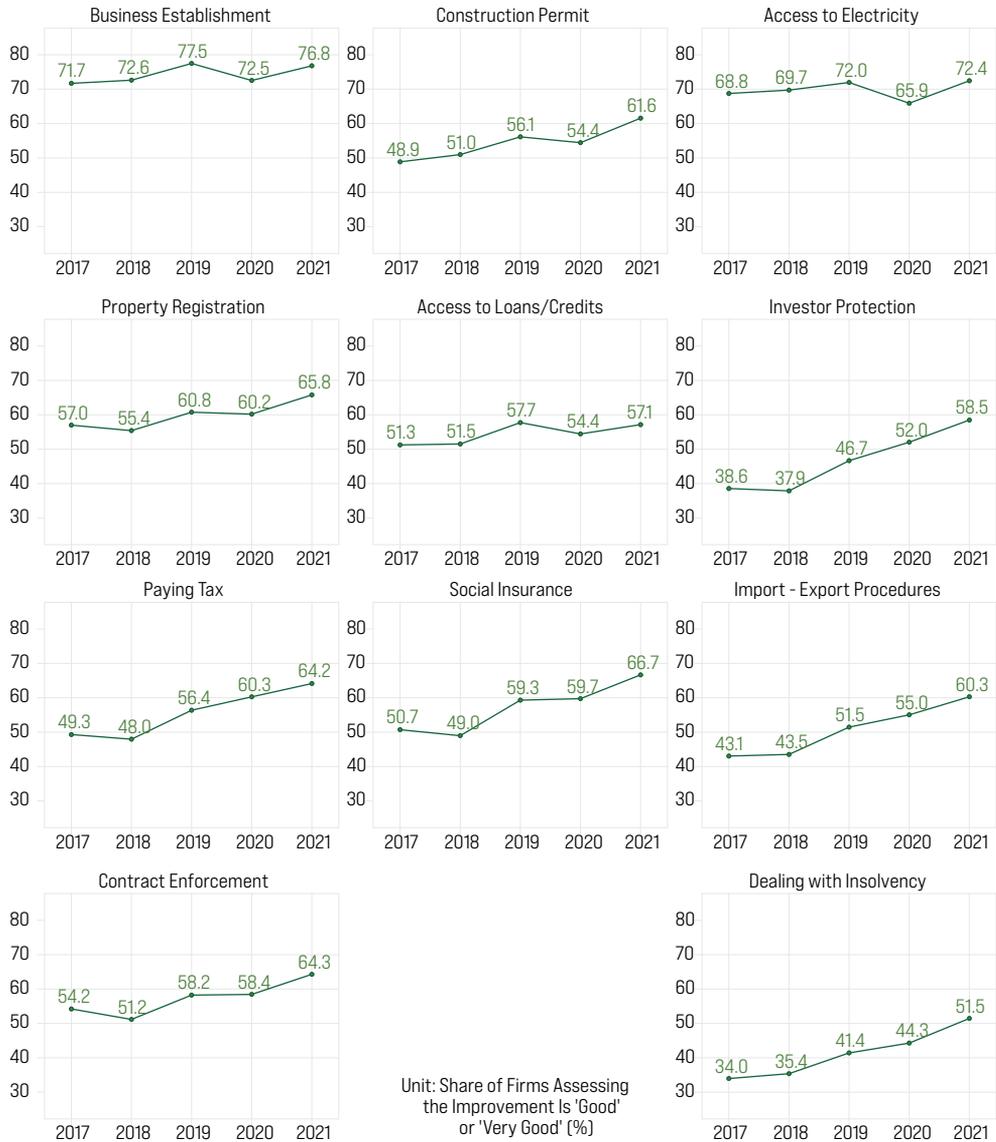
3 National Assembly, 2022, “Resolution 43/2022/QH15 regarding the fiscal and monetary policies to support the Government program of socioeconomic recovery and development”, <https://vanban.chinhphu.vn/?pageid=27160&docid=205183>

4 The Vietnamese Government, 2022, “Resolution 11/NQ-CP of the Government regarding the Socioeconomic Recovery and Development Program and the implementation of the National Assembly Resolution 43/2022/QH15 on the fiscal and monetary policies supporting the Program”, <https://vanban.chinhphu.vn/?pageid=27160&docid=205273>

5 The Government Online Newspaper (2021), “The full text of the 13th Party National Congress Resolution”, <https://baochinhphu.vn/toan-van-nghi-quyet-dai-hoi-dai-bieu-toan-quoc-lan-thu-xiii-cua-dang-102288263.htm>

6 The Vietnamese Government, 2019, “Resolution 02/NQ-CP of the Government on continuing the key tasks and solutions to improve business environment and national competitiveness in 2019 and orientations towards 2021”, <https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=195714>

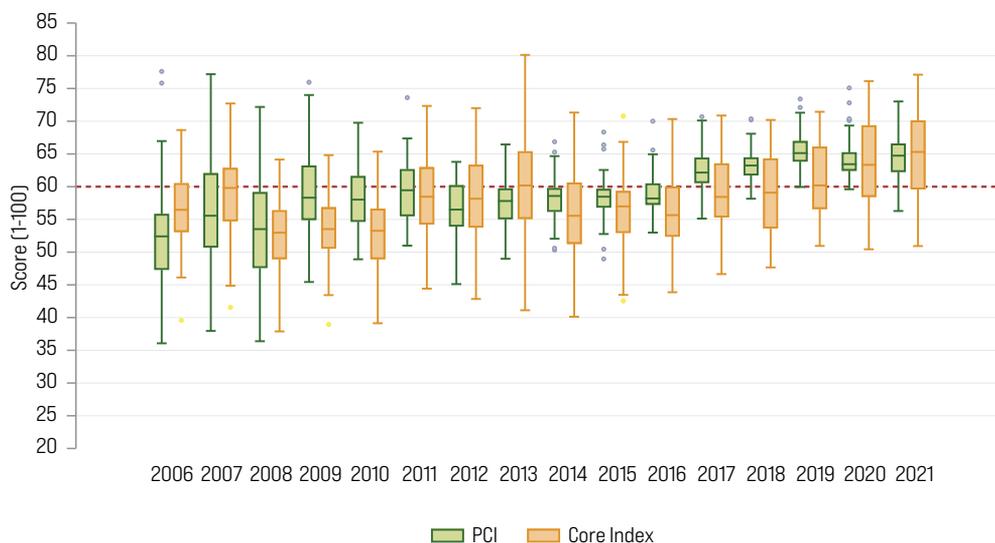
Figure 1.1 Assessment of Reforms in Policy Areas Specified in Government’s Resolution 19 and Resolution 02



Source: 2021 PCI Survey Question I3 “From your firm’s observation and experience, how do you rate the changes in the following areas in your province over the past year as compared the previous years?” Respondents were given multiple choice answers: 1) Positive; 2) Pretty positive; 3) No changes; 4) Somewhat negative; and 5) Negative.

The national trend reflects the pattern of business environment improvement across provinces, as indicated in Figure 1.2. Collected annually in all provinces since 2005, our data identifies trends in economic governance over time using two key measures, the PCI and the Core Index. The PCI is the annual aggregate score, which is periodically recalibrated and updated to reflect changes in the legal and regulatory environment affecting the business climate in Vietnam. The Core Index is aggregated from a limited set of 35 indicators that have been employed since 2006 without change. In Figure 1.2, blue boxes indicate the aggregate PCI and orange boxes present core PCI scores. The horizontal lines in the middle of each box present the median scores (equal to the score of the provinces ranked thirty-second) of a specific year. The lower and upper edges of each box provide the scores at the 25th percentile (the 16th ranked province) and the 75th percentile (the 48th ranked province), respectively. The ends of the range bar provide the lowest and highest values that are not outliers by standard statistical definitions. Dots outside the range bars are outliers – provinces that scored extraordinarily low or high in a given year. Overall, economic governance in Vietnam continues to show improvement. The final weighted PCI score of the median province in 2021 reached 64.7 points, increasing 1.3 points from 2020. This is the fifth consecutive year in which the median PCI score surpassed 60 points on a 100-point scale. In terms of the Core Index, the 2021 score landed at 65.3 points, which is 1.6 points higher than the Core Index in 2020 (63.7 points), continuing a broadly upward trend between 2017 and 2021.

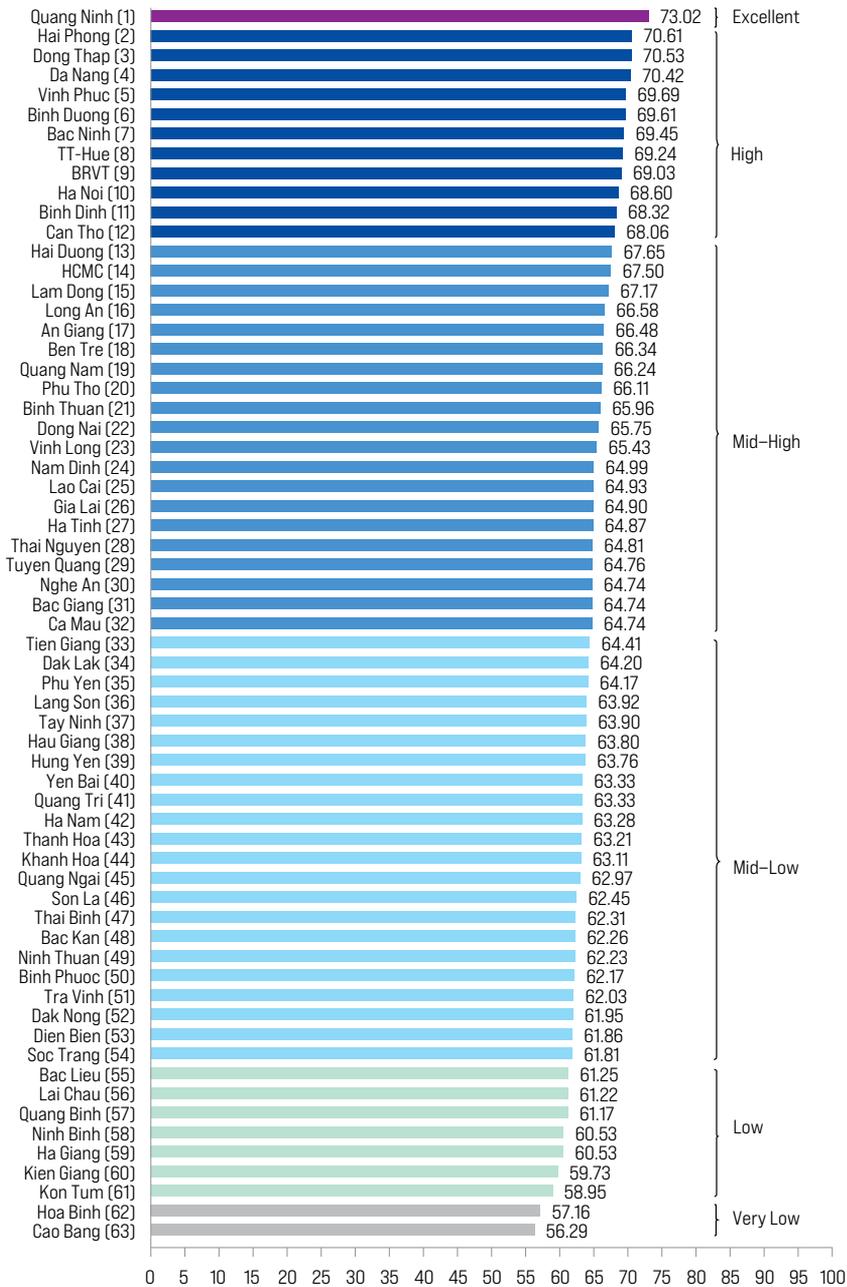
Figure 1.2 Box Plots of the PCI and Core Index over Time (2006-2021)



1.3. PROVINCIAL COMPETITIVENESS INDEX 2021

The PCI 2021 is scored on a 100-point scale from a weighted sum of ten subindices. Figure 1.3 displays the PCI 2021 ranking arranged in descending order and Figure 1.4 highlights the economic governance of Vietnam’s 63 provinces and cities on a national map.

Figure 1.3 Weighted Provincial Competitiveness Index 2021



Quang Ninh led the 2021 PCI ranking at 73.02 points, maintaining its position in the Excellent tier, leading the ranking for five years in a row. This achievement resulted from extraordinary efforts Quang Ninh made during 2021 when the provincial government did its job with proactivity, determination, and innovation. Despite the effects of COVID-19, the provincial Party Executive Committee adamantly improved governance, issuing Resolution 05-NQ/TU on strengthening administrative reform and improving the business environment and provincial competitiveness. The province aimed to develop an administration that sets satisfaction of citizens and firms as a primary measure of its service. The Provincial People's Committee (PCOM) issued action plans to improve the local business climate that were closely aligned with the guiding goals set in the national government's Resolution 02, assigning specific tasks to line departments to address individual PCI indicators.

In 2021, Quang Ninh conducted reviews to improve and simplify administrative procedures, reducing the regulated processing time by 40 to 50 percent.⁷ The public administration centers (PACs) at both provincial and district levels adopted a “five-on-spot” principle for document receipt, appraisal, approval, stamping, and return. By end of December 2022, the provincial PAC provided third- and fourth-grade⁸ online service for 1,712 administrative procedures out of the total 1,831 administrative procedures provided online. With 1,387 procedures offered on the provincial portal at the fourth grade (75 percent), the province excelled the average national rate of 48 percent.⁹ According to the provincial statistics, these provincial PACs provide 1,712 third-grade and 1,831 fourth-grade administrative procedures online, significantly higher than the national average at about 48 percent. The substantive efforts of the province paid off, putting it in the lead in two PCI subindices in 2021: Entry Costs (7.98 points) and Time Costs (8.52 points).

7 *The Vietnamese Communist Party E-paper, 2022, “Lan tỏa từ cải cách môi trường đầu tư kinh doanh ở Quảng Ninh” [Spillover from Quang Ninh's business and investment environment reform], <https://dangcongsan.vn/kinh-te-va-hoi-nhap/lan-toa-tu-cai-cach-moi-truong-dau-tu-kinh-doanh-o-quang-ninh-605197.html>*

8 *Article 3, Chapter 2 of Ministry of Information and Communication Circular 32/2017/TT-BTTTT dated 15 November 2017 specifies the provision of information and online public services via website or electric portal of state agencies: Online public services are public services and other services provided by state agencies for organizations and individuals via the internet-based environment. Grade 1 public services mean services ensuring provision of full information on administrative procedures and related regulations. Grade 2 online public services are grade 1 online public services, but also allow users to download document forms to complete required dossiers. Completed dossiers are to be sent directly or by post to public service providers. Grade 3 online public services are grade 2 online public services, but also allow users to fill in and send online document forms to service providers. Transactions during the process of handling such dossiers and service provision are conducted online. Payment of fees if any and receipt of results are conducted in person at service provider's premises. Grade 4 online public services are grade 3 online public services, but also allow users to pay fees (if any) online. Receipt of results can be done online, or in person or by post.*

9 *Ministry of Information and Communication, 2021, “Tỷ lệ dịch vụ công trực tuyến mức 4 của cả nước đạt trên 48%” [48 percent of administrative procedures are now provided online at fourth grade], <https://mic.gov.vn/ttcaicachTTHC/Pages/TinTuc/149222/Ty-le-dich-vu-cong-truc-tuyen-muc-4-cua-ca-nuoc-dat-tren-48-.html>*

Quang Ninh is realizing its commitments to address business concerns and obstacles. The provincial leadership encouraged agencies and officials to act with sincerity in both speech and actions toward businesses, recognizing that government efforts have tangible results and that corresponding benefits to firms and citizens are real. Several years ago, Quang Ninh developed a Departmental and District Competitiveness Index (DDCI) with constructive input from businesses in the province according to these principles. DDCI has now become a policy tool that fosters healthy competition among departments and district administrations to improve economic governance. One of the most remarkable initiatives of Quang Ninh is the introduction of an investment enabling task force, known as the Investor Care panel, with a mandate to facilitate nonstate investments into the province by understanding obstacles facing investors and addressing difficulties related to investment and land procedures, land clearance, and project operation-related procedures. The provincial authorities continued to expand the use of digital media and social networks (Facebook, Zalo) to actively gather information from businesses and promptly address emerging issues.

In the COVID-19 response activities, Quang Ninh effectively implemented the central government's policy and directions, initiating measures to help businesses safely resume operations, especially tourism. Aside from relief on taxes, fees, social insurance, and credit access, the province formed a committee overseeing manufacturing and circulation of goods which enabled them to ensure safety in factories and goods as well as facilitating commercial flows and preventing supply disruption. The provincial government also empowered district officials to decide on subsidies to employees, helping employers affected by COVID-19 to quickly tackle nascent issues at the grassroots level.¹⁰ The PCI survey also found that 87.9 percent of firms in Quang Ninh rated provincial government response to COVID-19 "good" or "very good," making it one of the provinces with the highest share of firms satisfied with the way the government managed the pandemic.

Securing the second position in the 2021 ranking is Hai Phong with 70.61 points. Moving up five places, the municipality sealed its highest PCI ranking ever, thanks to efforts to facilitate the local business environment. Hai Phong focused on expeditiously addressing business difficulties through direct, monthly dialogues between firms and leaders from the municipal government and departments. The city also implemented a center to promote investment, commerce, and tourism, which acted as a focal point in its one-stop-shop model to attract increased investment from major domestic and foreign entities.¹¹ This attracted many large domestic projects into the city, and even positioned it as a leading destination for foreign

¹⁰ Quang Ninh Province Portal, 2021, "Chia sẻ và đồng hành, tháo gỡ khó khăn cho doanh nghiệp" [Sharing, going together to address firms' difficulties], <https://www.quangninh.gov.vn/chuyen-de/tangtruong/Trang/ChiTietTinTuc.aspx?nid=105269>

¹¹ Nhân dân Online, 2021, "Cải thiện môi trường đầu tư ở Hải Phòng - từ nghị quyết đến thực tiễn", [Improvements in Hai Phong's business environment – from resolution to reality], <https://nhandan.vn/nhan-dinh/cai-thien-moi-truong-dau-tu-o-hai-phong-tu-nghi-quyet-den-thuc-tien-634092/>

investment.¹² The city also introduced its first edition of a DDCI in 2021, marking a strong step forward by a centrally-run large city. This move is significant because it broadens and deepens the set of actors who are exposed to the incentives generated by competitive rankings, which in turn promotes additional dialogue, transparency, and accountability in efforts business environment.

Some agencies in Hai Phong, including the Investment and Planning Department, the Tax Department, and the Economic Zone Management Board, have signed off public commitments to specific support and reform activities. Examples include a communication channel to discuss inadequate dossiers with firms, a promise that dossier revisions will not require more than one return trip, and a pledge to reduce by half the regulated time to complete many procedures. The city, an important gateway to the northeast, has made particularly positive steps by making these public commitments and offering businesses and the media outlets a chance to monitor their implementation. These efforts catapulted the city to leap 17 places higher in Transparency, ten places in Proactivity, and two places in Business Support Services rankings.

Dong Thap and Da Nang, two familiar PCI names, come in third and fourth places respectively. Scoring 70.53 points, Dong Thap maintains its leading status among the Mekong Delta provinces. The province has now frequented the Top 5 of the PCI national rankings for fourteen years running. Long known for its “Coffee with Entrepreneurs” initiative, which it initiated in 2016, Dong Thap extended its portfolio to activities supporting entrepreneurship and start-ups, investing in capacity-building to strengthen governance skills for household businesses. The province also encouraged formation of “hội quán” [periodic social meetings] and cooperatives to build bonds between individuals and businesses through sharing experiences and exchanging support to nurture mutual development and growth. This model proved to be an effective medium to strengthen linkages in local supply chains, particularly those in agricultural produce.¹³

Similarly, Da Nang is one of the provinces achieving consistently high scores on economic governance over time. With 70.42 points in 2021, the municipality moved one place higher than the prior year to seize fourth place overall. In addition to regularly implementing administrative reform efforts, the centrally-managed city formed its own interdepartmental

12 Ministry of Planning and Investment, 2022, “Hải Phòng dẫn đầu cả nước về thu hút vốn đầu tư trực tiếp nước ngoài”, [Hai Phong led the national foreign investment attraction], <https://fia.mpi.gov.vn/Detail/CatID/a963873a-ec84-4cae-8b5f-d0f38c10e10c/NewsID/68e41a86-f199-4016-8274-e13717272b66/MenuID/2a33ab04-8fd4-4a47-b7ee-8797d92dacc7>

13 The Vietnamese Communist Party E-newspaper, 2022, “Đồng Tháp tập trung cải thiện môi trường đầu tư kinh doanh” [Dong Thap concentrates on betterment of business climate], <https://dangcongsan.vn/kinh-te/dong-thap-tap-trung-cai-thien-moi-truong-dau-tu-kinh-doanh-601262.html>

task force to address constraints facing construction projects.¹⁴ These interdepartmental coordination mechanisms quickly capture firms' concerns and help the municipal government swiftly address any issues. The task forces will actively assist the city to attract investment and improve the business environment.

Vinh Phuc made a comeback to the fifth position in this year's ranking. Beginning in 2020, the provincial administration elevated triple goals that aim to build a comprehensive regulatory environment, quality technical infrastructure, and good public service delivery to businesses.¹⁵ Within these goals, administrative procedure reform is considered central to reducing time costs and simplifying procedures. The administration promised to shorten taxpayers' on-site pre-examination time for VAT refunds to 40 business days and to reduce the time spent on state budget tax payment procedures to 115 hours per year. The province also installed updated interdepartmental one-stop shops at all three levels of government. Remarkably, provincial hot lines effectively provide services in five languages: Vietnamese, Chinese, English, Japanese, and Korean. Vinh Phuc is among the first provinces to initiate and use a mechanism, known as the Chairman's Assistant Team, to address difficulties for firms. In 2021, the Assistant Team collected 97 collective opinions from businesses in the province and directly provided compliance guidance to investors implementing administrative procedures, alongside referring business petitions to the related regulators. The "Coffee with Entrepreneurs," which it recently adopted, also helped address 1,794 business concerns in various areas, including land clearance, transport and logistics, and other value chain linkage issues. Furthermore, state agencies in Vinh Phuc conducted eight large surveys, five of which were digitally implemented, to gather firm responses on their actual experiences in shipment, access to credit, worker recruitment, and policies to navigate through difficult waves of COVID-19. These efforts helped the province improve both the scores and rankings in many PCI subindices, rising to third place in Time Costs and Informal Charges, and coming in seventh in Policy Bias and Land Access. Businesses were satisfied with public service delivery in Vinh Phuc, rating the province sixth on the indicator "officials processing procedures are effective;" these officials were also considered "friendly" by 93.2 percent of firms. Additionally, 89.5 percent of firms agreed that the time to implement procedures was generally shorter than regulated, again putting Vinh Phuc third in the national ranking.

Next in the Top 10 are Binh Duong, Bac Ninh, Thua Thien – Hue, Ba Ria – Vung Tau, and Ha Noi. The central province of Thua Thien – Hue returned to the Top 10 for the first time since it was ranked second in PCI 2013. Similarly, Ba Ria – Vung Tau made an impressive comeback to the Top 10 following its eighth-position debut in the 2009 PCI ranking.

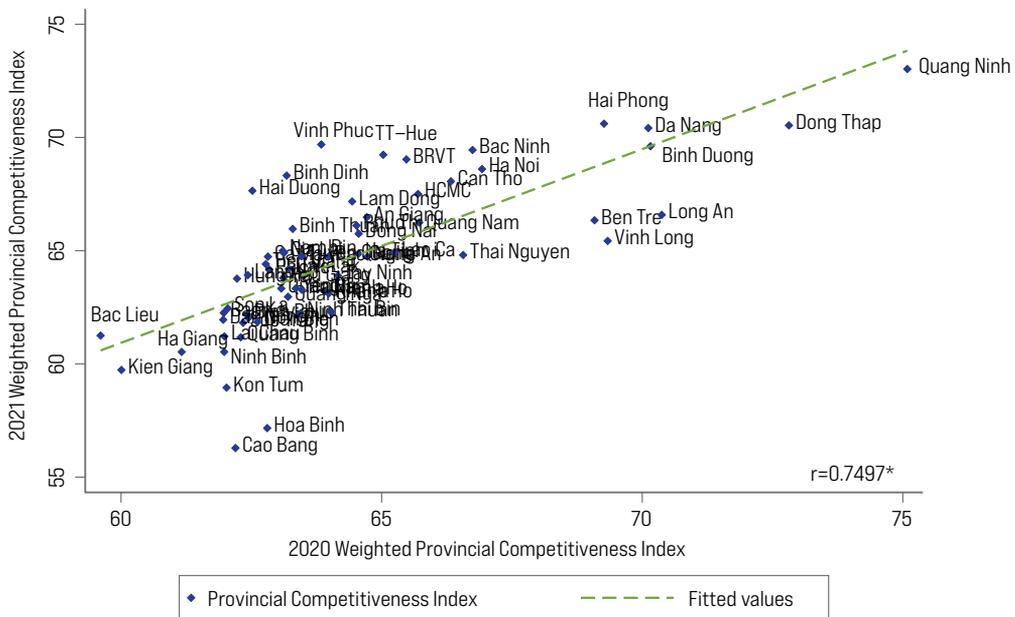
14 Da Nang People's Committee, 2021, *Decision 509/QĐ-UBND on the establishment of the interdepartmental task force to tackle difficulties of construction investment projects*, https://docs.portal.danang.gov.vn/images/documents/Van%20ban%20dieu%20hanh/2021/Thang%202/509%20qd_signed.PDF

15 Vietnam Law Online, 2020, "Vinh Phuc hướng đến mục tiêu '3 tốt' để thu hút các nhà đầu tư [Vinh Phuc heads to '3 tốt' triple goals to attract investors]", <https://baophapluat.vn/vinh-phuc-huong-den-muc-tieu-3-tot-de-thu-hut-cac-nha-dau-tu-post364280.html>

Aggregated by ten subindices as in the previous iterations, the most notable adjustments for 2021 include changing most indicators in the Policy Bias and Business Support Services subindices, adding new indicators measuring registration of conditional business lines to the Entry Costs subindex, and revising the indicators on implementing procedures digitally under the Time Costs subindex. Fifty-six new indicators were introduced, 52 old indicators were dropped, and eight existing indicators were revised. We also maintained 77 existing indicators, leading to a total of 141 indicators for 2021 iteration of the PCI. A fuller discussion of the revised methodology is presented in the Annex of the report.

Despite these changes, the 2021 PCI Index score is highly correlated with the previous year at 0.75, which is statistically significant ($p\text{-value} < .05$). This relatively high correlation coefficient indicates that the PCI 2021 results remain consistent with prior years, thus providing a relevant tool for capturing business perception of provincial economic governance over time.

Figure 1.5 Relationship between 2020 and 2021 PCI



1.4. KEY FEATURES IN PROVINCIAL ECONOMIC GOVERNANCE QUALITY OVER TIME

In this section, we present highlights in economic governance quality in 2021 by PCI subindices. The seven key findings include:

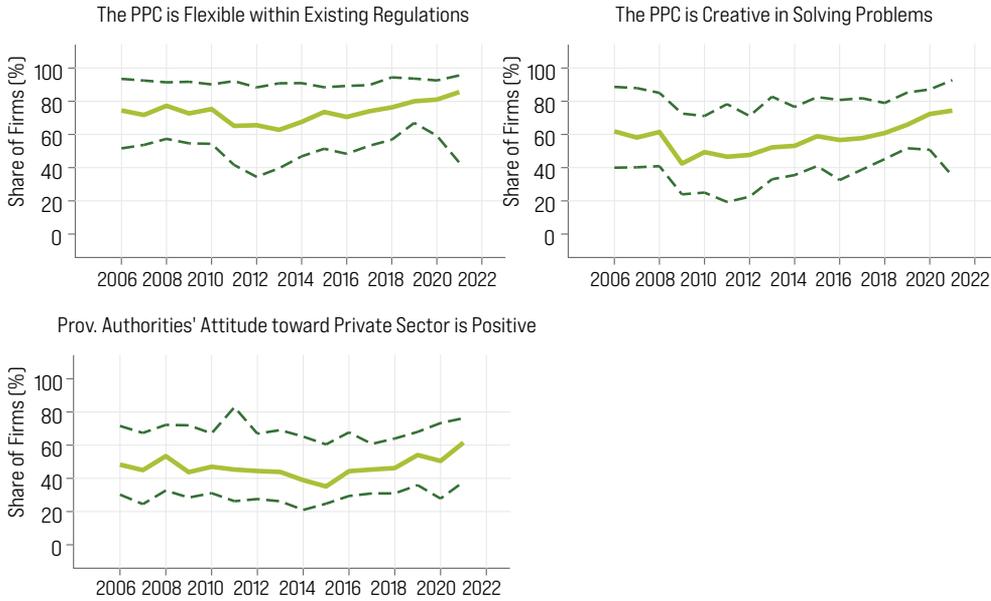
- (1) Local governments continue to promote proactivity and private sector support.
- (2) Informal charges continue to decline in most policy areas.
- (3) Administrative procedures settlement efficiency improved, but more reform efforts are needed.
- (4) Compliance with conditional business sublicensing procedures remains burdensome.
- (5) Land access is declining.
- (6) The impact of the Law on Support for Small and Medium Enterprises has a modest impact on businesses.
- (7) Information and dissemination of guidance to firms about integration opportunities remains weak.

1.4.1. Local Authorities Continue to Promote Proactivity and Private Sector Support

Proactivity, defined as a responsible attitude and the ability to resolve local problems, is a quality that firms expect from provincial authorities. These areas are assessed annually through the PCI's "Proactivity" subindex

The PCI 2021 recorded firms' feedback on provincial authorities' proactivity and efficiency in settling problems. Figure 1.6 depicts the broadly improving trend of three core indicators in the "provincial proactivity" subindex between 2006 and 2021. In 2021, 85.6 percent of respondents agreed "the Provincial Committee is flexible within the scope of law to create a favorable business environment," up from 81 percent in 2020. Similarly, 74.4 percent of businesses agreed that "even when central regulations are unclear, my provincial People's Committee is creative and clever in solving arising problems," which is two percentage points higher than 2020. In the meantime, 61.5 percent of firms said that provincial governments have positive attitude towards private business, far higher than the 50.5 percent recorded in 2020. All three measures reached a record high level in the 17 years of the PCI.

Figure 1.6 A Sample of Indicators on Proactive Leadership over Time

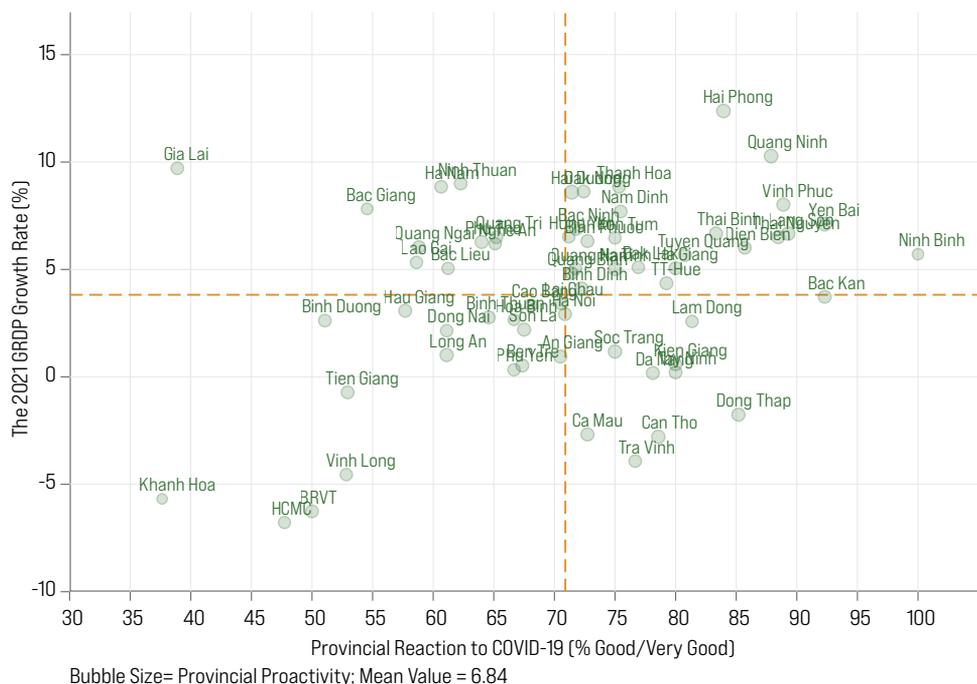


Green lines represent the median provincial score, while the dashed blue lines depict the minimum and maximum scores, respectively.

Source: 2021 PCI Survey Question H2: “Do you agree with the following statements?” Respondents were given multiple choice answers: 1) Strongly Agree; 2) Agree; 3) Disagree; 4) Strongly Disagree.

The irregular context of 2021, with numerous activities severely impacted by the COVID-19 pandemic, has tested local governance in many provinces. This year’s PCI data show a correlation between local GRDP growth rate and firms’ assessment of local government response to the pandemic. Provinces whose response to COVID-19 was positively assessed by firms while maintaining local GRDP growth rate higher than the national average are shown on the upper right quadrant of Figure 1.7. Representatives of these provinces include Hai Phong, Quang Ninh and Vinh Phuc, three of the top 5 provinces in the PCI 2021. It is important to recall, however, that both the severity of COVID-19 outbreaks and the economic impact varied heavily by provinces. Provinces with larger tourist sectors or those affected by supply-chain hold-ups faced greater economic difficulties. Thus, negative firm perceptions may have less to do with governance decisions than economic factors that were outside local leaders’ control.

Figure 1.7 The Correlation between Province's GRDP Growth Rate in 2021 and Firm's Assessment of Local Government's Response to COVID-19



Source: 2021 PCI Survey. The questionnaire for the 2021 PCI Survey is available in two versions, Form A and Form B, with some questions being unique to each. Each respondent was randomly assigned one of these two forms. Question J7b appears exclusively in Form B and asks respondents: "Overall, would you say the reaction of local governments to the coronavirus outbreak has been ___ to date?" with five response options: "Very good", "Somewhat good", "Neither good nor bad", "Somewhat bad", and "Very bad".

1.4.2. Informal Charges Continue to Decline

Anticorruption has been a central mission of the Party and government at all levels in recent years. Since 2013, the Central Anti-Corruption Steering Committee has been under the direction of Party General Secretary Nguyen Phu Trong with notable results. According to the CPV Central Committee's Commission for Internal Political Affairs, between 2013 and 2020, agencies in charge of legal proceedings at central and provincial levels have brought legal charges in 14,300 cases involving 24,410 people. More than 11,700 cases and 22,600 people have been brought to trial on charges of corruption and economic, and abuse of power.¹⁶ In

¹⁶ Party Central Committee's Commission for Internal Political Affairs, 2021, "Kết quả công tác phòng chống tham nhũng giai đoạn 2013-2020" [Results of anti-corruption work in the 2013-2020 period], <https://noichinh.vn/tin-tuc-su-kien/tin-trung-uong/202102/ket-qua-cong-tac-phong-chong-tham-nhung-giai-doan-2013-2020-309186/>

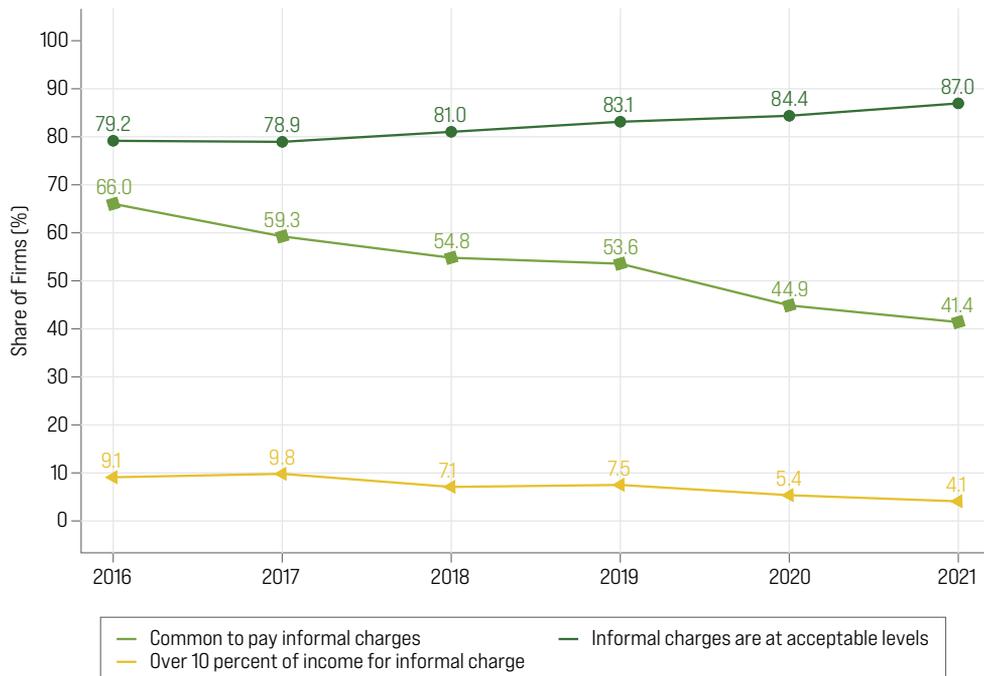
2021 alone, relevant agencies conducted legal proceedings in 390 cases, resulting in 1,011 people being charged with corruption, and abuse of power.¹⁷ Between 2013 and 2021, the National Assembly amended and promulgated 259 corruption-related laws, ordinances, and resolutions, especially the Anti-Corruption Law, the Criminal Code, the Criminal Procedure Code, the Law on Judicial Expertise, the Law on Denunciation, the Law on Thrift Practice and Combatting Waste, and the Law on Information Access. The government and Prime Minister promulgated 1,172 decrees, 966 resolutions, and 488 decisions. And Ministries and provinces issued nearly 88,000 documents to implement Party and government policies and regulations to fight corruption.¹⁸

Findings of the 2021 PCI survey indicate that the anti-corruption drive has generated positive results. This is demonstrated through a series of corruption indicators in the “informal charges” subindex. Specifically, businesses reporting paying for general informal charges dropped to 41.4 percent in 2021 from 44.9 percent in 2020. This is also a record low in 16 years (it was 70 percent in 2006). The size of informal charges has also declined considerably over time. The share of firms having to set aside more than 10 percent of their income to pay this cost dropped to 4.1 percent, less than half the level recorded in 2016 (9.1 percent).

17 Party Central Committee's Commission for Internal Political Affairs, 2022, “*Công tác phòng, chống tham nhũng, tiêu cực tiếp tục được đẩy mạnh, khẳng định quyết tâm mạnh mẽ, 'không ngừng', 'không nghỉ'*” [Anti-corruption drive gains momentum with strengthened and continuous determination], <https://noichinh.vn/tin-tuc-su-kien/tin-trung-uong/202201/cong-tac-phong-chong-tham-nhung-tieu-cuc-tiep-tuc-duoc-day-manh-khang-dinh-quyet-tam-manh-me-khong-ngung-khong-nghi-310586/>

18 The Supreme People's Court portal, 2021, “*The Supreme People's Court Chief Justice reports on the 2016-2021 tenure work to the National Assembly*”. <https://www.toaan.gov.vn/webcenter/portal/tatc/chi-tiet-tin?dDocName=TAND165071>

Figure 1.8 A Sample of Provincial-Level Indicators on Informal Charges over Time

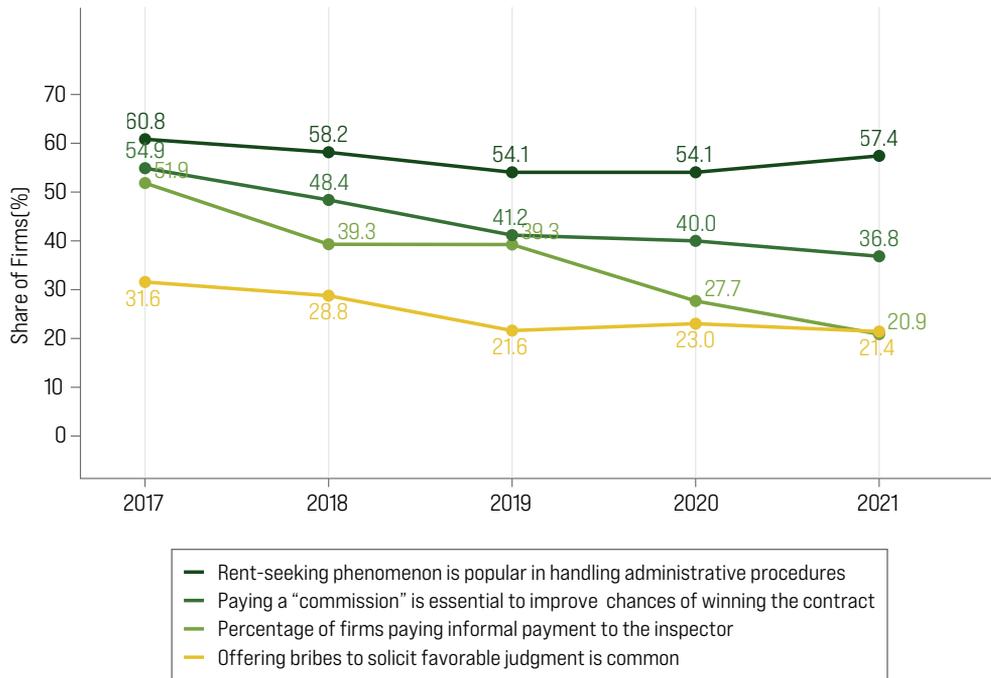


Source: 2021 PCI Survey. Question D1.3: “To what extent do you agree with following statements?” (7) Informal charges are at acceptable rate. Respondents were given multiple choice answers: 1) Strongly Agree; 2) Agree; 3) Disagree; 4) Strongly Disagree.

Question D3.12: “Do you agree with this statement: “Firms in my line of business usually have to pay extra ‘informal payments’?” Respondents were given multiple choice answers: 1) Strongly Agree; 2) Agree; 3) Disagree; 4) Strongly Disagree.

Question D3.13: “On average, what percentage of income do firms in your line of business typically pay per year for informal charges to public officials?” Respondents were given multiple choice answers: 1) 0%; 2) Less than 1%; 3) From 1 to under 2%; 4) From 2 to under 5%; 5) From 5 to under 10%; 6) From 10 to under 20%; 7) From 20 to 30%; and 8) Above 30%.

The prevalence of informal charges in particular areas also shows signs of reduction (Figure 1.9). Specifically, the share of firms paying informal charges to inspectors has dropped considerably from 27.7 percent in 2020 to 20.9 percent in 2021. The share of firms agreeing with the statement “paying a commission is necessary to win procurement contracts” decreased from 40 percent in 2020 to 36.8 percent in 2021. Firms unwilling to report a dispute to court, in the belief that the only way to win a favorable judgement was for them to bribe a judge, fell to 21.4 percent, 1.6 percentage points lower than the 23 percent recorded in 2020. However, amid this good news, there is room for improvement. The share of firms believing that rent-seeking phenomenon is popular in handling administrative procedures increased from 54.1 percent in 2020 to 57.4 percent in 2021.

Figure 1.9 Breakdown of Indicators on Informal Charges

Source: 2021 PCI Survey.

Question D1.3: "To what extent, do you agree with following statements?" (10) It is common that government officials cause troubles when processing procedures for businesses

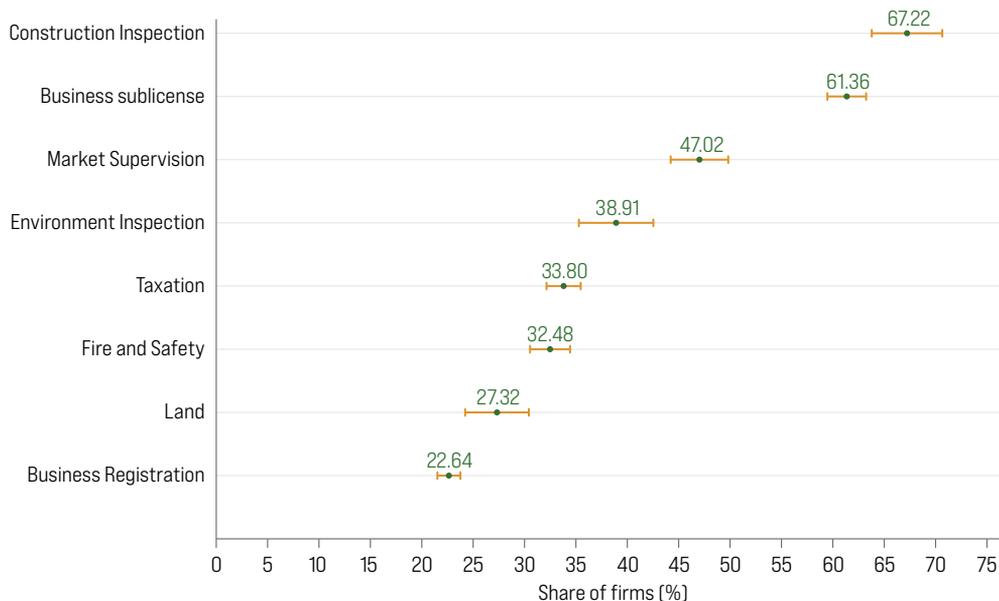
Question D2.8: "During any of the inspections, did you provide a gift or informal payment to the examiner?"

Question D4.19: "Do you agree with the following statement: "Paying a "commission" is essential to improve chances of winning the contract"?"

Question G1.2: "From your observation or experience, do you agree with the following statements?" (6) Formal costs are acceptable from the start of legal proceeding until enforcement of the judgments; (7) Informal costs are acceptable from the start of legal proceeding until enforcement of the judgments are acceptable.

Reducing informal charges remains a "long journey" for local government in Vietnam. PCI survey findings indicate that informal charges remain widespread in some important areas. The share of firms paying informal charges is high in construction inspections (67.22 percent) and conditional business sublicensing (61.36 percent). Generalizing across the areas where firms interact with local bureaucracies, two forms of petty corruption remain prevalent. Firms most often pay facilitation fees for public service delivery and procedures that should be provided to them anyway, such as accessing land or registering businesses. Second, firms pay informal charges during regulatory inspections to avoid work stoppages and potential fines, such as those for market management, environment, taxation, and fire and safety.

Figure 1.10 Areas Where Informal Charges Remain Prevalent



Source: 2021 PCI Survey. Question D3.16: “Please select all local agencies to whom you paid an informal charge in the last year? (Check all that apply)”

1.4.3. The Efficiency of Administrative Procedures Improved, but More Reform Efforts Are Still Needed

Administrative procedure reform is a key step for all levels of government. Procedural simplification creates a favorable and open environment for socio-economic development in general and particularly for business activities. According to the Ministry of Home Affairs, from the beginning of the XIV government term to November 2020, more than 1,000 administrative procedures, affecting 3,893 out of 6,191 business conditions and 6,776 out of 9,926 lists of goods, subject to specialized inspection were reduced.¹⁹

State agencies at central and local levels have also stepped up the implementation of the one-stop-shop mechanism for handling administrative procedures. This puts them in compliance with Decree No. 61/2018/ND-CP dated 23 April 2018 on the implementation of the single-window, one-stop-shop mechanism for handling administrative procedures as well as the more recent Prime Minister’s Decision No. 468/QĐ-TTg dated March 27, 2021 approving the project “Renovation of implementation of the one-stop-shop mechanism for handling administrative procedures.” The government also issued Resolution 68/NQ-CP

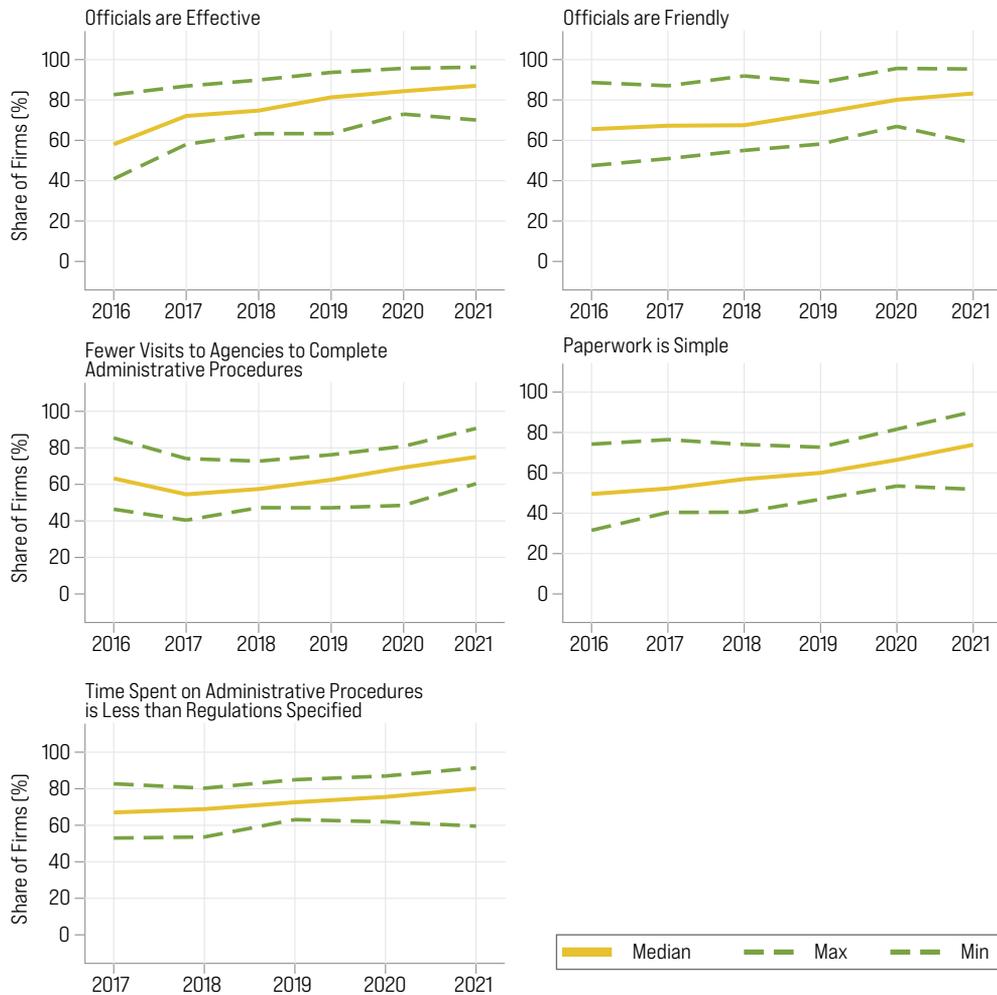
¹⁹ Ministry of Home Affairs, 2021, “Summary report: Summary of the State administrative reform master program for the period 2011 - 2020 and orientation for the period 2021 - 2030”

dated May 12, 2020, to reduce and simplify regulations related to business activities for the period 2020-2025. This resolution has a critically important mission to “reduce and simplify immediately unnecessary, unreasonable, illegal regulations, which are barriers and cause difficulties for enterprises and people in the current documents,” and goes on to state that this streamlining process is necessary for “contributing to improving the effectiveness and efficiency and ensuring the objectives of state management, promoting the development of enterprises.” Additionally, at the beginning of 2021 and 2022, the government issued Resolution 02 on improving the business environment and enhancing national competitiveness, which itself was a continuation of Resolution 19, renewed annually between 2014 and 2018, and Resolution 02, issued in 2019 and renewed in 2020. Recognizing that businesses need solutions to support post-pandemic recovery, administrative procedure reform can also be considered as a useful tool that is within the ability of state agencies to perform.

The government’s executive orders and the corresponding implementation efforts by ministries, branches, and local authorities show that state agencies recognize the importance of administrative procedure reforms to reduce the burden of legal compliance costs for businesses. This was the consistent position of the government for the 2016-2020 term and will continue in the new administration from 2021-2025.

The 2021 PCI survey findings reaffirm that efforts to reduce and simplify administrative procedures are bearing fruit. Figure 1.11 shows the extent to which firms agree that officials are effective and friendly, fewer visits to agencies are needed to complete administrative procedures, paperwork is simple, and administrative procedures could be completed in a timely manner. Specifically, 87 percent of firms believe “officials are friendly,” and 75 percent of firms agreed that firms do not have to make multiple visits to agencies for administrative procedures. Similar percentages of firms said “paperwork is simple” (74 percent) and that “time spent on administrative procedures is less than regulations specified” (87 percent). The business community clearly recognizes progress made by local government agencies to enhance the quality and utility of administrative procedures. Localities need to continue their work to maintain and improve such positive results in the coming years.

Figure 1.11 A Sample of Provincial-Level Indicators on Regulatory Burden over Time



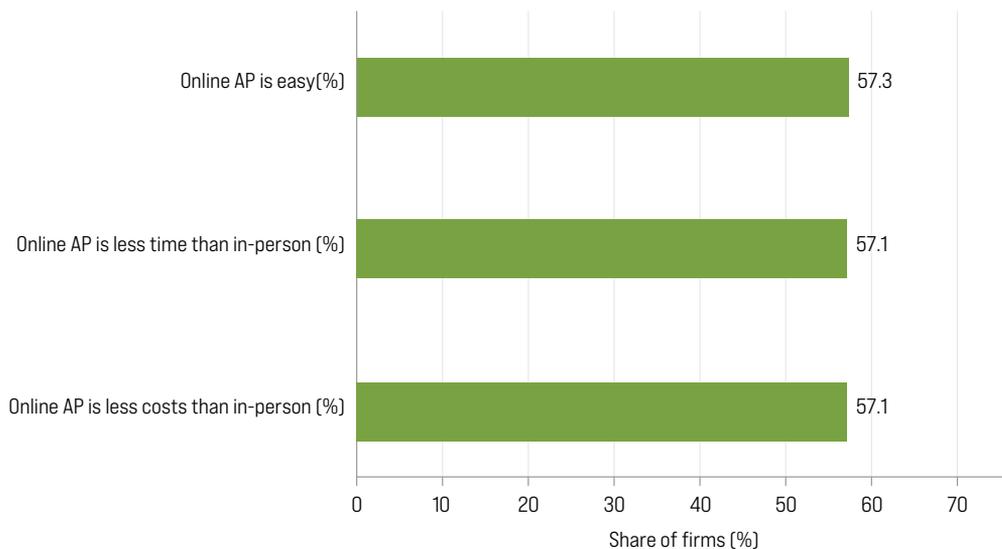
Source: 2021PCI Survey. Question D1.3: “To what extent, do you agree with following statements?” (1) Government officials are effective in processing paperwork; (2) Government officials are friendly; (3) Our firm doesn’t have to make many trips to obtain stamps and signatures from state agencies to complete the procedures; (5) Paperwork and procedures are simple; (8) Administrative procedures in my provinces are usually completed by officials before the official deadline for completion.

One element of this remarkable success in reforming administrative procedures is the stronger application of information technology to public service delivery. Online public services are increasingly popular for handling administrative procedures at all levels. In the past, they were promoted through the National Public Service Portal, the Public Service Portal, and digital one-stop information systems at the ministerial and provincial

levels. Although online administrative procedures (especially those at grades 3 and 4) still need improvements in both quantity and quality, firms are now able to carry out most administrative procedures via online platforms, such as filing taxes, social insurance, and import/export procedures. To promote the transition to online administrative procedures, the government issued Decree No. 45/2020/ND-CP dated April 8, 2020, on the implementation of administrative procedures using online portals. The Decree helped establish a synchronous and unified legal basis for these procedures as well as creating favorable conditions for people and businesses to conduct online transactions with low costs, gradually increasing the rate of online transactions in state administrative agencies.

The PCI 2021 survey reaffirmed the benefits of implementing online public services. Nearly 57.3 percent of firms agreed that public online services made transactions easier. Just under 57.1 percent agreed online administrative procedures take less time and cost less than submitting paper documents at state agencies (Figure 1.12).

Figure 1.12 Firms' Assessments of Online Administrative Procedures



Source: 2021 PCI Survey. Question D1.5.1a: "If you used an online portal, to what extent do you agree with following statements?" (1) Completing administrative procedures online was easy; (2) Completing administrative procedures online took less time than completing them in person using the traditional process; (3) Completing administrative procedures online costs less total money than completing in person using the traditional process.

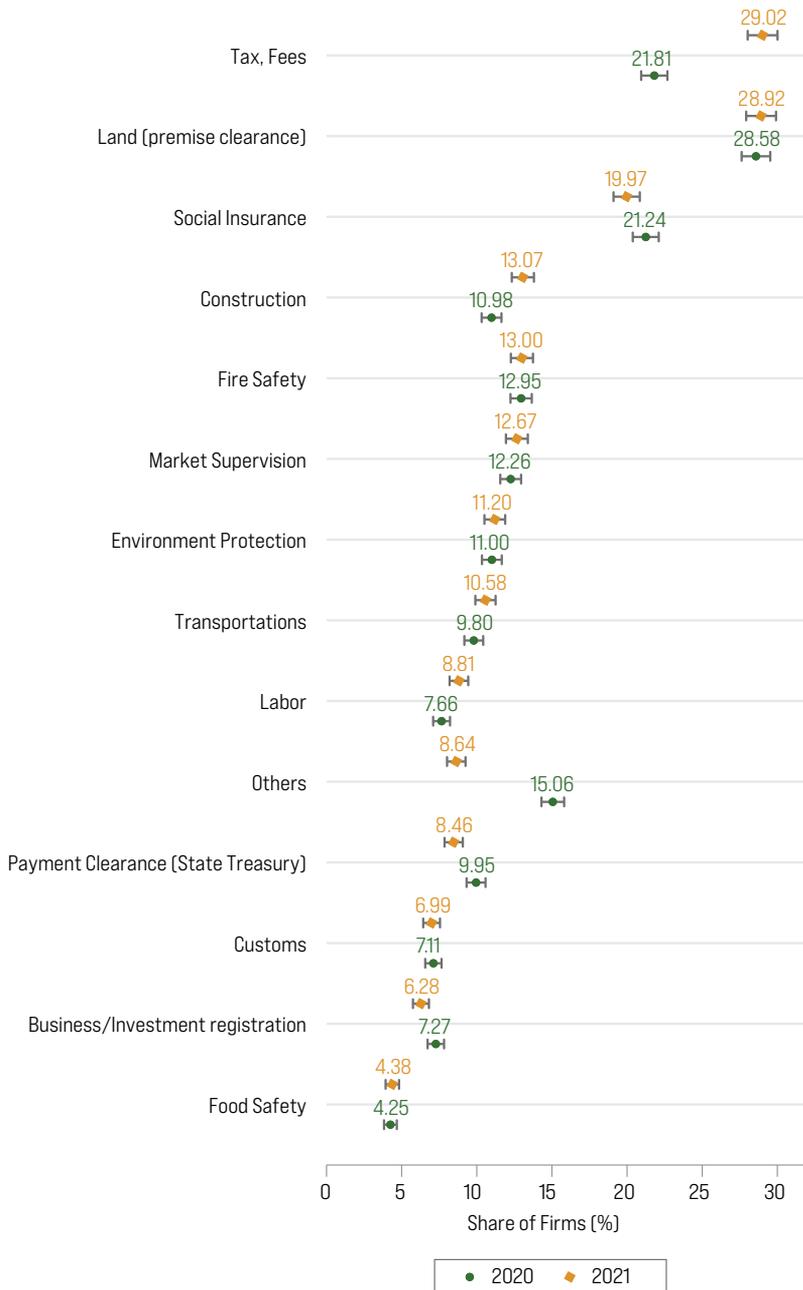
Despite remarkable successes in improving the efficiency of administrative procedures and implementing online public services, the Summary Report of the Master Program on State Administrative Reform for the 2011 - 2020 period and the Ministry of Home Affairs' orientation document for the period 2021 - 2030 also acknowledged limitations. Specifically, the Report pointed out that "administrative procedure reform" by itself is not a strong driving force for improving the business environment. There are unnecessary eliminations

of administrative procedures and there is a lack of coordination among all related agencies for administrative procedure reform to become effective.²⁰

After many years of PCI surveys, we recognize several administrative procedures are still troublesome for firms in 2021, sometimes making compliance difficult. Figure 1.13 shows the share of firms reporting specific types of administrative procedures that were challenging for businesses in 2020 and 2021. Procedures related to taxes, fees, land, social insurance, and construction continue to be the most troublesome. Businesses perceived the level of obstacles in complying with administrative procedures related to taxes and construction in 2021 to be significantly higher than in 2020. This is likely the result of two factors. First, COVID-19 reduced the capacity of administrative offices, during shutdowns or outbreaks when staff were out of the office. Second, policy-makers increased attention to these sectors over the past year to as part of efforts to increase tax and regulatory compliance. While these goals are important, the public interest of these objectives must be weighed against the burden it places on business operations.

²⁰ Ministry of Home Affairs, 2021, "Summary report: Reviewing the State administrative reform master program for the period 2011 - 2020 and orientation for the period 2021 - 2030"

Figure 1.13 Troublesome Administrative Procedures



Note: An administrative procedure is shown on each grid line in the figure. The share of firms saying a type of administrative procedure was troublesome in 2021 is shown above that procedure area’s grid line (see the yellow square symbol). The value below the gridline (green circle symbol) represents the value in 2020.

Source: 2021 PCI Survey. Question D1.2: “From your experience in the province, please indicate the most troublesome administrative procedures (Please check all that apply)”

One of the biggest obstacles for firms in complying with administrative procedures is the complexity of legal regulations. Figure 1.14 shows the share of firms spending at least 10% of their time understanding and enforcing legal regulations. The gray lines show the results recorded in 63 provinces and cities. The green line depicts the trajectory of the median province. This figure shows that administrative burden sharply increased in the period from 2012-2016 but began decreasing in the years 2017-2020. In 2021, however, the median value of this indicator increased again, from 22 percent in 2020 to 26 percent in 2021. Variance among provinces remains high.

Figure 1.14 Traceplot of Time Spent on Bureaucratic Procedures, 2006-2021



Source: 2021 PCI Survey. Question D11: “What percentage of senior management’s time was spent to understand and comply with administrative procedures over the past year?”

These changes call for more in-depth research and assessment, given the special context of 2020 and 2021. Most provinces, especially the economic hubs of Ho Chi Minh City, Da Nang, Ha Noi, and their adjacent provinces, implemented strong public safety restrictions in response to the pandemic. These measures covered a broad range of activities such as asking people to refrain from leaving their homes, imposing temporary halts on some business sectors, and imposing dual “3 on-site” and “one path, two destinations” principles on business operations to prevent the spread of the highly infectious Delta variant in the

fourth COVID-19 wave. Restrictive regulations were further tightened in many provinces, such as the requirement of a “travel permit” or a certificate of negative test valid for 24 hours. The absence of specific guidelines and resources preparation for policy initiatives, combined with the lack of an appropriate window of time to allow firms to understand and adjust, led to numerous compliance perplexities which, in turn, disrupted manufacturing activities and supply chains while generating sizeable additional costs for firms.²¹

In 2022, provincial governments should accelerate the action programs outlined in Resolution 76/NQ-CP dated July 15, 2021 regarding the Master Plan of Public Administration Reform in 2021 - 2030 and the Prime Ministerial Directive 23/CT-TTg dated September 2, 2021 on strengthening the implementation of said master plan. The effective rollout of this program will streamline the handling of administrative procedures, reducing compliance costs for firms and facilitating business operations. This is particularly urgent in the current context, since tackling regulatory constraints will promote more rapid recovery after the COVID-19 crisis.

1.4.4. Compliance with Conditional Business Sublicensing Procedures Remains Burdensome

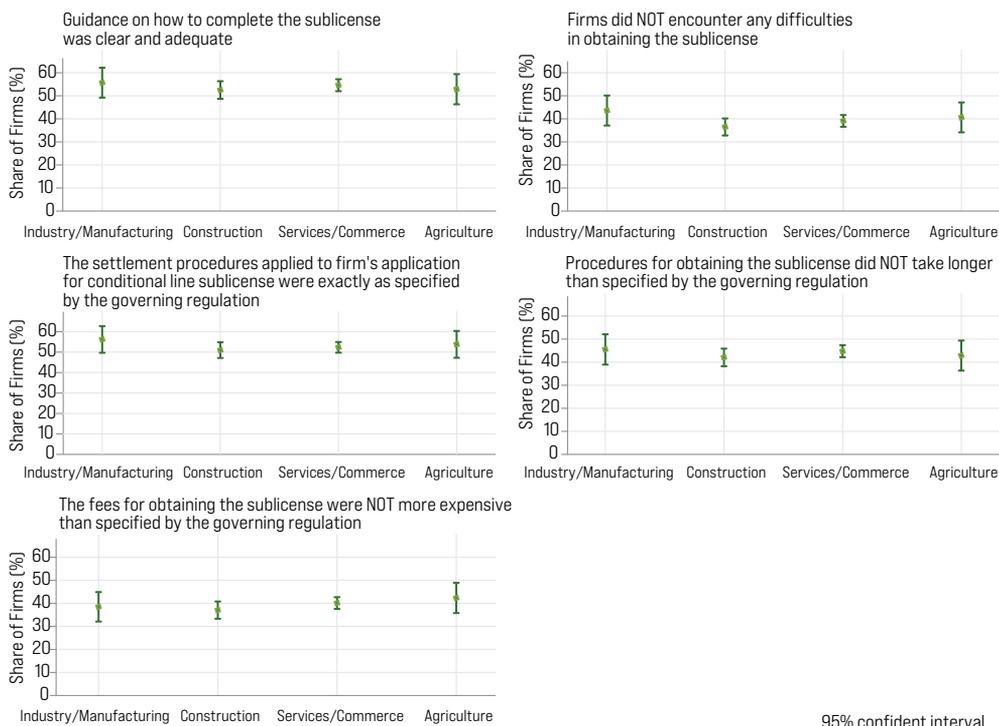
While firms were generally positive about business registration procedures, compliance with sublicense procedures remains burdensome. Figure 1.16 illustrates the share of firms agreeing with statements regarding the sublicense process. Levels of firm approval regarding the ease of implementation are never more than 60 percent. In other words, a sizeable share of firms was dissatisfied with the way the procedure was handled.

Comparing perceptions of firms in different sectors, about 53.7 percent of firms agreed “guidance on the procedure to apply for the certificate of conditional business line is clear and adequate,” and 52.1 percent agreed the process was precisely as specified. However, only 38.9 percent agreed that they did not encounter difficulties when implementing this procedure; 43.4 percent agreed that the time to implement the procedure was not longer than published; merely 39.1 percent said the fee was not higher than specified. These constraints were observed in all sectors, with little variation among the perceptions of firms in manufacturing, construction, commerce/service, and agriculture. When asked whether these challenges impacted business operations,²² 21.7 percent of firms answered that these difficulties caused them to delay or cancel their business plans in 2021.

²¹ VCCI (2021), *The Currents of Laws Report 2021*, Công Thương Publishing House.

²² Source: 2021 PCI Survey. Question B5.3: In general, did your experience with the following procedures to start your business have any unexpected impact on your business plan? (1) The registration procedures; (2) The re-registration procedures; (3) The sublicense procedures.

Figure 1.15 Firms Assessments of Processes for Obtaining a Sublicense



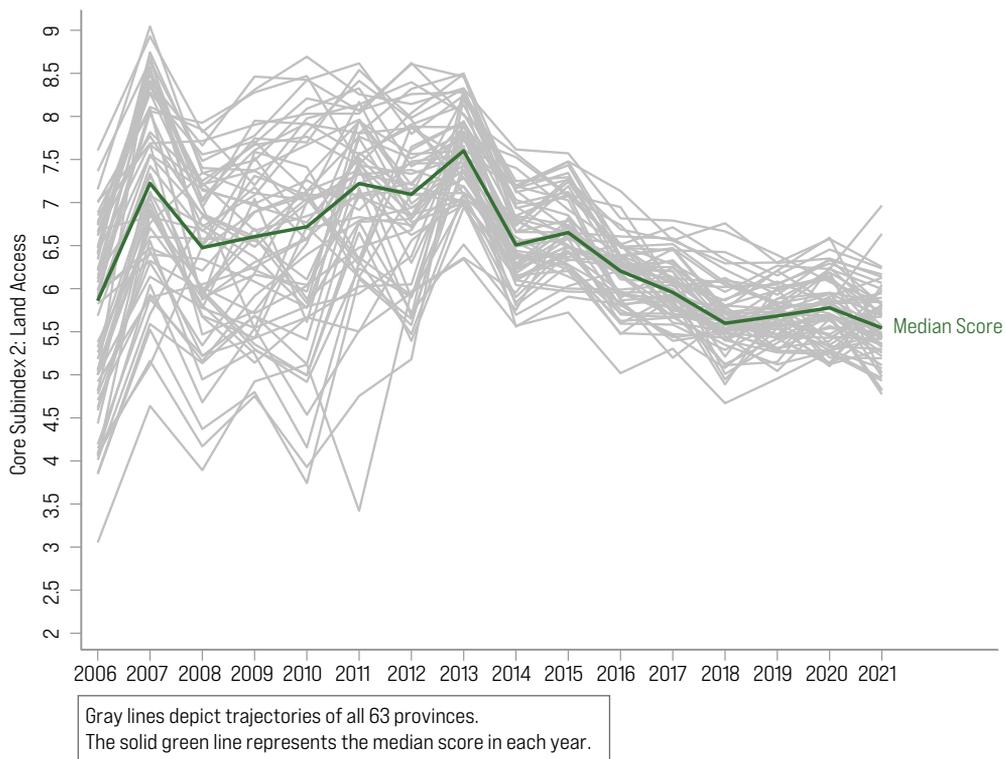
Source: 2021 PCI Survey. Question B4.2: “Please rate your agreement with the following statements about the process for obtaining a sublicense for your conditional business line?” (1) Guidance on how to complete the sublicense was clear and adequate; (2) I did NOT encounter any difficulties in obtaining the sublicense; (3) The settlement procedures applied to my application for conditional line sublicense were exactly as specified by the governing regulation; (4) The procedures for obtaining the sublicense did NOT take longer than specified by the governing regulation; (5) The fees for obtaining the sublicense were NOT more expensive than specified by the governing regulation.

1.4.5. Land Access is Declining

A secure business premise is a vital element in many business operations. Provincial governments have the ability to enable firms’ access to land through different policies and interventions. These include: developing reasonable land planning strategies; preparing a clean land fund for investors; transparently and proactively providing planning information to firms; facilitating land lease and rental procedures; expediting granting of land use right certificates; actively supporting land clearance process; and addressing obstacles in other related procedures, such as granting efficiently granting construction permits to enable businesses to operate on their business premises.

Given the importance of business premises to business operation and the required coordination across agencies and levels, land issues are among the most complicated policy challenges for many provinces. Our overtime observations of the trends in the Land Access core indicators mirror these challenges. Figure 1.16 demonstrates changing trends over the years of the PCI in a traceplot. Between 2013 and 2021, most of the grey lines representing scores of provinces are trended downward. The green line represents the score of the median province in each surveyed year on a declining trend after 2013, indicating no significant improvement and even a slight decline over the years. Also noteworthy is the reduction in variance among provinces after 2013 as the Land Law formalized policy and reduced differences in provincial implementation and separate initiatives over time, concentrating scores at a lower average.

Figure 1.16 Traceplot of Consistent Land Access and Security over Time

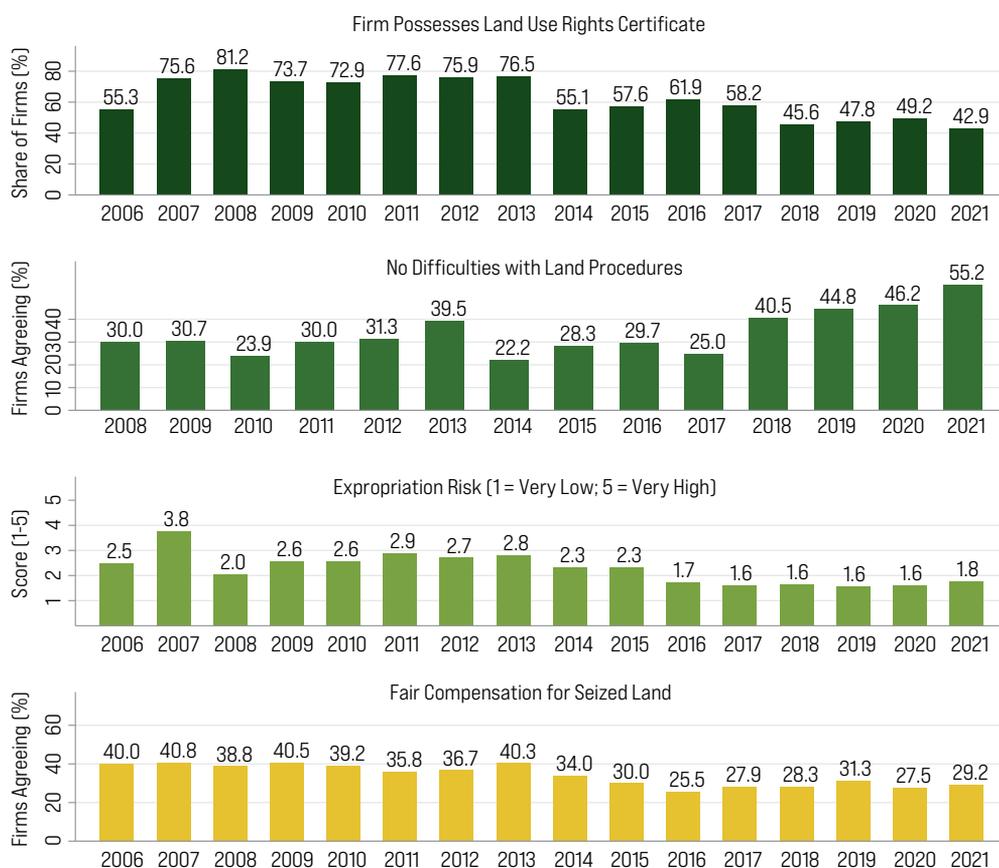


Source: PCI Survey Multiple Years. Authors' Calculations. For the list of indicators used, see Appendix 3, e-version of the 2021 PCI report on the website www.pcivietnam.vn.

Figure 1.17 demonstrates our analyses of several indicators over the years. While a positive sign is that the share of firms reporting no difficulty with land procedures rose to an all-time high in 2021 (55 percent), the share of firms agreeing that compensation for expropriation is appropriate remains low at 29 percent, significantly declining from 40 percent in 2013.

Worryingly, the share of firms that reported possessing land use right certificates (LURCs) fell to the lowest level since 2006. LURCs secure a business' property and provide confidence that their investments on that land will be safe for the foreseeable future. Declining title possessions means that many firms are operating without such security, which tends to be associated with greater risk and therefore less willingness to invest-in and expand their operations.

Figure 1.17 Core Indicators of Land Access and Security of Tenure over Time



Source: 2021 PCI Survey.

Question C4: "Does your firm have a land use rights certificate (LURC) for its main business premises?"

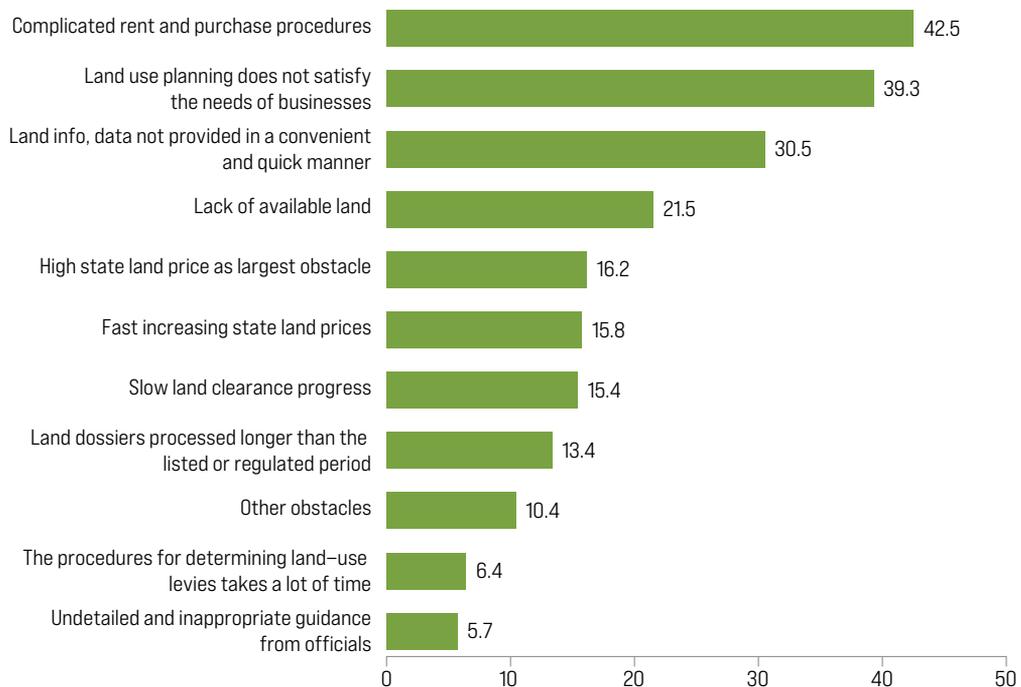
Question C4.3: "Please evaluate the risk that your land will be expropriated (seized/taken) for other purposes, change of planning, etc."

Question C4.4: "Based on your observations of other cases in your province, do you believe that you or your firm will receive fair compensation for your business premises in case of expropriation?"

Question C7 and C7.1: "Over the last 2 years, has your firm implemented land-related administrative procedures (e.g. procedures for land purchase, transfer or rent from the state)? If yes, has your firm encountered any difficulties when implementing these procedures with provincial agencies?"

To find the causes of these constraints, we asked firms about the key challenges encountered in accessing land or seeking to expand their business premises. Figure 1.18 indicates that the biggest constraint is complicated procedures for land rental and purchase (42.5 percent). Next is provincial land use planning which does not match firms' development needs (39.3 percent). This is likely due to manufacturing facilities either being sited away from the vicinity of infrastructure critical for delivery and transportation of goods or being located in close proximity to residential areas, leading to increased pollution risks. About 30.5 percent of firms reported that land information and data were not provided rapidly and conveniently. Over one fifth of firms complained about insufficiency of available land. Other major concerns include high land prices set by the government, fast-increasing government land prices, slow land clearance, and longer than published processing times for land dossiers. Challenges related to land procedures, as indicated in the PCI surveys,²³ are also top deterrent, leading to more than half of firms (53.8 percent) delaying or cancelling business plans in 2021.

Figure 1.18 Land-related Obstacles of Vietnamese Enterprises



Source: 2021 PCI Survey.

Question C6.1: "If yes, what are the largest obstacles to private firms in acquiring land in your province? (Please check all that apply)"

Question C7.1: "If yes, please specify those difficulties: (Check all that apply)"

These constraints directly relate to the implementation of the current Land Law 2013. There are many limitations to enforcing regulations on land procedures, one of which is “limitations and irrelevance of the policy that need to be adjusted to suit reality.”²⁴ A revised Land Law is expected to address obstacles, boost investment, and promote business operation.

1.4.6. Implementation of the Law on Support for Small- and Medium-Sized Enterprises Produced Modest Results

Assessing the implementation of business support programs provided by the government is one of the new areas in the 2021 PCI survey. The Law on Support for Small- and Medium-Sized Enterprises (SMEs) was ratified by the National Assembly on June 12, 2017 and became effective January 1, 2018. This critical legislation asserts the state’s commitment to the development of the private sector in which most businesses are SMEs, with an eye to fostering the private sector into a key driving force of economic growth. Four years of implementation later, it is critical to review the enforcement of the law to inform relevant adjustments given the business community’s urgent need for timely support to restore operations after enduring two years of a global pandemic.

The PCI survey attempted to investigate whether firms could access government relief programs under the SME Support Law, and whether the procedures to access this assistance were easy to implement. We designed a set of questions based on the SME Support Law to gather firm perceptions about seven support programs, which are:

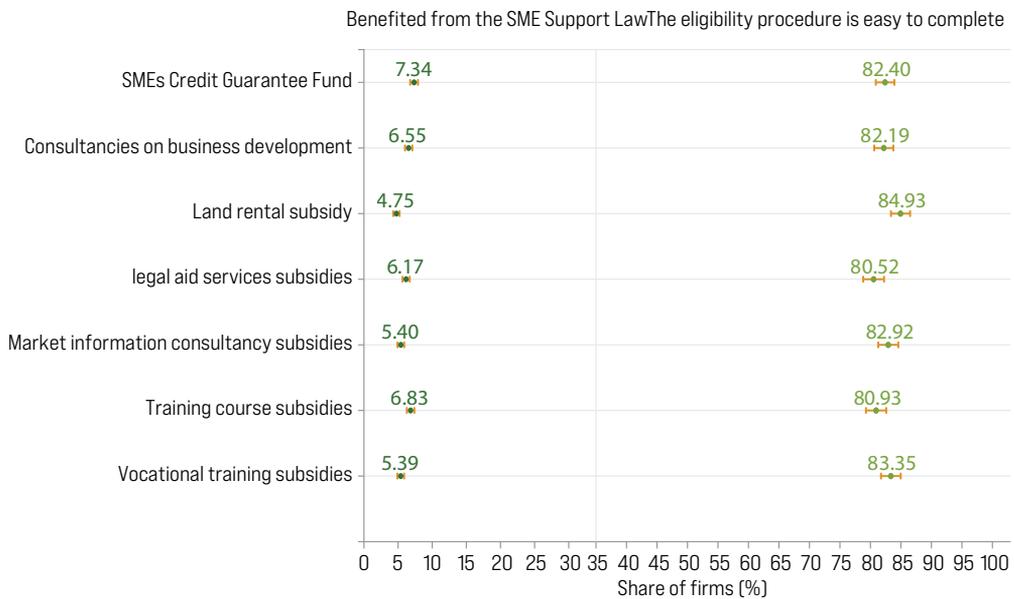
- (1) Access to credit from the SMEs Credit Guarantee Fund;
- (2) Consulting by state agencies for business development, enhancing management sophistication, management skills, and financial transparency to increase accessibility to credit;
- (3) Land rental subsidies for land in industrial parks, high-tech parks, and industrial complexes;
- (4) Fee exemptions or reductions for legal aid services provided by state agencies’ network of legal counsellors;
- (5) Fee waivers or reductions for market information consultancies provided by state agencies’ network of legal counsellors;
- (6) Fee exemptions or discounts for training courses subsidized by state budget on start-up and business/corporate management;
- (7) Discounts or fee waivers for vocational training for employees.

²⁴ Ministry of Natural Resources and Environment, 2022, “Workshop reviewing the implementation of the Land Law and development of the revised Land Law”, [https://monre.gov.vn/Pages/hoi-thao-tong-ket-thi-hanh-luat-dat-dai-va-xay-dung-du-an-luat-dat-dai-\(sua-doi\).aspx](https://monre.gov.vn/Pages/hoi-thao-tong-ket-thi-hanh-luat-dat-dai-va-xay-dung-du-an-luat-dat-dai-(sua-doi).aspx)

Figure 1.19 presents business' ratings of the above programs. We found fewer than eight percent of firms benefitted from individual programs. Only seven percent of firms actually accessed the most popular support program: credit from the SME Credit Guarantee Fund. The least popular program was the one offering subsidies for rentals in industrial parks, high-tech parks, and industrial complexes; only 4.75 percent of firms indicated they benefitted from this opportunity, as the vast majority of SMEs operate outside of these parks and don't benefit from these particular capital outlays.

On the bright side, in each program category, over 80 percent of firms that accessed relief programs indicated eligibility procedures were easy to complete. However, one note of caution is that only firms completing the entire procedure gave these assessments. The question does not capture those who never applied, because they were unaware the program existed. In fact, around 51.3 percent of PCI 2021 respondents said they did not hear about the SME Support Law. And among those that knew about the law, only 36.8 percent reported benefitting from at least one program. Given the high rate of firms unfamiliar with the law, the level of difficulty in complying with eligibility procedures may be larger than perceived by firms having accessed such support programs.

Figure 1.19 Business Assessments on Key Features of the SME Support Law



Note: The share of firms assess the ease of conducting eligibility procedures is calculated among firms which have previously reported receiving assistance under the SME Support Law.

Source: 2021 PCI Survey. Question E2.6: “While you may not have heard of the SME Law, it is possible that your business may have benefitted from some of the supports under the law. Please let us know if you have received any of the following benefits and whether the eligibility procedure is easy to complete?”

1.4.7. Information and Dissemination of Guidance to Firms about Integration Opportunities Remains Weak.

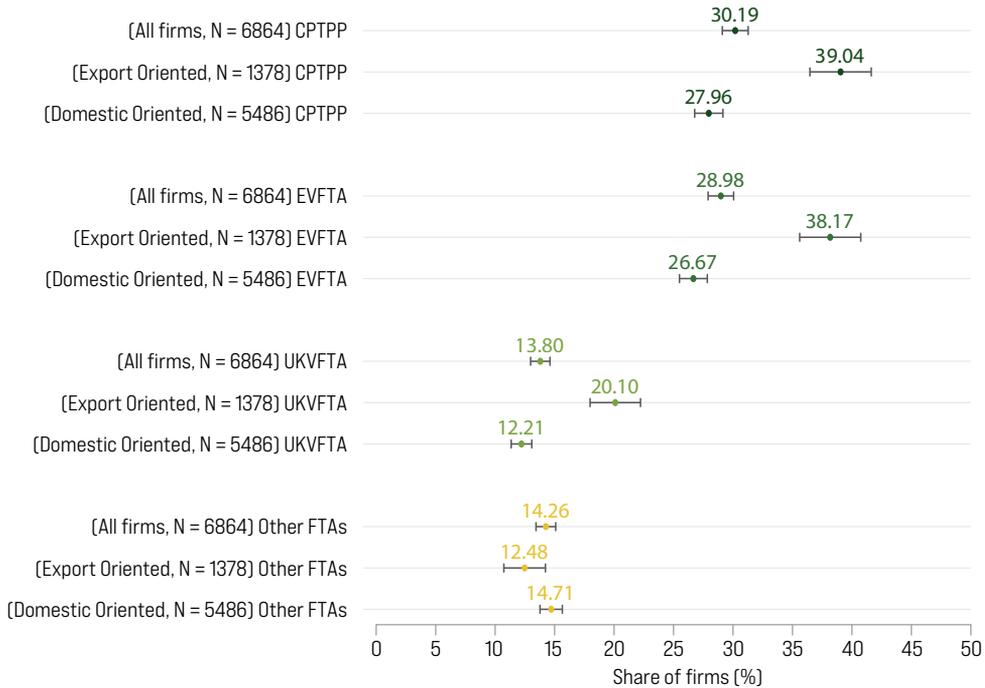
Countries around the world are fortifying economic cooperation through negotiating and signing free trade agreements (FTAs). According to the World Trade Organization (WTO) statistics, by December 2021, the number of effective FTAs was 352, a significant rise from 214 in 2010 and 98 in 2020.²⁵ These FTAs, whether bilateral or multilateral, establish a road map to progressively reduce and eliminate tariffs and non-tariff barriers to trade. This helps expand economic opportunities for signatory countries, promoting international trade. Benefits from FTAs are substantial, especially now that countries need to revitalize commercial activities and accelerate economic recovery after suffering serious effects of COVID-19.

Vietnam is not an outsider to this trend. By end of 2021, Vietnam entered fifteen FTAs with key partners, and negotiations over two additional FTAs are underway. Among these agreements, the most notable are the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the European Union-Vietnam Free Trade Agreement (EVFTA), and the UK-Vietnam Free Trade Agreement (UKVFTA). These are a new generation FTAs boasting extensive and comprehensive commitments in trade, investment, and related areas such as labor, environment, state enterprises, government procurement, transparency, and investment dispute resolution mechanisms.²⁶

In the 2021 PCI, we explored how accessible FTA-related information was to businesses, how firms benefitted from support programs to help them advantage of FTA opportunities, and what constraints firms faced. In this section, we present the fascinating results on the level of familiarity with FTAs, particularly the three most notable agreements. We also analyze firms' difficulties when implementing FTA-related legal documents.

Our analyses show that familiarity with free trade agreements is at quite a modest level among domestic firms, as illustrated in Figure 1.20. The CPTPP is the most well-known treaty with just over 30 percent of firms claiming awareness. Familiarity with EVFTA and UKVFTA was nearly 29 percent and 14 percent, respectively. Interest in these agreements varies considerably among export-oriented firms and domestic-oriented firms. About 39 percent of export-oriented businesses reported knowing about CPTPP; just over 38 percent of these firms claimed they were familiar with EVFTA. The share of domestic-oriented firms acquainted with these two FTAs are slightly under 29 percent and 27 percent, respectively.

26 Lê Quang Thuận, 2019, "Các hiệp định thương mại tự do thế hệ mới và tác động đối với kinh tế Việt Nam" [New generation FTAs and impacts on Vietnam's economy]. *Tạp chí Tài chính* [Finance Journal]. Accessed at: <https://tapchitaichinh.vn/nghien-cuu-trao-doi/cac-hiep-dinh-thuong-mai-tu-do-the-he-moi-va-tac-dong-doi-voi-kinh-te-viet-nam-309171.html>

Figure 1.20 Level of Familiarity with Different FTAs

Source: 2021 PCI Survey. Question K1: “Are you familiar with the following trade agreement?” (1) Comprehensive and Progressive Agreement for Trans Pacific Partnership (CPTPP); (2) European Union- Vietnam Free Trade Agreement (EVFTA); (3) UK Vietnam Free Trade Agreement (UKVFTA); (4) Other. Please specify.

Revising and developing domestic laws and regulations to effect commitments under FTAs is a critical activity of Vietnam’s international integration that ensures consistency between national regulations and FTA commitments while at the same time facilitating domestic firms to best benefit from the FTAs. A recent VCCI research project on legal development to implement CPTPP found that between 2019 and 2021, Vietnamese state agencies issued 11 legal normative documents including two laws, two decrees, and seven circulars, to implement this new generation of FTAs.²⁷

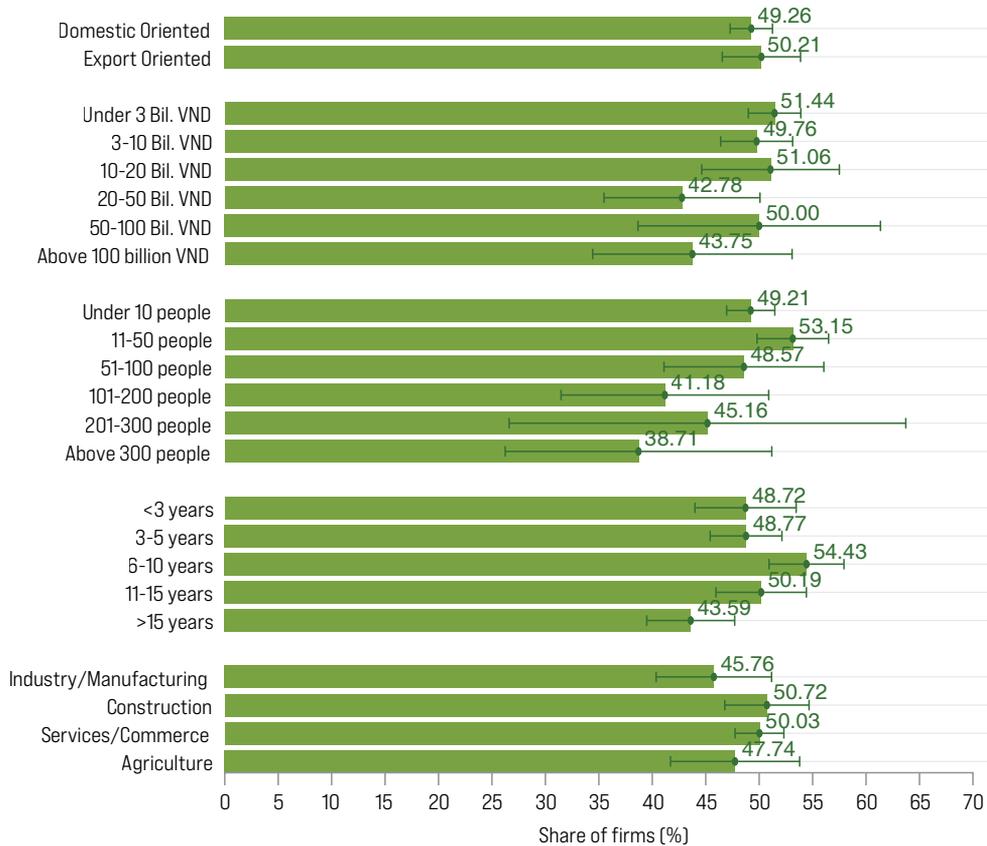
The quality of laws and bylaws has had significant effects on the ability to maximize benefits to be gained from free trade agreements. In the 2021 PCI survey, we asked firms about challenges encountered when complying with those legal documents. We found that about 49 percent of firms reported difficulty complying with legal documents, which are issued by Vietnamese government agencies to implement commitments made under FTAs (Figure 1.21). These difficulties were experienced quite evenly by different types of

²⁷ WTO Center, VCCI, 2021. “Legal development in implementation of CPTPP. Reviewing the implementation and policy implications”. Accessed at: <https://trungtamwto.vn/file/21230/bao-cao-nghien-cuu-xdpl-thuc-thi-cptpp.pdf>

firms, regardless of market orientation, size of investment, size of employment, years in operation, or industrial sectors.

Some findings from the aforementioned VCCI research are helpful to understand these PCI findings. First, the quality of consultations with businesses was not high. As most legal documents executing FTAs were developed in a shorter time than usual to meet the window of time allocated for the national legislative process, drafting agencies did not have sufficient time to prepare for public consultations in an appropriate way. Draft legal documents posted on the drafting agencies were often not enclosed with necessary justifications, such as drafting proposals or regulatory impact assessments. Consequentially, stakeholders, in particular the business community, faced difficulty in understanding and commenting on the legal documents being consulted. Second, documents guiding the implementation of such laws were issued in a longer time than required for FTA enforcement, though less than the average time for conventional lawmaking process. Take an example of the above eleven legal documents, on average, each document was issued 246 days later than January 14, 2019, the date CPTPP came into effect. Third, dissemination activities about FTA commitments were limited. Businesses still had to spend quite a lot of time to understand the technical contents in FTA commitments, such as rule of origin and tariff schemes, when they became involved with related legal documents. There is ample room for provincial governments to play a greater role in disseminating information and establishing channels to swiftly receive and address business concerns regarding FTA-related policies. Overall, these three limitations have created particular obstacles for businesses in understanding CPTPP and other FTAs to best take advantage of their potential benefits.

Figure 1.21 Share of Firms Encountering Difficulty with Legal Documents Issued for Implementation of FTAs



Source: 2021 PCI Survey. Question K5: "Did you encounter difficulty complying with legal documents issued in implementation of the aforementioned FTAs?"

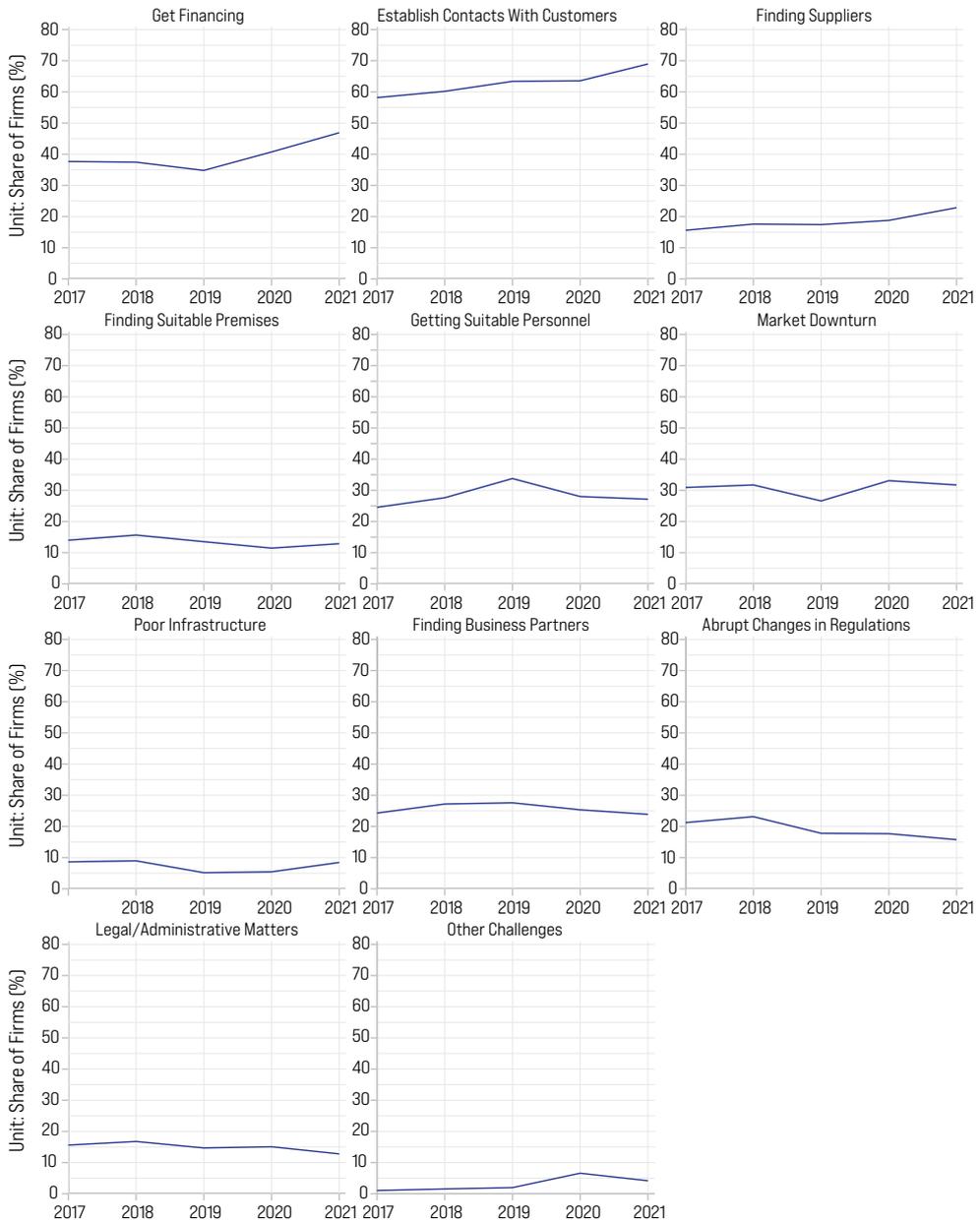
In a nutshell, as Vietnam is integrating further into the global economy, agencies at the national and provincial levels should increase efforts to familiarize the business community with the contents of Vietnam's FTA commitments. State agencies should be more proactive in accelerating the drafting process to meet issuance requirements. In addition, consultations on draft legal documents should be more substantive and effective, providing appropriate justification for decisions and consulting the larger business community. At the same time, state agencies in general and provincial governments in particular should craft and maintain respective mechanisms to receive and tackle obstacles firms face in implementing FTA commitments. Such mechanisms, if implemented effectively, can help firms prepare capabilities to take best advantage of benefits from FTAs.

1.5. MAIN CHALLENGES FACED BY BUSINESSES

Every year, the PCI survey investigates major challenges facing firms. These findings can help provincial authorities identify key areas that need government support. In 2022, this information becomes more important, as provincial government are implementing many solutions to restore the domestic private sector severely impacted by COVID-19.

Finding customers and getting credit or loans remain the top challenges businesses faced in 2021, as presented in Figure 1.22. Nearly 69 percent of PCI respondents encountered difficulties locating customers, an increase from 63.56 percent in 2020. Similarly, firms had greater difficulty accessing credit; 46.85 percent expressed trouble in 2021 compared with 40.73 percent the prior year. Other reported challenges were finding suppliers (22.8 percent), finding suitable business sites (12.88 percent), and poor quality of infrastructure (8.44 percent). Interestingly, firms' positive perceptions of the regulatory environment improved to 17.68 percent from 15.08 percent in 2020, despite a significant proportion of firms indicating difficulty caused by abrupt regulatory changes (15.75 percent) and administrative matters (12.78 percent). We also observed a trend over the last five years that credit access and finding customers remain persistent challenges for businesses. These difficulties were even more pronounced in the two years of COVID-19.

Figure 1.22 Major Challenges Faced by Firms



Source: 2021 PCI Survey. Question E1: "Do you face any difficulties in the following activities and services when running your business? (Please check those that apply)"

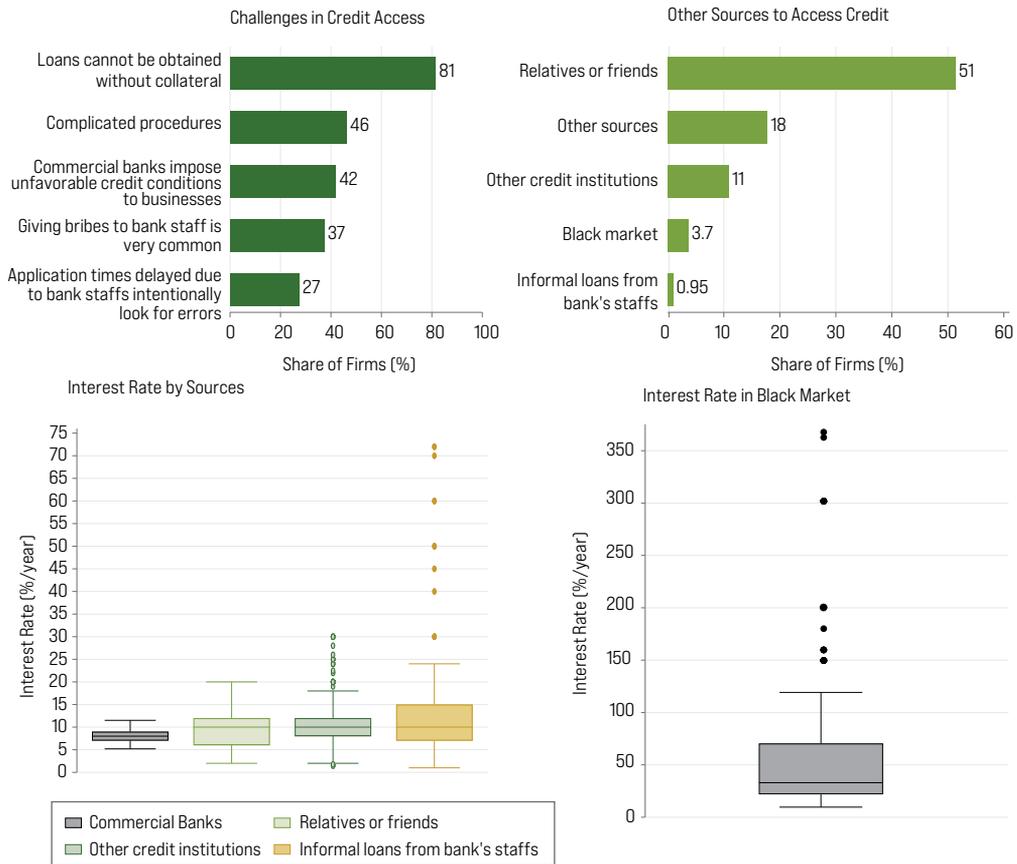
In 2021, the State Bank of Vietnam (SBV) applied credit management measures to support business operations affected by COVID-19. There were two general baskets of relief programs. The first basket included the allocation of capital for the Vietnam Bank for Social Policies to offer zero-interest loans for eligible firms to pay salaries for worker retention and production restoration. The second basket consisted of extending debt maturity, reducing interest and fees, and retaining debt categories for borrowers adversely affected by COVID-19. According to the SBV statistics, in 2021 alone, 2,333 firms accessed the zero-interest credit package, totaling 2,011 billion VND in disbursed loans.²⁸ However, the number of firms accessing the credit package accounts for a relatively small proportion of firms in operation. Overall, credit access remains a top challenge to business operations in the last year, as the 2021 PCI findings confirm.

Currently, many domestic private firms need additional resources to support their recovery after the devastating pandemic. The level of difficulty in accessing loans is illustrated in Figure 1.23. The biggest deterrent to firms' access to credit is that they are required to mortgage assets to be eligible for loans, as cited by 81 percent of firms. The second- and third-largest obstacles are burdensome borrowing procedures, and unfavorable credit conditions imposed by banks.

Since access to loans from commercial banks is challenging, firms had to seek alternative sources of financing. Eleven percent obtained loans from other credit institutions, such as people's credit funds or financial leasing companies. Most business owners mobilized capital from friends or relatives (51 percent) and other sources, such as shareholder contributions, loans from other firms, mortgages or selling corporate assets (18 percent). Nearly 4 percent of firms reported borrowing from predatory lenders. These loans often have exorbitant interest rates, estimated at 60 percent per annum on average, six times higher than the average interest rate for loans provided by mainstream lending institutions.

28 The State Bank of Vietnam, 2022, "Sectoral credit measures to support economic development in 2021 and orientations for 2022", accessed at:
https://www.sbv.gov.vn/webcenter/portal/vi/menu/trangchu/ttsk/ttsk_chitiet?leftWidth=20%25&showFooter=false&showHeader=false&dDocName=SBV482216&rightWidth=0%25¢erWidth=80%25&afrLoop=51891410646586224

Figure 1.23 Key Features of Credit Access in Vietnam



Source: 2021 PCI Survey. Question E4.14: “Where bank loans are not accessible, which of the following does your firm recourse to as a source of capital? And average interest rate per annum?”

These challenges to business operations, especially credit access, point to the need to have appropriate policies to support firms in the current context. Recently, the government enacted Resolution 11/NQ-CP,²⁹ which provides firms a chance to access loans from commercial banks at an annual interest rate of two percent to finance business activities in a number of areas.³⁰ The government relief package, worth 40,000 billion Vietnamese Dong, will provide firms with a considerable credit source. Interest rate relief and related policy solutions included in National Assembly Resolution 43/2022/QH15 and government

²⁹ Government Resolution 11/NQ-CP dated 30 January 2022 on the program for socioeconomic recovery and development and implementing the National Assembly Resolution 43/2022/QH15 regarding the fiscal and monetary policies to support the Government program of socioeconomic recovery and development

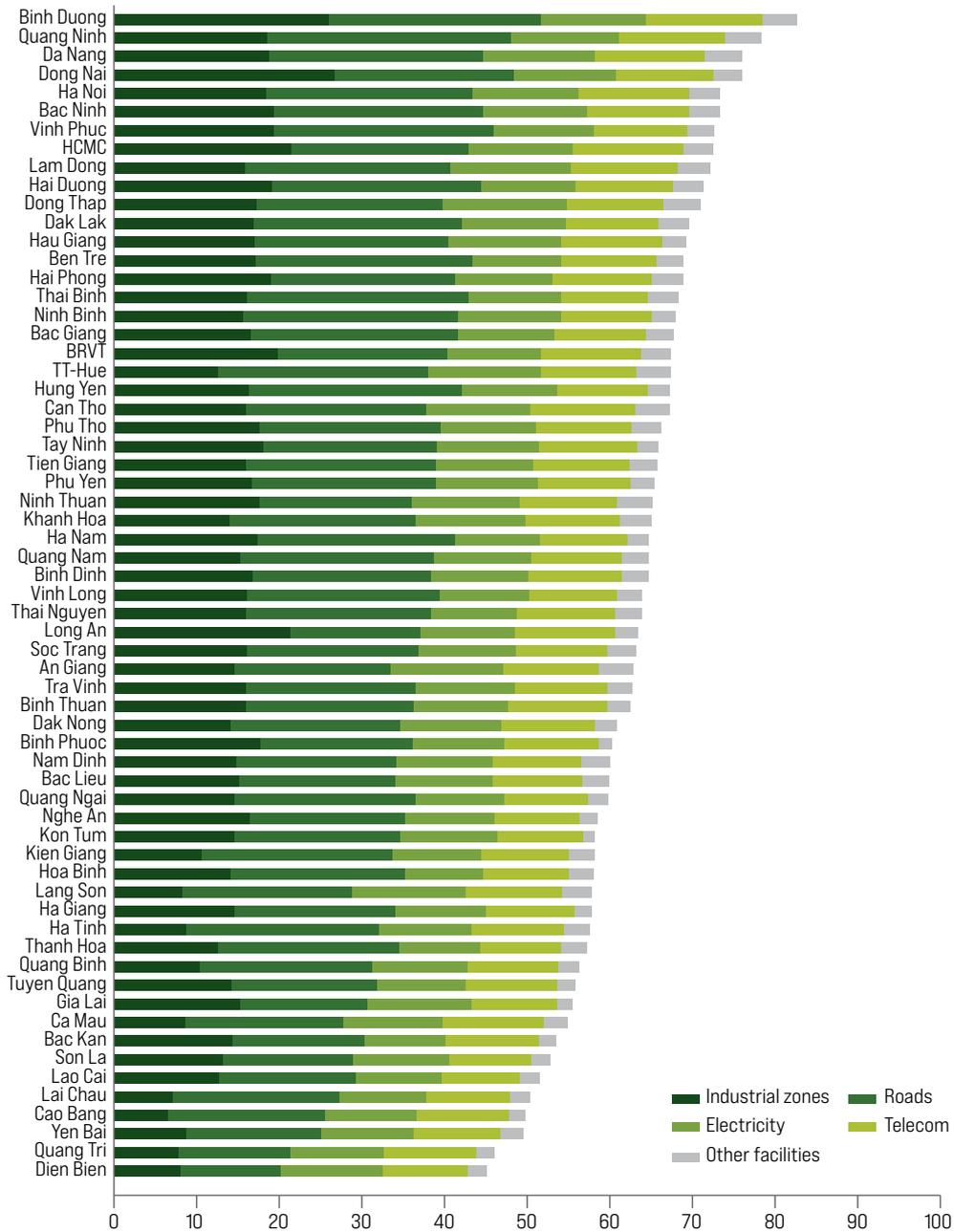
³⁰ These sectors include aviation, transportation and warehousing, tourism, accommodation, food service (restaurants), education and training, agriculture, forestry and aquaculture; manufacturing and fabrication, software publishing, computer programming and related activities, information, renovation of old residential buildings, construction of subsidized housing, and housing to be rented or sold to manual workers.

Resolution 11/NQ-CP are timely and significant measures to facilitate fast recoveries. However, the effectiveness of these relief programs will largely depend on the on-the-ground implementation.

1.6. THE INFRASTRUCTURE INDEX 2021

The rankings of 63 provinces in Vietnam in the 2021 Infrastructure Index is illustrated in Figure 1.24. Though separate from the main PCI assessment, the Infrastructure Index provides useful information for businesses and policy makers. Constructed from a combination of published statistics and data collected from the PCI survey, we retain four subindices measuring the quality of four fundamental business-related infrastructure areas. These include: 1) industrial zones/clusters; 2) roads and transportation; 3) basic utilities; 4) telecommunication, and 5) other infrastructure. In this year's ranking, Binh Duong, Quang Ninh, Da Nang, Dong Nai and Ha Noi are the best performers.

Figure 1.24 The Infrastructure Index 2021



1.7. BUSINESS CONFIDENCE

As in previous years, we dedicate a section to present the PCI Business Thermometer gauging business expansion plans over the next two years. This thermometer is an important indicator because it is based on the level of optimism of private businesses. It has also served as a leading indicator of economic performance throughout the history of the PCI. In 2021, only 34 percent of firms planned to increase operations, continuing the decline from 41 percent in the prior year. This result slid to the same low as in 2012 and was only two percentage points higher than 2013 when the business confidence dropped to the lowest level that decade. The past year also witnessed as many as 16.59 percent of firms planning to downsize or close in within two years, a record high in the PCI history.

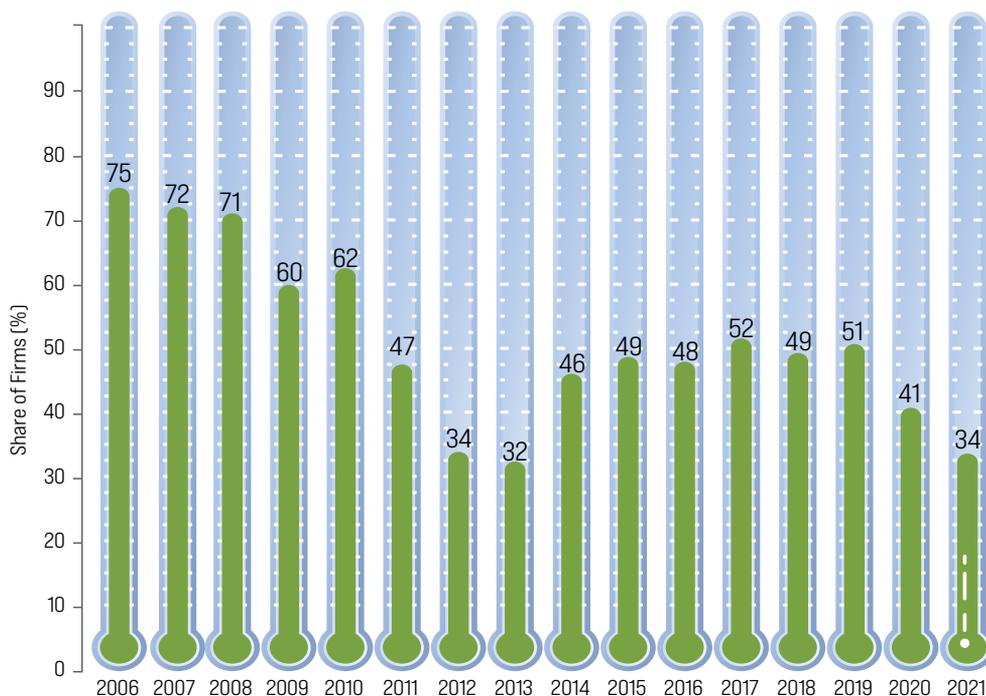
In 2021, both business operations and the national economy were seriously injured by waves of the COVID-19 pandemic, so these findings are understandable. By December 31, 2020, Vietnam recorded only 1,465 infection cases and 35 deaths;³¹ one year later, the total infection cases reached 1,731,257 with 32,394 deaths.³² Outbreaks across most parts of the country disrupted factory operations and services, hurting employment and worker income. The country's GDP declined to 2.58 percent,³³ the lowest growth rate since 2011. The low share of firms planning to expand reflects the overall economic situation as well as the challenging state of business operations in the past year.

31 Ministry of Health, 2020, "Ngày cuối cùng của năm 2020, Việt Nam phát hiện 9 ca mắc COVID-19" [On last day of 2020, Vietnam detected 9 COVID-19 infection cases]. <https://covid19.gov.vn/ngay-cuoi-cung-cua-nam-2020-viet-nam-phat-hien-9-ca-mac-covid-19-1717201528.htm>

32 Ministry of Health, 2021, "Ngày 31/12 có 16515 ca mắc COVID-19 tại 60 tỉnh thành" [Dec 31: 16,515 new Covid cases across 60 provinces]. https://moh.gov.vn/tin-lien-quan/-/asset_publisher/vjYyM7Q9aWnX/content/ngay-31-12-co-16-515-ca-mac-covid-19-tai-60-tinh-thanh-ha-noi-van-nhieu-nhat-voi-1-914-ca

33 General Statistics Office, 2021, "Một số nét chính tình hình kinh tế xã hội Quý IV và năm 2021" [Key features of the socioeconomic situation in 4th quarter and 2021]. <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2021/12/mot-so-net-chinh-tinh-hinh-kinh-te-xa-hoi-quy-iv-va-nam-2021/>

Figure 1.26 PCI Business Thermometer over Time



Source: PCI survey, Multiple years. Question A10: “Which statement best characterizes your firm’s investment plans over the next 2 years?” Share of firms selecting “plan to increase size of operations” or “consider to increase the size of operations”

Vietnam officially set its response policy to “safely adapt with flexibility, and effectively prevent COVID-19,” as laid out in Resolution 128/NQ-CP issued on October 11, 2021, with a focus on restoring economic backbone activities, including circulation, transportation, manufacturing, commerce, and services. Another government action to address the crisis was Resolution 11/NQ-CP on the program for socioeconomic recovery and development and the implementation of National Assembly Resolution 43/2022/QH15. There are signs these policy actions are beginning to pay off. The number of firms registering establishment and resuming operation recorded in the first quarter of 2022 increased by 36.7 percent over the same period last year; total registered capital increased by 21 percent, including additional capital registered by firms already in operation, which also surged by 34.5 percent. The Gross Domestic Product (GDP) in Q1 was estimated to increase by 5.03 percent compared to the same quarter in the prior year; the GDP growth rate was 4.72 percent in the first quarter of 2021 and 3.66 percent in the first quarter of 2020.³⁴ These figures suggest a brighter outlook may be coming in next year’s thermometer.

³⁴ General Statistics Office, Press release on the socioeconomic situation in quarter 1 of 2022, <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2022/03/thong-cao-bao-chi-ve-tinh-hinh-kinh-te-xa-hoi-quy-i-nam-2022/>

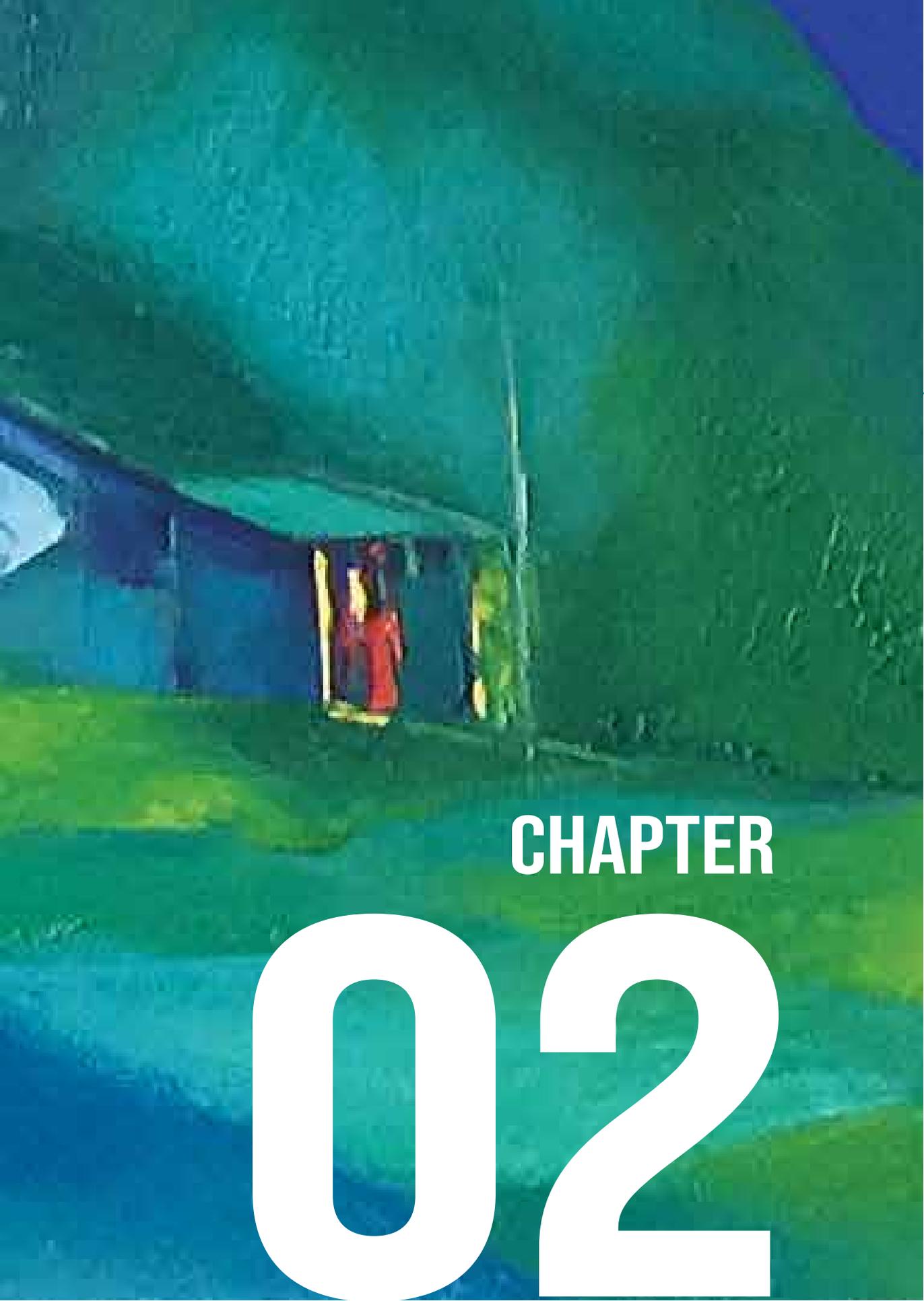
1.8. CONCLUSION

2021 was an extremely difficult year for the business community. This was indicated clearly by sharp drops in the business thermometer compared to previous years. Nevertheless, provincial economic governance has shown strong improvements in this challenging time indicating Vietnamese provinces and municipalities are advancing with support from the private sector. Some northern provinces, such as Quang Ninh, Hai Phong, Vinh Phuc, and Bac Ninh, are making very positive changes in economic development, strengthening governance, and managing the pandemic crisis well, as perceived by firms.

On the national scale, informal charges continue their downward trend. Administrative procedure reforms are also receiving firms' high approval. However, provinces and municipalities need to upscale these reforms, especially as they regard business establishment, land, and land access procedures. Provincial governments should increase their support and guidance to enable firms to take advantage of opportunities associated with Vietnam's international economic integration and provide support programs that work well for small and medium sized businesses.

This year, we adjusted the PCI methodology to closely reflect new developments in the provincial business landscape. Recently, the Prime Minister issued Decision 288/QĐ-TTg dated February 28, 2022 stipulating a framework for ministries, agencies and provincial governments to assess the implementation of established socioeconomic development goals.³⁵ In this decision, the PCI was included as a key indicator to evaluate provincial performance in administrative reform. This emphasizes the increasingly important role of PCI as an effective tool to measure economic governance and promote administrative reforms at the provincial level.

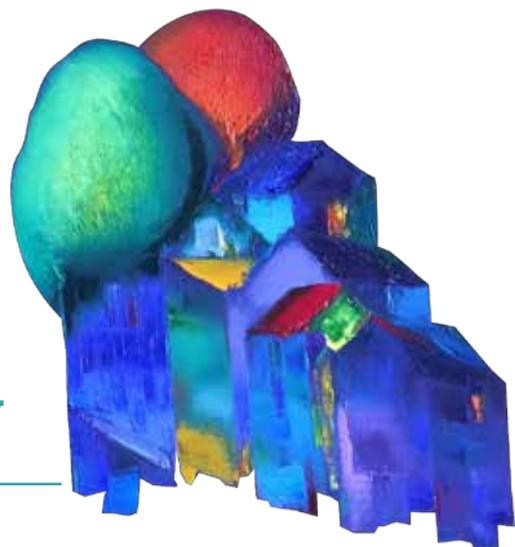
³⁵ *The Vietnamese Government, 2022, "Prime Minister Decision 288/QĐ-TTg on the promulgation of the Frame for Evaluation of Implementation of Socioeconomic Development Goals", <https://vanban.chinhphu.vn/?pageid=27160&docid=205377>*



CHAPTER

02

The Foreign Investment Survey



INTRODUCTION

Despite the negative effects of COVID-19, Vietnam remained one of the top destinations for foreign investment in 2021. Total registered foreign capital in 2021 reached \$31.15 billion USD, which is 9.2 percent higher than 2020. Total new investment amounted to \$15.25 billion USD, an increase of 4.1 percent over last year, with 1,738 licensed projects. These include mega projects such as the \$3.1 billion Liquefied Natural Gas power plant in Long An province by South Korea's GS Energy, the \$1.31 billion Japanese-invested O Mon II Thermo Power Plant, and the \$611.4 million Kraft Vina paper production facility with sizeable Japanese investment. Another \$9.01 billion of the total registered investment came from the 985 projects licensed in previous years that adjusted their capital in 2021, a significant increase of 40.5 percent over last year³⁶ and a substantial jump from the \$5.8 billion adjusted in 2019.³⁷ Notable examples of these adjusted investments included the Korea-owned LG Display Project worth \$2.15 billion in Hai Phong and the Polytex Far Eastern Limited Company factory project in Binh Duong, which added \$610 million to its original capital. In 2021, the realized foreign direct investment (FDI) was estimated

³⁶ General Statistics Office. *Report on socioeconomic situation in the fourth quarter and 2021 dated 29 Dec 2021*, retrieved at < <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2021/12/bao-cao-tinh-hinh-kinh-te-xa-hoi-quy-iv-va-nam-2021> >

³⁷ General Statistics Office. *Report on socioeconomic situation in the fourth quarter and 2019*, retrieved on 29 Dec 2021 at < <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2019/12/bao-cao-tinh-hinh-kinh-te-xa-hoi-quy-iv-va-nam-2019/> >

at \$19.24 billion, similar to 2020.³⁸ By end of 2021, Vietnam had 34,527 effective projects, totaling almost \$408.1 billion in registered capital and \$251.6 billion in realized/disbursed capital, accounting for 61.7 percent of total effective registered capital.³⁹

In this year's foreign investment section, we investigated how foreign-invested enterprises (FIEs) rated the business landscape in Vietnam. The foreign investment PCI survey (PCI-FDI) was conducted in 22 provinces and municipalities with the highest concentration of foreign investors. The sample size was representative of all firm categories in individual provinces. Firms were randomly selected using stratification within each province level by years in operation, legal form, and sector. This year's PCI-FDI respondents consist of 1,185 foreign investors from 47 countries and territories; the response rate was 28.2 percent. Over the course of the PCI-FDI survey (2010-2021), 18,172 firms have responded with their insights, making it the largest annual business survey in Vietnam.

This chapter comprises six sections. We probe how foreign firms fared in their operations and anticipated business prospects in Section 2.1. Next, we dissect firm characteristics by size, sector, customers, and suppliers. In Sections 2.3 and 2.4, we analyze the compliance burden and informal charges that foreign investors experienced. Labor issues are discussed in Section 2.5. The final section, 2.6, presents firm perceptions of infrastructure across the country. We conclude the chapter by revisiting some conclusions from previous findings.

³⁸ General Statistics Office. *Report on socioeconomic situation in the fourth quarter and 2021*.

³⁹ Foreign Investment Agency, Ministry of Planning and Investment. *Foreign investment attraction in Vietnam in 2021*, retrieved on 24 Dec 2021 at < <https://fia.mpi.gov.vn/Detail/CatID/f3cb5873-74b1-4a47-a57c-a491e0be4051/NewsID/5d476094-8272-4d9d-b810-1609ce7b67b3/MenuID> >

2.1. PERFORMANCE

Foreign investors saw declines in sales performance in 2021. The number of FIEs reporting profit was at an all-time low in this decade (38.7 percent). More firms (47.9 percent) reported losses than last year (47.1 percent), the biggest annual decline since 2012. Few firms (7.8 percent) increased their investment, the second year in a row that only single-digit percentages of firms reporting investment increase was recorded by the PCI. However, slightly more than half the firms surveyed (50.6 percent) planned to increase employment size. These numbers shed some light on the severity of COVID-19 on business performance, which we will delve into in greater detail in our special investigation in Chapter 3.

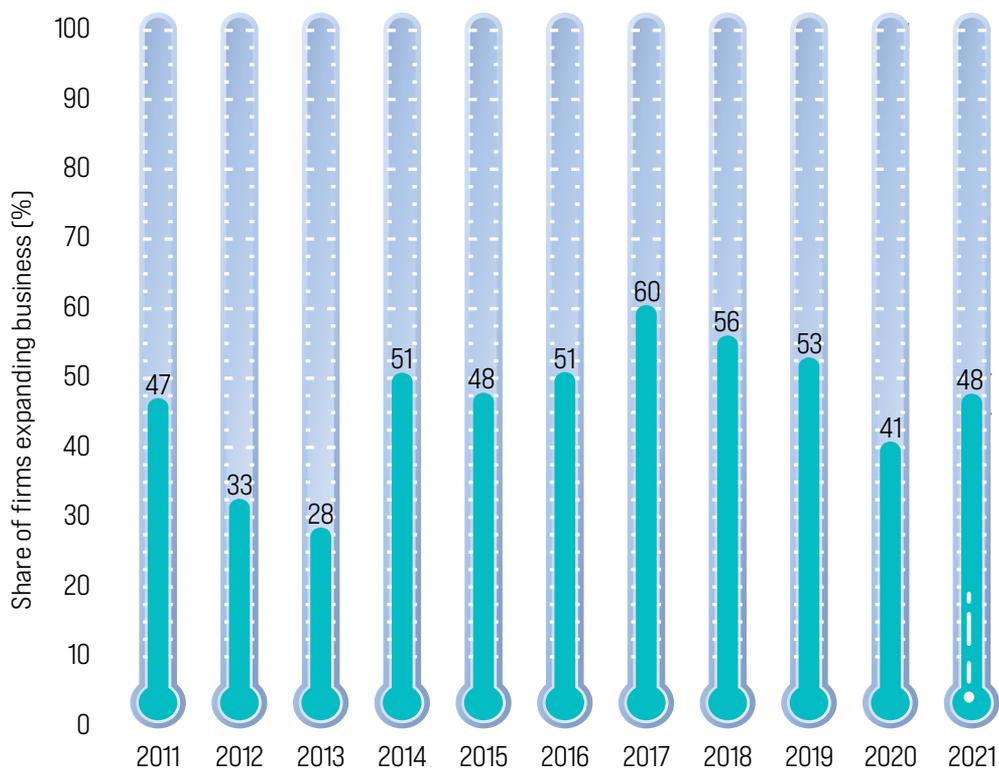
Table 2.1 Performance of Foreign Firms over Time

Year	Firms Increasing Investment (%)	Firms Adding Employees (%)	Firms Reporting Profits (%)	Firms Reporting Losses (%)
2012	5.2	31.0	60.4	27.5
2013	5.1	30.0	63.6	24.1
2014	16.1	62.4	57.9	34.2
2015	11.4	62.4	55.1	37.6
2016	11.0	63.3	59.0	33.4
2017	13.2	62.4	54.3	37.9
2018	11.8	58.2	53.1	36.7
2019	10.4	61.5	56.2	34.3
2020	8.4	55.0	42.6	47.1
2021	7.8	50.6	38.7	47.9

Source: PCI-FDI survey 2021, Question A8 "What was the total employment size of your firm?", Question A9 "What was the total equity capital of your firm?" and Question A10 "Which statement best characterizes your firm's overall performance?"

Foreign operations appeared to be sanguine about business prospects in Vietnam. A surprisingly large share of firms considered or planned expansions in the next two years (47.7 percent). This was an improvement from 2020 when only 40.8 percent projected expansion after their operations recorded big declines. Renewed business confidence was observable across most sectors, regardless of firms' orientation towards exports or the domestic market.

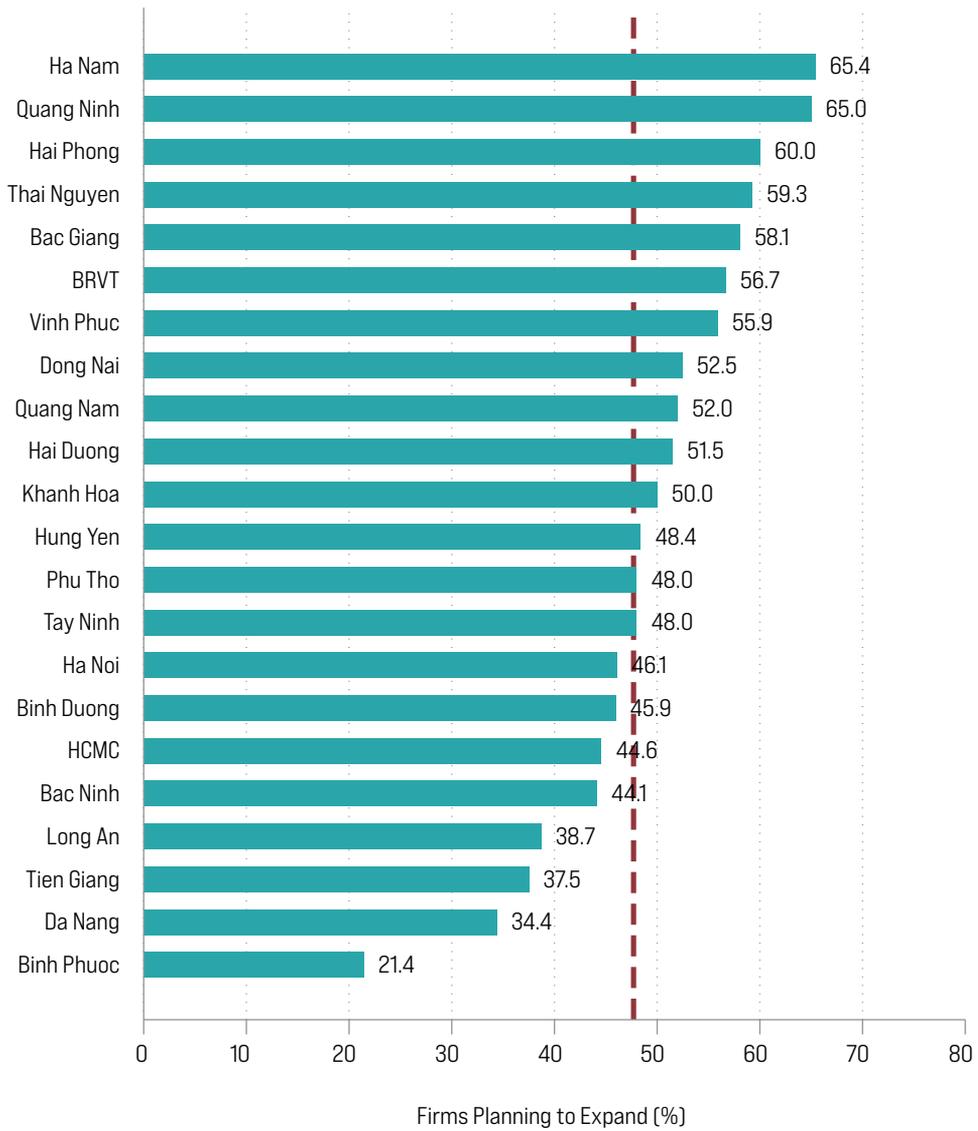
Figure 2.1 PCI-FDI Business Thermometer (2011-2021)



95% Confidence Interval

Source: PCI-FDI survey 2021, Question A.12 “Which statement best characterizes your firm’s investment plans over the next 2 years?”

Figure 2.2 portrays the share of foreign invested firms planning to increase the size of their operations by province. Among the 22 provinces where the survey was administered, three in the Red River Delta had the highest share of firms planning to expand: Ha Nam (65.4 percent); Quang Ninh (65 percent); and Hai Phong (60 percent). The two others in the top five on this list were the northern mountainous province of Thai Nguyen (59.3 percent) and Bac Giang (58.1 percent). It is noteworthy that some provinces with a large concentration of foreign firms reported a below-average share of firms planning to expand, including Ha Noi (46.1 percent), Binh Duong (45.9 percent), HCMC (44.6 percent), and Bac Ninh (44.1 percent). Some provinces recorded rates of planned FIE expansion significantly lower than the national average, including Binh Phuoc (21.4 percent) and Da Nang (34.4 percent).

Figure 2.2 PCI-FDI Business Thermometer, by Province

Source: PCI-FDI survey 2021, Question A.12 “Which statement best characterizes your firm’s investment plans over the next 2 years?” The dashed line represents the national average [47.7 percent].

2.2. CHARACTERISTICS

Figure 2.3 breaks down the sizes of the 1,185 respondents to the PCI-FDI 2021. Large majorities of foreign firms in Vietnam were small- and medium-sized in terms of capital, employment, or revenue. Specifically, the share of firms with investments totaling less than 100 billion Vietnam Dong (VND) accounted for 82.3 percent. Firms employing less than 200 workers accounted for 85.5 percent. In terms of sales, 95 percent reported revenue under 300 billion VND in 2021. As the foreign survey used stratified random sampling, these size characteristics can be considered a close reflection of the foreign business sector in Vietnam.

Figure 2.3: Size of Foreign Firms



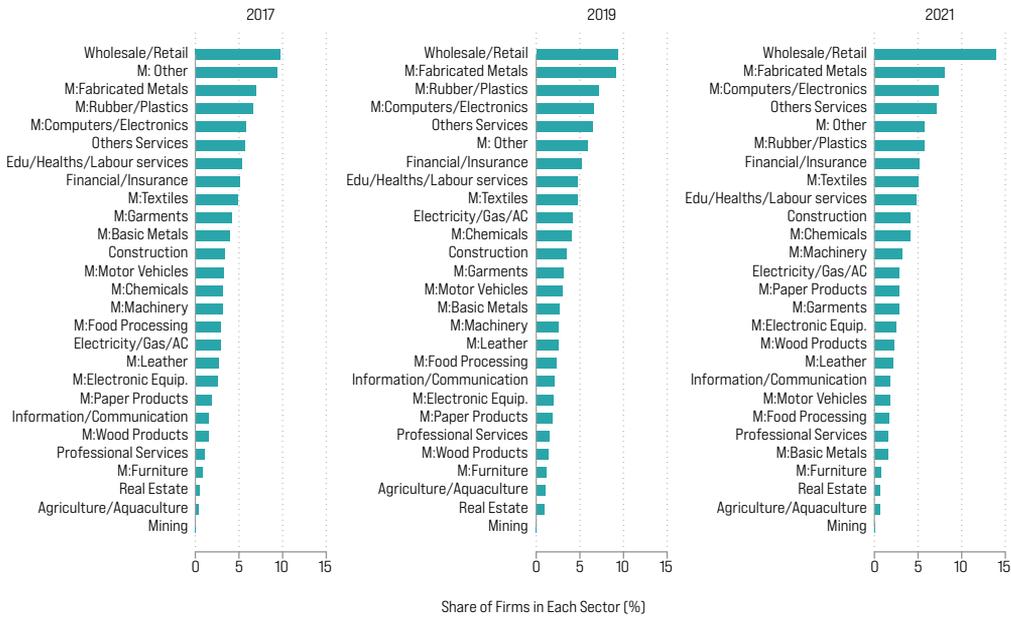
Source: PCI-FDI survey 2021, Question A8 “What was the total employment size of your firm?”, Question A9 “What was the total equity capital of your firm?” and Question A10 “What was the total revenue of your firm?”

Manufacturers remain the largest group among the PCI-FDI 2021 respondents, accounting for 57.4 percent of the total, spread out across several subcategories. This parallels a report from the Ministry of Planning and Investment that found manufacturers contributed 59.3 percent of the total FDI capital accumulated by end of 2021.⁴⁰ Figure 2.4 indicates that the overall investment distribution of FIEs has remained stable across subsectors in recent years. Continuing a trend over the past three years, the data reflect a gradual increase

⁴⁰ Foreign Investment Agency, Ministry of Planning and Investment. *Foreign investment attraction in Vietnam in 2021*, retrieved on 24 Dec 2021 at < <https://fia.mpi.gov.vn/Detail/CatID/f3cb5873-74b1-4a47-a57c-a491e0be4051/NewsID/5d476094-8272-4d9d-b810-1609ce7b67b3/MenuID> >

in the share of firms moving into more technologically sophisticated industries such as computers and electronics. In 2017, this sector came in at fifth place. It moved up to the fourth position in 2019 and became the third largest area of industry for FIEs in 2021.

Figure 2.4 FIEs by Sub-sector



Source: The PCI-FDI sample by Vietnam industrial classification

Table 2.2 tallies the composition of FIEs’ customers. Most foreign firms are exporters, either sending goods back to their home country (27.3 percent) or to a third country (31.2 percent). The share of firms supplying state-owned enterprises declined significantly from 9.2 percent in 2020 to 5.2 percent in 2021. Sales to other foreign firms in Vietnam remained at fairly large volume (48.4 percent), though they also declined from the prior year. About 32.8 percent of firms supplied domestic Vietnamese firms in 2021; 13.1 percent catered directly to domestic individuals. These sharp drops from the prior year suggest that the COVID-19 pandemic may have changed the composition of FIEs’ customers in 2021. There was a strong decline in domestic customers and buyers in the firms’ in home countries with a significant increase in sales to third countries.

Table 2.2 Customers of FIEs (percent with at least one vendor)

Year	Sales to Vietnamese State		Exports		Sales to Foreigners in Vietnam			Sales to Private Vietnamese		
	SOEs	Agency	Home	Third Country	Individual	Both	Enterprise	Individual	Both	Enterprise
2010	10.2	4.0	51.0	9.5		29.1		29.1		
2011	8.1	7.4	44.5	4.2		17.1		41.9		
2012	13.1	5.4	32.8	28.5		24.9		41.3		
2013	16.9	6.3	34.9	40.0		35.8		48.5		
2014	12.9	5.2	37.5	29.3		46.1		39.2		
2015	13.6	4.1	39.9	33.0		51.6		40.1		
2016	11.9	4.8	39.0	34.2	13.3		53.1	18.2		41.1
2017	10.6	4.3	33.6	26.6	11.6		56.0	18.3		41.0
2018	5.3	2.5	31.0	20.7	7.2		53.5	14.1		33.9
2019	8.4	3.5	34.2	22.5	10.4		57.1	16.9		40.7
2020	9.2	3.4	31.7	23.3	10.2		53.2	21.7		42.4
2021	5.2	1.9	27.3	31.2	7.2		48.4	13.1		32.8

Source: PCI-FDI survey 2021, Question A13 “Please choose the main customers of your firm.”

Importantly, the 2021 PCI-FDI found domestic Vietnamese businesses were foreign investors’ largest suppliers, with 52.4 percent of foreign firms buying from Vietnamese private firms. This reflects a growing trend that the Vietnamese private sector is increasing its connection to international supply chains, which has been a prominent objective of the country’s policy-makers. The share of FIEs taking inputs from Vietnamese SOEs and individual/householder businesses was 6.9 percent and 9.9 percent, respectively. The share of foreign operations ordering goods and services from home country suppliers and from third parties declined from the previous year, falling to 38.3 percent and 22.6 percent, respectively. One noticeable trend, however, is that foreign firms were buying less from all three categories of domestic suppliers than in 2020 and 2019. Although it is hard to pinpoint definitively, this appears to be a result of supply chain hold-ups, as foreign multinationals faced long waiting periods in accessing intermediate parts and goods due to limited cargo space and port congestions.⁴¹

41 Siripurapu, Anshu. 2022, “What Happened to Supply Chains in 2021?” Council on Foreign Relations, December 13. < <https://www.cfr.org/article/what-happened-supply-chains-2021>>

This year, we dig a bit deeper into FIEs' suppliers by also asking whether firms received goods and services from foreign buyers or multinational corporations of which they are subsidiaries. In response, 5.8 percent of foreign businesses reported receiving supplies from foreign buyers and just under 5 percent received goods from their parent MNCs.

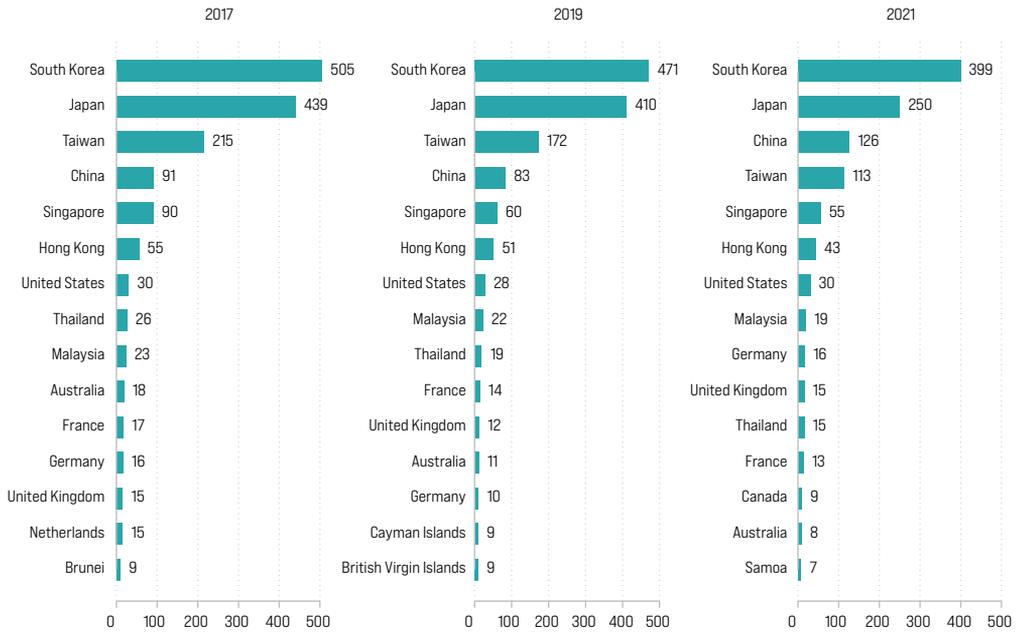
Table 2.3 Suppliers of FIEs (percent with at least one vendor)

Year	SOEs	Private Firms	Individual/ Household Business	In-House	Home Country Businesses	Third Country	Foreign Buyer	Multinational Corporations
2010	13.5	53.6	12.8	7.4	28.3	34.0	*	*
2011	7.6	30.4	7.4	8.6	15.9	18.6	*	*
2012	5.6	43.1	4.8	6.6	39.7	24.5	*	*
2013	9.5	47.9	10.1	12.8	45.6	34.0	*	*
2014	11.5	62.6	15.9	8.3	55.5	34.8	*	*
2015	11.9	68.9	19.3	8.5	58.0	38.3	*	*
2016	12.1	68.5	18.4	9.9	58.7	39.0	*	*
2017	10.0	62.5	16.1	6.9	49.2	26.6	*	*
2018	6.8	60.2	15.0	5.7	47.1	22.8	*	*
2019	10.1	65.9	17.1	7.3	44.3	24.8	*	*
2020	8.2	62.5	14.8	7.5	41.4	26.8	*	*
2021	6.9	52.4	9.9	4.9	38.3	22.6	5.8	5.0

Source: PCI-FDI survey 2021, Question A15 "Who are your suppliers of intermediate goods and services?" * supplier category introduced in 2021

Figure 2.5 shows the composition of FIEs' countries of origin, revealing the top five, in particular, have been quite consistent in recent years. South Korea continued to boast the largest contingent of foreign investors in Vietnam, with 399 respondents in this survey. Japan took second place with 250 respondents. Next in line was China with 126 respondents. Taiwan declined from prior years but nevertheless contributed a significant number of respondents (113). The fifth largest foreign investor is Singapore, a neighboring South East Asian country. The list is rounded out with firms from Singapore, the U.S., Malaysia, Germany, the U.K, Thailand, France, Canada, and Australia.

Figure 2.5 Country of Origin of FIEs



Source: PCI-FDI survey 2021, Question 2 Background information “Country where the headquarters of the parent company or biggest foreign investor is located”

2.3. REGULATORY BURDEN

Foreign investors reported mixed experiences with the regulatory burden in 2021. The median number of inspections dropped to zero in 2021, down from one visit in 2020 and two visits in 2019. The share of firms undergoing harassment (five inspection visits or more) drastically declined from 6.3 percent in 2020 to just 3.2 percent in 2021. These remarkable improvements likely resulted from the Vietnamese government's Resolution 01/NQ-CP, dated 1 January 2021, on the key tasks and solutions to implement the socioeconomic plan and estimated state budget.⁴² The government also provided guidance to ministries, central agencies, and provinces to forego all planned inspections except in special cases or in cases with evidence of violations during the COVID-19 crisis.⁴³

Since the beginning of 2020, the country has enacted various public health measures, including the Prime Minister's Directives 15, 16, and 19, which were aimed at preventing the spread of COVID-19. However, many issues arose from inconsistent interpretation and implementation at the provincial level. Some provincial governments even imposed extremely stringent measures that potentially hampered business operation and disrupted supply chains and manufacturing. To address this, the Prime Minister issued an Emergency Directive 789/CĐ-TTg on June 5 2021 to guide the implementation of dual response measures which specifically told provinces "not to restrict economic activities," and "not to create congestion or negative effects on business operations, and enforce quarantine properly on those coming from epidemic areas as regulated."

Despite these efforts, provinces' varying interpretations of public health policy, including the adoption of some extremely restrictive measures, had a measurable impact on foreign firms' operations. The disruptive effects mainly resulted from the varying comprehension and implementation of the government's COVID prevention policies across multiple levels of administration in the various provinces.⁴⁴ The data from the 2021 survey, shown in Table 2.4, reflect this situation. Despite the central government's emphasis on promoting economic

42 Prime Minister Directive 20/CT-TTg dated 15 May 2017 on rectifying firm inspection activities, Directive 11/CT-TTg dated 4 March 2021 on key tasks and solutions to address difficulties in business operations, and ensure social safety and security in response to Covid-19, Resolution 84/NQ-CP dated 29 May 2020 on key tasks and solutions to address difficulties in business operations and to promote disbursement of public investment capital for social safety and order during Covid-19 time.

43 Official Document 1785/TTCP-KHTH dated 6 October 2021 by Government Inspectorate on reviewing and adjusting the implementation of 2021 Inspection Plan, retrieved at <https://dav.gov.vn/upload_images/files/CV%20s%E1%BB%91%201785-TTCP-KHTH.pdf>

44 Ảnh Tuyết. (7/9/2021). Many indicators reversing, supply chain about to disrupt [Nhiều chỉ tiêu đảo chiều, chuỗi cung ứng có dấu hiệu đứt gãy]. Tạp chí Kinh tế Việt Nam. Retrieved at <<https://vneconomy.vn/nhiều-chi-tieu-dao-chieu-chuoi-cung-ung-co-dau-hieu-dut-gay.htm>>

activity, a large proportion of foreign firms reported an increased regulatory burden in 2021. The share of firms spending more than five percent of executives' time to ensure bureaucratic compliance leaped sharply from 32.9 percent in the previous year to 60.6 percent. The median time for export clearance increased from one day in 2020 to two days in 2021. Similarly, the median number of days for imports to clear customs rose significantly from 2 days in prior years to 3 days in 2021.

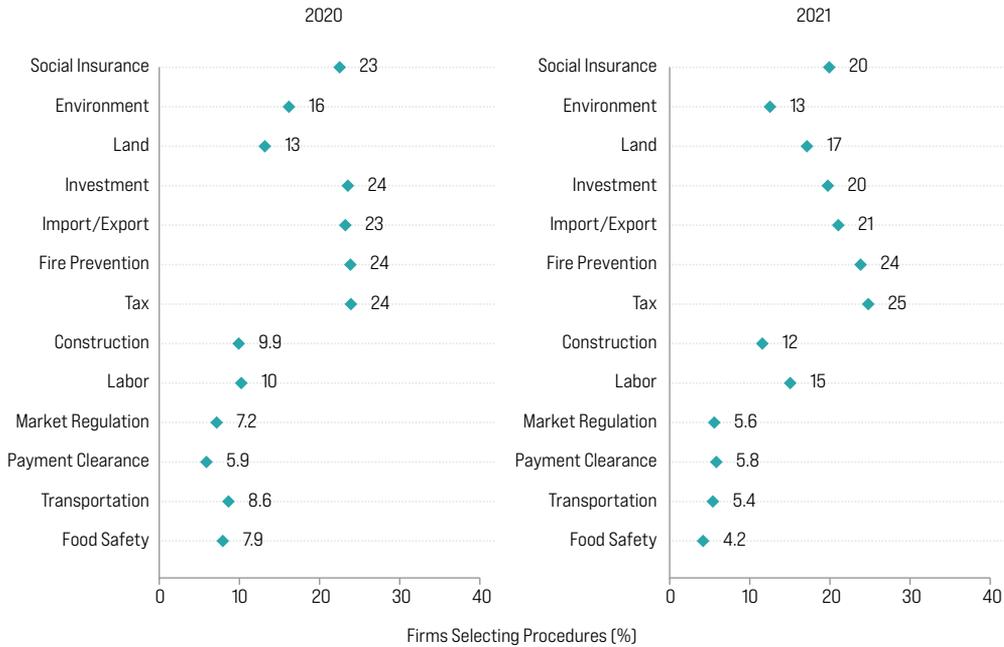
Table 2.4 Post-Entry Regulations for Foreign Firms

Year	Over 5% of Time Spent on Bureaucratic Procedures (percent)	Inspection (Median)	Harassment (5+ Inspections) (percent)	Days for Exports to Clear Customs (Median)	Days for Imports to Clear Customs (Median)
2010	56.6	2.00	19.9	1.00	2.00
2011	68.1	2.00	11.8	1.50	2.00
2012	79.4	2.00	12.9	2.00	2.00
2013	77.8	2.00	14.5	2.00	2.00
2014	70.2	2.00	17.5	1.00	2.00
2015	69.8	2.00	12.9	1.00	2.00
2016	71.9	2.00	23.8	1.00	2.00
2017	66.2	2.00	15.8	1.00	2.00
2018	42.6	2.00	9.8	2.00	2.00
2019	41.3	2.00	9.3	2.00	2.00
2020	32.9	1.00	6.3	1.00	2.00
2021	60.6	0.00	3.2	2.00	3.00

Source: PCI-FDI survey 2021, Question D1 “What percentage of senior management’s time was spent to understand and comply with administrative procedures over the past year?”, Question D6 “How many total times was your business inspected and examined in the last year?”, Question K10.1 “On average, how long does it take to clear customs for your exported goods?”, and Question K10.2 “If you import goods, on average, how long does it take you to clear customs?”

Several categories of administrative procedures were rated more positively by foreign operations in 2021, with a lower share of firms finding them burdensome than in 2020. These included investment registration, social insurance, import/export, environment, market regulation, and food safety. However, certain types of administrative procedures proved equally or more troublesome to FIEs; namely, tax (25 percent), fire prevention (24 percent), land (17 percent), construction (12 percent), and labor (15 percent).

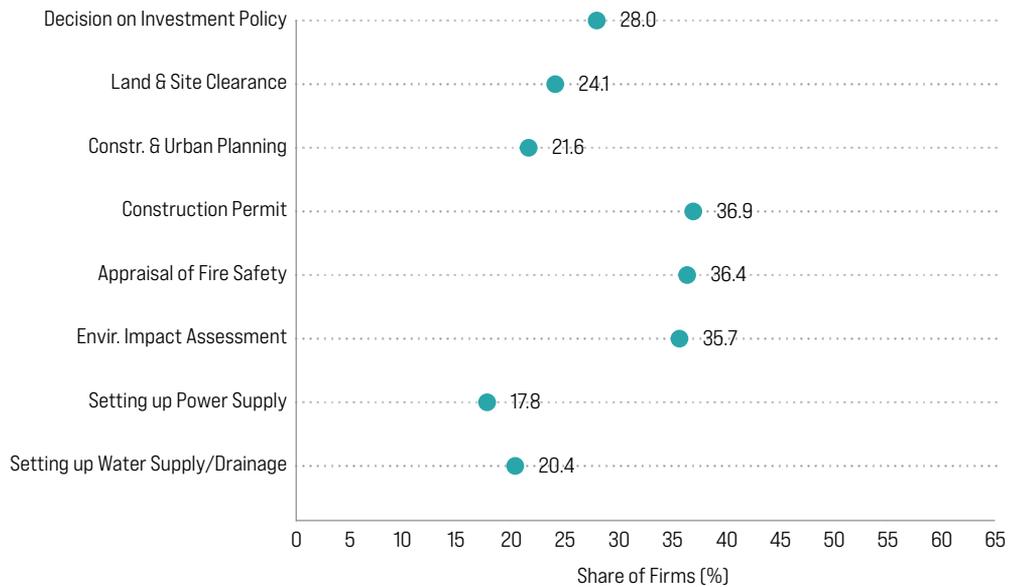
Figure 2.6 Most Burdensome Administrative Procedures



Source: PCI-FDI survey 2021, Question D.2 “From your experience in the province, please indicate the most troublesome administrative procedures.”

Digging a little further into foreign investors’ experiences in construction-related investment projects, we found that implementing some procedures was fairly difficult for firms over the span of two years. They struggled with such procedures as obtaining construction permits (36.9 percent), securing appraisal of fire prevention and fire fighting (36.4 percent), writing environmental impact assessment reports or getting approval of environmental protection plans (35.7 percent), and decision on investment policy (28 percent). Setting up power supply and setting up water supply and drainage were rated as easier than the remaining procedures with only 17.8 percent and 20.4 percent of firms, respectively, deeming these to be administratively difficulty areas.

Figure 2.7 Difficulties in Construction-Related Projects (2020-2021)



Source: PCI-FDI survey 2021, Question D.21.5 “Please indicate which of the following steps your firm had to undertake in the process of obtaining construction permits and starting operation, and did your firm encounter any difficulty when completing the procedure?” All firms answering this question were those who had undertaken construction projects in the past two years. The graph shows the share of these firms rating each procedure as “difficult.”

2.4. CORRUPTION

The Vietnamese government remains dedicated to combating corruption. The 13th National Party articulated in its resolution dated 1 February 2021 that “the continued fight against corruption” was among the top priorities in the country’s development orientations for 2021 – 2030, and a key task of this Congress.⁴⁵ These directions were further emphasized by the government’s commitment to “steadily, decisively, and effectively fight corruption, especially petty corruption,” which was put down in the 13th Party Congress Action Plan. This provided a foundation for ministries, agencies, and provincial administrations to build their respective action plans and implementation procedures.⁴⁶

The year 2021 witnessed significant progress in the anticorruption campaign. According to records from the Central Steering Committee on Anticorruption, 618 Party members were punished for corrupt deeds and deliberate violations (compared with only 132 in 2020). Many high-ranking officials were singled out for punishment, including 31 cases under the management of the Politburo and the Party Secretariat (15 more cases than in 2020). After inspections and audits, financial penalties amounting to 81,290 billion VN Dong and 811 hectares of land were proposed for 2,286 groups and 6,132 individuals, alongside administrative penalties. An astounding 390 cases and 1,011 defendants were prosecuted or investigated for taking bribes and abuse of power in 2021.⁴⁷

The progress in these anticorruption efforts was mirrored in the results of the foreign investment survey. As fear of punishment increased among officials, FIEs reported less experience with corruption. Most indicators of informal charges, the Vietnamese euphemism for petty bribery, continued their declining trend. The share of firms not paying any informal charges at all reached a high of 41.9 percent, the highest since 2010. However, 1.7 percent of firms still reported paying more than 10 percent of business revenue in bribes in 2021, marginally increasing from 1.2 percent the preceding year. Similarly, 5 percent of firms in 2021 spent five to ten percent of revenue to pay informal charges while only 2.1 percent did so in 2020. These findings indicate the continued necessity of the administration’s stronger commitment to combatting corruption.

45 *Communist Party of Vietnam (2021). Resolution of the 13th National Party Congress dated 1 February 2021, retrieved at <<https://tulieuvankien.dangcongsan.vn/ban-chap-hanh-trung-uong-dang/dai-hoi-dang/lan-thu-xiii/ngghi-quyet-dai-hoi-dai-bieu-toan-quoc-lan-thu-xiii-cua-dang-3663>>*

46 *The Vietnamese Government (2021). Resolution 50/NQ-CP dated 20 May 2021 promulgating the Action Plan to implement the 13th National Party Congress Resolution, retrieved at <<https://chinhphu.vn/?pageid=27160&docid=203259&classid=509>>*

47 *Vietnam News Agency (2022, Jan 21). 2021: Anticorruption recorded significant results [Công tác phòng, chống tham nhũng, tiêu cực đạt nhiều kết quả rõ rệt], retrieved at <<https://baotintuc.vn/infographics/nam-2021-cong-tac-phong-chong-tham-nhung-tieu-cuc-dat-nhieu-ket-qua-ro-ret-20220121063319919.htm>>*

Table 2.5 Cost of Informal Charges (Amount/Annual Income)

Year	0%	<1%	1-2%	2-5%	5-10%	>10%
2010	21.8	40.4	16.7	11.4	7.0	2.6
2011	30.2	33.7	20.0	7.7	6.7	1.6
2012	30.0	41.0	17.4	8.3	2.6	0.8
2013	19.7	48.5	18.3	8.7	3.1	1.7
2014	18.7	42.7	20.4	11.8	4.5	1.9
2015	16.4	44.5	18.2	12.8	6.4	1.8
2016	25.9	43.9	15.2	8.8	4.1	2.1
2017	31.3	41.1	14.4	6.8	3.8	2.6
2018	37.5	39.8	14.6	4.8	1.8	1.5
2019	36.6	40.0	13.1	6.0	2.8	1.4
2020	34.7	41.0	14.0	6.9	2.1	1.2
2021	41.9	31.0	13.6	6.9	5.0	1.7

Source: PCI-FDI survey 2021, Question D.13 “On average, what percentage of income do firms in your line of business typically pay per year for informal charges to public officials?”

Despite the general declining trend in bribe requests, a few areas stand out where informal charges seem to be moving in the opposite direction. The findings from 2021 highlight the need to step up anticorruption actions in areas where informal charges were rampant as perceived by FIEs, such as import/export (38.9 percent) and inspection (25.4 percent). Bribes in courts became a slightly a bigger concern to foreign firms (18.2 percent) than last year. Alarmingly, as many as 21.1 percent of firms reported paying bribes when completing land procedures in 2021, a sharp rise from 10.3 percent the preceding year. These findings match the higher proportion of firms rating land procedures as burdensome (presented in section 2.4). Importantly, we also observe a massive increase to 60.4 percent saying the requested service was delivered after bribery, indicating a tremendous increase in the predictability of bribes. This has the positive benefit of allowing firms to predict the cost of bribery and treat it as a tax, but has the negative impact of making bribes appear more systematic and transactional.

Table 2.6 Questions on Corruption in the PCI-FDI Survey

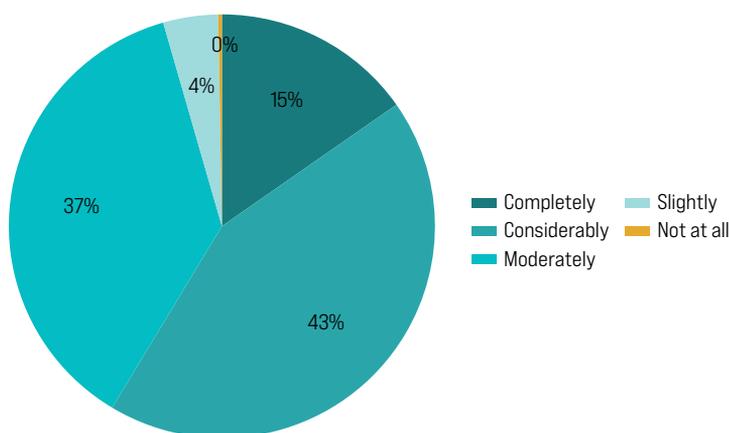
Year	Paid Informal Charges to Inspectors (percent)	Bribe during Customs Procedures (percent)	Bribe during Land Procedures (percent)	Bribes were a Deterrent to Using Courts (percent)	Service Delivered after Bribe Payment (percent)
2010		64.9		9.3	48
2011		52.9		5.2	46.1
2012		56.2		13.1	54.7
2013		58.6		14.5	59
2014		66.2		21.9	58.2
2015		66.5		23.9	59.1
2016	45.8	56.4	21	18.7	45.3
2017	44.9	53	14.6	18.9	50.3
2018	39.9	44.4	6.2	14.3	49
2019	32.5	42.5	10	14.9	44.5
2020	25.4	37.1	10.3	17.2	39.1
2021	25.4	38.9	21.1	18.2	60.4

Source: PCI-FDI survey 2021, Question D.8 “During any of the inspections, did you provide a gift or informal payment to the examiner?”, Question K.11 “Has your firm ever paid an informal charge to expedite import/export procedures?”, Question C7.2 “Paid informal charges to have the dossiers processed faster,” Question G. 3.1 “If you don’t appeal to the court, what are the reasons?”, and Question D.15 “In your opinion, if a firm in your province pays ‘informal charges’, how often is the service or document delivered as the firm expected?”

2.5. LABOR QUALITY

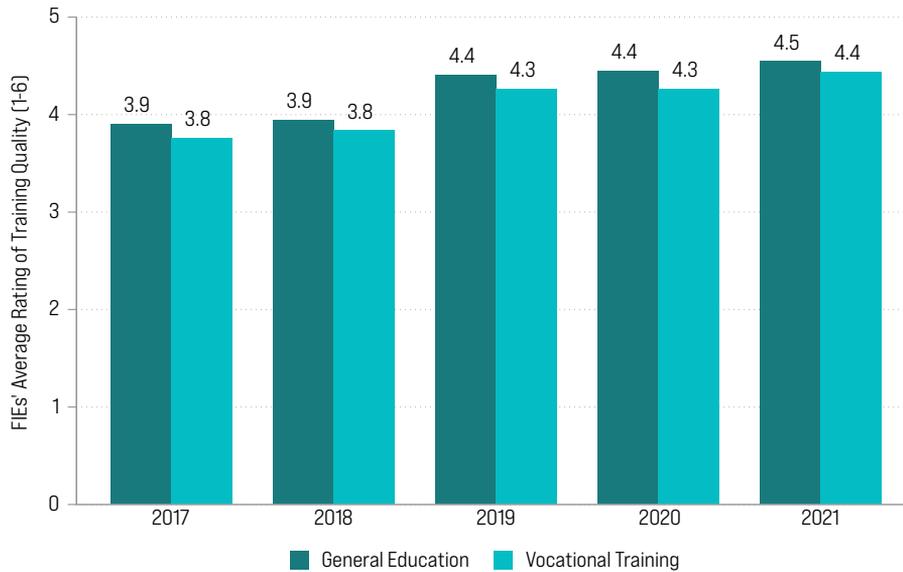
FIEs' rating of local labor quality is a key indicator to which provincial government needs to pay attention in its efforts to attract investment and develop business. Overall views of current labor quality remain satisfactory but not stellar. Assessing 2021 labor quality in their province of operation, only 15 percent of surveyed FIEs reported that "it completely meets the firm needs" and 43 percent believed that it "considerably meets the firm needs." The share of firms rating labor quality as "moderately" meeting their needs was 37 percent. Those who felt labor "slightly" or "not at all" met the needs of their company accounted for 5 percent of the respondents.

Figure 2.8 FIE Assessment of Provincial Labor Quality



Source: PCI-FDI survey 2021, Question E.9 "From your experience in employment, please judge the quality of local labor."

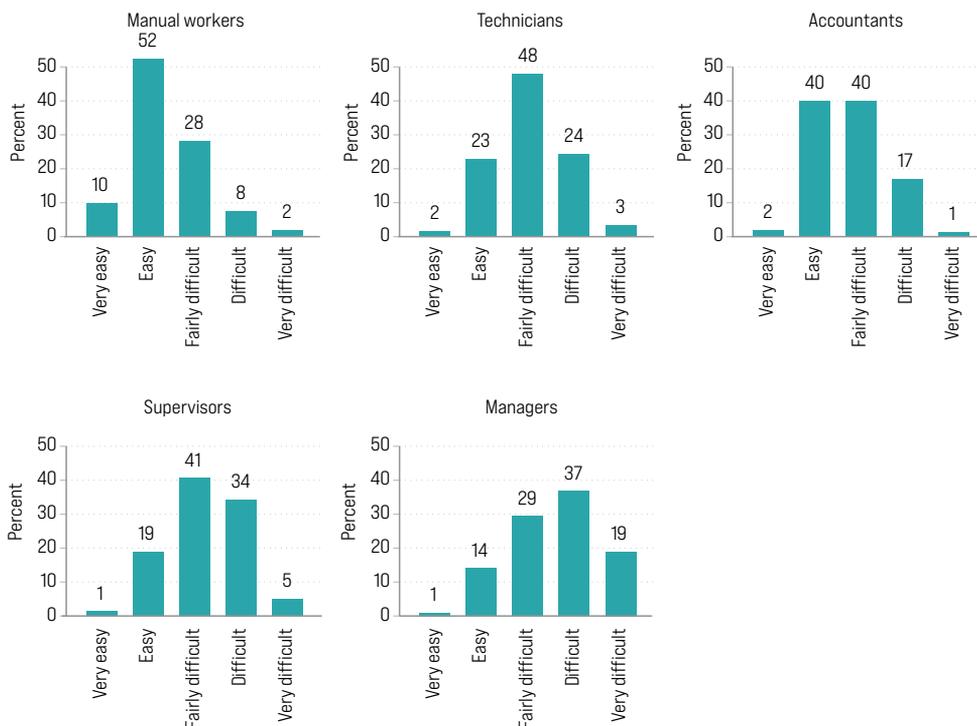
Nevertheless, FIEs tend to be more optimistic about future human capital improvements in their assessments of the value of technical and professional training that tomorrow's workers are receiving. FIEs' rating of local labor quality has steadily improved for both general education and vocational training in recent years. Specifically, on a 6-point scale (1="Very poor" to 6="Very good"), FIEs' average rating of general education was 4.5 points in 2021, up from 3.9 points in 2017 and 2018. A parallel trend is seen with firms' regard for vocational training which rose to 4.4 points in 2021, an increase from 3.8 points in 2017 and 2018. Despite pandemic disruptions, foreign firms continue to positively assess the training and education that their workers received.

Figure 2.9 Quality of General and Vocational Training

Source: PCI-FDI survey 2021, Question E.2 “How do you rate general education and vocational training for labor?” The graph displays the average of firms’ rating in each of the surveyed years.

An additional dimension of human capital development is the ease of recruiting qualified workers for replacement or expansion. Figure 2.10 shows details of FIEs’ assessment of recruiting ease across key worker types in the province. Firms in 2021 reported they have abundant access to manual workers with 62 percent considering it “very easy” and “easy” to hire these laborers. Accountants are also in relatively good supply with 42 percent having almost no difficulty recruiting these types of workers. The fractions of firms finding it easy to recruit technicians and supervisors are 25 percent and 20 percent, respectively. Reflecting a global challenge, recruiting talented managers was the most difficult, with only 15 percent of FIEs claiming it was “easy” or “very easy” to find them.

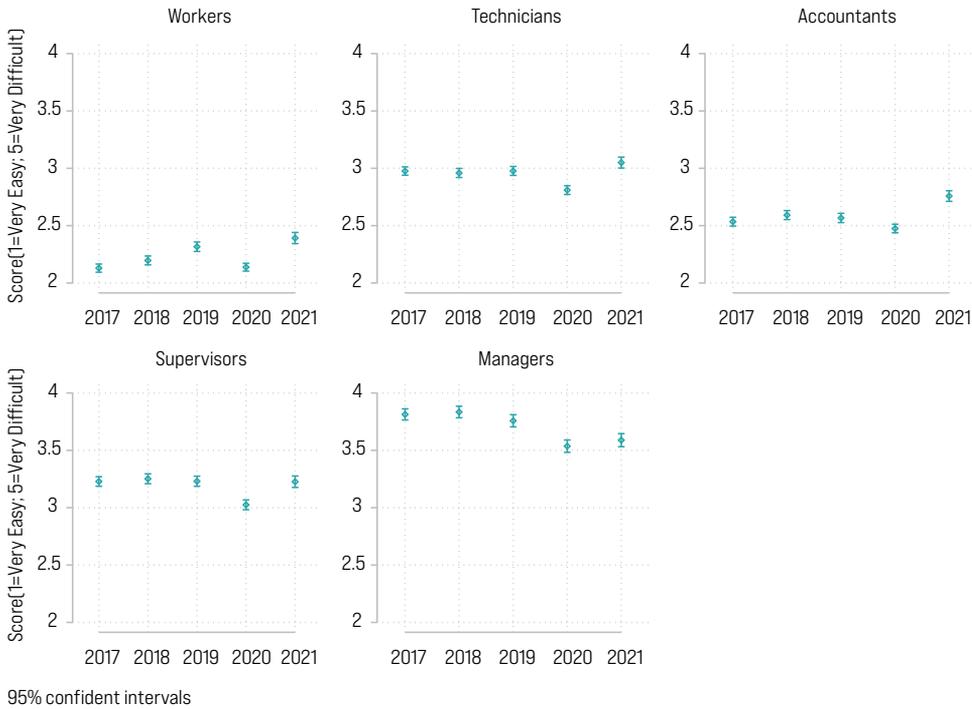
Figure 2.10 Ease in Recruitment by Labor Type



Source: PCI-FDI survey 2021, Question E.71 “Please evaluate the level of easiness in the recruitment of the following workers groups in your areas.” The graphs present shares of firms rating the easiness level of workers groups in 2021.

However, FIEs generally appeared to face more challenges in 2021 when recruiting capable workers. Survey results from the PCI-FDI show that difficulty in hiring all types of employees, from manual workers to technicians and accountants, increased in 2021 in comparison to previous years. The ease of recruiting supervisors improved when compared to 2020 but really only reached the same level previously noted in the 2017-2019 period. Recruitment of managers was slightly more difficult in 2021 than in 2020. This may be due to the higher demand for capable managers in the face of new business challenges.

Figure 2.11 Difficulty in Recruiting Workers



Source: PCI-FDI survey 2021, Question E.7.1 "Please rate the easiness level in recruitment of the following groups of labor at your firm." The graphs present firm assessment of difficulty in recruiting workers groups in the 2017-2021 period.

Average labor training costs represented 5.69 percent of FIEs' total operating expenses in the PCI-FDI Survey 2021. This is higher than the level recorded in 2020. However, the 95 percent confidence intervals in 2021 overlap with the preceding period, meaning that the increase is not statistically significant. Table 2.7 shows the fluctuations in FIEs' average labor training costs over the past decade.

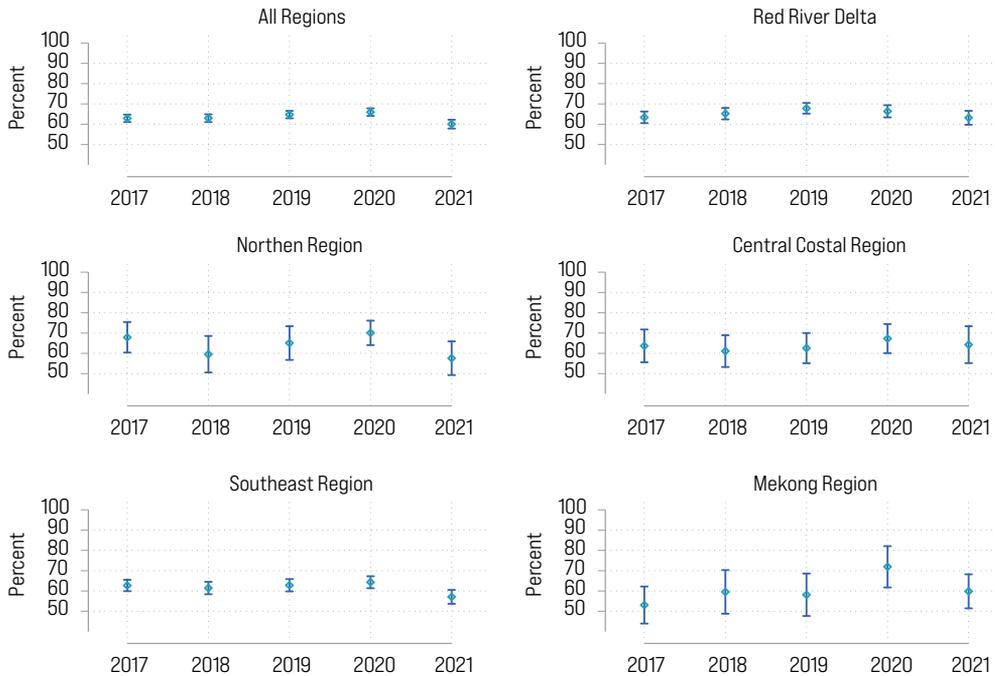
Table 2.7 Average Labor Training Cost of Firms (Percentage of Total Operation Cost)

Year	Observations	Average	Standard Deviation	95% Confidence Intervals	
				Lower Bound	Upper Bound
2010	619	7.71	13.71	6.63	8.79
2011	580	7.17	13.80	6.05	8.30
2012	574	3.62	5.52	3.17	4.07
2013	793	3.63	7.31	3.12	4.14
2014	798	5.95	11.75	5.13	6.76
2015	1020	5.24	10.20	4.62	5.87
2016	956	4.84	8.78	4.28	5.39
2017	1155	5.72	10.38	5.12	6.32
2018	1049	4.88	8.13	4.39	5.37
2019	1081	4.90	8.63	4.38	5.41
2020	1168	4.77	9.32	4.24	5.31
2021	1153	5.69	12.12	4.99	6.39

Source: PCI-FDI survey 2021, Question E.8 “In the last year, what percentage of business costs did your firm spend on labor training?”

Labor force stability is an important factor for FIEs to operate efficiently. The PCI-FDI Survey 2021 suggests that 60 percent of workers trained by the company remained with the firm for a period longer than a year, which represents a considerable drop from 66 percent in 2020 and a record low since the PCI-FDI Survey was first conducted. The Central Coastal and Red River Delta regions saw trained worker retention at 64.3 percent and 63.2 percent, respectively, while Eastern and Southern provinces recorded the lowest rate, 57.1 percent. However, these labor disruptions were largely involuntary on the part of both firms and employees. According to the GSO records on January 6, 2022, in 2021, 2.2 million migrant workers traveled back to their home provinces after lockdowns, including 447,000 returning from Hanoi, 524,000 returning from HCMC, 600,000 from southern provinces, and over 676,000 from other provinces. This left many businesses, especially foreign manufacturers, with severe worker shortages which persisted to March 2022 (the time of writing this report).⁴⁸ This phenomenon became more pronounced due to the acceleration of COVID-19 in the third quarter of 2021,⁴⁹ which we will probe further in Chapter 3 of the report.

48 *VnExpress* (2022). Over 2.2 million migrant workers left cities to return home. [Hơn 2,2 triệu lao động bỏ thành phố về quê], ngày 6/1/2022, retrieved at <[49 *Zing* \(2021\). Plight seen on a 1,000 km odyssey back home. \[Những cảnh đời trên hành trình hơn 1.000 km để về quê\]. Article published on October 7, 2021, <<https://zingnews.vn/nhung-canh-doi-tren-hanh-trinh-hon-1000-km-de-ve-que-post1268985.html>>](https://vnexpress.net/hon-2-2-trieu-lao-dong-bo-thanh-pho-ve-que-4412879.html#:~:text=Kho%E1%BA%A3ng%202%2C2%20tri%E1%BB%87u%20ng%C6%B0%E1%BB%9Di,t%E1%BB%9Bi%2015%2F12%2F2021.>></p>
</div>
<div data-bbox=)

Figure 2.12 Trained Workforce Retention

Source: PCI-FDI survey 2021, Question E.8.1 “On average, what percentage of the workers trained by your company remain with the firm for a period longer than a year?”

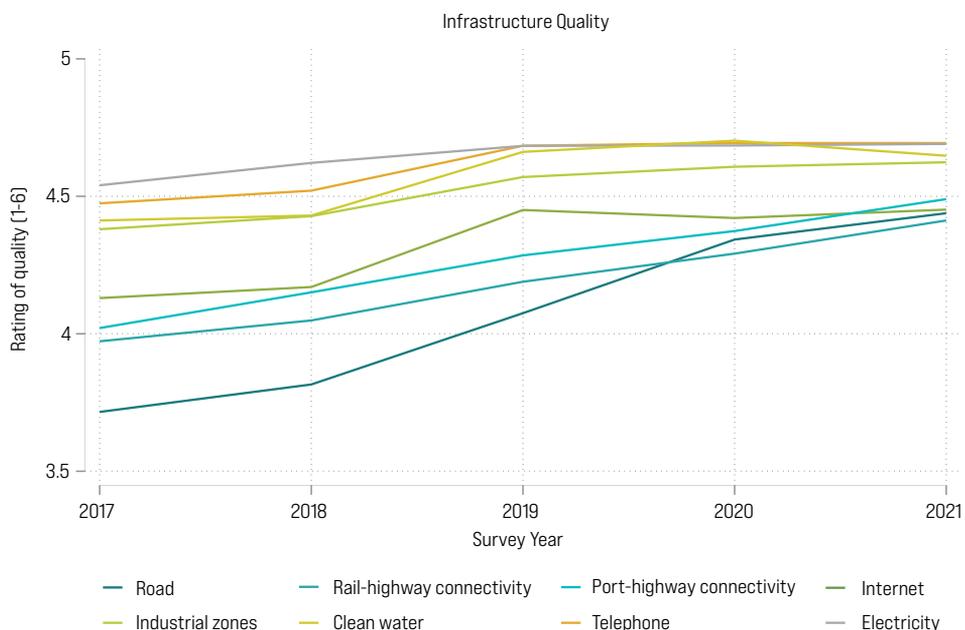
2.6. INFRASTRUCTURE

The 2020 PCI report pointed out that Vietnam's infrastructure was not a comparative advantage when foreign firms were considering an investment location. However, infrastructure development is a priority for policy-makers and its quality has improved incrementally in recent years.⁵⁰ The 2021 PCI-FDI survey results are in line with this positive trend. Figure 2.13 depicts firms' assessment of the quality of infrastructure types that are most important to the operation of the foreign firms (roads, electricity, telephone, internet, water, and industrial zone infrastructure) over the period 2017-2021. Firms were asked to evaluate each category on a 6-point scale (1 = “Very poor” and 6 = “Very good”). Roads are a broad area showing significant improvement over time, including road quality (3.72 points in 2017 and 4.44 points in 2021) and port-to-highway connections (4.02 in 2017, 4.49 in 2021) and the connection between railway and expressway (3.97 in 2017 and 4.41 in 2021). The

⁵⁰ VCCI (2021). 2020 PCI Report. NXBTN, retrieved at <<https://www.pcivietnam.vn/an-pham/bao-cao-pci-2020-ct185>>

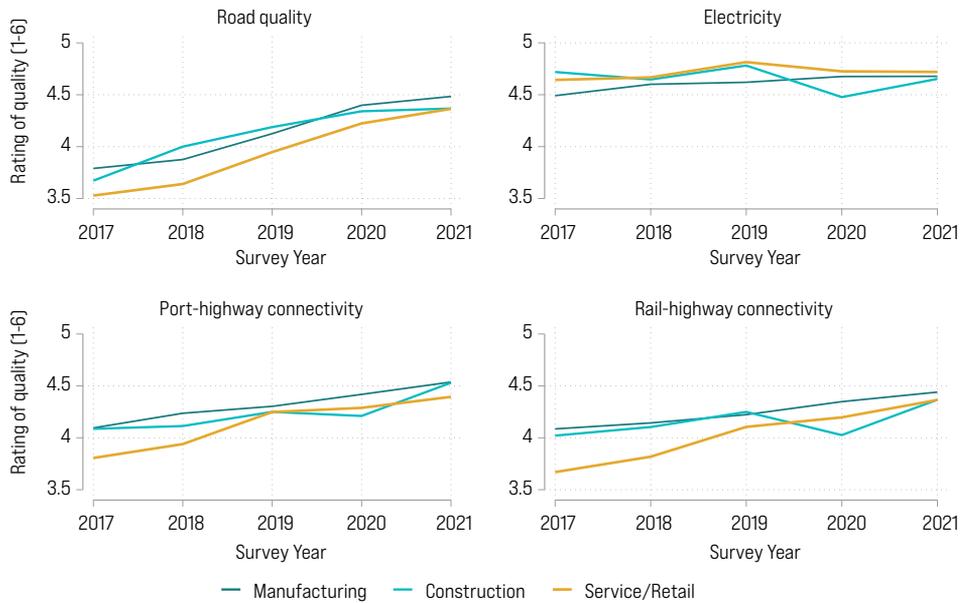
quality of industrial zones has similarly improved, moving from 4.38 points in 2017 to 4.62 points in 2021. Electricity (4.69) and telephone (4.69) once again tied for the top spot in 2021.

Figure 2.13 FIE Assessment of Vietnamese Infrastructure Quality (2017-2021)



Source: PCI-FDI survey 2021, Question E.2 “How do you rate the overall quality of these public services in the province?”

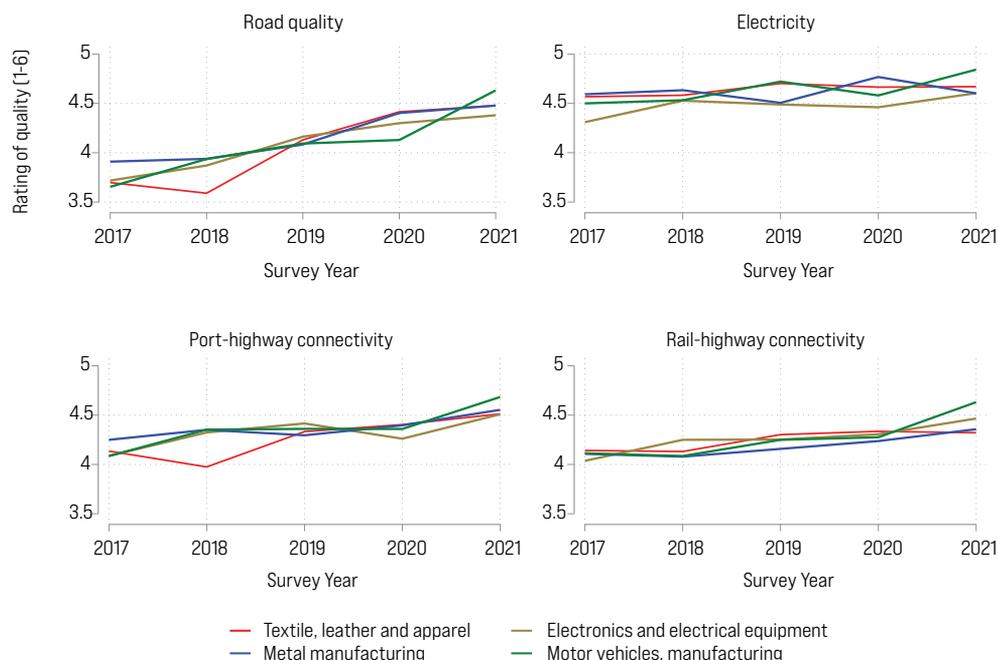
Figure 2.14 depicts firms’ assessment of two key types of basic infrastructure (roads and electricity) by main economic sectors: industry/manufacturing; construction; and services/commerce. Road quality, (including general roads and roads connecting ports and highways), railway connections, and expressways, were rated positively in all three sectors, especially by firms in industry/manufacturing. In 2021, FIEs generally appreciated the quality of electricity, with firms in the service/commerce sector expressing the most positive approval for this essential component supporting their operations.

Figure 2.14 Firms' Assessment of Infrastructure Quality, by Sector

Source: PCI-FDI survey 2021, Question E.2 “How do you rate the overall quality of these public services in the province?”

In 2018, we investigated whether Vietnam’s infrastructure was ready to meet the goal of attracting high-quality FDI investment. This PCI-FDI report revisited that probe by digging into firm ratings of infrastructure in four key sub-sectors: 1) Textile, leather and apparel; 2) Electronics and electrical equipment; 3) Metal manufacturing; and 4) Motor vehicle manufacturing. As shown in Figure 2.15, the overall picture is encouraging. FIEs in these sectors are generally pleased with the quality of infrastructure in Vietnam. In most cases, their ratings have also improved between 2017 to 2021. Enterprises in the more technologically sophisticated electronics industry have a rather positive perception of all the infrastructure categories.

Figure 2.15 Rating of Infrastructure Quality by Manufacturers



Source: PCI-FDI survey 2021, Question E.2 “How do you rate the overall quality of these public services in the province?”

Finally, for this report, we explored foreign firms’ ratings of infrastructure, the business environment, and firm confidence in efforts to improve the investment environment by local governments. Infrastructure quality is calculated as the average score of basic infrastructure essential to business operations,⁵¹ measured on a 6-point scale (1= “Very poor” and 6 = “Very good”). The business environment score is calculated as the average score of rating eleven areas⁵² identified in the government’s annual Resolution Q2⁵³ on improving the business environment and enhancing national competitiveness on a 5-point scale (1= “Very poor” and 5 = “Very good”). FIEs’ confidence in the local government’s efforts to improve the business environment is measured by the proportion of enterprises that trust or completely trust local government leaders who have acted to fulfill their commitments to improve the local business and investment environment.

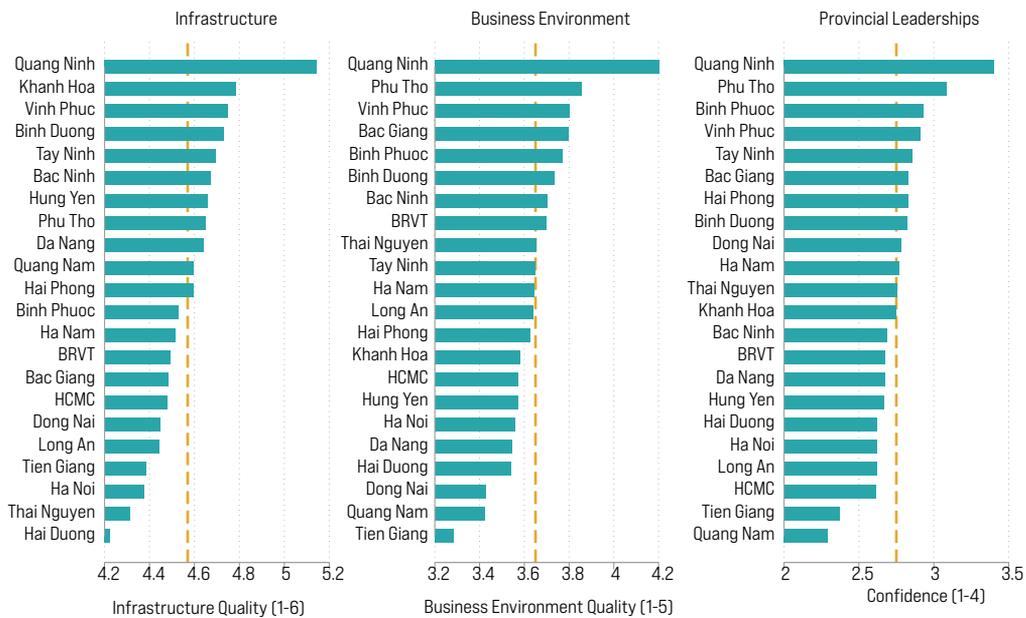
51 Including roads, roads connecting ports and roads, roads and airports, railways and roads, bridges, telephones, electricity, clean water, industrial zones/clusters, centralized wastewater treatment systems in industrial zone/cluster, Internet.

52 These include business establishment, construction licensing, access to electricity, property registration, credit loans, protection of shareholders and investors, tax procedures, social insurance, import-export, guaranteed contract execution and insolvency business handling.

53 Resolution Q2/NQ-CP on key tasks and solutions to improve business environment and national competitiveness, which was issued from 2019 and renewed annually until now. Its predecessor was Resolution 19/NQ-CP which was promulgated between 2015 and 2018.

Overall, FIEs' ratings of infrastructure quality, business environment and confidence in local governments are positive. Infrastructure and business environment were rated at 4.57/6 points and 3.65/5 points, respectively. Meanwhile, the average score of firm confidence in provincial and local leadership is 2.75 (65.1% confidence). There is a high degree of correlation between these dimensions. Specifically, the correlation between infrastructure and business environment is 0.64; the correlation between the quality of infrastructure and the level of confidence in the reform efforts of the local government is 0.62; and the correlation between business environment and the level of confidence in the reform efforts of the local government 0.89. These correlation coefficients are statistically significant ($p\text{-value} < .05$), showing that foreign firms approving infrastructure and the business environment tend to trust local government reform efforts. Figure 2.16 shows the detailed ratings by province and city, with the dashed line representing the average.

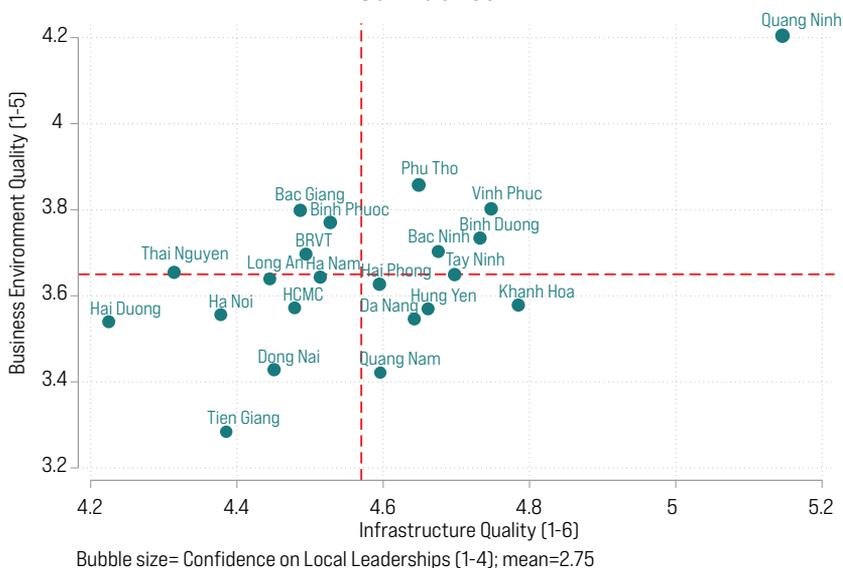
Figure 2.16 Infrastructure Quality, Business Environment, and Confidence in Local Government



Source: PCI-FDI survey 2021, Question E.2 “How do you rate the overall quality of these public services in the province?”, Question I.3 “From your firm’s observation and experience, how do you rate the changes in the following areas in your province over the past year as compared the previous years?”, Question I.2 “The new leadership has made commitment to improve the business environment through formal laws and regulations, but also in informal speeches and communications with firms like yours. How confident are you that leaders of the following agencies took action to implement their commitment based on your experience with previous commitments?”

Figure 2.17 shows the foreign firms' 2021 ranking of the quality of infrastructure, the business environment and the level of confidence in the efforts of local authorities to improve the investment environment. The x-axis is the infrastructure quality score; the y-axis is the business environment quality score. The bubbles are the evaluation results of the provinces and cities, showing the percentage of businesses that trust the local governments to make efforts to improve the investment environment. The upper right quadrant shows the provinces with high quality infrastructure and business environments. Quang Ninh is rated as superior to the rest of the provinces in terms of infrastructure quality and business environment. It also ranks as the province with the highest trust of foreign investors. Several other provinces also received positive reviews, including Phu Tho, Vinh Phuc, Binh Duong, and Bac Ninh. The lower right quadrant shows the provinces with good quality infrastructure, but the business environment requires more effort. These are Khanh Hoa, Tay Ninh, Hung Yen, Da Nang, Quang Nam, and Hai Phong. The upper left quadrant shows the provinces with limited infrastructure, but where the business environment is highly appreciated by foreign enterprises; namely, Bac Giang, Binh Phuoc and Ba Ria-Vung Tau. In the lower left quadrant are provinces that need drastic improvements in both infrastructure and business environment to inspire greater business confidence in the future.

Figure 2.17 Infrastructure Quality, Business Environment Quality and Business Confidence



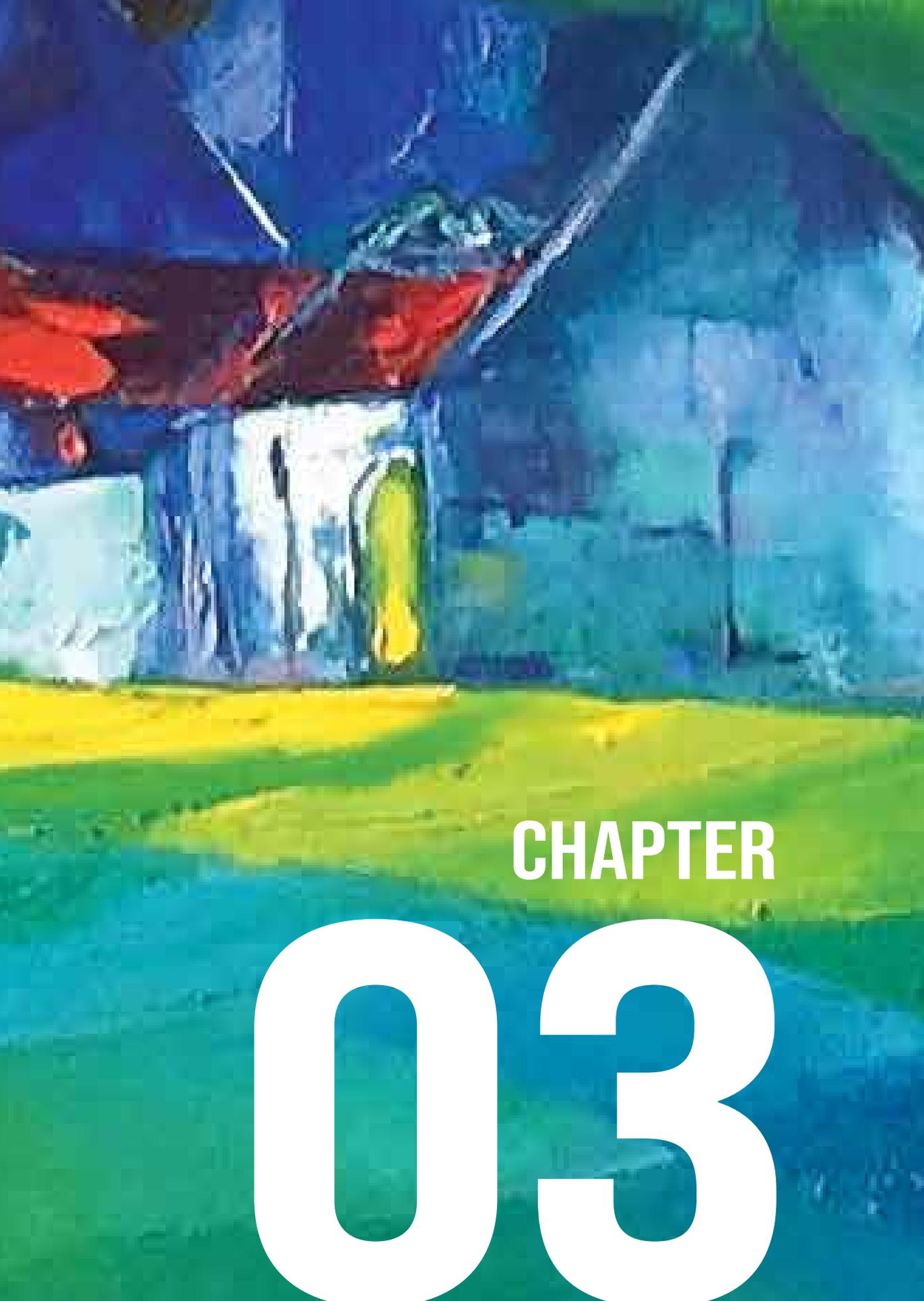
Source: PCI-FDI survey 2021, Question E.2 "How do you rate the overall quality of these public services in the province?", Question I.3 "From your firm's observation and experience, how do you rate the changes in the following areas in your province over the past year as compared the previous years?", Question I.2 "The new leadership has made commitment to improve the business environment through formal laws and regulations, but also in informal speeches and communications with firms like yours. How confident are you that leaders of the following agencies took action to implement their commitment based on your experience with previous commitments?"

CONCLUSION

The 2021 PCI-FDI survey results show improvements in Vietnam's business environment, as perceived by foreign investors. The burden of inspection and examination has decreased, and administrative procedure reform has made positive progress in many areas. The burden of informal charges continues its downward trend. Labor quality and infrastructure quality have also improved significantly over time.

However, Vietnam needs to maintain its efforts to improve the business environment, including reforming administrative procedures that have proved burdensome to foreign firms, such as taxation, fire prevention, import and export, investment registration, and social insurance. Vietnam can create more favorable conditions for businesses' investment projects, particularly in the areas of construction permits, fire prevention and control appraisal and assessment, and environmental impact assessments. The fight against corruption continues, especially in import and export, inspection, court proceedings and land administrative procedures. The quality of infrastructure also needs further development. Finally, FIEs expect provincial governments to deliver on the promise of improved labor quality and labor supply.

The majority of FIEs are still small and medium sized, showing that many foreign investors aim to become branch offices or nodes in larger FDI supply chains within Vietnam. Relatedly, the share of foreign operations buying from domestic suppliers all decreased from 2020 and 2019, signaling that domestic firms are struggling to participate in the supply chain for FDI enterprises in the country. Therefore, Vietnam needs more effective policies to facilitate domestic companies' integration with global value chains if it wants to take advantage of opportunities to connect with FIEs and benefit from technology and management spillover.



CHAPTER

03

COVID-19 Impact on Business Environment and Performance



3.1. INTRODUCTION

As we write this final chapter at the beginning of March, two major stories are dominating Vietnamese headlines. Vietnam recorded its highest daily COVID-19 infection rate of 110,280 individuals on March 2, 2022.⁵⁴ At the same time, Vietnamese officials are planning to allow travelers of all nationalities to enter the country on March 15, 2022, jumping dramatically ahead of the original June opening date.⁵⁵ The juxtaposition of the two news stories poignantly illustrates the conundrum that Vietnamese policy-makers find themselves in. How can the country restart the economy, spurring investment and activity by businesses and getting citizens back to work, while at the same time protecting consumers and workers from the dangers of potential outbreaks?

This is a complicated question made more difficult by the fact that appropriate policy response differs remarkably by the type of firm impacted by the policy choice. A one-size-fits-all set of policy levers is not appropriate. To illustrate this dilemma, consider that COVID-19 created four general baskets of problems for business operators. First, businesses were negatively impacted by the health consequences of the disease. Infection and fear of infection kept consumers out of stores and

⁵⁴ Nga, Le, 2022, "Vietnam's single-day Covid tally hits new peak at 110,280," VNEexpress, March 2, 2022 <<https://e.vnexpress.net/news/news/vietnam-s-single-day-covid-tally-hits-new-peak-at-110-280-4433974.html>>

⁵⁵ Berg, Bailey, 2022, "Vietnam Aims to Reopen Borders to All Travelers in March," AFAR, February 25, 2022. <<https://www.afar.com/magazine/vietnam-to-reopen-to-international-travelers-in-march-2022>>

restaurants and workers at home. Second, stringent regulations and lockdown policies prevented businesses from opening or increased the costs of staying open, leading to lower profits. Third, reduced economic activity had knock-on effects as unemployment and lost income further reduced business sales and other activities. Fourth, businesses reliant on international customers struggled with an initial depression in demand in overseas markets. Later, as overseas demand for manufacturers roared back to life, supply chain congestion meant that internationally dependent businesses had trouble accessing intermediate goods and services and thus had difficulty keeping up with overseas orders.

These four sets of problems impacted businesses differently depending on two structural dimensions. First, foreign firms had greater access to international financial resources, human capital, expertise, and related factors that allowed them to better withstand prolonged lockdowns than their Vietnamese counterparts. On the other hand, Vietnamese firms are generally smaller, nimbler, and can better navigate local government restrictions and regulations. Second, the prospective market had great implications for how businesses responded to policies. Domestic-oriented investors, who were trying to sell to Vietnamese customers and foreigners in Vietnam, were more likely to be negatively affected by the initial health effects and lockdowns than Vietnamese exporters. Indeed, in 2020, foreign manufacturing exporters actually continued to grow throughout the crisis, which was a key reason Vietnam was among the world's top performing economies in the first year of the pandemic.⁵⁶ In 2021, however, export-oriented firms were anxious to get back to work and felt the government's continued lockdown and relatively slow rollout of vaccinations were making it difficult to meet overseas demands and orders.⁵⁷

These differing challenges came to a head in September 2021 when a collection of foreign chambers of commerce wrote a letter to the Prime Minister complaining about the country's COVID policy.⁵⁸ They were particularly concerned about three connected issues. Slow vaccination rates meant a large portion of the Vietnamese population was exposed to infection, so Vietnam insisted on factory closures to keep the disease from spreading in the workplace, which held up production. In addition, migrant workers had returned to their hometowns during the lockdown period and were unable to safely travel back to provinces

56 Tan, Shawn; Tran, Trang. 2020. "Impacts of COVID-19 on Firms in Vietnam, Report No. 2: Results from the 2nd Round of COVID-19 Business Pulse Survey." World Bank, Washington, DC. © World Bank. <<https://openknowledge.worldbank.org/handle/10986/34902> License: CC BY 3.0 IGO>; Yee, Len Nee, 2021, This is Asia's top-performing economy in the Covid pandemic – it's not China," CNBC, January 27, 2021, <<https://www.cnbc.com/2021/01/28/vietnam-is-asias-top-performing-economy-in-2020-amid-covid-pandemic.html>>

57 Lopez, Edwin, 2021, "6 charts show the effects of Vietnam's lockdowns on supply chains," March 4, 2022, SupplyChainDive, <<https://www.supplychaindive.com/news/6-charts-effects-Vietnam-lockdowns/608745/>>

58 Lee, Jinjoo, 2021, "Vietnam's Factory Shutdowns Tug at Apparel Industry's Seams," Wall Street Journal, March 2, 2022 <<https://www.wsj.com/articles/vietnams-factory-shutdowns-tug-at-apparel-industrys-seams-11630661403>>

where their factories were located.⁵⁹ Together, the delays threatened to thwart the fall push to meet holiday production deadlines. Many manufacturers, including Nike, which produces 50 percent of its clothing in Vietnam through Korean and Taiwanese contractors, expressed severe concerns. As part of the discussion, the American Chamber of Commerce (AMCHAM) included a survey of its membership, which suggested that 20 percent of manufacturers in the organization were considering diversifying to other countries which provided a more hospitable and stable environment for production.⁶⁰

Prime Minister Pham Minh Chinh responded in an official letter on December 10, 2021, expressing his sympathy with their complaints, but also emphasizing his goals of a stringent pandemic response to reduce the epidemiological risk of spread on the factory floor, which could seep out into other parts of the economy. An additional constraint was the government lockdowns were relatively popular with those not dependent on the international economy. In the 2021 UNDP-MDRI COVID-19 survey, 88 percent of respondents expressed support for government lockdowns, even when reminded about potential damage to foreign investors. Those reminded of the benefits of lockdowns on limiting spread expressed 95 percent support for such stringent efforts.⁶¹ Among those concerned about lockdowns were Vietnamese in small and medium size businesses who were threatened by health risks to their own customers and employees resulting from an outbreak in an industrial zone with large collections of migrant workers. According to GSO data, COVID-19 was particularly challenging for this group in 2021, as nearly 120,000 private, domestic businesses withdrew from the market – a rate that was 17.8 percent higher than 2020.⁶²

The COVID-19 situation has improved remarkably after Vietnam dropped its COVID Zero policy and moved toward an incremental re-opening. At the same time, once vaccines became available, the government rapidly moved to distribute the medicine and Vietnamese citizens displayed little reluctance to inoculate. Vietnam has now administered at least 200 million doses of COVID vaccines. Assuming every person needs two doses, that's enough to have vaccinated about 101.1 percent of the country's population. Workers have re-entered the factory and the supply chain pressures receded.⁶³ In addition, the Vietnamese government has issued four waves of relief packages, targeted to assist negatively impacted individuals

59 Reuters. 2021, "We are tired": Workers flee Vietnam's largest city as long lockdown eases," October 4, 2021. <<https://www.reuters.com/world/the-great-reboot/we-are-tired-workers-flee-vietnams-largest-city-long-lockdown-eases-2021-10-04/>>

60 AmCham Vietnam, 2021, *Flash Survey-COVID-19 Concerns*, Hanoi: Vietnam

61 United Nations Development Program and Mekong Development Research Institute, 2021, "Experiences with Government Responses to COVID-19 Pandemic in Viet Nam-2nd round survey," Hanoi: United Nations <file:///C:/Users/ejm5/Dropbox/PCI%202021/Literature/COVID-19_Round2_Presentation_EN.pdf>

62 General Statistics Office, *Report on Socio-Economic Situation in Quarter 4 and in 2021*, retrieved at <<https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2021/12/bao-cao-tinh-hinh-kinh-te-xa-hoi-quy-iv-va-nam-2021/>>

63 Emont, Jon, 2021, "Supply Chains in Southeast Asia Are Less Vulnerable after Delta-Driven Disruptions," *Wall Street Journal*, December 6, 2021 <<https://www.wsj.com/articles/supply-chains-in-southeast-asia-are-less-vulnerable-after-delta-driven-disruptions-11638794416>>

and workers. These have involved direct payments as well as targeted loan and tax forgiveness policies.⁶⁴

Nevertheless, challenges remain. The government's most recent set of relief packages brought the total relief to a level of about 7.9 percent of GDP.⁶⁵ While generous, this was far lower than the ASEAN average of 15.8 percent.⁶⁶ There is also some evidence of mistargeting with less fortunate groups receiving less aid.⁶⁷ Moreover, the heavy reliance on tax and fee relief failed to assist businesses who were unable to earn any revenue or who went bankrupt during the crisis. As Vietnamese policy-makers set out to design the next set of relief efforts, a better understanding of the specific needs of the business community is critical. In addition, the most recent spike in COVID-10 infections reveals the ever-present potential risks of opening-up and the need to remain both cautious and vigilant.

In this year's special investigation for Chapter 3, we discuss the results of a module that we designed for the 2021 COVID-19 survey. This module builds on the results that we presented in last year's PCI report.⁶⁸ We begin the analysis in Section 3.1 by categorizing the business community by their origin and market orientation, discussing how the four types of firms created by this typology differ remarkably in their resources, needs, sectoral distribution, and even locations within Vietnam. A notion of caution is in order, as the PCI sample is comprised of firms still in operation, but cannot speak to the concerns of firms that did not survive the pandemic.

Next, in Section 3.2, we demonstrate how these differences impacted firms' beliefs about COVID-19. We show that, while nearly all businesses felt that COVID-19 had damaged their operations, foreign firms were slightly more sanguine. More interestingly, COVID-19 had diverse effects on the four different types of businesses. Export-oriented firms reported greater difficulties managing and engaging with supply chains and accessing international customers. Export-oriented firms also were more likely to complain about the availability of employees. This concern was most vocally expressed by foreign exporters. Nearly three-quarters cited it as their most crucial issue. Domestic-oriented foreign firms were

64 Vietnam Chamber of Commerce and Industry (VCCI) 2022, "Position Paper of the Vietnam Chamber of Commerce and Industry," Hanoi Vietnam Business Forum, February 21, 2022.

65 Uyen, Nguyen Dieu Tu, 2022, "Vietnam Approves \$15.3 Billion Aid for Covid-Hit Economy," January 11. <<https://www.bloomberg.com/news/articles/2022-01-11/vietnam-approves-15-3-billion-stimulus-for-covid-hit-economy>>

66 <https://www.csis.org/programs/southeast-asia-program/projects/past-projects/southeast-asia-covid-19-tracker>

67 United Nations Development Program and Mekong Development Research Institute, 2021, "Experiences with Government Responses to COVID-19 Pandemic in Viet Nam-2nd round survey," Hanoi: United Nations <file:///C:/Users/ejm5/Dropbox/PCI%202021/Literature/COVID-19_Round2_Presentation_EN.pdf>

68 Malesky, Edmund, Phan Tuan Ngoc, and Pham Ngoc Thach, 2021. *The Vietnam Provincial Competitiveness Index: Measuring Economic Governance for Private Sector Development, 2019 Final Report*, Vietnam Chamber of Commerce and Industry and United States Agency for International Development: Hanoi, Vietnam.

predominantly concerned with accessing domestic customers – 61 percent of domestic-oriented foreign companies and 52 percent of domestic-oriented Vietnamese businesses answered it was a problem. A final problem was cash flow shortages, which were widespread but more heavily concentrated among Vietnamese firms. Foreign firms were less susceptible due to higher sales volumes, more diversified customer bases, and access to alternative sources of capital and financing.

Section 3.2 studies four different types of business performance: employment, sales, survival prospects, and expansion plans. On average, foreign firms were less likely to lay off workers in 2021. Nearly 1/3 of domestic businesses were forced to reduce employment, compared to only 1/5 of foreign companies. Reflecting their faster recoveries, export-oriented foreign firms were the least likely to suffer layoffs at 16 percent. However, among the set of firms that did fire workers, the size of the layoffs for all firms was substantial, equaling about 50 percent for all firms. Export-oriented foreign firms suffered the highest decline in sales revenue between 2020 and 2021, reflecting the impact of the supply chain hold-up. At the same time, however, their sales remained substantially larger than other groups. Their quicker recovery and greater resources and financial assets played a tremendous role in business assessments of their future. Nearly half of foreign firms believe that they can operate indefinitely in Vietnam if current economic and COVID-19 conditions remain, compared to one-third of Vietnamese businesses. Among firms concerned about closure, foreign firms anticipate survival durations of nearly a year, compared to 7 months for Vietnamese businesses. The biggest differences appear in optimism about the future. Foreign and export-oriented businesses expressed the greatest degree of optimism through their willingness to expend resources on business expansion. Over half of export-oriented foreign companies indicated a willingness to expand. This is followed by 45 percent of domestic-oriented foreign businesses and 42 percent of export-oriented Vietnamese firms. The least optimistic group is domestic-oriented Vietnamese firms, predominantly in the retail and service sectors, where only 29 percent of businesses see expansion as possibility. In fact, the negativity runs deeper in this group, as 11 percent are planning to reduce the size of their businesses and 6.6 percent plan to close operations entirely. These shares were substantially higher than any other group.

Section 3.4 studies the government policy response. Supermajorities of all businesses expressed support for the government responses at both the central and local levels. However, key differences remain between firm types. Vietnamese firms were significantly more positive about provincial guidance and transparency on COVID-10 regulations and policies. However, foreign firms were more likely to say that they received help accessing government relief programs from local authorities. When we drill down into the differences between foreign and domestic investors within individual provinces, we find substantial gaps in answers. Foreign firms in Khanh Hoa, for instance, were 49 percentage points more favorable about government policies than domestic firms in the same province. Quang Nam

province illustrated the opposite bias on behalf of domestic firms. In the middle are provinces, such as Binh Duong, where domestic and foreign investors were equally dissatisfied. Bac Ninh stood out with high levels of support from both sectors.

A final survey experiment, covered in Section 3.4.3, tested the specific question of whether investors thought there were too many COVID-19 restrictions impeding business. To shed light on the debate between advocates for stimulating economic growth and those warning of the epidemiological consequences of re-opening, we introduced two primes. The first reminded investors about the economic losses caused by business shutdowns, while the second reminded them of the negative health effects of COVID-19 outbreaks. We did not find a significant difference in responses to the two primes. Answers to the question of support for government restrictions were entirely driven by the two structural dimensions of origin and orientation. All else equal, foreign investors were twelve percentage points more likely to oppose restrictions, regardless of treatment. Export-oriented investors were six percentage more likely to oppose them. Thus, in sum, 43 percent of export-oriented foreign investors were frustrated with too many restrictions, compared to only 22.5 percent of domestic-oriented Vietnamese firms.

Section 3.5 studies firm-level responses to the crisis with a battery of questions related to business actions to: 1) safeguard firm operations; 2) protect the health and income of employees; and 3) maintain and continue business activity. Foreign exporters were more likely than other businesses to engage in all activities related to safeguarding firm operations, especially in hiring a response coordinator, auditing critical activities, and checking government information. Sixty percent of foreign exporters hired a business coordinator and over half audited activities and checked government websites. By contrast, when it came to protecting workers, we found that large majorities of businesses in the three most internationally engaged types engaged in all of these activities. Foreign businesses were slightly more active with little difference between exporters and those targeting the domestic market. Export-oriented Vietnamese firms were also very active in protecting workers. In comparison to the disease prevention and labor protection activities, surprisingly few firms were able to complete transitions to new investments to continue business tasks. The highest reported completion rate was 30 percent for finding alternative suppliers and rationing supplies. Automation of business tasks was the least likely activity with fewer than 30 percent of all businesses taking steps in that direction and fewer than 20 percent of domestic businesses reporting making the change.

However, automation may have been the most consequential choice, as 62 percent of foreign exporters answered that automation helped productivity. Other groups were less optimistic, but significant shares reported productivity boosts, including 53 percent of domestic-oriented foreign companies and 31 percent of export-oriented Vietnamese companies. One important reason why productivity was more beneficial for foreign firms,

and foreign exporters in particular, may be that these firms were the most likely to say they struggled with maintaining their workforces at full capacity during the pandemic. Automation helped compensate for lost manpower on the factory and service floors.

In Section 3.6, we bring all the different factors together using a machine learning approach to identify the drivers of business durability and optimism. We find that domestic firms feel significantly more threatened than their foreign counterparts. Exporters appear to be recovering more quickly and are more optimistic about the future. However, exporting Vietnamese firms may require more tailored support programs to navigate difficult COVID-19 waves. Government policies and attitudes matter. Firms that rated government responses more highly believe they can endure and are more likely to plan expansion. Finally, firms can take their own steps to enhance their opportunities. Most individual steps matter, but firms that were proactive about renegotiating vending contracts and protecting worker hygiene have better business prospects. Finally, among all types of firms, those that engaged in automation are much more optimistic about the success of their future business.

These results point to the need to differentiate relief and assistance policies. In the final section, 3.7, we reflect on the immediate policy implications that result from this analysis. Before highlighting these conclusions, it is important to note a critical limitation of PCI data – it is infused with survivor bias. Over 100,000 domestic businesses went bankrupt during the pandemic and several thousand foreign operations canceled or reduced investments. We cannot know the conditions that caused those firms to fail and do not know how they might have answered the PCI's survey question. We are therefore drawing conclusions from the subset of relatively successful businesses that had the management acumen, financial resources, and luck to survive thus far into the pandemic.

That said, our analysis reveals several opportunities for policy adjustment based on the needs and suggestions of the surviving businesses:

- Domestic-facing Vietnamese firms are hurting and are in urgent need of support. Most of these small restaurants, coffee shops, retail outlets, light manufacturers, and construction companies struggled to survive and have diminished prospects of long-term success. Their number one concern is cash flow shortages. As they struggle, they have laid off workers and lowered salaries through direct contractual changes and working hour reductions. Many were under-served by tax relief programs because they had little profit or sales to begin with, so Corporate Income Tax (CIT) and Value Added Tax (VAT) relief was less impactful. Direct subsidies, guaranteed loans, and labor support programs are urgently needed. These companies would also benefit from restructuring support to help them expand their market and sales through e-commerce and internet activities, which could help address their second-largest challenge: reaching domestic consumers.

- Export-oriented Vietnamese firms need less immediate support but could benefit from greater assistance in subsidizing medium-term adjustments to international supply chains either through sales to foreign buyers in Vietnam or external buyers. Targeted business partner matchmaking may be helpful. Additional medium-term support to assist automation in the use of business tasks, particularly digitalization of services, industrial robots, and machine learning in data analysis, can generate large productivity improvements.
- Foreign firms have greater resources to draw upon and were better able to self-insulate to protect workers and business operations as well as re-tool to address new challenges. That said, there are policy changes that could help them. Ensuring safe international opening through less restrictive entry policies for tourists and business travelers, while maintaining requirements for vaccines and rapid testing, should enhance sales opportunities for foreign service companies while simultaneously insuring against the danger of another outbreak and subsequent lockdown.
- Finally, export-oriented foreign firms need greater support maintaining their output levels and meeting international shipping deadlines. Less restrictive lockdowns and regulations, especially in the industrial clusters where these businesses operate, have already had some positive effects. Additional benefits will be gained from policies that facilitate movement of migrant labor into these locations alongside better and safer housing and the provision of medical and other services when they arrive.

Ultimately, the goal is to understand that these businesses have very different resources, interests, and needs. Economic policy will need to be crafted in a way that assists recovery of each element without creating spillover effects that injure others.

3.2. DIFFERENTIATING IMPACT BY ORIGIN AND ORIENTATION

The critical lesson that emerged from the exchange of letters between the foreign chambers and the Prime Minister's office was that impact of COVID-19 was strikingly different for businesses of different sizes, sectors, technological sophistication, management capability, and geographic location. As a result, a one-size-fits-all approach to restrictions on business activity was unlikely to work and could potentially generate severe frictions for those negatively affected by government choices. While COVID-19 policy opinions in Vietnam vary along a wide array of factors, a great deal can be learned by simplifying the variation to two dimensions: 1) Origin; and 2) Orientation. In a polity with an unlimited budget and bureaucratic capacity, these different issues would not be a concern. However, Vietnam,

like other countries, was forced to make choices about how to prioritize and sequence regulations and policy rollouts.

Starting with origin, foreign investors operating in Vietnam, 30 percent of whom are subsidiaries of multinational corporations (MNCs), have access to greater resources, capabilities, and overseas connections than Vietnamese firms. FIEs were better able to draw on these resources to withstand prolonged uncertainty and shutdowns, insulate from outbreaks, and implement COVID-19 protections within their own operations. Domestic firms had greater local knowledge and connections, but less ability to draw upon internal and external resources to withstand prolonged shutdowns and uncertainty.

Business orientation may even be a more important differentiator. Firms focused on the domestic market were more likely to be impacted by government shutdowns, but also more susceptible to the impact of COVID-19 on customer health, confidence, and economic outlook. Fears of infection that kept customers home could severely damage business outlooks. At the same time, as the impact of both government shutdowns and outbreak fears reverberated throughout the economy, and citizens lost jobs and income, customer purchasing power and sales declined. Firms primarily interested in exporting internationally, either to their home country or to third countries, faced a different set of concerns. These businesses were less concerned about the confidence of Vietnamese consumers. Instead, they worried about the ability of their workforce to meet the needs of the international market. In 2020, at the outset of COVID-19, export-oriented businesses faced slowdowns in their international markets. In 2021, however, these businesses faced a changing international environment. As many developed markets recovered and government stimulus packages kicked in, foreign consumers increased their purchases of manufactured goods. The global supply chain crisis led to increasing demand for manufactured exports in Vietnam, but the relatively slow rollout of vaccinations and government hesitation to lift restrictions in the face of the Delta variant generated significant fear that these companies would not meet critical deadlines for shipments, compounding the growing supply chain hold-ups.

3.2.1. Classifying Firm Types

Table 3.1 illustrates how combining these two dimensions leads to four distinct firm types: 1) Vietnamese firms focused on the domestic economy; 2) Vietnamese exporters; 3) foreign firms with domestic orientation; and 4) foreign exporters. As in the broader Vietnamese economy, the domestic-oriented Vietnamese firms are the largest constituency, making up 72 percent of respondents to both PCI surveys. Vietnamese exporters account for about 17 percent, followed by domestic-oriented foreign investors and foreign exporters, who account for 6.7 percent and 6.2 percent of the sample respectively.

Table 3.1 further shows that these business types varied dramatically in size at the end of 2020 before the PCI 2021 surveys went out. Domestic-oriented firms were the smallest in

terms of total employment, equity capital, and sales. On average, Vietnamese exporters have employment and capital sizes about four times as large as their domestic-oriented counterparts and total revenue that is 2.5 times as large. Domestic-oriented foreign companies' average employment size was not much larger than Vietnamese exporters, but they had much greater investment capital and roughly 20 percent greater sales. Foreign exporters are in a completely different league. Their workforces average about 144 employees, 120 percent larger than their domestic-oriented counterparts. Their capital is 64.1 billion VND (\$2.7 million USD), over 42 percent greater than domestic-oriented foreigners and 7.5 times the size of the domestic-oriented Vietnamese firms. Their 2020 sales revenue of 83 billion VND (\$3.6 million USD) was 30 percent larger than domestic-oriented foreigners and over 4 times as large as domestic-oriented Vietnamese firms. The table shows in stark relief how the needs and resources of these four types were quite different heading into 2020. Exported-oriented foreign investors had greater workforces to protect, maintain, and mobilize. But, they also had greater resources to safeguard themselves as well as upgrade technology and processes to continue operations.

Table 3.1 Differences in Average Firm Characteristics by Origin and Orientation

Origin	Orientation	Number of PCI Respondents	Number of Workers	Equity Capital (Billions of VND)	Total Revenue (Billions of VND)	Years since Establishment
Vietnamese	Domestic	6,658	15.0 (11.6 - 18.4)	7.5 (5.8 - 9.2)	20.2 (17.8 - 22.7)	9.4 (9.3 - 9.6)
Vietnamese	Export	1,378	61.5 (54.1 - 68.9)	25.3 (21.6 - 28.9)	51.5 (46.6 - 56.3)	10.5 (10.1 - 10.9)
Foreign	Domestic	616	65.9 (54.6 - 77.1)	45.0 (39.4 - 50.6)	60.4 (52.9 - 67.9)	7.9 (7.4 - 8.5)
Foreign	Export	569	144.5 (133.0 - 156.0)	64.1 (58.5 - 69.8)	83.3 (75.8 - 90.8)	9.0 (8.5 - 9.6)

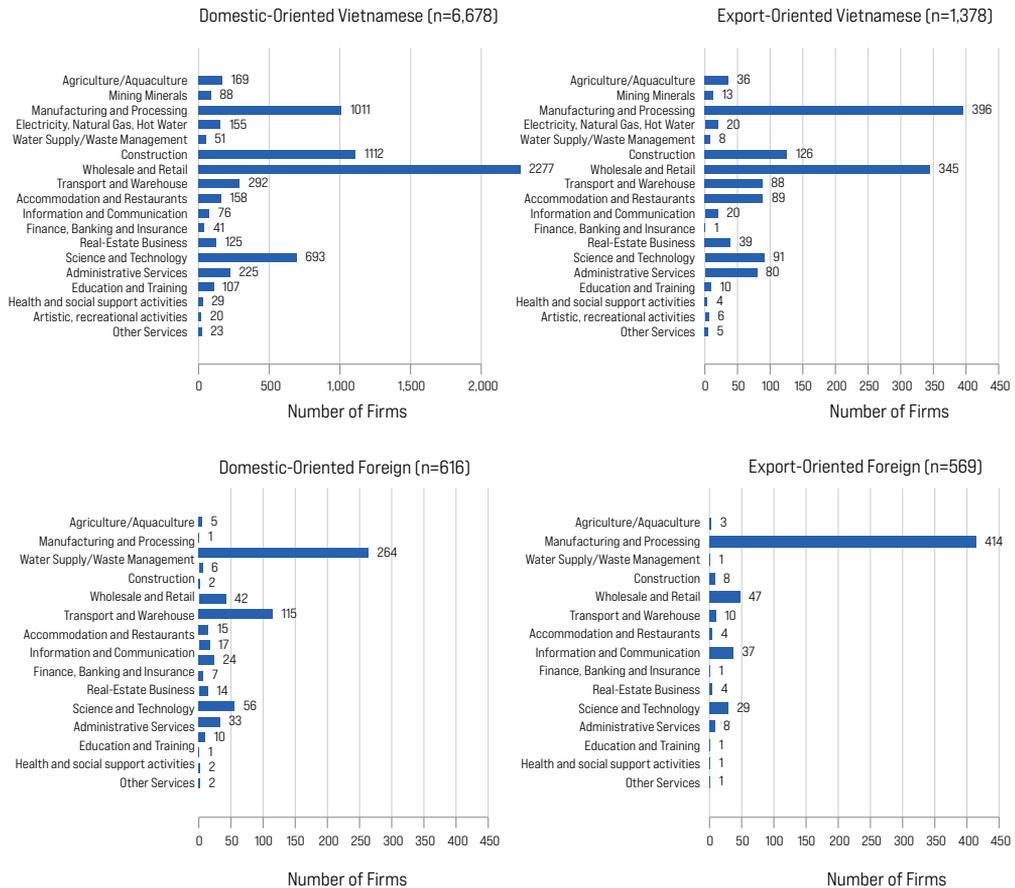
Source: PCI and PCI FDI Survey 2021. Average by category displayed with 95 percent confidence interval in parentheses. Vietnamese firms are classified as those that answered the PCI domestic survey, Foreign firms are those that answered the PCI-FDI survey. Export orientation derived from Question A11 "Please choose the main customers of your firm." Firms that answered "individuals and firms located outside Vietnam" classified as export-oriented, all others classified as domestic oriented. Number of workers in 2020 from Question A6.2, Equity capital in 2020 from Question A7.2, Total revenue in 2020 from Question 8.1, Years since establishment calculated by subtracting Question A1 (Establishment year) from 2022.

Figure 3.1 elaborates on the four-fold typology by showing the differences in the four types by sector. Domestic-oriented Vietnamese firms are primarily concentrated in wholesale and retail sales, construction, manufacturing (predominantly food processing, wood, and other non-metallic products), science and technology services, and food and accommodation. The bulk of domestic-oriented foreign business, by contrast, are active in manufacturing and processing (predominantly chemicals and rubber products) with some wholesale and retail trade. They have little representation in science and technology services or consulting. Both Vietnamese and foreign exporters are heavily concentrated in manufacturing, although Vietnamese firms tend to export more textiles, apparel, and food products, while foreigners export fabricated metals, computers and electronics, electrical equipment, and machinery, with less emphasis on food and primary products. In addition, Vietnamese exporters also engage in wholesale trading, where they tend to trade goods purchased elsewhere.

Figure 3.2 demonstrates significant variation in location. Domestic-oriented Vietnamese firms are well-represented everywhere. However, export-oriented Vietnamese firms are concentrated in a few key locations, consisting of the five national-level cities along with a select few provinces surrounding them, including Binh Duong, Dong Nai, Bac Ninh, and Vinh Phuc. Binh Duong and Dong Nai, in particular, were at the heart of the debate about re-opening early because of the large presence of industrial and export processing zones. Domestic-oriented foreign firms are based primarily in the national-level cities, but export-oriented foreigners are heavily concentrated in Binh Duong, Long An, and Bac Ninh as well, which again benefit from their proximity to HCMC and Hanoi, respectively.

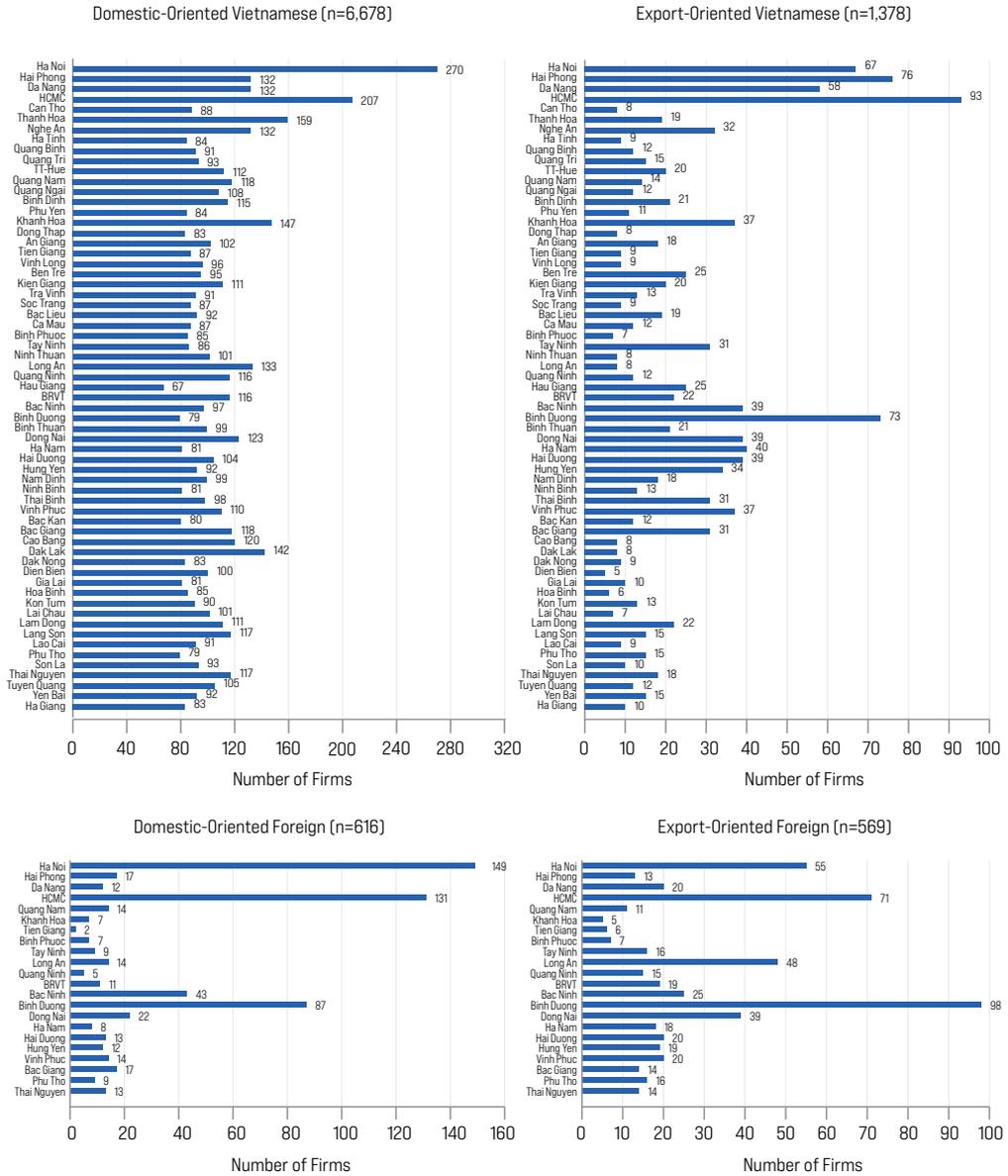
Figure 3.3 studies the country of origin of major exporters. Interestingly, the major foreign investors of South Korea, Japan, Singapore, China, and Taiwan have large representation among both domestic-oriented and export-oriented firms. Indeed, many of the domestic-oriented firms actually entered Vietnam to sell intermediate services and products to exporters as part of global supply chains. In addition, many foreign businesses followed foreign MNCs to sell specialized services and goods to expatriates from those sectors. Among the smaller investors, Vietnam's Southeast Asian neighbors, such as Malaysia and Thailand, are heavily concentrated in firms selling to the Vietnamese market. By contrast, firms from the United States are more interested in export.

Figure 3.1 Industrial Sector Distribution by Firm Type



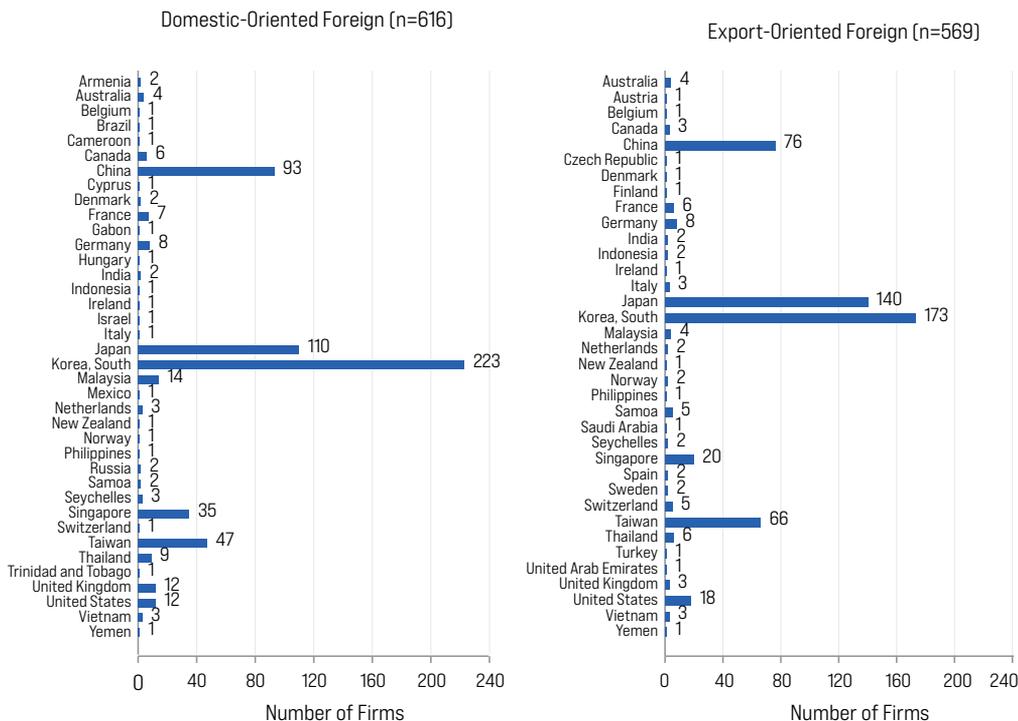
Source: PCI and PCI FDI Survey 2021. Vietnamese firms are classified as those that answered the PCI domestic survey; Foreign firms are those that answered the PCI-FDI survey. Export orientation is derived from Question A11 “Please choose the main customers of your firm.” Firms that answered “individuals and firms located outside Vietnam” are classified as export-oriented, all others are classified as domestic oriented. Industrial sector is from the ISIC Rev 4 at the broad category level.

Figure 3.2 Location of Main Operation by Firm Type



Source: PCI and PCI FDI Survey 2021. Vietnamese firms are classified as those that answered the PCI domestic survey; Foreign firms are those that answered the PCI-FDI survey. Export orientation is derived from Question A11 “Please choose the main customers of your firm.” Firms that answered “individuals and firms located outside Vietnam” are classified as export-oriented, all others are classified as domestic oriented. Business location is derived from Question A2.1 “In which province or city does the firm have its main operations.”

Figure 3.3 Country of Origin by Investor Orientation



Source: PCI and PCI FDI Survey 2021. Export orientation is derived from Question A11 “Please choose the main customers of your firm.” Firms that answered “individuals and firms located outside Vietnam” are classified as export-oriented, all others are classified as domestic oriented. Business location is derived from Question Background 2 “Country where the headquarters of the mother company or biggest FOREIGN investor is located?”

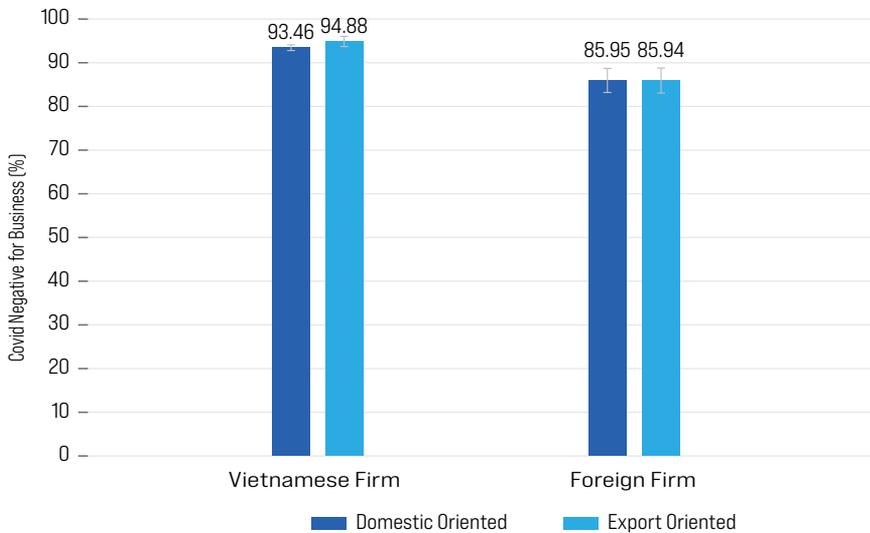
3.2.2. Firm Needs by Typology

Figure 3.4 illustrates that COVID-19 was extremely disruptive for all businesses. The graph presents average scores by the four types of firms, along with 95 percent confidence intervals, which indicates the range of answers possible in repeated samples. When confidence intervals overlap, it indicates that differences are unlikely to be statistically significant, meaning they may not manifest in additional samples from the same underlying population.

The first thing to notice is that all businesses in Vietnam suffered greatly. Ninety-two percent reported that their COVID-19 experience in the past year was either negative or completely negative. However, the situation was significantly worse for domestic firms with 94-95 percent experiencing negative effects, compared to 86 percent of foreign investors. It appears that the greater financial and technical resources of some foreign firms allowed them to stave off the worst effects. Interestingly, we do not see wide differences in the overall effects of COVID-19 by orientation. Domestic and export-oriented firms appeared

to suffer similarly, which we can see by the overlapping confidence intervals in both the Vietnamese and foreign categories.

Figure 3.4 COVID-19 Disruptive for All Businesses but Slightly Worse for Domestic Investors



Source: PCI and PCI FDI Survey 2021. Business location is derived from Question J1 “How has your business been impacted by COVID-19?” Answers recorded on a five-point Likert scale ranging from 1 “Completely Negative” to 5 “Completely Positive.” We calculate the proportion of firms from each group which answered 1 “Completely Negative” or 2 “Mostly Negative.”

Although the general effects of COVID-19 were uniformly negative, when we drill deeper into the specific problems faced by firm type, we start to see some important patterns. Figure 3.5 studies the five major issues faced by firms in the country. Respondents were asked whether they experienced a particular problem; the graph displays the total share of all respondents who answered “yes” in each category.

As is to be expected, export-oriented firms reported greater difficulties in managing and engaging with supply chains and accessing international customers. Export-oriented firms also were more likely to complain about the availability of employees. This concern was most vocally expressed by foreign exporters. Nearly three-quarters cited it as their most crucial issue. The responses reflect difficulties in getting their workforces vaccinated in time to meet international shipping deadlines as well as hold-ups caused by migrant workers, who were trapped in their home provinces by lockdowns, and could not travel to work in factories in major production centers, such as Binh Duong and Bac Ninh.

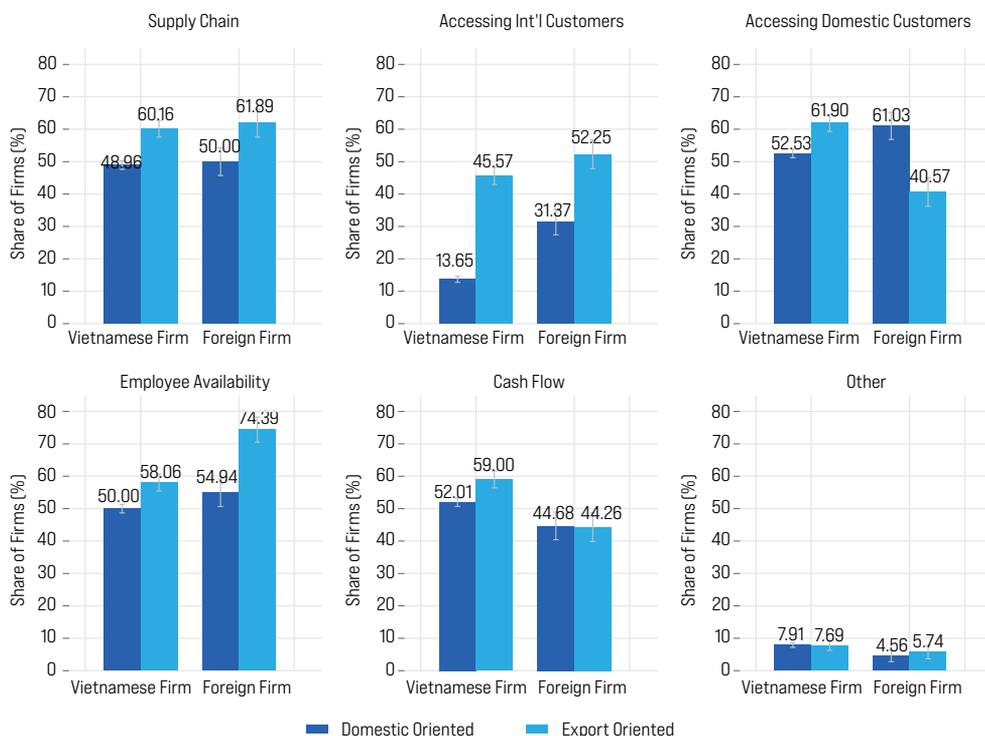
Domestic-oriented foreign firms were predominantly concerned with accessing domestic customers – 61 percent of domestic-oriented foreign companies and 52 percent of domestic-oriented Vietnam answered it was a problem. Lack of domestic customers was a

result of fear of infection keeping people home, lockdowns due to outbreaks, and declining purchasing power from knock-on economic effects. Interestingly, 62 percent of export-oriented Vietnamese firms indicated problems with domestic customers as well. This was predominantly due to manufacturers who were interested in also selling products in their home market.

A final problem was cash flow shortages, which were widespread, but more heavily concentrated among Vietnamese firms. Foreign firms were less susceptible due to higher sales volumes, more diversified customer bases, and access to alternative sources of capital and financing.

The concentration of problems among specific firm types perfectly illustrates the problem faced by the Vietnamese government in devising a national COVID-19 strategy. Allowing firms to re-open for production before full-scale vaccination might alleviate issues with supply chain hold-ups and enhance employee availability. At the same time, however, those strategies could contribute to outbreaks that might endanger the dwindling customer base of domestic-oriented companies and consumers' purchasing power.

Figure 3.5 Dramatic Differences in COVID-19 Impact by Business Origin and Orientation



Source: PCI and PCI FDI Survey 2021. Source of business difficulties derived from Question J1.1 “If you answered Mostly Negative or Completely Negative, in what ways has your business been affected so far?” Firms were invited to answer “yes” or “no” in each category.

3.3. FOUR MEASURES OF COVID BUSINESS PERFORMANCE

3.3.1. COVID-19 Impact on Employment

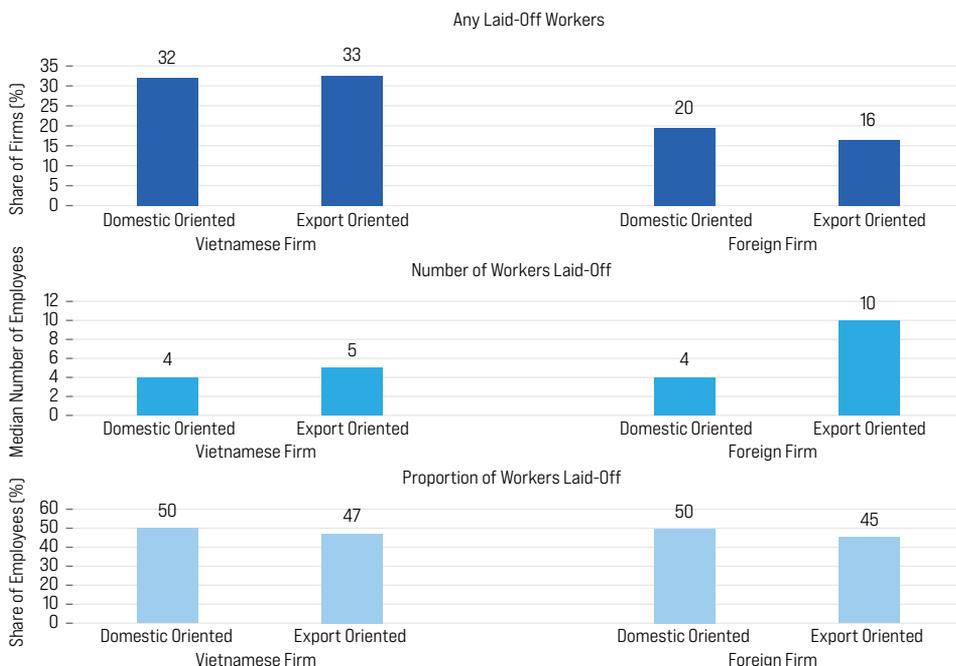
As firms struggled to deal with declining business opportunities and sales revenue brought about by the 2021 outbreak of the Delta variant, many were forced to severely cut costs to keep their operations afloat. Last year, we reported that about one third of all firms reduced the size of their workforce in 2020. In 2021, the impact of COVID-19 on the business community was arguably even greater. A key difference this year was that the foreign exporting sector faced greater difficulties.

As Figure 3.6 demonstrates, this resulted in dramatic layoffs in 2021. Among the 9,221 firms that answered the two PCI surveys, nearly one-third reduced their workforce by at least one employee by December 2021. The total number of COVID-19-related layoffs in the PCI 2021 survey is 28,033 workers (20,684 in domestic businesses and 7,349 in foreign businesses). This is in addition to the 40,239 workers that were recorded as being laid-off in the 2020 PCI survey.

In sum, thirty-three percent of domestic firms and 18 percent of foreign firms laid off at least one worker in 2021. Vietnamese firms released a median of 4 or 5 employees per firm, depending on whether the firm is domestic or export-oriented. However, given the small size of most domestic private businesses (56 percent have fewer than 10 employees and 87 percent have fewer than 50 employees), this resulted in a substantial reduction in the share of the workforce at the beginning of the pandemic. In the average Vietnamese firm, about 50 percent of the workforce was let go. On the extreme end, 29 private domestic firms laid off 100 (or more) workers with three firms releasing at least 400 workers.

About 18 percent of foreign firms laid off workers as well, with the median layoff size being four employees, accounting for seventeen percent of the workforce in the average firm. However, foreign exporters laid off about 10 workers per operation. In total, this implies that close to half of domestic-oriented and export-oriented workers were let go. This is a 20-percentage point increase over 2020. A small concentration of exporters, particularly in electronics and garment manufacturing, laid off vast numbers of employees. Forty-two foreign firms (2.6 percent) laid off at least 100 workers, and four firms released 400 or more employees.

Figure 3.6 Foreign Firms Less Likely to Lay off Workers, but Share of Layoffs Quite Similar



Source: PCI and PCI FDI Survey 2021. Employment effects derived from Question J2 “How many employees did you have to let go (layoff) because of the business slowdown from COVID-19 pandemic? ____” Proportion of workers calculated by comparing answers to Question A8.2 “What was the total employment size of your firm in 2020?”

3.3.2. COVID-19 Impact on Sales/Revenue

As a result of declining domestic and international consumption, and delays caused by the great supply chain hold-up, firms reported dramatically lower sales revenue in 2021. Figure 3.7 reports the implications for businesses in two graphs.

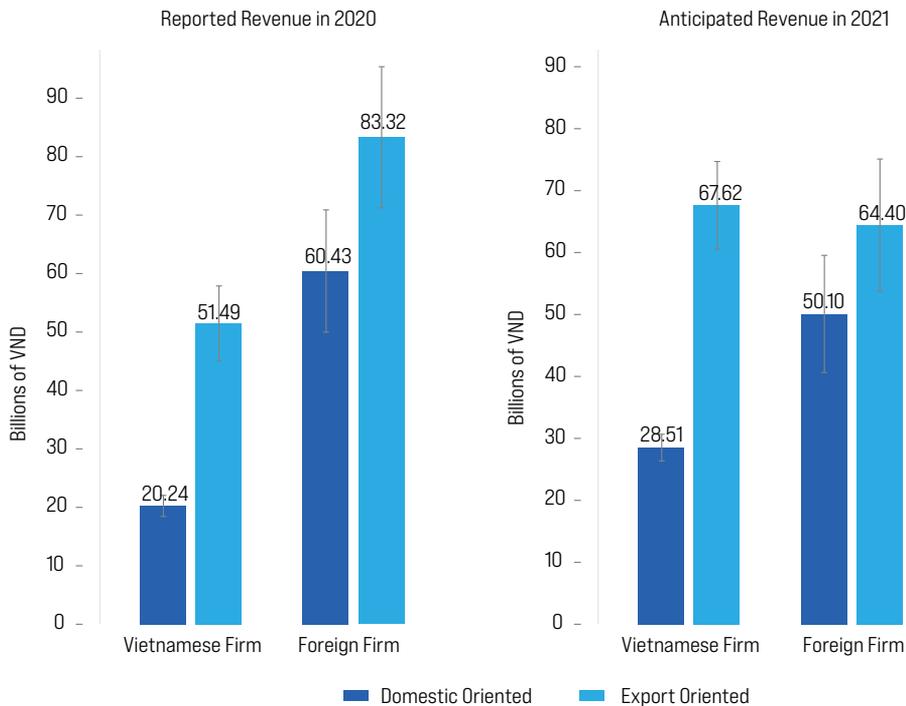
First, we show firms’ average revenue in 2020, which already includes sales declines reported that year. This panel confirms what we reported above, that average sales are significantly higher for foreign firms, but within the two categories of firm origin, export-oriented firms tend to have greater sales. Most visibly, export-oriented foreign firms headed into 2021 with four times the sales of the average domestic-oriented Vietnamese business.

However, the second panel reports anticipated performance in 2021. Here, we see a surprising change. While both types of domestic firms show healthy upticks, especially export-oriented domestic firms, foreign investors reported revenue significantly below their 2020 numbers. Domestic-oriented foreign firms declined about 10 billion VND (\$434,782)

from 2020, and export oriented FIEs declined by 16 billion VND (\$695,562). This is consistent with foreign investors' previous concerns regarding declining international sales and supply chain congestion.

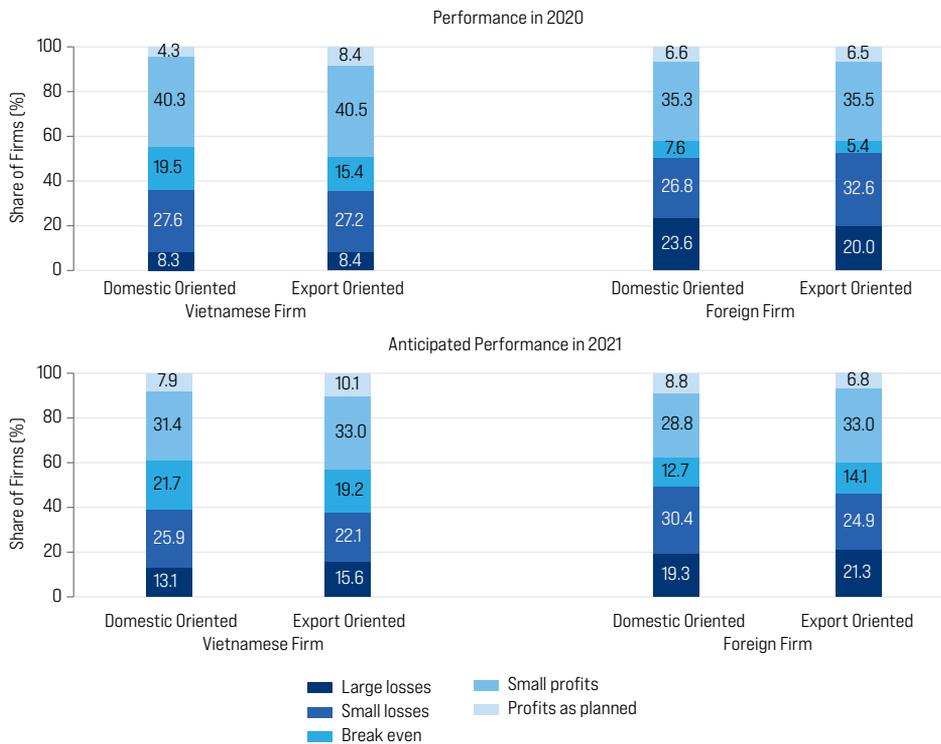
Figure 3.8 reports a very similar story. Foreign firms were significantly more likely to report losses in both 2020 and 2021. In 2021, the greatest losses were recorded by foreign exporters with roughly 56 percent claiming large or small losses. Domestic-oriented FIEs also demonstrate performance challenges with slightly less than half (49 percent) reporting losses. Domestic enterprises struggled but fared slightly better. Slightly less than 40 percent of both types of domestic firms reported losses in the past year, marginally higher than in 2020. Domestic firms were not significantly more likely to claim higher profitability – the differences in profitability are well within the survey's three percentage point margin of error. The big difference is that domestic firms were more likely to say that they broke even.

Figure 3.7 Revenue Performance in 2020 and 2021



Source: PCI and PCI FDI Survey 2021. Revenue in 2020 derived from Question A8.1 "What was the total revenue of your firm?" Revenue in 2021 derived from Question A8.2 "What is the total anticipated revenue of your firm in 2021?" Sales revenue declines derived from Question J5 "Please estimate your company's total revenue in 2021 compared to 2020 due to the COVID-19." The first panel shows average reported sales revenue in 2020. The middle panel shows the share of total firms that reported they experienced any sales decline. The third panel calculated the average sales revenue loss of firms that reported declines.

Figure 3.8 Forty Percent of All Operations Remain Profitable



Source: PCI and PCI FDI Survey 2021. Performance derived from Question A9 “Which statement best characterizes your firm’s overall performance?”

3.3.3. Durability of the Business Sector

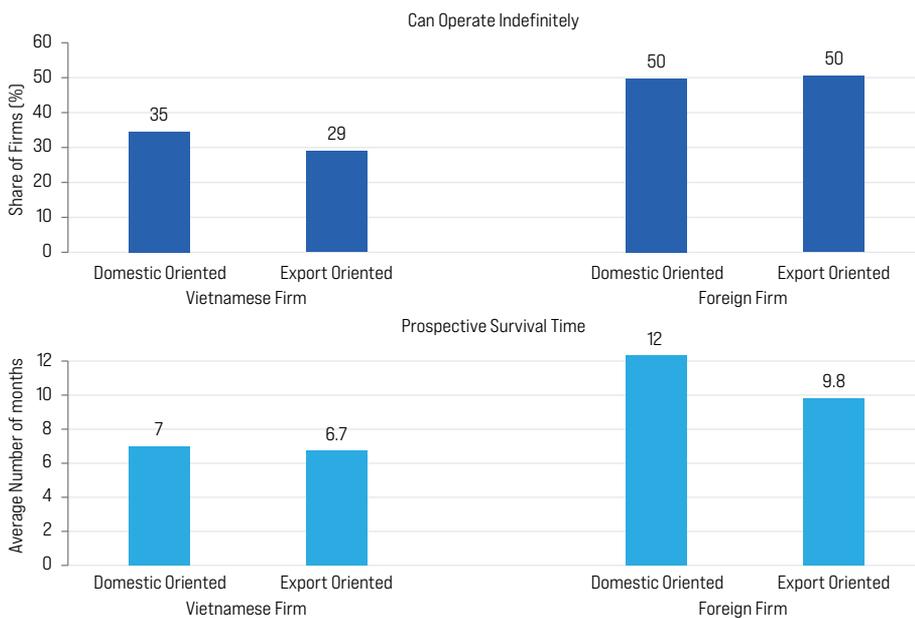
Despite their slightly better sales performance and profitability in 2021 compared with foreign investors, Vietnamese firms are not well-positioned to survive another difficult year according to Figure 3.9. When asked how much longer their business could persist amidst the current level of government stringency, only 35 percent of domestic-facing companies and 29 percent of export-oriented companies believed they were capable of survival, compared to nearly half of all foreign firms. This result indicates much greater frailty among the domestic sector caused by its limited financial resources and lack of access to overseas connections and assistance.

The bottom panel goes even further by studying those firms that reported that they could not survive indefinitely. Strikingly, Vietnamese firms believe that their businesses can only continue to operate for another seven months without assistance or a drastic change in government policy. Given the response dates of the PCI survey, this would mean that most

of these firms would be in serious financial straits by August 2022. Foreign firms expect to last a bit longer. Domestic-oriented firms report that they are positioned to last the year, while export-oriented firms, reflecting their revenue and profitability shocks, report that they would persist for just under ten months.

In Section 3.6 we study the underlying drivers of these durability measures, finding that both government policy and firm-level initiatives play critical roles in determining which firms feel more confident in their ability to make it through another outbreak and the ensuing lockdowns.

Figure 3.9 Survival Probability by Business Type



Source: PCI and PCI FDI Survey 2021. Both questions derived from Question J3.4 “Given your current business approach, how much longer do you think your business can maintain operations if the current government policies of support, temporary lockdowns, and vaccination plans continue? _____Months ___Indefinitely.” The upper panel presents the share of firms responding that they are positioned to survive indefinitely. The lower panel records the average survival time reported by firms that cannot survive indefinitely.

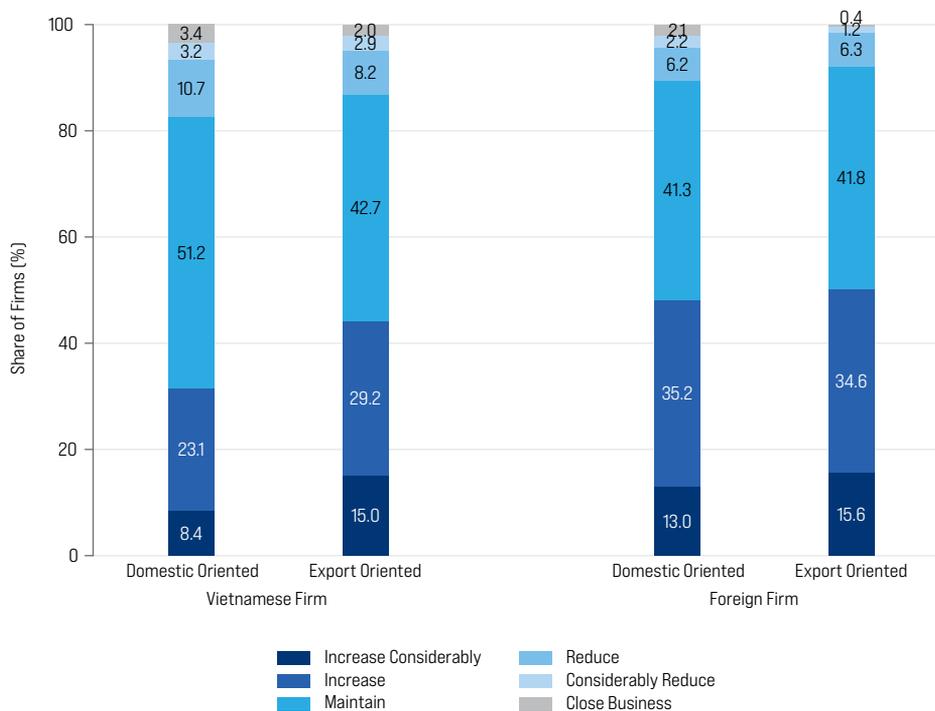
3.3.4. Expansion Plans: PCI Thermometer by Type

Foreign and export-oriented firms are also more sanguine about their recovery. While business thermometer numbers reported in Chapter 1 are at all all-time lows, Figures 3.10 and 3.11 demonstrate that confidence is higher among FIEs than the domestic sector. Slightly over half of export-oriented FIEs plan to expand their operations over the next two years, followed by 45 percent of domestic-oriented FIEs and 41 percent of export-oriented

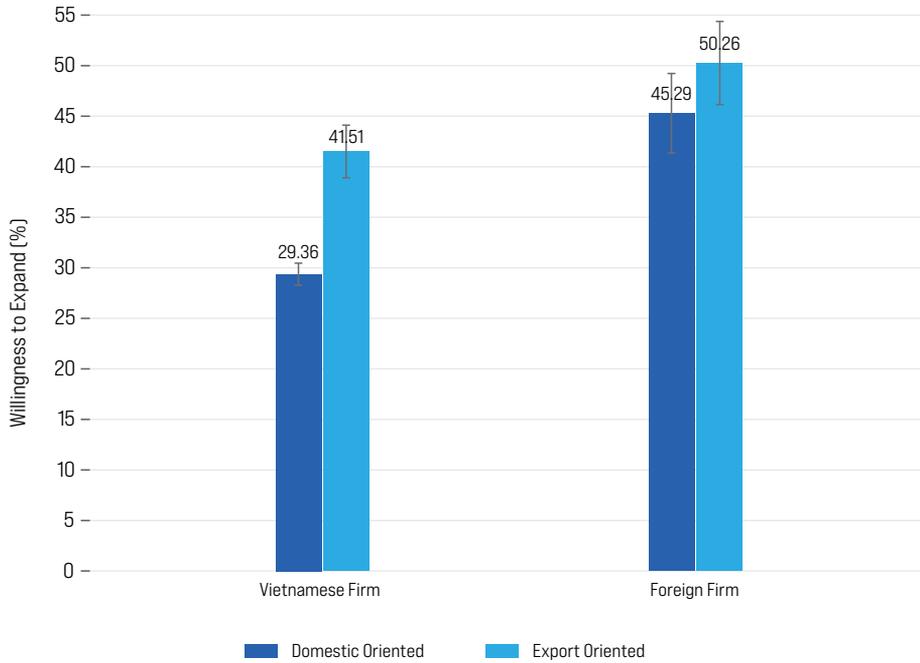
Vietnamese firms. By contrast, less than one third of domestic-oriented Vietnamese firms feel the same way. These numbers reflect businesses' confidence (or lack thereof) that international economic activity is resuming, that supply chains are becoming unlocked, and that higher sales volumes will return as overseas purchasers continue their patterns of heavy consumption of manufactured products. Domestic-oriented businesses are also looking forward to supply chain recovery stemming from the improved prospects of renewed tourism and entry by foreign tourists and business travelers.

Reflecting the grim durability message above, domestic-oriented Vietnamese firms are also at higher risk of closure. Eleven percent plan to reduce business activity over the next two years, and 6.6 percent plan to close entirely. This is far higher than the anticipated closure rates reported by other firm types. It is quite clear that these domestic-oriented firms, particularly SMEs in the service sector, are in dire need of government assistance.

Figure 3.10 Business Plans over Next Two Years



Source: PCI and PCI FDI Survey 2021. Business plans derived from Question A10 “Which statement best characterizes your firm’s investment plans over the next 2 years?”

Figure 3.11 PCI Business Thermometer by Firm Type

Source: PCI and PCI FDI Survey 2021. Expansion plans derived from Question A10 “Which statement best characterizes your firm’s investment plans over the next 2 years?” We calculate the share of firms that answered 1 “Plan to increase to the size of operations considerably” and 2 “Plan to increase the size of operations.”

3.4. EVALUATION OF GOVERNMENT RESPONSE

3.4.1. General Satisfaction with Government Policy

The PCI survey asked firms to rate provincial COVID-19 guidance on three dimensions: 1) clarity and adequacy; 2) timeliness; and 3) helpfulness in assisting businesses to receive relief. Firms were invited to respond on a four-point scale, ranging from strong agreement (that the local government performed admirably) to strong disagreement.

Figure 3.12 reports these differences. The first thing to notice is that there is a general belief that provincial governments performed well. Among all firms, 88 percent believed that provincial guidance was clear and adequate; 86 percent reported that it was timely; and 76 percent provided favorable responses to relief policies.

Vietnamese firms were only slightly more positive than foreign firms in assessing the quality and timeliness of the guidance; the difference was not large. Domestic firms thought guidance was 5 percentage points more adequate (89 percent versus 84 percent) and 3 percentage points timelier (86 percent versus 83 percent). Both differences are statistically significant ($p=.0001$ and $p=.0034$), but substantively small. Export orientation played no role in the rating of guidance quality or timeliness.

The pattern reverses, however, when it comes to assisting in accessing relief packages. Here, foreign firms rated provincial performance as superior by 5 percentage points (79 percent versus 74 percent). Again, the difference is statistically significant and substantively important ($p=.0004$).

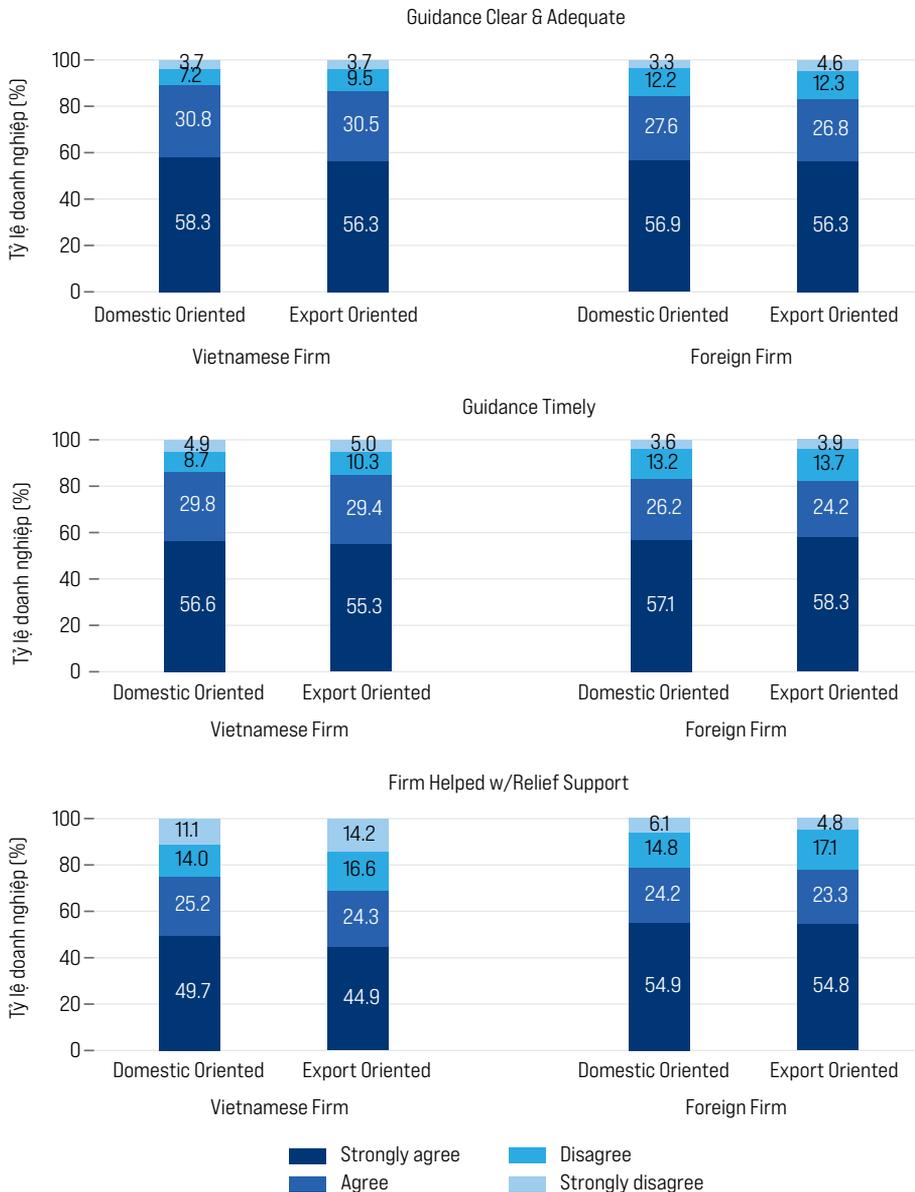
The aggregate scores, however, conceal a big difference at the provincial level. Figure 3.13 depicts how foreign investors and domestic investors answer the questions within the same province. When the bar is to the right of the zero line, it indicates that foreign investors rate the provincial leadership's COVID performance more favorably than domestic investors. When the bar is to the left, domestic investors' ratings are more favorable. For instance, foreign investors in Khanh Hoa were 51 percentage points more favorable than domestic investors about provincial guidance on COVID-19 policies and 58 percentage points more favorable in regard to helping investors seek government relief programs. This is the highest degree of bias evident in the survey, however, the small sample size of 12 FIEs in Khanh Hoa does imply that a small number of respondents are answering, which may be biasing the positivity numbers upward. By contrast, Quang Nam demonstrates consistent biases toward domestic investors on both dimensions showing gaps of -18.4 and -11.5 percentage points, respectively.

Provinces are relatively evenly split on provincial guidance, but there is appears substantial bias toward foreign investors in terms of accessing relief. Five of the 22 provinces in both

surveys were ranked higher by foreign investors on measures assisting them with COVID-19 relief resources.

Ho Chi Minh City and Hanoi stand out as the locations with the least evidence of bias. Both foreign and domestic investors ranked their guidance from these cities as relatively equal.

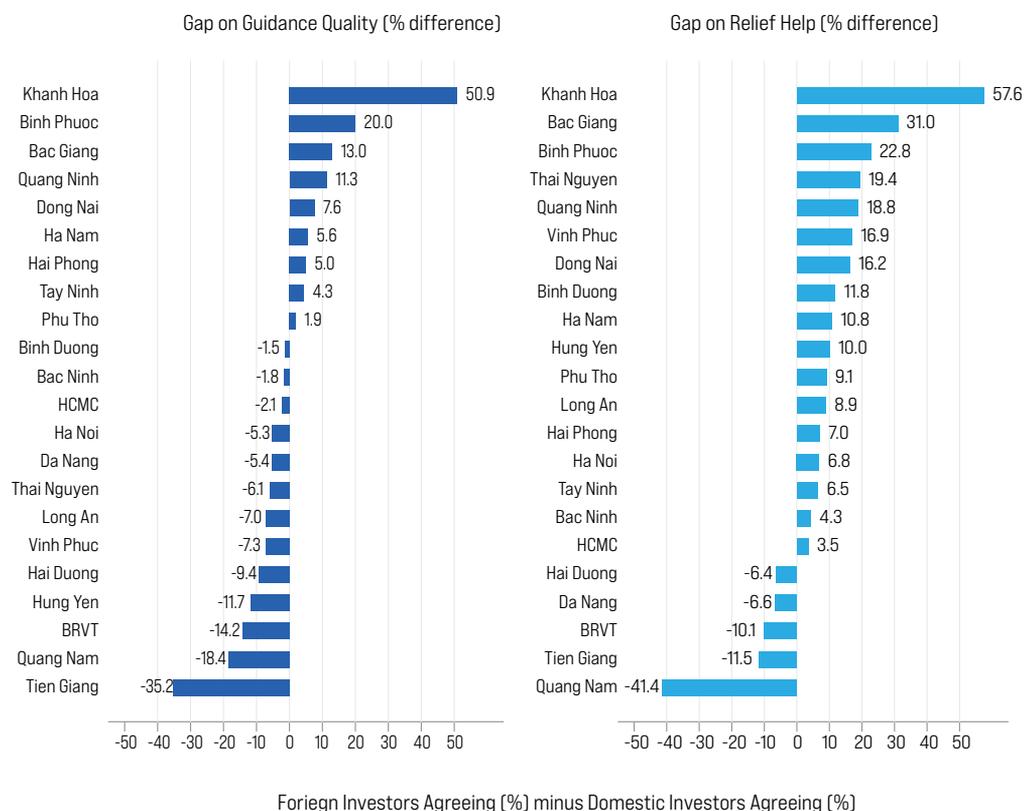
Figure 3.12 General Satisfaction with Provincial Guidance



Source: PCI and PCI FDI Survey 2021. Evaluation of provincial governments derived from questions J6 “Please rate your level of agreement with the following statements: 1. Guidance from the provincial government is clear and adequate for business operations in the Covid-19 context; 2. Guidance from the provincial government is

provided timely for business operations in the Covid-19 context; 3. The provincial government effectively guided my firm on access to government relief packages.” We calculate the share of firms that answered 1 “Strongly Agree” or 2 “Agree.”

Figure 3.13 Difference in Quality Assessment between Foreign and Domestic Investors



Source: PCI and PCI FDI Survey 2021. Evaluation of provincial governments derived from Question J6 “Please rate your level of agreement with the following statements: 1. Guidance from the provincial government is clear and adequate for business operations in the Covid-19 context; 2. The provincial government effectively guided my firm on access to government relief packages.” We calculate the share of firms that answered 1 “Strongly Agree” or 2 “Agree.” Graph depicts the difference between foreign investors who agree with each statement and domestic investors who agree.

3.4.2. Survey Experiment 1: Comparing Provincial versus Central Response

Our first survey experiment is presented in Figure 3.14. The PCI survey asked firms whether they agreed government officials did a good job responding to COVID-19. The survey was randomized so that half of the respondents were asked to evaluate the central government, while the others were asked to evaluate the provincial government. The main finding is that super majorities of all investors rated government performance highly. Most believed

that Vietnamese authorities did well. Investors were marginally more likely to rate central government performance higher than provincial governments, although the differences are not statistically significant with any group.

Overall, foreign investors are more negative about both provincial and central government performance than domestic investors. Averaging over orientation, 72 percent of domestic investors were satisfied with the central government versus 64 percent of foreign investors. Views of provincial government were slight lower; 70 percent of domestic investors were satisfied compared with 61 percent of foreign investors. The lowest ratings overall were expressed by domestic-oriented foreign investors.

Figure 3.15 charts how firms rated their provinces. Again, we find wide differences in provincial performance. However, we find quite similar results in terms of the direction of the bias. In Khanh Hoa, Binh Phuoc, and Ninh Binh, less than half of Vietnamese investors were satisfied with how their province managed the COVID-19 crisis. By contrast, the provinces of Yen Bai, Phu Tho, and Nam Dinh had nearly perfect agreement that the province managed the pandemic well. Wide differences were also visible among foreign investors. Quang Ninh and Binh Phuoc reported relatively high satisfaction. However, firms in the southern provinces of HCMC, Long An, and Tay Ninh, along with Quang Nam, registered tremendous disappointment. Views were quite similar between domestic- and export-oriented investors.

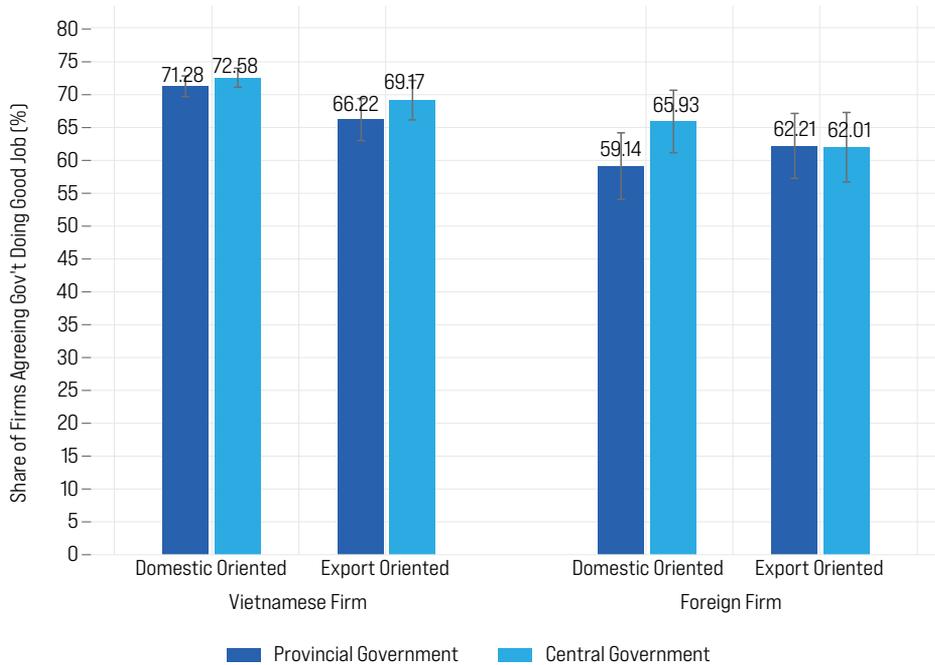
When we look at the differences in assessments between Vietnamese and foreign businesses, we observe extremely similar results to Figure 3.13. Four types of provinces are observable: 1) those that overtly favor foreign investors in their policies; 2) those who are assessed more highly by domestic investors; 3) those that appear neutral because of negative assessments by both types of investors; and 4) those who all investors thought handled the pandemic well.

Khanh Hoa, Binh Phuoc, and Bac Giang stand out as locations where foreign investors were significantly more satisfied with provincial performance than domestic investors. However, Quang Nam, Tay Ninh, and HCMC registered as more favorable to domestic investors.

Other locations appeared to be more neutral. However, in the cases of Binh Duong, Dong Nai, and BRVT, the neutrality arises from the relatively low assessments by both Vietnamese and foreign investors. For instance, in Dong Nai, just over half of domestic investors (51.3 percent) and foreign investors (55 percent) agreed that their province did a good job. Again, these were provinces most likely to be influenced by supply chain hold-ups and restrictions on movement of migrant labor.

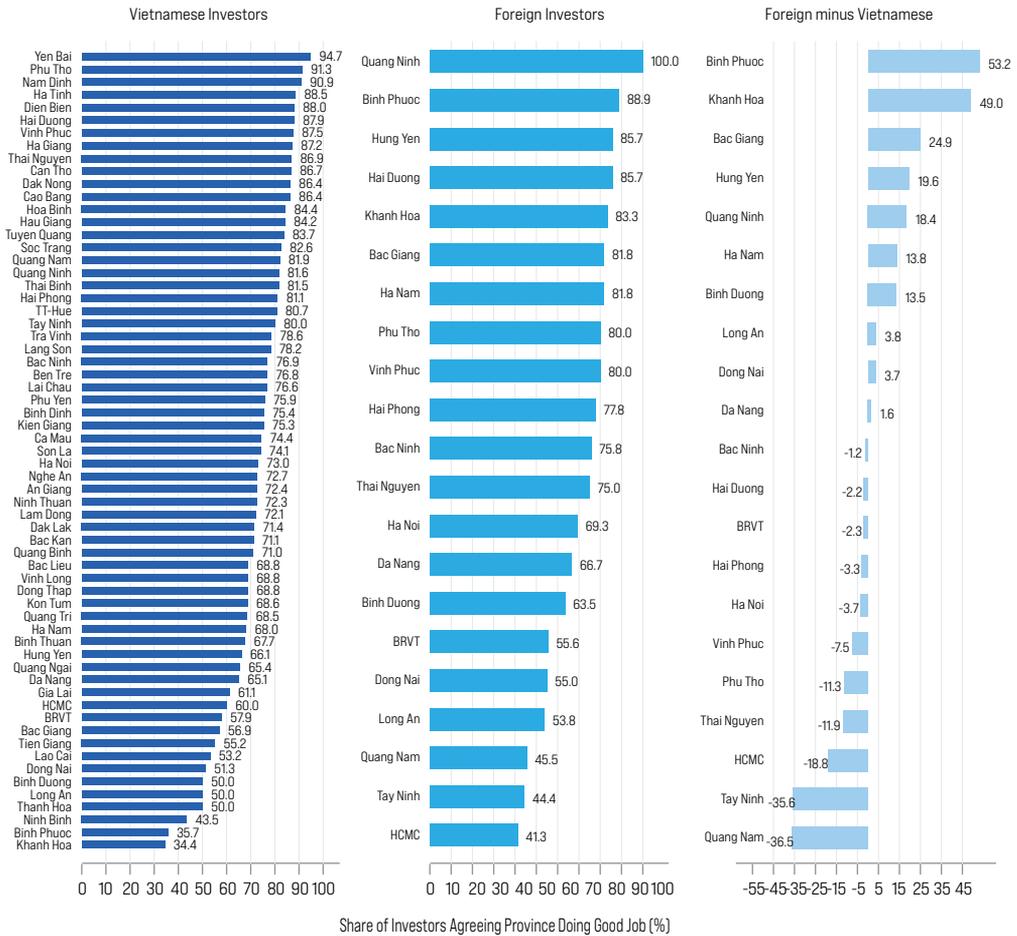
By contrast, Vinh Phuc appears neutral because of relatively high assessments from domestic investors (87.5 percent) and foreign investors (80 percent). Bac Ninh ranks similar to Vinh Phuc as pleasing both foreign and domestic investors.

Figure 3.14 Foreign Investors More Negative about Performance of Central and Especially Local Governments



Source: PCI and PCI FDI Survey 2021. Evaluation of provincial and central governments derived from questions J7 "Overall, would you say the reaction of [(A) the Government// (B) local governments] to the coronavirus outbreak has been to date?" 50 percent of respondents were assigned to Form A and 50 percent were assigned to Form B. Firms were invited to respond on a five-point scale: 5) Very good; 2) Somewhat good; 3) Neither good of bad; 2) Somewhat bad; and 1) Bad. We present the share answering Very good or Somewhat good.

Figure 3.15 Assessment of Provincial Government COVID Performance



Source: PCI and PCI FDI Survey 2021. Evaluation of provincial government derived from questions J7 “Overall, would you say the reaction of [(A) the Government// (B) local governments] to the coronavirus outbreak has been to date?” The first panel shows the evaluation of Vietnamese investors, the second the evaluation of foreign investors, and the third the difference between the two assessments.

3.4.3. Survey Experiment 2: Priming Health versus Business Impact

To get a sense of whether firms disagree with the severity of COVID-19 restrictions and lockdowns, we tried a second experiment, which is depicted in Figure 3.16. We asked all investors “To which extent do you say the government has placed restrictions among the following?” Respondents were invited to respond on a five-point scale: 5) Far too few restrictions; 2) Too few restrictions; 3) About the right amount of restrictions; 2) Too many restrictions; and 1) Far too many restrictions.

Prior to the experiment, 50 percent of respondents were exposed to a priming statement reminding them of the public health consequences of COVID-19: “As of today, there have been thousands of confirmed cases of coronavirus in Viet Nam, and close to tens of people have died from the disease.” The other 50 percent of respondents were exposed to a prime highlighting the economic effects of COVID-19: “These policies have also had economic effects. According to the State Bank of Viet Nam, the economy will experience slower growth of between 5 percent and 6 percent in 2021 and many people have been unable to work due to the pandemic.”

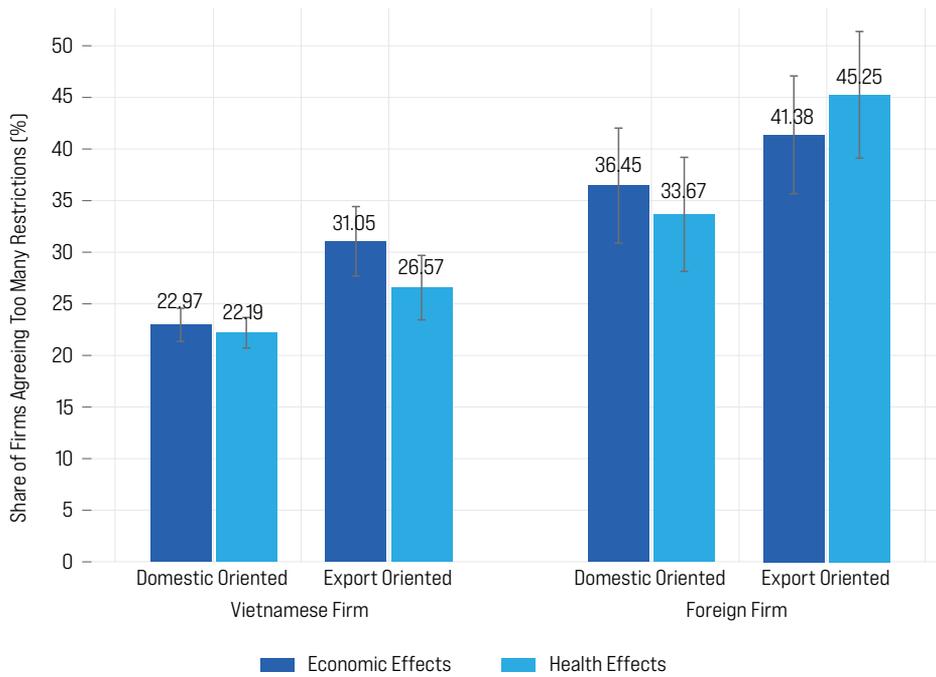
We present the share of investors from each category agreeing that there were too many restrictions in Figure 3.16. Our expectation was that investors exposed to the health treatment would be more supportive of restrictions, while those exposed to the economic effects would favor less restrictive policy. This hypothesis was rejected. The prime had close to zero impact on firms’ assessment of regulatory stringency. Overall, 25 percent of all firms given the health treatment reported that restrictions were too high, compared to 26.8 percent of those receiving the economic prime.⁶⁹ The 1.8 percentage point average difference in beliefs is not substantively significant, falling well within the margin of error of the survey. This can also be seen clearly in the graphs. While the green bar depicting average scores for the green prime (economic effects) is slightly higher for almost every category of firm, the confidence intervals overlap, demonstrating that the results are also not statistically significant.

Views about restrictions are entirely determined by the orientation and origin of the company. All else equal, foreign investors are 12 percentage points more likely to oppose restrictions, regardless of treatment, and export-oriented investors are 6 percentage points more likely to oppose them. Thus, 43 percent of export-oriented foreign investors are frustrated with too many restrictions, compared to only 22.5 percent of domestic-oriented Vietnamese firms.

Although, in all cases, a majority of firms was satisfied with the level of stringency, it is clear that the range of business needs and the public dangers posed by COVID-19 mean firms have very different policy perspectives. Recovering from the crisis and addressing future pandemics should take these considerations into account.

⁶⁹ Remember, the sample is heavily weighted toward domestic-oriented Vietnamese.

Figure 3.16 Foreign and Export-oriented Investors Less Supportive of Restrictions on Business Activity during COVID-19



Source: PCI and PCI FDI Survey 2021. Rating of regulatory influence derived from Question J8 "To which extent do you say the government has placed such restrictions among the following?" Respondents were invited to respond on a five-point scale: 5) Far too few restrictions; 2) Too few restrictions; 3) About the right amount of restrictions; 2) Too many restrictions; and 1) Far too many restrictions. We present the share answering "too many" and "far too many" restrictions. Prior to the experiment 50 percent of respondents were exposed to a prime reminding them of the health consequences of COVID-19, "As of today, there have been thousands of confirmed cases of coronavirus in Viet Nam, and close to tens of people have died from the disease," while 50 percent of respondents were exposed to a prime reminding them of the economic effects of COVID-19, "These policies have also had economic effects. According to the State Bank of Viet Nam, the economy will experience slower growth of between 5 percent and 6 percent in 2021 and many people have been unable to work due to the pandemic."

3.5. FIRM-LEVEL PROTECTIVE MEASURES

3.5.1. Responses to Keep Businesses Operating

In this section, we look at individual policies that firms themselves undertook to protect and maintain their operations during the second year of the pandemic. We studied six policies identified by business strategy experts as critical during this period.

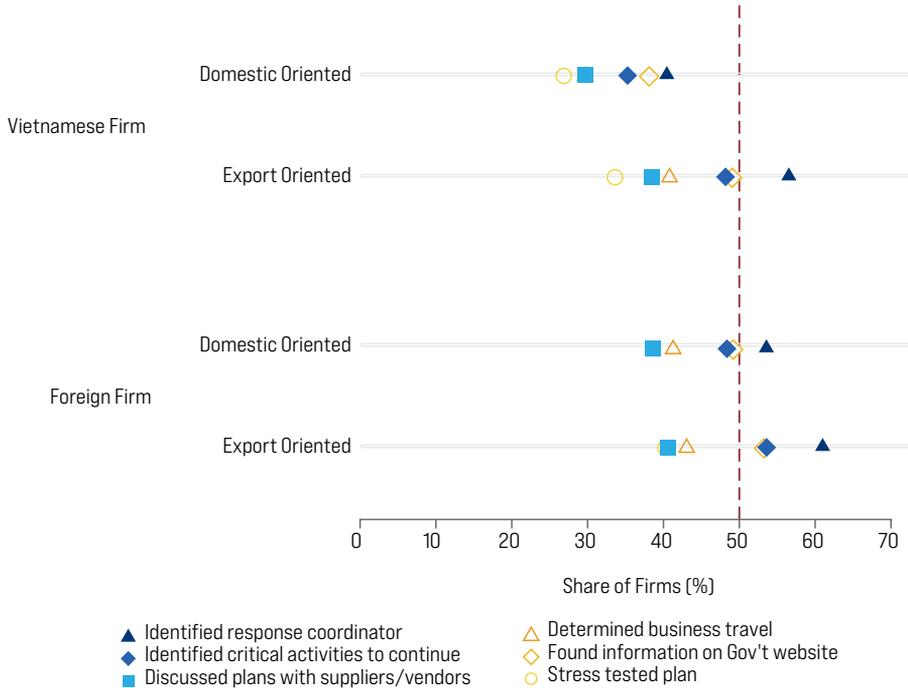
These were: 1) appointing a coordinator and/or team with defined roles and responsibilities for preparedness and response planning; 2) identifying the critical activities undertaken by the business, which would have to continue during a coronavirus outbreak in the province, including maintaining employees and procuring inputs that support those activities (e.g. raw materials, suppliers, sub-contractor services); 3) discussing and negotiating with critical suppliers and sub-contractors to ensure they have robust plans in place to cope with COVID-19 outbreaks, so that the business will not lack vital inputs; 4) determining the potential impact on business-related travel and how that will affect sales and investment decisions; 5) searching for information on government websites to keep track of COVID-19 outbreaks; 6) stress-testing the firm's pandemic plan and revising it periodically to update and account for new advice and guidance from the government.

Figure 3.17 displays the results of this analysis. We present the share of firms in each of the four categories that engaged in each of the six preventative exercises. The first thing to notice is the relative ordering of activities is very similar across all origins and orientations. The most common activity for all groups was identifying a response coordinator. Next, firms either engaged in an audit of critical activities or searched government websites. Third, firms discussed plans with suppliers or determined business travel. The least likely activity was stress-testing plans and periodically updating them as new information became available.

Foreign exporters were more likely than other businesses to engage in all activities, especially hiring a response coordinator, auditing critical activities, and checking government information. More than 60 percent of foreign exporters hired a business coordinator and over half audited their activities and checked government websites. Domestic-oriented foreign firms and Vietnamese exporters engaged in preventative activities at the same level with one critical exception: foreign firms were much more likely to stress test their business plans than domestic firms.⁷⁰ Domestic-oriented Vietnamese firms, probably due to their smaller-sized operations, were the least likely to engage in any of the six essential activities. Fewer than half of these firms engaged in any protective activity at all; stress-testing plans and negotiating with suppliers represented the least popular courses of action.

⁷⁰ Note that stress test for domestic-oriented foreign firms is partially obscured by the square for "discuss plans with vendors."

Figure 3.17 Foreign and Export-oriented Businesses More Likely to Take Preventive Measures within Their Operations



Source: PCI and PCI FDI Survey 2021. Rating of firm preparations for COVID-19 derived from Question J3 “We would like to understand how your firms has prepared their staff and operations for potential business disruptions, including outbreaks such as COVID-19. Please let us know some following issues: 3.1 How has your firm prepared to cope with the COVID-19 outbreak?” Firms were asked whether they: 1) Completed; 2) Started; or 3) Did not start each measure. We calculate the share of firms in each group that completed each of the six activities.

3.5.2. Responses to Protect Employees

Next, we asked about the specific efforts taken to protect employees from COVID-19 outbreaks. A company wants to not only maintain employee health, but also to keep the work force operating during cases of major outbreaks. We studied five activities recommend by Vietnamese public health experts.

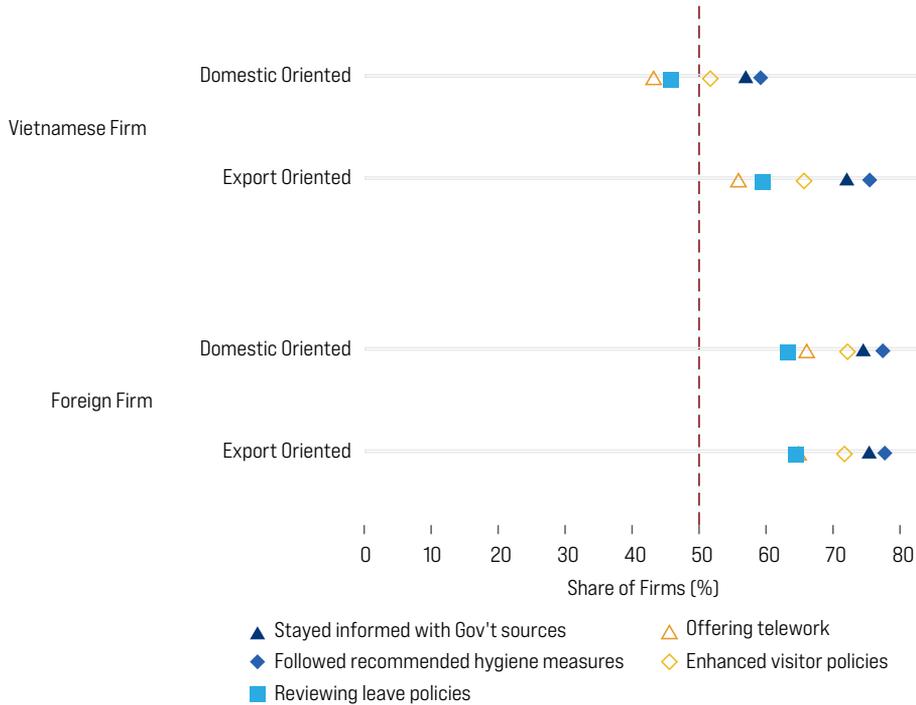
These tasks comprised: 1) staying informed by checking latest information through the official sources (Ministry of Health, Provincial government website); 2) promoting recommended workplace cleanliness and hygiene measures (encouraging social distancing, limiting handshaking, informing employees of what to do if a visitor shows symptoms of COVID-19, and displaying handwash reminder posters); 3) revisiting the firm’s benefits and leave policies, ensuring employees have coverage to deal with medical situations such as

self-isolation or taking care of a sick family member, communicating with employees to help them understand their labor rights, and training supervisors about the businesses' COVID-19 plans and policies; 4) offering telework arrangements, which required evaluating the equipment, policies and communication tools needed to support these arrangements; and 5) preventing the spread of COVID-19 to/from workplace visitors by informing employees what to do if a visitor showed symptoms of COVID-19 or was exposed to the virus.

We found that large majorities of businesses in the three most internationally connected types engaged in all activities. Foreign businesses were slightly more active than others with little difference between exporters and those targeting the domestic market. Export-oriented Vietnamese firms were also very active in protecting workers. The main difference was that Vietnamese exporters were about ten percentage points less likely to offer telework than their foreign counterparts.

Domestic-oriented Vietnamese firms were less proactive in putting labor protections in place. A majority of firms stayed informed about government policies and followed recommend hygiene procedures. However, only about 40 percent of firms adjusted their leave policies or started telework opportunities. This is not surprising, since most businesses in this category are small and service-oriented with limited technology and few employees. Generous leave policies and telework arrangements may simply not have been possible for coffee shops and restaurants who could only stay open by offering pick-up or delivery services. Similarly, small manufacturers and food processors with limited administrative and clerical positions may not have been able to offer such flexibility even to their most valuable employees.

Figure 3.18 Vietnamese Domestic-oriented Businesses Much Less Likely to Take Preventative Measures to Protect Workers



Source: PCI and PCI FDI Survey 2021. Rating of firm preparations for COVID-19 derived from Question J3 “We would like to understand how your firms has prepared their staff and operations for potential business disruptions, including outbreaks such as COVID-19. Please let us know some following issues: 3.2 How has your firm protected employees against the COVID-19 outbreak?” Firms were asked whether they: 1) Completed; 2) Started; or 3) Did not start each measure. We calculate the share of firms in each group that completed each of the five activities.

3.5.3. Responses to Continue Operations

Our final set of business activities focused firm-level actions to keep businesses operating during these difficult times. These comprised: 1) shifting to e-commerce options to engage customers online and manage decreased in-person consumer demand; 2) identifying products, services, and supplies at risk of disruption and considering alternative suppliers, rationing critical parts, and other strategies to address shortages; 3) reviewing insurance coverage policies for disease outbreaks as well as expanding or adding business interruption, key person protection and/or business income insurance; 4) establishing policies on travel to affected geographic areas and managing employees working in or near these areas; and 5) increased automation of business operations using robots or digital devices.

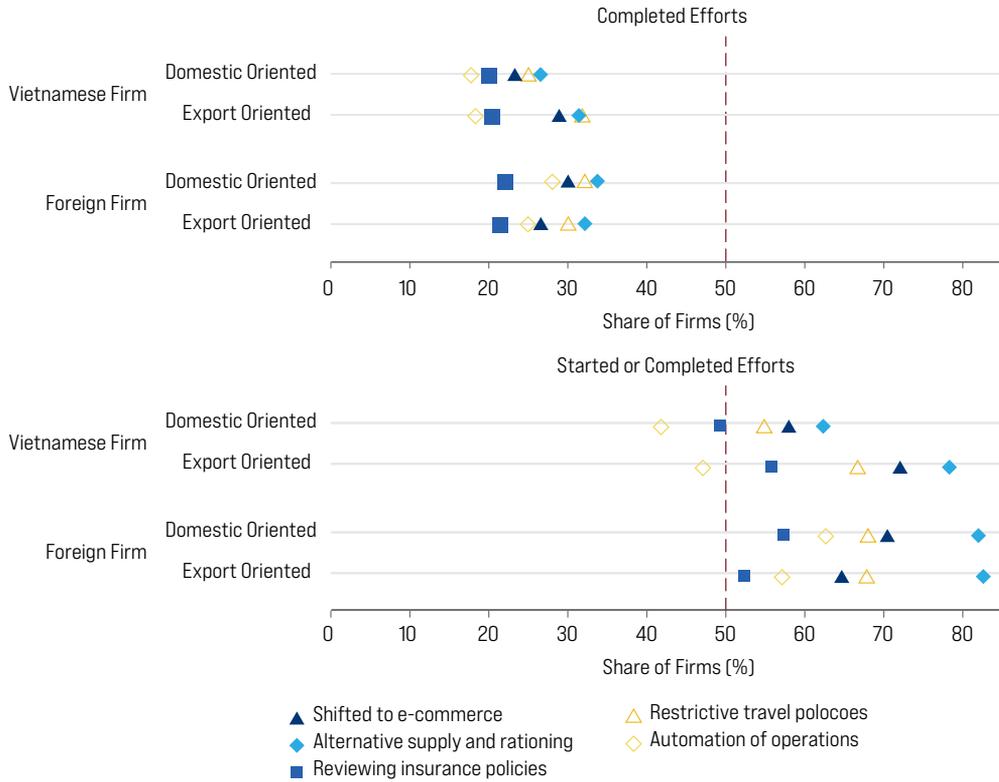
In Figure 3.19, we depict advances on these activities in two panels. The top panel illustrates the share of firms that completed a transition to these behaviors. The bottom panel indicates the share of firms that either completed the activity or started the activity but had not yet completed it at the time of the survey. As a result, the second panel numbers are larger, because it includes both those who have fully implemented and those who are just beginning.

In comparison to the disease prevention and labor protection activities, surprisingly few firms were able to complete these business continuation initiatives by the time of the PCI survey. The highest reported completion rate was 30 percent for finding alternative suppliers and rationing supplies. By contrast, over 80 percent of the three internationally engaged types of businesses had taken steps to strengthen their own supply chains, either by seeking out alternative vendors or rationing. Automation was the least likely activity with fewer than 30 percent of all businesses taking steps in that direction. Domestic businesses reported fewer than 20 percent of firms had completed the change. Again, among the domestic-oriented Vietnamese firms, this may be due to the proliferation of service sector businesses. Indeed, only about 40 percent of these firms indicated they have even started engaging in automation.

Vietnamese exporters, along with domestic-oriented foreign companies, were the most likely to have shifted to e-commerce activities to market their businesses and services. Foreign exporters, many of whom are part of MNCs or pre-existing value chains, were less likely to take such steps. Indeed, over 70 percent of Vietnamese exporters and domestic-oriented foreign firms are starting the shift to e-commerce, compared to only 65 percent of foreign exporters.

Domestic-oriented foreign firms were also the most likely to automate activities to address labor shortages and lockdowns with 28 percent completing the transition and 62 percent starting new automated activity. Foreign exporters were slightly behind at 25 percent completion and 57 percent starting new automated activities. By contrast, less than 50 percent of all Vietnamese firms made any move at all toward greater automation.

Figure 3.19 Limited Efforts at Firm-Level Continuation Policies



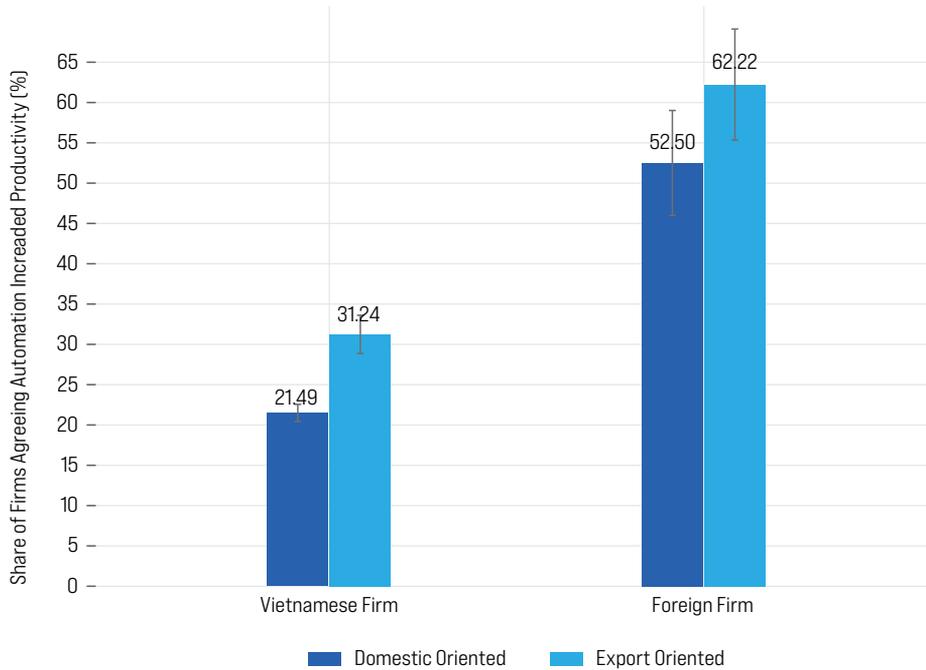
Source: PCI and PCI FDI Survey 2021. Rating of firm preparations for COVID-19 derived from Question J3 “We would like to understand how your firms has prepared their staff and operations for potential business disruptions, including outbreaks such as COVID-19. Please let us know some following issues: 3.3 How has your firm maintained continued operations?” Firms were asked whether they: 1) Completed; 2) Started; or 3) Did not start each measure. The panel presents the share of firms in each group that completed each of the five activities. The second panel displays the share of firms that started them.

In a separate set of follow-up questions, firms were asked to reflect on the extent of automation they had engaged in, “Since the outbreak of COVID-19 in December 2019, to what extent has your firm automated tasks previously done by human workers? What percentage of tasks in your business have been automated?” The analysis showed a very similar pattern. Domestic-oriented foreign firms report automating 11.8 percent of current tasks with plans to automate 17 percent. Export-oriented foreign businesses have automated 9 percent of current tasks and plan to automate 15 percent. Vietnamese firms are further behind with only 6.6 percent of current tasks automated and plans to reach 9 percent.

By far, the most common form of automation was digitizing production or services; 49 percent and 44 percent of domestic-oriented foreign companies and foreign exporters, respectively, have made the transition. Digitalization was also employed by a quarter of Vietnamese exporters and 18 percent of domestic-oriented Vietnamese firms. Machine learning or artificial intelligence in data analysis and strategic planning was used by 20 percent of foreign exporters and 16 percent of domestic-oriented foreign firms. Industrial robots were used in production and delivery by 20 percent of foreign exporters and 11 percent of domestic-oriented foreign firms. Fewer than 10 percent of domestic firms were engaged in activities involving machine learning or robots.

Interestingly, while foreign exporters were not the most likely business types to automate, they were easily the group most likely to think that automation improved their productivity in the past year. Among foreign exporters, 62 percent answered that automation helped productivity, compared to only 53 percent of domestic-oriented foreign companies and 31 percent of export-oriented domestic companies. Automation-related productivity was probably more beneficial for foreign firms, and foreign exporters in particular, since these firms were the most likely to say they struggled with maintaining their workforces at full capacity during the pandemic. Automation helped compensate for lost labor on the factory and service floors.

Figure 3.20 Foreign Investors More Likely to Believe Productivity Improved as a Result of Automation



Source: PCI and PCI FDI Survey 2021. Productivity calculations derived from Question J4.5 “Did investment in digitalization or automation improve your firm’s productivity measured by output per worker?” We present the share of firms who employed digital technology that answered yes.

3.6. TYING EVERYTHING TOGETHER: MACHINE LEARNING ANALYSIS OF BUSINESS DURABILITY

In this final section, we pull together all the topics covered thus far to understand what factors most facilitated business survival and optimism and plans for expansion post COVID-19. To do this, we return to the issues of origin and orientation discussed in Section 3.1, the government responsiveness and guidance measures discussed in Section 3.4, and the efforts that firms took to protect themselves and their employees in Section 3.5. This analysis is critical for identifying the drivers of business survival that will undergird government policy choices and firm-level strategy innovations.

To address the complexity of managing the hundreds of interrelated factors that could potentially influence survival, we employ a machine learning technique called the least absolute shrinkage and selection operator (LASSO). LASSO is a regression analysis method that performs both variable selection and regularization to enhance the prediction accuracy and interpretability of a statistical model. LASSO works by including a penalty into the model, thereby forcing the sum of the absolute value of the regression coefficients to be less than a fixed value, driving non-influential coefficients to zero and excluding them from impacting prediction.

We focus on two key outcome variables. First, we study the number of months that a firm believes it can continue to operate given current conditions, described in Section 3.3.3 and depicted in Figure 3.9. Recall that firm estimates of months of survival ranged from zero for very struggling firms to about a decade (120 months) for relatively successful firms. About 35 percent of all firms answered that they could survive indefinitely. To include these firms in the model, we re-coded their survival probability to 150 months.

Second, we use the dichotomous PCI thermometer measure of whether firms intend to expand their operations over the next two years. This indicator, which has proved to be a leading indicator of overall economic performance since it was first introduced in 2006, was discussed in section 3.3.4.

We regress these outcome variables on our measures of firm origin (FDI versus Vietnamese), orientation (domestic or export) and their interaction along with province, two-digit sector, and country of origin fixed effects, and labor and capital size shown in Table 3.1. To measure government responses, we look at the three evaluations of provincial guidance, transparency, and help with relief programs displayed in Figure 3.12. We also include firms' assessment of the overall government performance, which was shown in Figure 3.14. As there was little difference between assessments of provincial and central government performance, we combined them into a single measure.

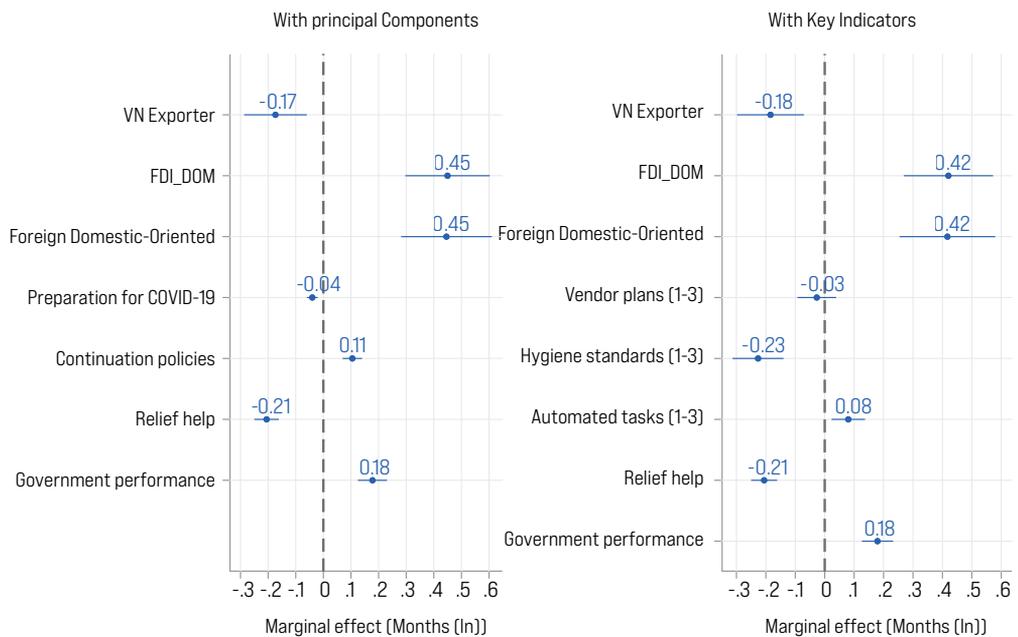
To address the 16 measures of firm-level preparation, labor protection, and continuation policies, we first perform a data reduction technique, known as principal component analysis, to identify the underlying dimensions that drove firm-level choices. We identified two principal components or latent factors that explain 62 percent and 10 percent of the total variation in the three batteries respectively. These factors comprise: 1) firm-level business and labor protective measures, described in Figures 3.17 and 3.18; and 2) firm efforts to continue practices, described in Figure 3.19. In an accompanying regression, we also employed the most influential factor from the three different batteries. These were: 1) whether the firm discussed new plans with its suppliers, which we code on a three point-scale called vendor plans, where zero represents no effort, one equals started the discussions, and two equals the talks were completed; 2) whether the respondent followed government recommended government hygiene procedures, which is also measured on the same three-point scale; and 3) whether the respondent automated operations on the same three-point scale.

The coefficient pathway plots, which demonstrate which covariates were pushed toward zero by the operation and which ones remained sizable and robust, are shown in the Appendices in Figure 3.22 and Figure 3.33. To simplify presentation, Figure 3.21 and Figure 3.22 illustrate the models recommended by the algorithm to minimize bias and variation. Bias represents the set of covariates that produce the smallest mean squared error in a training dataset. Variance is the consistency of the MSE estimations in four repeated k-fold cross validations.

Figure 3.21 depicts the impact of a standard deviation movement in each covariate, surrounded by 95 percent confidence intervals. The left panel of the graph clearly shows that foreign investors, especially foreign exporters, have the greatest likelihood of survival compared to Vietnamese businesses. Respectively, foreign exporters and domestic-oriented foreign investors expect to survive 43 percent and 42 percent longer than the 66 months projected by Vietnamese domestic-oriented businesses (which serves as the reference category). Importantly, Vietnamese exporters reported the lowest anticipated survival duration. They expect a survival time that is 13 percent shorter than domestic investors. Holding these structural factors constant, we find that the most important covariate influencing business survival is continuation policies. A one standard deviation increase in the index measuring whether firms started or completed these efforts is associated with a 12 percent increase in business survival, which translates to about 8 months on average. A one standard deviation increase in assessment of government performance (equal to about 0.85 movement) on the five-point scale is associated with 18 percent longer survival, which is just longer than a year. The second panel shows that automation was the most important of the firm-level policies. Moving from zero automation to complete automation of planned operations would translate into 12 percent longer durability, which, again, is equal to about 8 months.

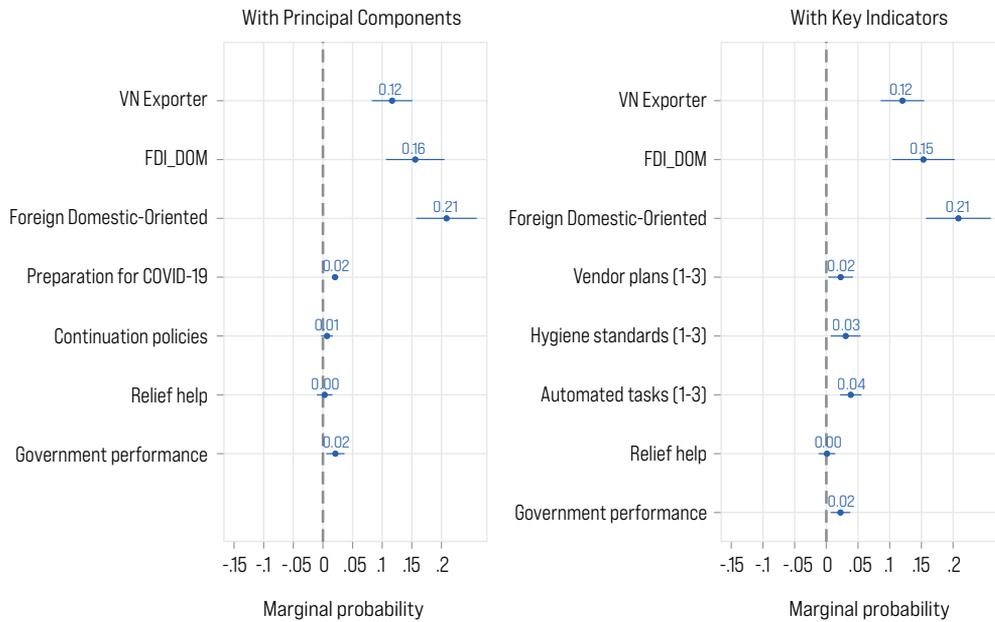
Figure 3.21 applies a similar LASSO algorithm to business expansion decisions. Again, we find that foreign exporters and domestic-oriented foreign businesses are 20 percent and 15 percent more likely to expand than domestic-oriented Vietnamese businesses, respectively. Vietnamese exporters are 12 percent more likely to expand. Government policy has a significant but small substantive effect. Moving from a rating of very negative to very positive would lead to a 5 percent increase in the probability of business expansion. Both firm-level preparation and continuation were also significant. One-point improvements in renegotiating with vendors and following hygiene standards are correlated with 2 percent increases in expansion over those who made no efforts. Finally, automation efforts were highly influential. Moving from zero tasks automated to complete automation is associated with a six percent increase in willingness to expand.

Figure 3.21 Covariates of Business Survival after COVID-19



Source: PCI and PCI FDI Survey 2021. Results of linear regression of Question J3.4 measuring projected survival in months on covariates selected using LASSO [See Appendix for full results]. The left panel displays regression results using principal components analysis to summarize all measures of firm policies that were summarized in Figure 3.16 (firm preparations), Figure 3.17 (labor preparations), and Figure 3.18 (continuation policies). These were reduced to two factors: 1) Preparation for COVID-19; and 2) Continuation Policies. The right panel uses the most powerful measure for each of the three policy realms: 1) Vendor plans; 2) Hygiene standards; and 3) Automating business tasks. Results display regression coefficients with 95 percent confidence intervals. K-fold cross validation was used to test the validity of the model findings' root means squared errors (RMSE) ranging from 1.75-1.80.

Figure 3.22 Covariates of Business Expansion after COVID-19



Source: PCI and PCI FDI Survey 2021. Results of linear regression of Question A10 measuring whether firms intend to expand their business over the next two years (expand=1) on covariates selected using LASSO (See Appendix for full results). The left panel displays regression results using principal components analysis to summarize all measures of firm policies that were summarized in Figure 3.16 (firm preparations), Figure 3.17 (labor preparations), and Figure 3.18 (continuation policies). These were reduced to two factors: 1) Preparation for COVID-19; and 2) Continuation Policies. The right panel uses the most powerful measure for each of the three policy realms: 1) Vendor plans; 2) Hygiene standards; and 3) Automating business tasks. Results display regression coefficients with 95 percent confidence intervals. K-fold cross validation was used to test the validity of the model findings' root mean squared errors (RMSE) ranging from 4.64-4.75.

3.7. POLICY IMPLICATIONS

The LASSO analysis pulls together the major outcomes detailed above to generate policy implications for officials and researchers. To be clear, none of these findings are inherently causal. For instance, firms may have automated activities specifically with expansion in mind, so that automation was really an outgrowth of willingness to expand rather than vice versa. An additional limitation is that the PCI data itself is hampered by survivor bias. Over 100,000 domestic businesses went bankrupt during the pandemic and several thousand foreign operations canceled or reduced investments. As a result, the findings are best thought of as indicators or correlates of optimistic plans among the relatively successful subset of firms at the beginning of the pandemic.

That said, a few findings are clear. Domestic firms feel significantly more threatened than their foreign counterparts. Exporters appear to be recovering more quickly and are more optimistic about the future; however, exporting Vietnamese firms may require more tailored support programs to successfully navigate the difficult COVID-19 waves. Government policies and attitude matter. Firms that rated central provincial responses more highly believe they can endure and are more likely to plan expansion. Finally, firms can take their own steps to enhance their opportunities. Most individual steps matter, but firms that were proactive about renegotiating vending contracts and protecting worker hygiene have better business prospects. Finally, among all types of firms, those that engaged in automation are much more optimistic about the success of their future business.

One worrisome pattern was the negative coefficient on help with relief efforts. Firms indicating that provincial government helped guide their relief efforts had lower numbers of planned or implemented survival projects (such as automation) and lower probabilities of survival. There are two potential explanations for these correlations. First, there may have been bias in government targeting of firms, such as directing efforts to larger or more connected operations, so that relief efforts did not reach those most in need. Second, relief targeting may have been precise yet unable to overcome the severe hardships firms were facing. We cannot tell from our current data, but it is an important topic for future research.

These results point to the need to differentiate relief and assistance policies.

- Domestic-facing Vietnamese firms are hurting and are in urgent need of support. Most of these small restaurants, coffee shops, retail outlets, light manufacturers, and construction companies struggled to survive following the onset of the pandemic and have diminished prospects of long-term success. Their number one concern is cash flow shortages. As they struggle, they have laid off workers and lowered salaries through direct contractual changes and working hour reductions. Many of these were underserved by tax relief programs because they had little profit or sales

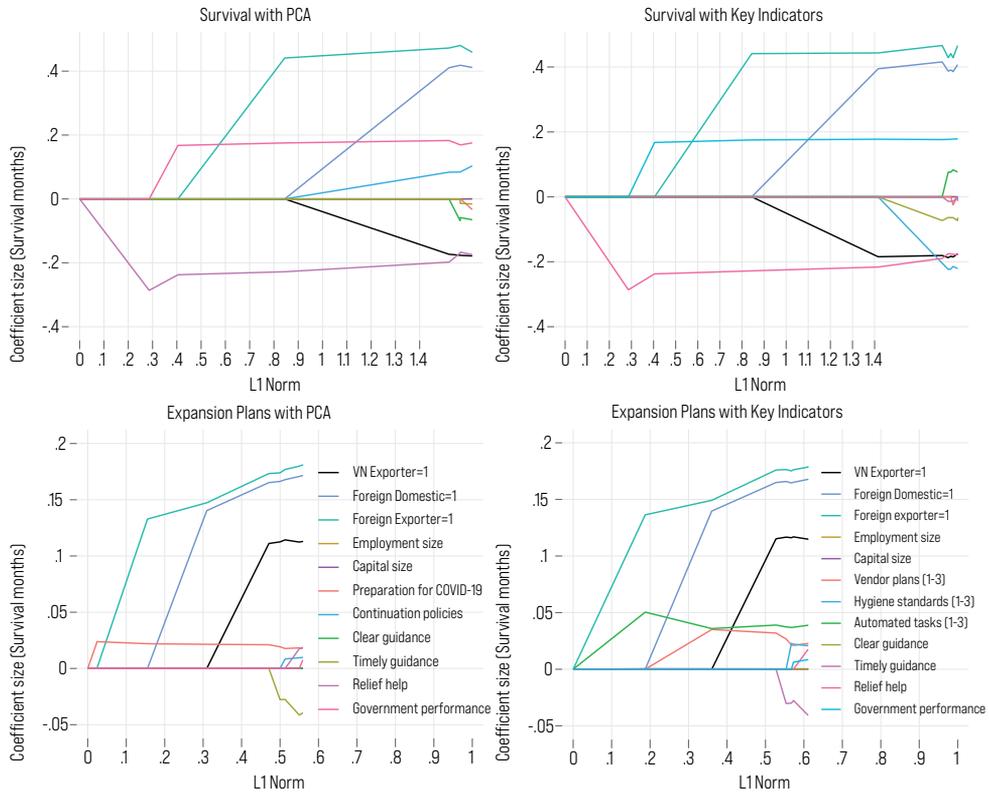
to begin with, so Corporate Income Tax (CIT) and Value Added Tax (VAT) relief was less successful. Direct subsidies, guaranteed loans, and labor support programs are urgently needed. These companies would also benefit from restructuring support to help them expand their market and sales through e-commerce and internet activities, which could help address their second largest campaign of difficulties reaching domestic consumers.

- Export-oriented Vietnamese firms need less immediate support but could benefit from greater assistance subsidizing medium-term adjustments to international supply chains either through sales to foreign buyers in Vietnam or to external buyers. Targeted business partner matchmaking may be helpful. Additional medium-term support can be directed to assist automation of business tasks. In particular, digitalization of services, industrial robots, and machine learning in data analysis can generate large productivity improvements.
- Foreign firms have greater resources to draw upon and were better able to self-insulate to protect workers and business operations as well as re-tool to address new challenges. That said, there are policy changes that could help them. Ensuring a safe international opening through less restrictive entry policies for tourists and business travelers, while still maintaining requirements for vaccines and rapid testing, should enhance sales for foreign service companies while minimizing the danger of another outbreak and subsequent lockdown.
- Finally, export-oriented foreign firms need greater support to maintain their output levels and meet international shipping deadlines. Less restrictive lockdowns and regulations, especially in the industrial clusters where these businesses operate, have already had some positive effects. Additional benefits will be gained from policies facilitating the movement of migrant labor into these locations, as will better and safer housing, and support for providing essential medical and other services when they arrive.

Ultimately, the goal is to understand that these businesses have very different resources, interests, and needs. Economic policy will need to be crafted in a way that assists recovery of each element without creating spillover effects that injure others.

3.8. APPENDIX

Figure 3.23 Lasso Model Selection and Regularization



Source: PCI and PCI FDI Survey 2021. Coefficient paths from LASSO estimation. Vertical axes show the coefficient from each iteration of LASSO. The horizontal axis shows the penalty (L1 Norm) of logged lambda. Coefficients that diverge from zero indicate variables selected. Coefficients that diverge to zero are dropped. The top two graphs model covariate fit with Question J3.4 measuring projected survival. The bottom two graphs model covariate fit with Question A10 measuring whether firms intend to expand their business over the next two years (expand=1). The left graph in each row displays regression results using principal components analysis to summarize all measures of firm policies that were summarized in Figure 3.16 (firm preparations), Figure 3.17 (labor preparations), and Figure 3.18 (continuation policies). These were reduced to two factors: 1) Preparation for COVID-19; and 2) Continuation Policies. The right graphs use the most powerful measure for each of the three policy realms: 1) Vendor plans; 2) Hygiene standards; and 3) Automating business tasks.



ANNEXES

Annex 1

Revised 2021 Methodology



The Provincial Competitiveness Index (PCI) measures the economic governance of local governments in Vietnam in order to promote private sector development. Over its history, PCI has become an evidence-based reference for both central and provincial governments in economic policy-making and implementation, supporting stakeholders in the oversight of provincial actions to improve business environment, while at the same time providing an increasingly important tool in investment location decisions by businesses.

To ensure that the PCI remains useful to policymakers and responsive to the business community's expectations, every four years the PCI team commits to reevaluate the headline index and revise the methodology. Similar to the prior periodic recalibrations in 2009, 2013 and 2017, the PCI research team made adjustments in 2021 to best reflect changes in the business environment and regulatory framework in Vietnam as well as the developments in the business community in the country. The ultimate goal of these adjustments is to provide valuable and comprehensive analyses of provincial economic governance and thereby put forth recommendations to governments at all levels, especially to provincial governments, to act on behalf private sector development.

Information from the experts and stakeholders on the ground is critical material that informs PCI methodology recalibration. Every year, the PCI project team visits provinces across Vietnam to provide diagnostics of local economic governance based on the PCI findings and analyses. Open policy dialogues facilitate sharing of perspectives from knowledgeable locals on economic governance and new issues faced by businesses. Through these interactive events, the PCI team gathered valuable new suggestions on how to improve the PCI.

Incisive suggestions from public officials at provinces, economic and public policy experts, and representatives of the business community played an essential part of the recalibration. We conducted extensive consultation on the draft PCI revised methodology with key stakeholders in May 2021 and received feedback from 33 provinces and municipalities and 25 experts and academics, along with numerous business representatives. Based on these helpful comments, we reviewed and made a number of adjustments. First, we reviewed all the indicators used in the 2017-2021 period and dropped those that were no longer important, which we define as reflecting dimensions already addressed by new policies or where national policy has flattened variation leading to similar improvements in most provinces. Next, we added new indicators or re-adjusted existing indicators to best reflect economic governance issues at the provincial level. Finally, each subindex was re-arranged and structured to reflect reform priorities that the PCI want to convey to provincial governments. Fifty-six new indicators were introduced, 52 old indicators were dropped, and eight existing indicators were revised. We also maintained 77 existing indicators, leading to a total of 141 indicators for 2021 iteration of the PCI. The major adjustments include:

- **Entry Costs subindex:** Ten new indicators were added to more broadly cover the ease of business registration and operation start-up. For instance, we included an indicator on the share of firms required to make two revisions or more to their business registration dossier in addition to the existing indicator that measures the median days to complete business registration. The 2021 PCI survey indicated that the share of firms undergoing this experience ranges from 5 percent to 34 percent, with an average share of 17 percent of firms reporting such harassment. Other indicators proposed by experts and firms include those measuring the ease of registration of conditional line business (known as baby licenses), as this area has been a strategic policy priority since 2018 and was re-emphasized in the Master Program of Public Administration Reform in 2021-2030. The PCI survey this year affirmed the need to remain diligent in monitoring this issue, as only 57.7 percent of firms rated guidance by provincial authorities on conditional business registration clear and adequate, and only 41.4 percent of firms reported encountering no difficulties in completing this procedure. While there is certainly room for improvement, conditional licenses also have some more positive news. Fifty-six percent of respondents reported the settling process was exactly as specified, a little higher than 48 percent of firms reported the time for completing the procedure was not longer than regulated, and 42.5 percent consented that the registration cost was not higher than specified by regulations. We also added another three indicators to measure the regulatory burden on new entrants, taking into account the stakeholder inputs, including the share of firms delaying or canceling business plans as a result of difficulties in business registration, re-registration (7 percent), and registration of sublicenses (21.7 percent).

- Land Access and Security of Tenure subindex: Four new indicators were added, with the first three focusing on measuring land access, including whether the time to process land dossiers was longer than specified or regulated (52.9 percent); guidance from officials receiving and settling dossiers was not clear and adequate (20 percent); and the procedure for determining land levies took longer than regulated (23 percent). The last new indicator measures the effects of implementing land procedures on business operations – the share of firms having to delay/cancel business plans due to difficulties encountered in completing such administrative steps (53.9 percent).
- Transparency subindex: We added four indicators on access to information frequently sought by firms on provincial websites. These were the share of firms finding these pieces of critical information on provincial websites useful: provincial investment incentives (43.1 percent), administrative procedures (68.2 percent), governing documents of provincial leadership (49.1 percent); and legal documents issued by provincial governments (58.8 percent). On the dimension of transparency of local business climate, we introduced an indicator that measures the proportion of firms agreeing negotiations with tax authorities can help reduce tax obligations (36.4 percent) and another on the predictability of provincially issued regulations (33.4 percent). Based on expert suggestions, we replaced the indicator measuring the level of details of budget documents for use in business activities with another indicator that measures the availability of some types of information crucial to provincial website openness, such as socioeconomic reports and provincial statistical yearbooks.
- Time Costs subindex: The Master Program of Public Administration Reform for the period 2021-2030 requires state agencies to increase digital settlement of administrative procedures. Based on recommendations from experts, businesses, and provincial administrations, we added related questions on the survey questionnaires to promote provincial efforts in this important dimension. The survey findings showed that slightly more than 57 percent of firms did not have problems implementing procedures online and the same proportion observed reduced time and cost when implementing procedure digitally. These findings highlight the need to improve the effectiveness of digital administrative procedure settlement and the validity of these indicators in the revised methodology. Additionally, we readjusted the indicator of firms undergoing three inspection visits or more (previously five or more) to better determine the inspection burden, which has proven to be an area that calls for continued attention and reform, with nearly ten percent of firms reporting undergoing three inspection visits or more in the last year.
- Informal Charges subindex: Vietnam has stepped up anticorruption since 2016 and achieved many positive results. As a result, the informal cost burden on businesses has trended downward, but there are still areas where stronger

efforts need to be continued. Many experts have suggested that this subindex should be supplemented with more specific indicators than just petty corruption measured by indicators of informal fee. The PCI survey 2021 asked businesses to give more detailed assessments and found some areas with markedly high levels of informal charges, including: construction inspection (71.4 percent), conditional business licenses (63.2 percent), environmental inspections (33 percent), fire safety inspections (30 percent) and business registration/re-registrations (18.8 percent). These indicators were added to form the informal charges subindex to provide a more robust and fulsome measure of the ecosystem of corruption faced by businesses

- **Policy Bias subindex:** Between 2013 and 2020, the PCI data showed that bias towards SOEs decreased significantly. However, favoritism towards large firms, colloquially referred to as “backyard” firms, which possesses strong connections with public officials persists at a remarkable level. Capturing the policy bias caused by these relationships requires adjustments to measure the equality of provincial policies that were recommended by our expert panelist experts. The 2021 PCI survey found that a considerable proportion of firms perceived that provincial authorities favored large firms over SMEs, granting privileges in handling policy constraints (52.63 per cent), investment incentives (38.9 percent), land access (24.81 percent), settlement of administrative procedures (20 percent), access to information (25.5 percent), tax exemptions and reductions (17 percent), mining licensing (10 percent). These measures were added to construct the subindex, replacing the old indicators measuring favoritism towards SOEs and FIEs specifically. Bias toward SOEs and FIEs is still captured by the new measure, however, we have expanded the definition of favored firms to include large and connected domestic, private operations as well.
- **Proactivity of Provincial Leadership subindex:** The consulted stakeholders emphasized that this subindex should measure whether a provincial government insures the stability and consistency of business environment and whether it keeps its commitments to improve the business environment. We implemented this suggestion by adding questions to our surveys and found that only 53.4 percent of firms rated the stability and consistency of their local business environment positively, and only 71.2 percent of firms were confident that provincial leaderships would keep their commitments to improve the business environment. Both measures exhibited reasonably large variation in the share of firms across provinces. These results reinforce the expert views and introduce these indicators to this subindex. To avoid duplication with new indicators in the Policy Bias index, we dropped two indicators measuring local authorities’ responses to firms’ problems and firm satisfaction with the authorities’ responses and their efforts to handles these issues of handling the issue.

- **Business Support Services subindex:** We recalibrated this subindex to measure more on business support policies rather than services, allowing us to better explore firm perceptions and experiences of business support programs legislated under the Small and Medium sized Enterprise (SME) Support Law effective since 2018. The new indicators focus on important aspects of SME support, including: the ease in accessing programs that provide credit guarantees from the SME Credit Guarantee Fund; corporate governance consultancy services; subsidies to improve corporate management sophistication and financial transparency that increases firm accessibility to credit; land rental subsidies in industrial zones and clusters; legal aid service provided by the network of state agency counsellors; subsidies on entrepreneurship and corporate administration training funded by the state budget; and other vocational training subsidies for workers. We added four indicators related to the international economic integration which, as suggested by most experts, is the focus of new business support programs, and should be included in the PCI to measure the facilitation of international integration for firms to help them best take advantage of the FTAs and other international treaties to which Vietnam has proactively worked to gain admission. These indicators measure the quality of information on the effective FTAs provided by local governments, timely settlement by provincial governments of firms' difficulties related to FTA compliance, and firm familiarity with programs supporting integration and the ease of participation in such programs.
- **Labor Policy sub index:** Basing on expert inputs, we replaced indicators measuring the quality of job-matching services with three new indicators on the ease of recruiting manual workers, technical workers, and managers. These changes were intended to assist provincial authorities in more effectively developing and implementing labor supply policies. In addition, we introduced two new indicators, the first using the more detailed hard data released by the GSO on the proportion of trained workers by province, and the second using the hard data of average high school graduation scores to assess local labor quality.
- **Law and Order subindex:** This subindex is kept unchanged for most parts, with only a minor adjustment to the indicator "formal and informal costs are acceptable from the start of legal proceeding until enforcement of the judgments." In this adjustment, we split this indicator into two separate ones: "formal costs are acceptable from the start of legal proceeding until enforcement of the judgments" and "informal costs are acceptable from the start of legal proceeding until enforcement of the judgments. This revision was intended to better identify obstacles that prevent firms from using courts to settle disputes and avoid conflating rising administrative fees with informal requests for additional monies.

Due to the unique impact of the COVID-19 pandemic on the Vietnamese economy, the PCI research team chose to postpone recalibrating the sub-index weights until 2023. The key concern is that a period of immediate recovery from this unique shock requires a different set of priorities for central and local policy-makers than more normal periods where more stable economic managements is required. Given the importance of sub-index weights for setting governance priorities and for tracking progress overtime, we determined that it would be best to generate the weights once the country is more firmly on track to a healthy and sustainable recovery. Until then, we will maintain the 2017 weights, which were generated during the last period of pre-pandemic economic stability.

Sub-Index 1: Entry Costs	Source	Variable	Measure	2021
Dimension 1. Business Registration				
1. Length of business registration in days (Median)	2018 PCI Survey Question: C1	c1_2005	Min	5
			Median	7
			Max	15
			Correlation w/Previous Year	0.297*
2. Firms have to make 2+ revisions to their business registration dossier (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B1.2	c1_2_1	Min	5
			Median	17
			Max	34
			Correlation w/Previous Year	N.A
3. Length of business re-registration in days (Median)	2018 PCI Survey Question: C2	c2	Min	3
			Median	5
			Max	10
			Correlation w/Previous Year	0.18
4. Percentage of firms registering or re-registering through new methods: online, public administration center & post offices - <i>New variable in 2017</i>	2018 PCI Survey Question: C3	c3_new_2017	Min	18.60
			Median	59.32
			Max	84.90
			Correlation w/Previous Year	0.49*
5. Procedures at one-stop-shop are transparently listed (% Agree)	2018 PCI Survey Question: C3.1.1	c3_1	Min	38.89
			Median	66.67
			Max	95.12
			Correlation w/Previous Year	-0.28*
6. Guidance and instruction on procedures at one-stop-shop are clear and adequate (% Agree)	2018 PCI Survey Question: C3.1.2	c3_2	Min	37.04
			Median	73.68
			Max	100
			Correlation w/Previous Year	0.17
7. Staffs at one-stop-shop are professional and knowledgeable (% Agree)	2018 PCI Survey Question: C3.1.3	c3_3	Min	18.52
			Median	44.74
			Max	82.86
			Correlation w/Previous Year	-0.07

Sub-Index 1: Entry Costs	Source	Variable	Measure	2021
8. Staffs at one-stop-shop are friendly (% Agree)	2018 PCI Survey Question: C3.1.4	c3_4	Min	18.18
			Median	50.00
			Max	85.71
			Correlation w/Previous Year	0.21
9. Inter-departmental APs are available in registering to declare use of labor, registering for social insurance code issuance, and registering for use of pre-printed VAT invoices (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B1.3	c1_2_2	Min	28.21
			Median	67.50
			Max	90.00
			Correlation w/Previous Year	N.A
Dimension 2: Applying for Certificates of Conditional Business Lines				
10. Guidance on how to complete the sublicense is clear and adequate (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B4.2.1	c4_2_1	Min	34.29
			Median	57.69
			Max	80.00
			Correlation w/Previous Year	N.A
11. Firms did NOT encounter any difficulties in obtaining the sublicense (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B4.2.2	c4_2_2	Min	21.05
			Median	41.38
			Max	68.42
			Correlation w/Previous Year	N.A
12. The settlement procedures applied to my application for conditional line sublicense were exactly as specified by the governing regulation (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B4.2.3	c4_2_3	Min	27.91
			Median	55.88
			Max	80.77
			Correlation w/Previous Year	N.A
13. The procedures for obtaining the sublicense did NOT take longer than specified by the governing regulation (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B4.2.4	c4_2_4	Min	23.81
			Median	48.26
			Max	84.62
			Correlation w/Previous Year	N.A
14. The fees for obtaining the sublicense were NOT higher than specified by the governing regulation (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B4.2.5	c4_2_5	Min	23.08
			Median	42.50
			Max	68.00
			Correlation w/Previous Year	N.A

Sub-Index 1: Entry Costs	Source	Variable	Measure	2021
Dimension 3: Overall Entry Cost Burden				
15. Firms had to delay / cancel business plans due to difficulties in completing business registration procedure (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B5.1	c6_1	Min	0.00
			Median	6.67
			Max	23.53
			Correlation w/Previous Year	N.A
16. Firms had to delay / cancel business plans due to difficulties in completing business re-registration procedure (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B5.2	c6_2	Min	0.00
			Median	7.14
			Max	23.91
			Correlation w/Previous Year	N.A
17. Firms had to delay / cancel business plans due to difficulties in completing sublicense procedure (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B5.3	c6_3	Min	0.00
			Median	21.74
			Max	42.86
			Correlation w/Previous Year	N.A
18. Percentage of firms waiting for more than one month to complete all steps necessary to start operations	2018 PCI Survey Question: C5	c4_1month	Min	0.00
			Median	8.89
			Max	29.55
			Correlation w/Previous Year	0.03
19. Percentage of firms waiting more than three months to complete all steps necessary to start operations	2018 PCI Survey Question: C5	c4_3month	Min	0.00
			Median	0.00
			Max	10.81
			Correlation w/Previous Year	0.00

Sub-Index 2: Land Access and Tenure Security	Source	Variable	Measure	2021
Dimension 1. Access to Land				
1. Median number of days to wait for Land Use Rights Certificate	2018 PCI Survey Questions: B4.2	LURCwait_new	Min	7
			Median	30
			Max	90
			Correlation w/Previous Year	0.19
2. Percentage of firms that say nonstate enterprises do not have difficulties in accessing land or expanding premises	2018 PCI Survey Question: B6	no_ landproblems	Min	36.59
			Median	55.17
			Max	82.80
			Correlation w/Previous Year	0.18
3. Percentage of firms say lack of available land - <i>New variable in 2017</i>	2018 PCI Survey Question: B6.1	lack_avail_land	Min	4.76
			Median	21.65
			Max	46.88
			Correlation w/Previous Year	0.42*
4. Percentage of firms say slow land clearance progress - <i>New variable in 2017</i>	2018 PCI Survey Question: B6.1	slow_land_ clearance	Min	0.00
			Median	14.81
			Max	44.12
			Correlation w/Previous Year	0.51*
5. Percentage of firms say inadequate land information - <i>New variable in 2017</i>	2018 PCI Survey Question: B6.1	inadequate_ land_info	Min	9.09
			Median	31.25
			Max	46.88
			Correlation w/Previous Year	0.08
6. Land dossiers were processed longer than the listed or regulated period (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: C7.2{1}	b6_2_1new	Min	0.00
			Median	52.94
			Max	87.50
			Correlation w/Previous Year	N.A
7. Officials receiving dossiers and settling administrative procedures did not provide full and detailed instructions (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: C7.2{5}	b6_2_4new	Min	0.00
			Median	20.00
			Max	62.50
			Correlation w/Previous Year	N.A
8. The procedures for determining land-use levies takes a lot of time (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: C7.2{4}	b6_2_6new	Min	0.00
			Median	23.08
			Max	75.00
			Correlation w/Previous Year	N.A

Sub-Index 2: Land Access and Tenure Security	Source	Variable	Measure	2021
Dimension 2: Security of Tenure				
9. Firms' rating of expropriation risk (1=Very Low; 5=Very High)	2018 PCI Survey Question: B4.3	b4_1_4	Min	1.43
			Median	1.76
			Max	2.05
			Correlation w/Previous Year	0.22
10. Percentage of firms that say compensation for land is always or highly likely fair.	2018 PCI Survey Question: B4.4	fair_compensation	Min	6.12
			Median	29.17
			Max	45.76
			Correlation w/Previous Year	0.27*
11. Percentage of firms that agree that changes in government land prices reflect changes in market prices.	2018 PCI Survey Question: B5	landprice	Min	43.82
			Median	77.97
			Max	92.25
			Correlation w/Previous Year	0.44*
Dimension 3. Difficulties in Land Transaction				
12. Percentage of firms that have completed land procedures in the last two years and have encountered no difficulties in land-related procedures.	2018 PCI Survey Question: B71	no_difficulty	Min	0.00
			Median	27.27
			Max	57.14
			Correlation w/Previous Year	0.23
13. Percentage of firms that want to have LURCs but don't have LURCs because of complicated procedures and troublesome staffs.	2018 PCI Survey Question: B4.5	LURC_deterred	Min	1.56
			Median	10.45
			Max	22.54
			Correlation w/Previous Year	0.18
14. Firms have to delay / cancel business plans due to difficulties faced in completing land APs (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: C7.3	b8new	Min	20.00
			Median	53.85
			Max	100.00
			Correlation w/Previous Year	N.A

Sub-Index 3: Transparency	Source	Variable	Measure	2021
1. Access to planning documents (1=Impossible to access; 5=Easy to access)	2018 PCI Survey Question: F1.1-F1.13†	planning_avg	Min	2.22
			Median	2.68
			Max	3.02
			Correlation w/Previous Year	-0.06
2. Access to legal documents (1=Impossible to access; 5= Easy to access).	2018 PCI Survey Question: F1.1-F1.13†	legal_avg	Min	2.79
			Median	3.06
			Max	3.35
			Correlation w/Previous Year	-0.07
3. Transparency in bidding (% Yes) - <i>New variable in 2017</i>	PCI Survey 2017 Question: D4-13	bidding_info	Min	50.00
			Median	81.69
			Max	100.00
			Correlation w/Previous Year	-0.21
4. Received information requested (% Yes) - <i>New variable in 2017</i>	PCI Survey 2017 Question: F1-2.3.1	f2_2016_1	Min	50.00
			Median	75.00
			Max	100.00
			Correlation w/Previous Year	0.29*
5. Median days to receive information requested (Days) - <i>New variable in 2017</i>	PCI Survey 2017 Question: F1-2.3.2	f2_2016_2	Min	1.00
			Median	3.00
			Max	14.00
			Correlation w/Previous Year	-0.01
6. Relationship important or very important to get access to provincial documents (% Important or Very Important)	2018 PCI Survey Question: F2	f2_new	Min	26.77
			Median	60.63
			Max	86.74
			Correlation w/Previous Year	-0.23
7. Negotiations with tax authority are an important part of doing business that should be done (% Agree or Strongly Agree)	2018 PCI Survey Question: D2.8	g94_new	Min	19.10
			Median	47.62
			Max	78.24
			Correlation w/Previous Year	0.03
8. Negotiations with tax authority can help reduce tax obligations (% Agree or Strongly Agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: D2.11	tax_nego_reduce	Min	16.67
			Median	36.36
			Max	70.24
			Correlation w/Previous Year	N.A

Sub-Index 3: Transparency	Source	Variable	Measure	2021
Predictability of implementation of central laws at the provincial level [% Usually or Always]	2018 PCI Survey Question: F1-4.1	f6_new	Min	
			Median	
			Max	
			Correlation w/Previous Year	
9. Predictability of implementation of central laws at the provincial level [% possible - Usually, Always and Sometimes]	2021 PCI Survey Question: F1-4.1	f8_new21	Min	19.20
			Median	33.64
			Max	53.41
			Correlation w/Previous Year	0.15
10. Predictability of regulations issued at the provincial level [% Usually or Always] - <i>New variable in 2021</i>	2021 PCI Survey Question: F4.(2)	f7_2017_new	Min	14.28
			Median	34.29
			Max	55.68
			Correlation w/Previous Year	N.A
11. Business Associations' role in advising and countering provincial polices [% Important or Very Important]**	2018 PCI Survey Question: F2-5.3	f5_1_new	Min	27.47
			Median	63.64
			Max	82.39
			Correlation w/Previous Year	-0.08
12. Percentage of firms have accessed provincial websites [%]	2018 PCI Survey Question: F1-3	f6	Min	24.71
			Median	58.70
			Max	83.33
			Correlation w/Previous Year	0.32*
13. Website information about provincial investment incentives is useful - <i>New variable in 2021</i>	2021 PCI Survey Question: F3.1(1)	web_incentive	Min	6.52
			Median	43.14
			Max	66.18
			Correlation w/Previous Year	N.A
14. Website information about regulations on administrative procedures is useful - <i>New variable in 2021</i>	2021 PCI Survey Question: F3.1(2)	web_ap	Min	19.57
			Median	68.18
			Max	86.67
			Correlation w/Previous Year	N.A
15. Website information about governing documents of provincial leaders is useful - <i>New variable in 2021</i>	2021 PCI Survey Question: F3.1(3)	web_governing	Min	10.87
			Median	49.15
			Max	73.33
			Correlation w/Previous Year	N.A

Sub-Index 3: Transparency	Source	Variable	Measure	2021
16. Website information about provincial legal documents is useful - <i>New variable in 2021</i>	2021 PCI Survey Question: F3.1(4)	web_legal	Min	12.00
			Median	58.82
			Max	85.71
			Correlation w/Previous Year	N.A
17. Openness and quality of provincial webpage	Analysis by PCI Research Team (For Scorecard See Section)ψ	web_04	Min	24.88
			Median	41.26
			Max	62.56
			Correlation w/Previous Year	0.32*
Budget documents are published right after being approved (% Yes) Budget documents have enough details for use in business activities (% Yes) Budget documents have enough details for use in business activities (% Yes)	PCI Survey 2013 Question: F2.2	-	Min	
			Median	
			Max	
			Correlation w/Previous Year	

Sub-Index 4: Time Costs of Regulatory Compliance	Source	Variable	Measure	2021
Dimension 1. Time Costs				
1. Percentage of firms spending over 10 percent of their time on understanding and complying with regulations	2018 PCI Survey Question: D1-1	g1_new	Min	13.40
			Median	25.93
			Max	42.75
			Correlation w/Previous Year	0.09
2. Local government officials are effective [% Strongly Agree or Agree]	2018 PCI Survey Question: D1-3.1	par1_capacity_new	Min	70.08
			Median	87.00
			Max	96.26
			Correlation w/Previous Year	0.42*
3. Local government officials are friendly [% Strongly Agree or Agree]	2018 PCI Survey Question: D1-3.2	par1_friendly_new	Min	58.70
			Median	83.22
			Max	95.35
			Correlation w/Previous Year	0.38*
4. Firms don't have to travel many trips to obtain stamps and signatures [% Strongly Agree or Agree]	2018 PCI Survey Question: D1-3.3	par2_transcosts_new	Min	60.38
			Median	75.00
			Max	90.65
			Correlation w/Previous Year	0.40*
5. Paperwork is simple [% Strongly Agree or Agree]	2018 PCI Survey Question: D1-3.4	par3_paper_new	Min	51.89
			Median	73.91
			Max	90.32
			Correlation w/Previous Year	0.47*
6. Fees are listed publically [% Strongly Agree or Agree]	2018 PCI Survey Question: D1-3.5	par4_fees_new	Min	85.16
			Median	94.70
			Max	99.24
			Correlation w/Previous Year	0.34*
7. Time to do APs is shorter than regulations specified [%] - <i>New variable in 2017</i>	2018 PCI Survey Question: D1-3.7	par7_shortertime_new	Min	59.52
			Median	80.00
			Max	91.40
			Correlation w/Previous Year	0.19
8. Firms have no difficulties completing APs digitally [% Strongly Agree or Agree]- <i>New variable in 2021</i>	2021 PCI Survey Question: D1.5.1a(1)	digital_ap_easy	Min	28.57
			Median	57.3
			Max	71.21
			Correlation w/Previous Year	N.A

Sub-Index 4: Time Costs of Regulatory Compliance	Source	Variable	Measure	2021
			Min	27.07
9. Time to complete APs digitally (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: D1.5.1a(2)	digital_ap_time	Median	57.14
			Max	72.83
			Correlation w/Previous Year	N.A
10. Costs to complete APs digitally - <i>New variable in 2021</i>	2021 PCI Survey Question: D1.5.1a(3)	digital_ap_cost	Min	27.82
			Median	57.14
			Max	78.26
			Correlation w/Previous Year	N.A
Dimension 2. Inspections and Examination				
11. Percentage of firms underwent 3+ visits per year by provincial agencies - <i>New variable in 2021</i>	2021 PCI Survey Question: D6	d1_2017_new	Min	2.75
			Median	9.92
			Max	22.50
			Correlation w/Previous Year	N.A
14. Percentage of 5+ visits per year - <i>New variable in 2017</i>	2018 PCI Survey Question: D2-4	d1_2017_new	Min	
			Median	
			Max	
			Correlation w/Previous Year	
12. Overlapping inspection (%) - <i>New variable in 2017</i>	2018 PCI Survey Question: D2-4.1	d1_1new	Min	1.13
			Median	9.09
			Max	28.42
			Correlation w/Previous Year	0.39*
13. Median tax inspection hours	2018 PCI Survey Question: D2-7	d4	Min	1
			Median	5
			Max	40
			Correlation w/Previous Year	0.53*
14. Using inspection to extract rents (%) - <i>New variable in 2017</i>	2018 PCI Survey Question: D2-5.1	harass_inspection	Min	1.85
			Median	13.79
			Max	28.38
			Correlation w/Previous Year	0.35*

Sub-Index 5: Informal Charges	Source	Variable	Measure	2021
Dimension 1. Petty Corruption				
1. Enterprises in my line of business usually have to pay for informal charges (% Agree or Totally Agree)	2018 PCI Survey Question: D3-9	g3_new	Min	23.08
			Median	41.41
			Max	70.24
			Correlation w/Previous Year	0.29*
2. Rent-seeking phenomenon is popular in handling administrative procedures for businesses (% Strongly Agree or Agree)	2018 PCI Survey Question: D1-3.9	g92_new	Min	16.30
			Median	57.43
			Max	78.20
			Correlation w/Previous Year	0.28*
3. Percentage of firms saying that informal charges usually or always deliver expected results	2018 PCI Survey Question: D3-12	g5_new	Min	13.11
			Median	55.22
			Max	91.33
			Correlation w/Previous Year	0.30*
4. Informal charges are at acceptable levels (% Strongly Agree or Agree)	2018 PCI Survey Question: D1-3.6	d9_5_new	Min	66.28
			Median	86.96
			Max	97.14
			Correlation w/Previous Year	0.07
5. Percentage of firms paying informal payment to inspectors - <i>New variable in 2017</i>	2018 PCI Survey Question: D2-6	d3_2016	Min	7.32
			Median	20.88
			Max	46.90
			Correlation w/Previous Year	0.51*
6. Percentage of firms paying informal charges in business registration / re-registration (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B1.4 and B2.3	bizreg_bribe	Min	7.14
			Median	18.75
			Max	51.43
			Correlation w/Previous Year	N.A
7. Percentage of firms paying informal charges when implementing sublicense procedures (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: B4.2(6)	sublicense_bribe	Min	31.71
			Median	63.16
			Max	79.59
			Correlation w/Previous Year	N.A

Sub-Index 5: Informal Charges	Source	Variable	Measure	2021
8. Percentage of firms paying informal charges to fire safety inspectors (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: D16	firesafety_ bribe	Min	6.45
			Median	30.00
			Max	57.63
			Correlation w/Previous Year	N.A
9. Percentage of firms paying informal charges to environment inspectors (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: D16	envir_bribe	Min	0.00
			Median	33.33
			Max	100.00
			Correlation w/Previous Year	N.A
10. Percentage of firms paying informal charges to market regulators (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: D16	mrkregulator_ bribe	Min	8.33
			Median	50.00
			Max	87.50
			Correlation w/Previous Year	N.A
11. Percentage of firms paying informal charges to tax inspectors (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: D16	tax_bribe	Min	9.38
			Median	30.51
			Max	52.94
			Correlation w/Previous Year	N.A
12. Percentage of firms paying informal charges to construction inspectors (%) - <i>New variable in 2021</i>	2021 PCI Survey Question: D16	construction_ bribe	Min	14.29
			Median	71.42
			Max	100.00
			Correlation w/Previous Year	N.A
Dimension 2. Grand Corruption				
13. Percentage of firms paying over 10 percent of their revenue for informal charges	2018 PCI Survey Question: D3-10	g4_new	Min	0.79
			Median	4.08
			Max	15.71
			Correlation w/Previous Year	0.56*
14. Percentage of firms paying informal charges in land APs - <i>New variable in 2017</i>	2018 PCI Survey Question: B7.2	land_bribe	Min	0.00
			Median	26.67
			Max	66.67
			Correlation w/Previous Year	-0.18

Sub-Index 5: Informal Charges	Source	Variable	Measure	2021
15. Paying a “commission” is essential to improve chances of winning the contract (% Yes) - <i>New variable in 2017</i>	2018 PCI Survey Question: D4-13.2	procurement_bribe	Min	0.00
			Median	36.84
			Max	100.00
			Correlation w/Previous Year	-0.05
16. Offering bribes to solicit favorable judgment is common - <i>New variable in 2017</i>	2018 PCI Survey Question: H.1-2.5	court_bribe	Min	4.17
			Median	21.43
			Max	55.00
			Correlation w/Previous Year	0.09

Sub-Index 6: Policy Bias	Source	Variable	Measure	2021
1. Local government's attitude does not depend on firm's contribution (% Agree or Strongly Agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: D1-3(9)	d14_1_new	Min	39.67
			Median	77.21
			Max	88.72
			Correlation w/Previous Year	N.A
2. Preferential treatment to big companies (both state-owned and nonstate) is an obstacle to your business operations (% Agree or Strongly Agree)	2018 PCI Survey Question: I4	h25_new	Min	19.55
			Median	43.37
			Max	69.75
			Correlation w/Previous Year	-0.01
3. Provincial authorities prioritize handling large firms' difficulties over SMEs' (% Agree or Strongly Agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: H-2.6	h2_7_new	Min	31.87
			Median	52.63
			Max	73.33
			Correlation w/Previous Year	N.A
4. Provincial authorities prioritize attracting investment from large firms over SMEs (% Agree or Strongly Agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: H-3	h3_new	Min	15.79
			Median	38.89
			Max	59.78
			Correlation w/Previous Year	N.A
5. Land access as a privilege to large firms (% Agree or Strongly Agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: H-3.1(1)	h4_1_1	Min	11.11
			Median	24.81
			Max	47.90
			Correlation w/Previous Year	N.A

Sub-Index 6: Policy Bias	Source	Variable	Measure	2021
6. Faster and simpler administrative procedures as a privilege to large firms (% Agree or Strongly agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: H-3.1(5)	h4_1_3	Min	7.61
			Median	20.00
			Max	31.37
			Correlation w/Previous Year	N.A
7. Ease in getting state contracts as a privilege to large firms (% Agree or Strongly agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: H-3.1(6)	h4_1_4	Min	5.11
			Median	15.75
			Max	39.67
			Correlation w/Previous Year	N.A
8. Mineral exploitation licenses as a privilege to large firms (% Agree or Strongly agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: H-3.1(4)	h4_1_6	Min	2.17
			Median	9.68
			Max	20.59
			Correlation w/Previous Year	N.A
9. Ease in access to information as a privilege to large firms (% Agree or Strongly agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: H-3.1(7)	h4_1_7	Min	8.06
			Median	23.53
			Max	36.27
			Correlation w/Previous Year	N.A
10. CIT holiday or reduction as a privilege to large firms (% Agree or Strongly agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: H-3.1(3)	h4_1_9	Min	3.26
			Median	16.67
			Max	28.32
			Correlation w/Previous Year	N.A
11. "Contracts, land, ... and other economic resources mostly fall in the hands of enterprises that have strong connections to local authorities" (% Agree)	2018 PCI Survey Question: I5	h5_new	Min	35.63
			Median	61.07
			Max	86.36
			Correlation w/Previous Year	0.05
1. Province give privileges to state-owned economic group corporations, causing difficulties to your business (% Agree)	2018 PCI Survey Question: I4	h4_new	Min Median Max Correlation w/Previous Year	

Sub-Index 6: Policy Bias	Source	Variable	Measure	2021
2. Land access as a privilege to state-owned economic group (% Agree)	2018 PCI Survey Question: 14.1.1	soe_land	Min Median Max Correlation w/Previous-Year	
3. Credit access as a privilege to state-owned economic group (% Agree)	2018 PCI Survey Question: 14.1.2	soe_credit	Min Median Max Correlation w/Previous-Year	
4. Mineral exploitation license as a privilege to state-owned economic group (% Agree)	2018 PCI Survey Question: 14.1.3	soe_mining	Min Median Max Correlation w/Previous-Year	
5. Faster and simpler administrative procedures as a privilege to state-owned economic group (% Agree)	2018 PCI Survey Question: 14.1.4	soe_ap	Min Median Max Correlation w/Previous-Year	
6. Ease in getting state contracts as privilege to state-owned economic group (% Agree)	2018 PCI Survey Question: 14.1.5	soe_contract	Min Median Max Correlation w/Previous-Year	
7. Province give priority in solving problems and difficulties to foreign companies over domestic ones (% Agree)	2018 PCI Survey Question: 12.6	h27_new	Min Median Max Correlation w/Previous-Year	
8. Province give priority to FDI attraction than private sector development (% Agree)	2018 PCI Survey Question: 13	h3_new	Min Median Max Correlation w/Previous-Year	

Sub-Index 6: Policy Bias	Source	Variable	Measure	2021
9. Advantage in land access for FIEs (% Agree)	2018 PCI Survey- Question: I3.1.1	fie_land	Min Median Max Correlation w/Previous-Year	
10. CIT reduction and holiday for FIEs (% Agree)	2018 PCI Survey- Question: I3.1.2	fie_tax	Min Median Max Correlation w/Previous-Year	
11. Advantage in procedures (faster, more simplified) for FIEs (% Agree)	2018 PCI Survey- Question: I3.1.3	fie_ap	Min Median Max Correlation w/Previous-Year	
12. More local government support during FIEs operation (% Agree)	2018 PCI Survey- Question: I3.1.4	fie_operation	Min Median Max Correlation w/Previous-Year	

Sub-Index 7: Proactivity	Source	Variable	Measure	2021
1. Firms' assessment of the attitude of provincial government toward private sector [% Positive or Somewhat Positive]	2018 PCI Survey Question: I1	h1_new	Min	37.91
			Median	61.54
			Max	76.25
			Correlation w/ Previous Year	0.21
2. The PPC is flexible within the legal framework to create favorable business environment [% Strongly Agree or Agree]	2018 PCI Survey Question: I2.2	h72_new	Min	43.01
			Median	85.56
			Max	95.56
			Correlation w/ Previous Year	0.13
3. The PPC is very proactive and innovative in solving new problems [% Strongly Agree or Agree]	2018 PCI Survey Question: I2.3	h73_new	Min	35.00
			Median	74.35
			Max	92.72
			Correlation w/ Previous Year	0.31*
4. There are good initiatives at the provincial level but they are not well implemented by departments [% Strongly Agree or Agree]	2018 PCI Survey Question: I2.1	h21_new	Min	13.33
			Median	31.87
			Max	56.73
			Correlation w/ Previous Year	0.14
5. Province have good policies but they are improperly implemented at district level [% Strongly Agree or Agree]	2018 PCI Survey Question: I2.4	h28_new	Min	15.56
			Median	36.05
			Max	69.49
			Correlation w/ Previous Year	0.08
6. Province's reaction to lack of clarity in central policies/documents: % "delay and seek instructions" and "do nothing".	2018 PCI Survey Question: I1.3-I1.4	pro_active	Min	13.46
			Median	29.35
			Max	63.34
			Correlation w/ Previous Year	0.20
7. Provincial authorities timely handle firm's difficulties raised in PPD dialogues - <i>New variable in 2017</i>	2018 PCI Survey Question: I2.7	h29_new	Min	43.62
			Median	78.51
			Max	91.67
			Correlation w/ Previous Year	0.27*
8. Provincial policies on firms are stable and consistent [% Agree or Strongly Agree] - <i>New variable in 2021</i>	2021 PCI Survey Question: F5	f8_2021_new	Min	30.28
			Median	53.39
			Max	75.19
			Correlation w/ Previous Year	N.A

Sub-Index 7: Proactivity	Source	Variable	Measure	2021
9. Firms were confident that provincial leaderships would keep their commitments to improve business environment [%] - <i>New variable in 2021</i>	2021 PCI Survey Question: I2	h72_2021_ new	Min	29.12
			Median	71.72
			Max	86.15
			Correlation w/ Previous Year	N.A
8. Received local authorities' responses and/or feedback to firm's questions/problems [% Yes] - <i>New variable in 2017</i>	2018 PCI Survey Question: F2-6.3	obstacle_ response	Min	
			Median	
			Max	
			Correlation w/ Previous Year	
9. Satisfied with local authorities' responses or their ways of handling the issue [% Yes] - <i>New variable in 2017</i>	2018 PCI Survey Question: F2-6.4	obstacle_ satisfy	Min	
			Median	
			Max	
			Correlation w/ Previous Year	

Sub-Index 8: Business Support Services	Source	Variable	Measure	2021
Dimension 1. Assessment of the eligibility procedures for subsidies under SME Support Law				
1. Procedure to access credits for SMEs is easy to complete [%] - <i>New variable in 2021</i>	2021 PCI Survey Question: E6(7)	e14_1_2	Min	45.16
			Median	82.61
			Max	98.15
			Correlation w/Previous Year	N.A
2. Procedure for consultancies services to improve corporate governance is easy to complete [%] - <i>New variable in 2021</i>	2021 PCI Survey Question: E6(7)	e14_2_2	Min	42.86
			Median	82.05
			Max	100.00
			Correlation w/Previous Year	N.A
3. Procedure for land rental subsidies is easy to complete [%] - <i>New variable in 2021</i>	2021 PCI Survey Question: E6(7)	e14_6_2	Min	45.45
			Median	86.36
			Max	100.00
			Correlation w/Previous Year	N.A
4. Procedure for legal aid services subsidies is easy to complete [%] - <i>New variable in 2021</i>	2021 PCI Survey Question: E6(7)	e14_7_2	Min	41.67
			Median	79.41
			Max	95.45
			Correlation w/Previous Year	N.A
5. Procedure for market info consultancies subsidies is easy to complete [%] - <i>New variable in 2021</i>	2021 PCI Survey Question: E6(8)	e14_8_2	Min	48.65
			Median	82.14
			Max	100.00
			Correlation w/Previous Year	N.A
6. Procedure for training courses subsidies is easy to complete [%] - <i>New variable in 2021</i>	2021 PCI Survey Question: E6(9)	e14_9_2	Min	38.46
			Median	80.95
			Max	100.00
			Correlation w/Previous Year	N.A
7. Procedure for vocational training subsidies is easy to complete [%] - <i>New variable in 2021</i>	2021 PCI Survey Question: E6(10)	e14_10_2	Min	40.00
			Median	83.33
			Max	97.96
			Correlation w/Previous Year	N.A

Sub-Index 8: Business Support Services	Source	Variable	Measure	2021
Dimension 2. International Economic Integration				
8. Quality of FTA-related information provided by local agencies met firm's needs [% meet] - <i>New variable in 2021</i>	2021 PCI Survey Question: K2.3.1	fta2_3_1_new	Min	10.41
			Median	28.33
			Max	58.25
			Correlation w/Previous Year	N.A
9. Firm's difficulty in complying with FTA implementing legal documents are addressed appropriately by provincial agencies [%] - <i>New variable in 2021</i>	2021 PCI Survey Question: K5.1	fta5_1	Min	26.67
			Median	63.27
			Max	92.31
			Correlation w/Previous Year	N.A
10. Familiarity with program supporting firms to make advantage of FTAs (% Familiar) - <i>New variable in 2021</i>	2021 PCI Survey Question: K6.1	fta6_1_1	Min	6.67
			Median	20.83
			Max	68.09
			Correlation w/Previous Year	N.A
11. Ease of access to program supporting to make advantage of FTAs (% Very Easy and Easy) - <i>New variable in 2021</i>	2021 PCI Survey Question: K6.1	fta6_1_3_new	Min	36.36
			Median	75.00
			Max	100.00
			Correlation w/Previous Year	N.A
Dimension 4. Business Support Services (Hard Data)				
1. Number of trade fairs held by province in previous year**	Data provided by Viet Trade of the Ministry of Trade	trade_fair_avg	Min	
			Median	
			Max	
			Correlation w/Previous Year	
12. Ratio of the total number of service providers to the total number of firms [%]	Tax Authority [Author's Calculation]	totalproviders_per	Min	0.08
			Median	0.70
			Max	2.78
			Correlation w/Previous Year	0.83*
13. Ratio of the number of nonstate and FDI service providers to the total number of service providers [%]	Tax Authority [Author's Calculation]	psd_private_per	Min	20.00
			Median	83.33
			Max	98.33
			Correlation w/Previous Year	0.73*

Sub-Index 8: Business Support Services	Source	Variable	Measure	2021
4. Firm has used business information search services (%)	2018 PCI Survey Question: E2-6.1	e711_use	Min Median Max Correlation w/Previous Year	
5. Firm used private provider for above business information search services (%)	2018 PCI Survey Question: E2-6.1	e711_priv	Min Median Max Correlation w/Previous Year	
6. Firm intends to use above service provider again for business information search services (%)	2018 PCI Survey Question: E2-6.1	e712_continue	Min Median Max Correlation w/Previous Year	
7. Firm has used legal consultancy services (%)	2018 PCI Survey Question: E2-6.2	e721_use	Min Median Max Correlation w/Previous Year	
8. Firm used private provider for legal consultancy services (%)	2018 PCI Survey Question: E2-6.2	e721_priv	Min Median Max Correlation w/Previous Year	
9. Firm intends to use above service provider again for legal consultancy (%)	2018 PCI Survey Question: E2-6.2	e722_continue	Min Median Max Correlation w/Previous Year	
10. Firm has used business matchmaking services (%)	2018 PCI Survey Question: E2-6.4	e741_use	Min Median Max Correlation w/Previous Year	

Sub-Index 8: Business Support Services	Source	Variable	Measure	2021
11. Firm used private provider for business matchmaking services (%)	2018 PCI Survey Question: E2-6.4	e741_priv	Min Median Max Correlation w/Previous Year	
12. Firm intends to use above service provider again for business matchmaking services (%)	2018 PCI Survey Question: E2-6.4	e742_continue	Min Median Max Correlation w/Previous Year	
13. Firm has used trade promotion services (%)	2018 PCI Survey Question: E2-6.5	e751_use	Min Median Max Correlation w/Previous Year	
14. Firm used private provider for trade promotion services (%)	2018 PCI Survey Question: E2-6.5	e751_priv	Min Median Max Correlation w/Previous Year	
15. Firm intends to use above service provider again for trade promotion services (%)	2018 PCI Survey Question: E2-6.5	e752_continue	Min Median Max Correlation w/Previous Year	
16. Firm has used technology related services (%)	2018 PCI Survey Question: E2-6.6	e761_use	Min Median Max Correlation w/Previous Year	
17. Firm used private provider for technology related services (%)	2018 PCI Survey Question: E2-6.6	e761_priv	Min Median Max Correlation w/Previous Year	

Sub-Index 8: Business Support Services	Source	Variable	Measure	2021
18. Firm intends to use above-service provider again for technology related services (%)	2018 PCI Survey Question: E2-6.6	e762_continue	Min Median Max Correlation-w/Previous-Year	
19. Firm has used accounting and financing training services (%)	2018 PCI Survey Question: E2-6.7	e771_use	- - -	
20. Firm used private provider for above accounting and financing training services (%)	2018 PCI Survey Question: E2-6.7	e771_priv	- - -	
21. Firm intends to use above-service provider again for accounting and financing training services (%)	2018 PCI Survey Question: E2-6.7	e775_continue	- - -	
22. Firm has used business administration training services (%)	2018 PCI Survey Question: E2-6.8	e781_use	- - -	
23. Firm used private provider for above business administration training services (%)	2018 PCI Survey Question: E2-6.8	e781_priv	- - -	
24. Firm intends to use above-service provider again for business administration training services (%)	2018 PCI Survey Question: E2-6.8	e785_continue	- - -	

Sub-Index 9: Labor Policies	Source	Variable	Measure	2021
1. Services provided by provincial agencies: high school education (% Very Good or Good)	2018 PCI Survey Question: E1-2.7	e13_new	Min	46.24
			Median	69.23
			Max	80.89
			Correlation w/Previous Year	0.43*
2. Services provided by provincial agencies: vocational training (% Very Good or Good)	2018 PCI Survey Question: E1-2.8	e1_12_new	Min	30.22
			Median	54.24
			Max	70.19
			Correlation w/Previous Year	0.62*
3. Firm has used labor exchange services (%)	2018 PCI Survey Question: E2-6.3	use_exchange	Min	
			Median	
			Max	
			Correlation w/Previous Year	
4. Firm used private provider for above labor exchange services (%)	2018 PCI Survey Question: E2-6.3	private_exchange	Min	
			Median	
			Max	
			Correlation w/Previous Year	
5. Firm intends to use above service provider again for labor exchange services (%)	2018 PCI Survey Question: E-6.3	use_again	Min	
			Median	
			Max	
			Correlation w/Previous Year	
3. Percentage of total business costs spent on labor training	2018 PCI Survey Question: E3-9 (Data is the residual after regressing labor costs on firm type, sector, size, number of enterprises in province, average industrial wage in province.)	e9 (e9_resid)	Min	0.61 [-1.21]
			Median	1.51 [-0.05]
			Max	6.37 [4.85]
			Correlation w/Previous Year	-0.07 [-0.07]

Sub-Index 9: Labor Policies	Source	Variable	Measure	2021
4. Percentage of total business costs spent on labor recruitment	2018 PCI Survey Question: E3-8 (Data is the residual after regressing labor costs on firm type, sector, size, number of enterprises in province, average industrial wage in province.)	e8(e8_resid)	Min	2.47 [-3.41]
			Median	5.72 [-0.1]
			Max	11.99 [5.25]
			Correlation w/Previous Year	0.08 [-0.03]
5. Overall satisfaction with labor (% Agreeing Labor Meets Firm Needs)	2018 PCI Survey Question: E3-10	satisfied_labor	Min	21.00
			Median	54.76
			Max	80.49
			Correlation w/Previous Year	0.46*
6. Percentage of labor force having completed vocational training - <i>New variable in 2021</i>	2021 PCI Survey Question: E3-10	e15_3	Min	32.16
			Median	52.85
			Max	70.01
			Correlation w/Previous Year	N.A
7. The easiness level in recruitment of manual labor (% Very Easy or Easy) - <i>New variable in 2021</i>	2021 PCI Survey Question: E3-7.1(1)	worker_easy	Min	51.19
			Median	73.39
			Max	93.75
			Correlation w/Previous Year	N.A
8. The easiness level in recruitment of technical staff (% Very Easy or Easy) - <i>New variable in 2021</i>	2021 PCI Survey Question: E3-7.1(2)	technical_easy	Min	16.30
			Median	35.19
			Max	69.07
			Correlation w/Previous Year	N.A
9. The easiness level in recruitment of managers & supervisors (% Very Easy or Easy) - <i>New variable in 2021</i>	2021 PCI Survey Question: E3-7.1(4)	manager_easy	Min	16.48
			Median	30.36
			Max	50.55
			Correlation w/Previous Year	N.A

Sub-Index 9: Labor Policies	Source	Variable	Measure	2021
10. Percentage of trained employed workers at 15 years of age and above by province - <i>New variable in 2021</i>	MOLISA, GSO	trained_worker	Min	10.27
			Median	20.07
			Max	48.50
			Correlation w/Previous Year	N.A
11. Average high school graduation score - <i>New variable in 2021</i>	MOET	high_school_score	Min	4.80
			Median	6.16
			Max	7.01
			Correlation w/Previous Year	N.A
9. Ratio of vocational training school graduates to untrained laborers -	Ministry of Labor, Invalids and Social Affairs- General Labor Department	vocational	Min	
			Median	
			Max	
			Correlation w/Previous Year	
10. Secondary school graduates as % of workforce	General Statistical Office	secondary_plus	Min	
			Median	
			Max	
			Correlation w/Previous Year	
11. Percentage of workers having completed training at vocational schools -	2018 PCI Survey- Question: E3-11	e15_3	Min	
			Median	
			Max	
			Correlation w/Previous Year	

Sub-Index 10: Law & Order	Source	Variable	Measure	2021
Dimension 1. Firm's confidence in the judicial system				
1. Legal system provided mechanism for firms to appeal against officials' corrupt behavior [% Always or Usually]	2018 PCI Survey Question: F2-7	g8_new	Min	19.54
			Median	43.01
			Max	61.63
			Correlation w/Previous Year	0.13
2. Firm is confident that legal system will uphold property rights and contracts [% Strongly Agree or Agree]	2018 PCI Survey Question: H1-1	h79_new	Min	80.21
			Median	90.06
			Max	97.28
			Correlation w/Previous Year	0.18
3. Willingness to use court in case a dispute arises [% Yes]	2018 PCI Survey Question: H1.3	willingness	Min	29.89
			Median	59.46
			Max	86.49
			Correlation w/Previous Year	0.32*
4. The leaders will discipline the offending staffs [% Agree] - <i>New variable in 2017</i>	2018 PCI Survey Question: F2-7.1	f71_new	Min	7.26
			Median	48.86
			Max	63.86
			Correlation w/Previous Year	0.20
Dimension 2. Quality of the provincial court				
5. Cases filed by non-state entities at Provincial Economic Court per 100 firms.	People's Supreme Court	private_cases	Min	0.06
			Median	1.18
			Max	11.40
			Correlation w/Previous Year	0.92*
6. Non-state claimants as a percentage of claimants at Provincial Economic Court.	People's Supreme Court	per_private_claimant	Min	7.69
			Median	86.21
			Max	100.00
			Correlation w/Previous Year	0.60*
7. Ratio of economic cases solved [%] (2014)	People's Supreme Court	casesolved_per	Min	25.92
			Median	65.56
			Max	94.83
			Correlation w/Previous Year	0.65*

Sub-Index 10: Law & Order	Source	Variable	Measure	2021
8. Provincial court judge economic cases by the law (% Agree or Strongly Agree)	2018 PCI Survey Question: H1-2.1	g3_2013_law	Min	85.84
			Median	94.17
			Max	100.00
			Correlation w/Previous Year	0.27*
			Min	60.11
9. Provincial court resolve economic cases quickly (% Agree or Strongly Agree)	2018 PCI Survey Question: H1-2.2	g3_2013_quick	Median	81.61
			Max	91.27
			Correlation w/Previous Year	0.13
			Min	60.61
			Median	81.65
10. Court judgements are enforced quickly (% Agree or Strongly Agree)	2018 PCI Survey Question: H1-2.3	g3_2013_implement	Max	93.39
			Correlation w/Previous Year	0.21
			Min	36.81
			Median	84.35
			Max	94.74
11. Legal aid agencies support businesses in the use of laws when disputes arise (% Agree)	2018 PCI Survey Question: H1-2.4	g3_2013_assist	Correlation w/Previous Year	-0.01
			Min	
			Median	
			Max	
			Correlation w/Previous Year	
12. Formal costs are acceptable from the start of legal proceeding until enforcement of the judgments (% Agree or Strongly Agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: G1-2.6	g26_formal_charge	Min	66.67
			Median	80.24
			Max	92.55
			Correlation w/Previous Year	N.A
			Min	54.95
13. Informal costs are acceptable from the start of legal proceeding until enforcement of the judgments (% Agree or Strongly Agree) - <i>New variable in 2021</i>	2021 PCI Survey Question: G1-2.7	g27_informal_charge	Median	71.47
			Max	90.43
			Correlation w/Previous Year	N.A
			Min	
			Median	

Sub-Index 10: Law & Order	Source	Variable	Measure	2021
14. Judgement by the court is fair [% Agree or Strongly Agree]	2018 PCI Survey Question: H1-2.6	g3_2013_fair	Min	79.80
			Median	92.19
			Max	96.94
			Correlation w/Previous Year	0.34*
Dimension 3. Security				
15. Security situation in the province [% Good or Very Good] - <i>New variable in 2017</i>	2018 PCI Survey Question: H2-6	security_situation	Min	56.10
			Median	77.67
			Max	97.82
			Correlation w/Previous Year	0.55*
16. Was firm a victim of theft or break in last year [% Yes] - <i>New variable in 2017</i>	2018 PCI Survey Question: H2-6.1	g17_1	Min	0.00
			Median	5.69
			Max	17.39
			Correlation w/Previous Year	0.29*
17. Local police handled firm's case effectively [% Yes] - <i>New variable in 2017</i>	2018 PCI Survey Question: H2-6.4	g17_4	Min	16.67
			Median	63.64
			Max	83.33
			Correlation w/Previous Year	0.14
18. Did firm have to pay money to gangster groups [% Yes] - <i>New variable in 2017</i>	2018 PCI Survey Question: H2-7	g18	Min	0.00
			Median	0.90
			Max	8.96
			Correlation w/Previous Year	0.27*

Annex 2

Provincial Green Index Methodology



1. INTRODUCTION

For over a decade and a half, the PCI has served as a tool for highlighting the frontiers of provincial-level private sector development policy and, in so doing, clarifying, and incentivizing concrete actions that other provinces could take to improve the reputations of their respective business environments. At its inception in 2005, the PCI demonstrated that a set of provinces had already begun clearly distinguishing themselves by providing particularly fertile ground for private business growth. Binh Duong's leadership, for example, had built a strong reputation vis-à-vis both domestic and foreign investors for its dynamism in resolving issues of red tape and government harassment. Today, a high PCI ranking still clearly signals provincial authorities' commitment to an open and fair playing field that promotes competition and innovation.

Recent years, however, have seen a marked increase in environmental tensions within Vietnam's extraordinary private sector success story and, as a result, calls for a transition to a greener form of development. Some of the pressure for change comes from broader global trends, exemplified by Vietnam joining an unprecedented multinational commitment to reduce greenhouse emissions. But, just as importantly, pressure for change has also come from growing awareness and passion among ordinary Vietnamese citizens about natural and industrial disasters, pollution, rising sea levels, and deforestation. In response to these converging forces, Vietnam's national leadership has signaled that the need for a new model of development is real and urgent.⁷¹

⁷¹ See, for example, Prime Minister Pham Minh Chinh's speech at the 26th United Nation Climate Change Conference of the Parties (COP26): <https://en.baochinhphu.vn/full-remarks-by-pm-pham-minh-chinh-at-cop26-11142627.htm>

In response, VCCI is exploring how to best build on the success of the PCI to assist in reorienting provincial governments towards the new target of green private sector development. As a result, the 2022 PCI survey will include a new set of questions to gauge firm perspectives on provincial government efforts to encourage environmentally sustainable business practices and foster quality, green investment, and innovation. VCCI's aim is a new provincial ranking system – which we are terming the Provincial Green Index (PGI) – that encourages province-level progress towards private sector development that aligns with the country's National Green Growth Strategy and Strategy for Responding to Climate Change. This chapter puts forward a vision of the key dimensions of the PGI and the challenges to its successful construction.

As with the PCI, it will be critical that the PGI can be clearly connected to and incentivize progress on concrete policy action at the provincial level. The VCCI vision for green private sector development fundamentally rests on a market-based approach, wherein the terms of competition are reshaped to raise the minimum environmental standards required to enter and compete in the market and to enhance the incentives and support for business activities that provide net environmental benefits. Consistent with the core principles of the PCI, provincial governments will play a central role in establishing and maintaining the shifting rules of the game. Achieving desired goals will require policy approaches that ensure clarity, fairness, and legitimacy.

Clarity means the provision of details that allow for measurement and evaluation of policy outcomes, which keep both the business community and government accountable. It enables businesses to make realistic plans and confidently take concrete actions, such as making new investments. Fairness refers to the transparent and equal application of rules that maximizes socially beneficial competition between firms. Finally, legitimacy comes from broad-based consensus on the shared social purpose behind difficult decisions and their associated individual-level costs and constraints. This is achieved through consultation of stakeholders during not only the rule-making process but also the rule enforcement and even the rule-reforming phases of governance. Legitimacy also comes from “practicing what you preach.” Government has the opportunity to model green behavior, including the actions of state-owned enterprises (SOEs) under provincial management, public procurement, and spending decisions.

2. THE DIMENSIONS OF THE PROVINCIAL GREEN INDEX

We conceive of four dimensions to a PGI measuring the effectiveness of green private sector development policy at the provincial level in Vietnam. Because of the multi-faceted nature of green private sector development and the associated complexity in valuing the relative socio-political and economic importance of each of these four dimensions, we envision each to be an equally weighted component of the aggregate PGI. We list and describe the four

dimensions below, from the most traditional and well-established provincial government activities to the newest and most aspirational.

2.1. MINIMIZING HARM TO BUSINESS OPERATIONS BY NATURAL DISASTERS AND CLIMATE CHANGE EVENTS THROUGH EFFECTIVE PROVINCIAL GOVERNMENT PROVISION OF PUBLIC INFRASTRUCTURE AND SERVICES.

Disaster readiness and response are the most traditional environmental responsibilities for provincial governments in Vietnam. The 2019 PCI included a special Climate Change Component (VCCI and The Asia Foundation 2020), which include questions about provinces' natural disaster preparedness and found that firm evaluation of their host provinces were generally quite positive. Interestingly, responses were highly correlated with evaluations of other PCI dimensions (especially sub-indices for Provincial Dynamism and Law & Order). This makes sense, as these provincial capabilities should indeed relate directly to general private sector development by strengthening firm resilience, i.e. the capacity of firms to survive and grow despite environmental shocks and challenges.

2.2. MINIMIZING HARM TO THE ENVIRONMENT BY PRIVATE COMPANIES THROUGH CONSISTENT COMPLIANCE WITH MINIMUM ENVIRONMENTAL STANDARDS.

This form of environmental governance has been partially measured by the PCI throughout its existence. In particular, the PCI has always asked firms if they have been inspected by environmental regulators within the past year and which types of local inspections are the most burdensome. The PGI will aim to go deeper by inquiring about the purpose, efficiency, and effectiveness of inspections, including asking about the competence of environmental regulators and the degree to which they are seen to be working together with firms to make compliance as practical and feasible as possible.

We envision this dimension including consideration of the degree to which governments effectively mobilize constructive social pressure on, and oversight of, firms and their environmental activities through either empowerment of civil society organizations or engagement in public-private partnerships. The 2019 and 2020 PCI surveys included questions about the relative effectiveness of government regulation versus social pressures in shaping firms' environmental behavior and we would look to make this a regular measure over time.

2.3. MAXIMIZING ENVIRONMENTAL BENEFITS GENERATED BY CORE PROVINCIAL GOVERNMENT ACTIVITIES, INCLUDING PROCUREMENT, SOE MANAGEMENT, AND PUBLIC INVESTMENTS AND POLICIES.

This dimension is focused on provincial government activities that have traditionally not required significant consideration of environmental impact. It recognizes the need for

provincial governments to conduct comprehensive reviews to identify opportunities for more effective contributions towards green growth and climate change adaptation and mitigation goals. Central to this review should be attention to maximizing the efficiency with which natural resources are consumed, including minimizing waste as well as maximizing reuse/recycling and use of renewable energies, while paying special attention to each province's own key natural resources.

As is always the case when implementing change, internal efficiency and effectiveness, as well as external legitimacy, will be facilitated by increased measurement and transparent reporting. Such in-house reform is relevant to provincial green governance for three main reasons. First, provincial government spending and related operations have a significant and direct environmental impact. This is particularly true when one accounts for provincially managed SOEs. Second, the government can model environmentally conscientious decision-making and behavior for the private sector. Doing so could not only help overcome potential information asymmetries by providing examples for others to follow, but it should also strengthen the legitimacy of government efforts to regulate change by the private sector. Third, by supporting green businesses through procurement, provinces can help create a market for their goods and services, thus encouraging a transition to a lower-carbon, more environmentally friendly economy.

2.4. MAXIMIZING ENVIRONMENTAL BENEFITS GENERATED BY PRIVATE COMPANIES THROUGH EFFECTIVE PROVINCIAL GOVERNMENT INCENTIVES AND SUPPORT SERVICES.

This is the most challenging of the four dimensions in that it is the area where governments have the least experience and expertise. Fundamentally, provincial governments must intervene in markets to correct failures to account for environmental impact. This is likely to involve identifying particular private sector actors or actions that exhibit positive environmental impact and supporting them with favorable access to valuable government-controlled resources; principally land, taxes, and procurement. The critical challenge in any such ambitious effort to nudge markets towards greener behavior is to make clear and transparent policies to avoid negative perceptions of rent-seeking by government officials with a discretionary power over valuable resources. In our discussions with some businesses about access to favorably priced land controlled by provincial governments, we already heard complaints about rent-seeking behavior. The new Law on Environmental Protection,⁷² which went into effect at the start of 2002, expands environmental protection taxes through the creation of an extended producer responsibility system. The law also lays out an emissions quota system and carbon offset market that will require provincial involvement. How provinces respond to these challenges and how funds collected are

⁷² For a review of major changes, see:

<https://vanban.chinhphu.vn/?pageid=27160&docid=202613&classid=1&typegroupid=3>

used will play a role in incentivizing positive behavior and limiting the negative impacts of business activities.

Provincial government provision of sector-specific training and information campaigns about technologies and processes for enhancing the efficiency of natural resource use, waste management, recycling, production, and use of renewable energies would all fall under this dimension. Some provinces indicated they conducted such activities in their Green Growth Action Plans, but the PGI survey questions would seek to identify whether firms are aware of such opportunities and the degree to which they see them as accessible and worthwhile.

In addition to these four dimensions, which are expected to be aggregated into PGI scores for each province, we believe it will be important and valuable for the same survey exercise to involve the regular collection of data on firm attitudes and behavior toward environmental impact and innovation. This data will not be factored into assessments of the quality of provincial governments' green governance efforts, but provincially aggregated breakdowns should still serve as valuable inputs for local administrators, as well as for national policymakers and researchers.

3. THE INPUTS FOR THE PROVINCIAL GREEN INDEX

Following the precedent of the PCI and other similar subnational governance indices (Malesky and Merchant-Vega 2011), the aim is for each PGI dimension to be based on both survey responses (60%) and hard data (40%), by which we mean relevant data from sources other than the survey. The vision is that, whether the PGI is incorporated into the PCI or kept as a stand-alone index, the survey questions for the PGI will be incorporated into the same questionnaire tool and administered to the same sample. As a result, we do not discuss issues of survey sampling in this document.

There are several distinct challenges in designing survey questions. Survey questions for the first dimension will benefit greatly from relevant work in the 2019 PCI survey in that they will seek feedback on whether the government is doing enough to help businesses. Questions for the second dimension will similarly be able to build on existing PCI questions about inspections but go into greater detail about the nature of environmental inspections and other efforts to get as many businesses as possible to meet socially accepted minimum standards. This will involve the use of a variety of survey strategies, including projection-based questions (asking about "firms like yours") and, more effectively, list and survey experiments, all aimed at facilitating greater honesty about socially undesirable behavior. It is worth noting that firms' PCI survey responses frequently do not call for less regulation. In fact, in the 2020 PCI, more than half (54 percent) of respondents agreed their provincial government should engage in more stringent environmental regulations.

Survey Questions for the third and fourth dimensions will be significantly more challenging given that they both relate to evaluating provincial governments on new areas of responsibility where very little policy action has occurred. Our approach will be to ask firms to agree or disagree with statements about the government taking the environmental impact of potential suppliers into account when procuring goods and services (for Dimension 3) or when selecting which companies get access to scarce government-controlled resources such as plots in industrial zones (for Dimension 4).

Given the reality on the ground, however, there is also an elevated risk that a high percentage of respondents will accurately have insufficient information to make judgments. As such, there is also a high risk that we will not be able to identify significant variation across many provinces along these two dimensions, at least in the initial years of the PGI. The aim will be to design questions that will be able to identify policy changes and innovation as they begin to occur in pioneering provinces. The challenge is that tracking such policy changes and innovation over time requires designing questions that will themselves remain unchanged. This consistency of questions has been a critical component of the PCI's success over the past 16 years.

To support each of the four dimensions, we need data that is published and attributed to all 63 provinces on an annual basis. Published data from the Ministry of Natural Resources and Environment, the primary ministry responsible for the Strategy for Responding to Climate Change) or the Ministry of Planning and Investment, the ministry responsible for the Green Growth Strategy will be very useful. However, relevant government data on the environmental impact of business operations remains very limited. Through surveying, data on the share of firms above a certain size threshold in a province to have achieved ISO14001 certification can become hopefully available, and would be a concrete measure of Dimension 2 ("Minimizing harm to the environment").

Given the generally limited nature of relevant government information, the need for hard data is likely to be more reliably served through the targeted collection of relevant observations. This is likely to include efforts to collect data on each of the four dimensions through phone calls, reviewing websites, and/or physical field survey visits. For example, whether it is possible for an interested party to get information from a provincial website or via phone calls to a nominated agency contacts about what natural or industrial disaster insurance is available in the province would be a relatively concrete measure for Dimension 1 ("Minimizing harm to business operations"). Similarly, phone, online, or in-person interviews to explore whether the provincial government offers preferential access to land for firms engaged in any particular types of environmentally beneficial businesses (e.g. waste management or renewable energy producers) would be a concrete measure for Dimension 4 ("Maximizing environmental benefits generated by private companies").

4. CHALLENGES TO THE SUCCESSFUL DESIGN OF THE PROVINCIAL GREEN INDEX

A key foundational strength underlying the sustained success of the PCI has been the clarity and relative simplicity of its purpose. As touched on in the introduction, the goal of the PCI was always to identify and highlight the provincial business environments that were most conducive to growth in the volume and scale of private companies. The primary challenge for most provinces involved removing obstacles to natural entrepreneurial inclinations latent throughout the country's population. This clarity of mission for the PCI also facilitated analysis of individual index dimensions based on their predictive relationships with relevant provincial growth statistics that could then be translated into different weights within the index.

Varying definitions of green private sector development, unfortunately, do not provide such clarity of mission for the PGI. What is green private sector development? Green private sector development ideally achieves similar levels of growth in jobs and wealth as traditional private sector development, but does so with substantially more efficient and effective use of natural resources and management of waste and pollution. In fact, as we have presented, green private sector development has multiple dimensions with quite different goals. As noted earlier, our initial design for the PGI assumes equal weighting for our diverse set of four dimensions.

Furthermore, Vietnam's green transition is in a relatively nascent, largely conceptual phase. Over the past two years, the PCI team has frequently been asked for guidance on what types of policy and policy implementation initiatives provincial governments should be taking to achieve greener growth. This is not surprising, given the relative newness of the global and local pressures, but it is quite different from the previous transition to private sector development when some provinces clearly led the way in demonstrating best practices. While terms like "Green Economy" and "Circular Economy" are now quite common in policy discussions, their definitions and connections to specific policies remain elusive,⁷³ especially at the provincial level. This challenge is reflected in the limited detail in the national and provincial level action plans for both responding to climate change and green growth.⁷⁴ In particular, these documents tend to be very thin on clear and concrete benchmarks that can be measured and tracked over time. Corresponding government data, especially relating directly to business operations and disaggregated by the provincial level is also patchy and difficult to access. Proposals and discussion of policy specifics have mostly occurred at the national level, including some - e.g., taxation, energy pricing, and

⁷³ Vietnam does not yet have a Green Investment Taxonomy used by government and the financial industry to determine "what is green." (<https://www.centralbanking.com/central-banks/financial-stability/7869026/thai-regulators-aim-to-create-green-taxonomy>). However, GIZ is currently working with MOF and Vietnam's State Bank on a definition, as part of their work on "green bonds".

⁷⁴ Action plan to response to Climate Change and Action plan to implement Green Growth Strategy.

financial sector policy initiatives - over which provinces do not have the power to deviate at all from national policy though they may be assessed by businesses in their implementation.

A third challenge lies in objectively evaluating how each provincial government performs, given its own unique conditions and opportunities for green growth. For example, provinces in the South-Central region, like Binh Thuan, Ninh Thuan, and Binh Dinh, have clear natural advantages in developing renewable solar and wind energy relative to northern provinces like Phu Tho, Yen Bai, and Cao Bang. As such, it would not be constructive to have a volume of renewable energy production as the main driver of provincial rankings, as provincial governments cannot reasonably influence their natural endowments. This parallels the role of infrastructure in private sector development and is the reason why the evaluation of provincial infrastructure is not a core part of the PCI provincial ranking design. Relatedly, there is the challenge of assessing how the consequences of poor environmental governance and the benefits of good environmental governance both tend to spill across geographic borders quite easily.

REFERENCES

Malesky, E. J. and N. Merchant-Vega (2011). "A peek under the engine hood: The methodology of subnational economic governance indices." *Hague Journal on the Rule of Law* 3(2): 186-219.

VCCI and The Asia Foundation (2020). "Adapting to succeed: Assessing the impact of climate change on Vietnamese businesses."

Vietnam Business Forum (2021). "Vietnam is on the right track of the global development trend", December 22, 2021. Visit at: <https://vccinews.com/news/46231/vietnam-on-right-track-of-global-development-trend.html>

REFERENCES

AmCham Vietnam, 2021, Flash Survey-COVID-19 Concerns, Hanoi: Vietnam

Ánh Tuyết. [7/9/2021]. Many indicators reversing, supply chain about to disrupt [Nhiều chỉ tiêu đảo chiều, chuỗi cung ứng có dấu hiệu đứt gãy]. *Tạp chí Kinh tế Việt Nam*. Retrieved at <<https://vneconomy.vn/nhieu-chi-tieu-dao-chieu-chuoi-cung-ung-co-Tap-chi-Kinh-te-Viet-Nam-dau-hieu-dut-gay.htm> >

Berg, Bailey, 2022, "Vietnam Aims to Reopen Borders to All Travelers in March," *AFAR*, February 25, 2022. <https://www.afar.com/magazine/vietnam-to-reopen-to-international-travelers-in-march-2022>

Center for Strategic and International Studies (CSIS), 2022, Southeast Asia COVID-19 Tracker, <https://www.csis.org/programs/southeast-asia-program/projects/past-projects/south-east-asia-covid-19-tracker>

Communist Party of Vietnam [2021]. Resolution of the 13th National Party Congress dated 1 February 2021, retrieved at <<https://tulieuvankien.dangcongsan.vn/ban-chap-hanh-trung-uong-dang/dai-hoi-dang/lan-thu-xiii/nghi-quyet-dai-hoi-dai-bieu-toan-quoc-lan-thu-xiii-cua-dang-3663>>

Da Nang People's Committee, 2021, Decision 509/QĐ-UBND on the establishment of the inter-departmental task force to tackle difficulties of construction investment projects, https://docs.portal.danang.gov.vn/images/documents/Van%20ban%20dieu%20hanh/2021/Thang%202/509%20qd_signed.PDF

Emont, Jon, 2021, "Supply Chains in Southeast Asia Are Less Vulnerable after Delta-Driven Disruptions," *Wall Street Journal*, December 6, 2021 <<https://www.wsj.com/articles/supply-chains-in-southeast-asia-are-less-vulnerable-after-delta-driven-disruptions-11638794416>>

Foreign Investment Agency, Ministry of Planning and Investment. Foreign investment attraction in Vietnam in 2021, retrieved on 24 Dec 2021 at < <https://fia.mpi.gov.vn/Detail/CatID/f3cb5873-74b1-4a47-a57c-a491e0be4051/NewsID/5d476094-8272-4d9d-b810-1609ce7b67b3/MenuID> >

General Statistics Office, 2021, "Một số nét chính tình hình kinh tế xã hội Quý IV và năm 2021" [Key features of the socioeconomic situation in 4th quarter and 2021]. <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2021/12/mot-so-net-chinh-tinh-hinh-kinh-te-xa-hoi-quy-iv-va-nam-2021/>

General Statistics Office, Press release on the socioeconomic situation in quarter 1 of 2022, <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2022/03/thong-cao-bao-chi-ve-tinh-hinh-kinh-te-xa-hoi-quy-i-nam-2022/>

General Statistics Office. Report on socioeconomic situation in the fourth quarter and 2021 dated 29 Dec 2021, retrieved at < <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2021/12/bao-cao-tinh-hinh-kinh-te-xa-hoi-quy-iv-va-nam-2021> >

General Statistics Office. Report on socioeconomic situation in the fourth quarter and 2019, retrieved on 29 Dec 2021 at <<https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2019/12/bao-cao-tinh-hinh-kinh-te-xa-hoi-quy-iv-va-nam-2019/>>

Lê Quang Thuận, 2019, “Các hiệp định thương mại tự do thế hệ mới và tác động đối với kinh tế Việt Nam” [New generation FTAs and impacts on Vietnam’s economy]. *Tạp chí Tài chính* [Finance Journal]. Accessed at: <https://tapchitaichinh.vn/nghien-cuu-trao-doi/cac-hiep-dinh-thuong-mai-tu-do-the-he-moi-va-tac-dong-doi-voi-kinh-te-viet-nam-309171.html>

Lee, Jinjoo, 2021, “Vietnam’s Factory Shutdowns Tug at Apparel Industry’s Seams,” *Wall Street Journal*, March 2, 2022 < <https://www.wsj.com/articles/vietnams-factory-shutdowns-tug-at-apparel-industrys-seams-11630661403>>

Lopez, Edwin, 2021, “6 charts show the effects of Vietnam’s lockdowns on supply chains,” March 4, 2022, *SupplyChainDive*, <<https://www.supplychaindive.com/news/6-charts-effects-Vietnam-lockdowns/608745/>>

Malesky, Edmund, Phan Tuan Ngoc, and Pham Ngoc Thach, 2021. The Vietnam Provincial Competitiveness Index: Measuring Economic Governance for Private Sector Development, 2019 Final Report, Vietnam Chamber of Commerce and Industry and United States Agency for International Development: Hanoi, Vietnam.

Ministry of Health, 2020, “Ngày cuối cùng của năm 2020, Việt Nam phát hiện 9 ca mắc COVID-19” [On last day of 2020, Vietnam detected 9 COVID-19 infection cases]. <https://covid19.gov.vn/ngay-cuoi-cung-cua-nam-2020-viet-nam-phat-hien-9-ca-mac-covid-19-1717201528.htm>

Ministry of Health, 2021, “Ngày 31/12 có 16515 ca mắc COVID-19 tại 60 tỉnh thành” [Dec 31: 16,515 new Covid cases across 60 provinces]. https://moh.gov.vn/tin-lien-quan/-/asset_publisher/vjYyM709aWnX/content/ngay-31-12-co-16-515-ca-mac-covid-19-tai-60-tinh-thanh-ha-noi-van-nhieu-nhat-voi-1-914-ca

Ministry of Home Affairs, 2021, “Summary report: Reviewing the State administrative reform master program for the period 2011 - 2020 and orientation for the period 2021 - 2030”

Ministry of Information and Communication, 2021, “Tỷ lệ dịch vụ công trực tuyến mức 4 của cả nước đạt trên 48%” [48 percent of administrative procedures are now provided online at fourth grade], <https://mic.gov.vn/ttcaicachTTHC/Pages/TinTuc/149222/Ty-le-dich-vu-cong-truc-tuyen-muc-4-cua-ca-nuoc-dat-tren-48-.html>

Ministry of Natural Resources and Environment, 2022, “Workshop reviewing the implementation of the Land Law and development of the revised Land Law”, [https://monre.gov.vn/Pages/hoi-thao-tong-ket-thi-hanh-luat-dat-dai-va-xay-dung-du-an-luat-dat-dai-\(sua-doi\).aspx](https://monre.gov.vn/Pages/hoi-thao-tong-ket-thi-hanh-luat-dat-dai-va-xay-dung-du-an-luat-dat-dai-(sua-doi).aspx)

Ministry of Planning and Investment, 2022, “Hải Phòng dẫn đầu cả nước về thu hút vốn đầu tư trực tiếp nước ngoài”, [Hai Phong led the national foreign investment attraction], <https://fia.mpi.gov.vn/Detail/CatID/a963873a-ec84-4cae-8b5f-d0f38c10e10c/NewsID/68e41a86-f199-4016-8274-e13717272b66/MenuID/2a33ab04-8fd4-4a47-b7ee-8797d92dacc7>

National Assembly, 2022, “Resolution 43/2022/QH15 regarding the fiscal and monetary policies to support the Government program of socioeconomic recovery and development”, <https://vanban.chinhphu.vn/?pageid=27160&docid=205183>

Nga, Le, 2022, “Vietnam’s single-day Covid tally hits new peak at 110,280,” *VNExpress*, March 2, 2022 <<https://e.vnexpress.net/news/news/vietnam-s-single-day-covid-tally-hits-new-peak-at-110-280-4433974.html>>

Nhân dân Online, 2021, “Cải thiện môi trường đầu tư ở Hải Phòng - từ nghị quyết đến thực tiễn”, [Improvements in Hai Phong’s business environment – from resolution to reality], <https://nhandan.vn/nhan-dinh/cai-thien-moi-truong-dau-tu-o-hai-phong-tu-nghi-quyet-den-thuc-tien-634092/>

Official Document 1785/TTCP-KHTH dated 6 October 2021 by Government Inspectorate on reviewing and adjusting the implementation of 2021 Inspection Plan, retrieved at <https://dav.gov.vn/upload_images/files/CV%20s%E1%BB%91%201785-TTCP-KHTH.pdf>

Party Central Committee’s Commission for Internal Political Affairs, 2021, “Kết quả công tác phòng chống tham nhũng giai đoạn 2013-2020” [Results of anti-corruption work in the 2013-2020 period], <https://noichinh.vn/tin-tuc-su-kien/tin-trung-uong/202102/ket-qua-cong-tac-phong-chong-tham-nhung-giai-doan-2013-2020-309186/>

Party Central Committee’s Commission for Internal Political Affairs, 2022, “Công tác phòng, chống tham nhũng, tiêu cực tiếp tục được đẩy mạnh, khẳng định quyết tâm mạnh mẽ, ‘không ngừng’, ‘không nghỉ’” [Anti-corruption drive gains momentum with strengthened and continuous determination], <https://noichinh.vn/tin-tuc-su-kien/tin-trung-uong/202201/cong-tac-phong-chong-tham-nhung-tieu-cuc-tiep-tuc-duoc-day-manh-khang-dinh-quyet-tam-manh-me-khong-ngung-khong-ngi-310586/>

Quang Ninh Province Portal, 2021, “Chia sẻ và đồng hành, tháo gỡ khó khăn cho doanh nghiệp” [Sharing, going together to address firms’ difficulties], <https://www.quangninh.gov.vn/chuyen-de/tangtruong/Trang/ChiTietTinTuc.aspx?nid=105269>

Reuters. 2021, “‘We are tired’: Workers flee Vietnam’s largest city as long lockdown eases,” October 4, 2021. < <https://www.reuters.com/world/the-great-reboot/we-are-tired-workers-flee-vietnams-largest-city-long-lockdown-eases-2021-10-04/>>

Siripurapu, Anshu. 2022, “What Happened to Supply Chains in 2021?” *Council on Foreign Relations*, December 13. < <https://www.cfr.org/article/what-happened-supply-chains-2021>>

Tan, Shawn; Tran, Trang. 2020. “Impacts of COVID-19 on Firms in Vietnam, Report No. 2: Results from the 2nd Round of COVID-19 Business Pulse Survey.” World Bank, Washington, DC. © World Bank. <<https://openknowledge.worldbank.org/handle/10986/34902> License: CC BY 3.0 IGO>; Yee, Len Nee, 2021, This is Asia’s top-performing economy in the Covid pandemic – it’s not China,” *CNBC*, January 27, 2021, < <https://www.cnbc.com/2021/01/28/vietnam-is-asias-top-performing-economy-in-2020-amid-covid-pandemic.html>>

The Government Online Newspaper [2021], “The full text of the 13th Party National Congress Resolution”, <https://baochinhphu.vn/toan-van-nghi-quyet-dai-hoi-dai-bieu-toan-quoc-lan-thu-xiii-cua-dang-102288263.htm>

The State Bank of Vietnam, 2022, “Sectoral credit measures to support economic development in 2021 and orientations for 2022”, accessed at: https://www.sbv.gov.vn/webcenter/portal/vi/menu/trangchu/ttsk/ttsk_chitiet?leftWidth=20%25&showFooter=false&showHeader=false&dDocName=SBV482216&rightWidth=0%25¢erWidth=80%25&_afLoop=51891410646586224

The Supreme People’s Court portal, 2021, “The Supreme People’s Court Chief Justice reports on the 2016-2021 tenure work to the National Assembly”. <https://www.toaan.gov.vn/web-center/portal/tatc/chi-tiet-tin?dDocName=TAND165071>

The Vietnamese Communist Party E-newspaper, 2022, “Đồng Tháp tập trung cải thiện môi trường đầu tư kinh doanh” [Dong Thap concentrates on betterment of business climate], <https://dangcongsan.vn/kinh-te/dong-thap-tap-trung-cai-thien-moi-truong-dau-tu-kinh-doanh-601262.html>

The Vietnamese Communist Party E-paper, 2022, “Lan tỏa từ cải cách môi trường đầu tư kinh doanh ở Quảng Ninh” [Spillover from Quang Ninh’s business and investment environment reform], <https://dangcongsan.vn/kinh-te-va-hoi-nhap/lan-toa-tu-cai-cach-moi-truong-dau-tu-kinh-doanh-o-quang-ninh-605197.html>

The Vietnamese Government (2021). Resolution 50/NQ-CP dated 20 May 2021 promulgating the Action Plan to implement the 13th National Party Congress Resolution, retrieved at <https://chinhphu.vn/?pageid=27160&docid=203259&classid=509>

The Vietnamese Government, 2019, "Resolution 02/NQ-CP of the Government on continuing the key tasks and solutions to improve business environment and national competitiveness in 2019 and orientations towards 2021", <https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=195714>

The Vietnamese Government, 2022, "Prime Minister Decision 288/QĐ-TTg on the promulgation of the Frame for Evaluation of Implementation of Socioeconomic Development Goals", <https://vanban.chinhphu.vn/?pageid=27160&docid=205377>

The Vietnamese Government, 2022, "Resolution 02/NQ-CP regarding the key tasks and solutions to improve business environment and national competitiveness in 2022", <https://vanban.chinhphu.vn/?pageid=27160&docid=205075&classid=509>

The Vietnamese Government, 2022, "Resolution 11/NQ-CP of the Government regarding the Socioeconomic Recovery and Development Program and the implementation of the National Assembly Resolution 43/2022/QH15 on the fiscal and monetary policies supporting the Program", <https://vanban.chinhphu.vn/?pageid=27160&docid=205273>

United Nations Development Program and Mekong Development Research Institute, 2021, "Experiences with Government Responses to COVID-19 Pandemic in Viet Nam - 2nd round survey," Hanoi: United Nations <file:///C:/Users/ejm5/Dropbox/PCI%202021/Literature/COVID-19_Round2_Presentation_EN.pdf>

Uyen, Nguyen Dieu Tu, 2022, "Vietnam Approves \$15.3 Billion Aid for Covid-Hit Economy," January 11. <<https://www.bloomberg.com/news/articles/2022-01-11/vietnam-approves-15-3-billion-stimulus-for-covid-hit-economy>>

Vietnam Chamber of Commerce and Industry (VCCI), 2021, The Currents of Laws Report 2021, Công Thương Publishing House.

Vietnam Chamber of Commerce and Industry (VCCI), 2021. 2020 PCI Report. NXBTN, retrieved at <https://www.pcivietnam.vn/an-pham/bao-cao-pci-2020-ct185>

Vietnam Chamber of Commerce and Industry (VCCI) 2022, "Position Paper of the Vietnam Chamber of Commerce and Industry," *Hanoi Vietnam Business Forum*, February 21, 2022.

Vietnam Law Online, 2020, "Vĩnh Phúc hướng đến mục tiêu '3 tốt' để thu hút các nhà đầu tư [Vinh Phuc heads to '3 tốt' triple goals to attract investors], <https://baophapluat.vn/vinh-phuc-huong-den-muc-tieu-3-tot-de-thu-hut-cac-nha-dau-tu-post364280.html>

Vietnam News Agency (2022, Jan 21). 2021, “Anticorruption recorded significant results” [Công tác phòng, chống tham nhũng, tiêu cực đạt nhiều kết quả rõ rệt], retrieved at <https://baotintuc.vn/infographics/nam-2021-cong-tac-phong-chong-tham-nhung-tieu-cuc-dat-nhieu-ket-qua-ro-ret-20220121063319919.htm>

VnExpress, 2022. “Over 2.2 million migrant workers left cities to return home” [Hơn 2,2 triệu lao động bỏ thành phố về quê], retrieved at <https://vnexpress.net/hon-2-2-trieu-lao-dong-bo-thanh-pho-ve-que-4412879.html#:~:text=Kho%E1%BA%A3ng%20%2C2%20tri%E1%BB%87u%20ng%C6%B0%E1%BB%9Di,t%E1%BB%9Bi%2015%2F12%2F2021.>>

WTO Center, VCCI, 2021, “Legal development in implementation of CPTPP. Reviewing the implementation and policy implications”. Accessed at: <https://trungtamwto.vn/file/21230/bao-cao-nghien-cuu-xdpl-thuc-thi-cptpp.pdf>

World Trade Organization (WTO), 2021, Database of the World Trade Organization, accessed at: <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx>

Zing, 2021, “Plight seen on a 1,000 km odyssey back home.” [Những cảnh đời trên hành trình hơn 1.000 km để về quê]. Article published on October 7, 2021, <https://zingnews.vn/nhung-canh-doi-tren-hanh-trinh-hon-1000-km-de-ve-que-post1268985.html>