

Enterprises' Awareness and Assessment of Provincial Competitiveness Index in Ninh Binh Province

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Abstract

This study investigates enterprise awareness of the Provincial Competitiveness Index (PCI) in Ninh Binh province, Vietnam, and analyzes the level of agreement among businesses regarding 43 component indicators of PCI. Primary data were collected using qualitative methods through a survey of 235 enterprises, based on a questionnaire designed with input from local policymakers and business managers. The results indicate that overall awareness of PCI remains low, particularly among small enterprises, privately owned firms, and those operating outside the industrial and commercial sectors. However, nearly half of the surveyed businesses expressed interest in PCI, suggesting potential for improved awareness in the future. Enterprises highly value factors such as information transparency, business support policies, and fair competition, while issues such as informal costs, administrative procedures, and land access remain notable concerns. The study also shows that differences in ownership type, legal status, and business sector influence how enterprises evaluate PCI component indicators. These findings provide practical implications for enhancing local governance, improving policy communication, and strengthening the provincial investment environment.

Keywords: Provincial Competitiveness Index PCI, business awareness, information transparency, business environment, administrative procedures

Research Purpose

The study aims to examine enterprises' awareness of the Provincial Competitiveness Index (PCI) in Ninh Binh province, Vietnam, and to analyze the level of agreement among businesses regarding 43 component indicators of PCI. It also seeks to identify key factors influencing enterprise evaluation of the business environment and to provide policy implications for improving local governance and competitiveness.

Research Motivation

Although the PCI has become an important tool for measuring local economic governance in Vietnam, little is known about how enterprises—particularly small and private firms—perceive and engage with the index at the provincial level. This research is motivated by the need to bridge the gap between policy intentions and business community awareness, to strengthen the link between provincial development strategies and enterprise needs, and to improve communication of PCI-related information.

Main Findings

Through a survey of 235 enterprises, based on a questionnaire designed with input from local policymakers and business managers, the results indicate that overall awareness of PCI remains low, particularly among small enterprises, privately owned firms, and those operating outside the industrial and commercial sectors. However, nearly half of the surveyed businesses expressed interest in PCI, suggesting potential for improved awareness in the future. Enterprises highly value factors such as information transparency, business support policies, and fair competition, while issues such as informal costs, administrative procedures, and land access remain notable concerns. The study also shows that differences in ownership type, legal status, and business sector influence how enterprises evaluate PCI component indicators

Practical/Managerial Implications

Local authorities need to enhance communication and dissemination of PCI in a clear and accessible way, especially targeting SMEs; Strengthening the alignment between the province's development strategy and business needs will make PCI a more effective tool for improving the investment environment; Streamlining administrative procedures, reducing informal costs, and ensuring transparent land access are critical for building business trust; Policy implementation should prioritize factors most valued by enterprises—such as transparency, support services, and fair enforcement—to enhance governance capacity and attract sustainable investment.

Keywords: Provincial Competitiveness Index PCI, business awareness, information transparency, business environment, administrative procedures

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1. INTRODUCTION

Ninh Binh is a province in the southern part of the Red River Delta, serving as an economic and social gateway between the Northern Coastal region, the Hanoi Capital area, the Northwest region, and the North Central region of Vietnam. With an area of 141,178.14 ha and a population of 1.211 million people as of 2022, Ninh Binh has a rich historical background and is blessed by nature with many scenic spots, historical sites, and unique cultural characteristics, notably the Trang An landscape complex which has been recognized by UNESCO as a world cultural and natural heritage.

During the period 2015 – 2020, Ninh Binh's has an average annual growth rate of gross regional domestic product (GRDP) of 8.03%. The target average GRDP growth rate for the period 2021 – 2030 is set at 8.59%. The expected investment capital demand for the period 2021 – 2030 is 11.67 billion USD (Ninh Binh Statistics Office, 2023). Ninh Binh is continuously improving business environment to attract investment, enhance provincial competitiveness, and grow businesses. In 2024, Ninh Binh's Provincial Competitive Index (PCI) reached 69 points, ranking 17th out of 63 provinces nationwide, an increase of 2 places compared to the previous year (VCCI, 2025). Enhancing PCI is essential for improving business environment and attracting investment.

Although PCI has been widely disseminated in recent years, many enterprises appear to lack a comprehensive understanding of this index. This study in Ninh Binh province aims to assess enterprise's awareness, perception and attitudes toward the PCI, thereby clarifying their level of understanding and interest, while also providing practical evidence for local authorities to formulate appropriate policies that enhance awareness, trust, and consensus among enterprises regarding efforts to improve the investment environment.

2. LITERATURE REVIEW

2.1 Provincial Competitiveness Index

Provincial competitiveness is measured by the Provincial Competitiveness Index (PCI). The PCI was developed in 2005 through a collaboration between VCCI and USAID. PCI serves as a concrete indicator for measuring and assessing the quality of economic governance, the level of convenience and friendliness of the business environment, and the administrative reform efforts of provincial and municipal governments in Vietnam, thereby fostering the development of the private sector.

Provincial Competitiveness Index consists of 10 component indices, reflecting areas of economic governance that impact the development of the private sector: (1) Market entry; (2) Access to land; (3) Transparency; (4) Time costs; (5) Informal costs; (6) Fair competition; (7) Proactivity; (8) Business support policies; (9) Labor training; (10) Legal institutions.

In 2021, the PCI consists of 10 component indices with 141 indicators (an increase of 16 indicators compared to 2017). The component indices are weighted at 5%, 10%, or 15%.

The PCI is not only a tool for measuring and ranking the governance competencies of local authorities, but also a channel for reflecting the business community's perceptions of business environment. Based on the feedback of enterprises operating in the province, the PCI allows for relatively fair comparison among provinces and cities at different levels. It allows local authorities to monitor and evaluate implementation of policies, and to introduce reforms that can create more favorable conditions for the private economic sector.

2.2 The impact of PCI on enterprise behavior and perception

For nearly two decades of implementation in Vietnam, PCI has become a valuable tool in monitoring administrative reforms, improving investment environments and enhancing the efficiency of local governance. PCI is applied as not only a tool for public policy management, but it also attracts considerable attention from the research community. In addition to studies on improving investment environment and strengthening local governance capacity, an emerging approach focuses on analyzing the impact of PCI on the business community—both in terms of satisfaction levels and investment behavior.

Empirical studies have outlined the relationship between PCI and indicators of economic growth or investment attraction. Dung, H.C et al. (2018), in a study on Phu Tho province, demonstrated that factors such as governance quality, transparency, business support policies and informal charges have significant impact on the satisfaction level of enterprises. Giang, H.T.T (2021) used panel data from 63 provinces and cities in 2010-2019 period to analyze the impact of PCI on FDI inflows, confirming the positive role of indices such as transparency, infrastructure and labor quality in attracting foreign investment.

Le, N.P & Duy, L.V (2021) pointed out that in the Central Highlands, an area with distinctive conditions for development, components such as informal costs, transparency, and labour training play a decisive role in attracting businesses. Similarly, a study by Ngoc, N.T.B & Duy, N.V (2023) also shows that PCI has a positive impact on GRDP growth and public investment efficiency in the Red River Delta area, simultaneously improving the pillars of business support and fair competition. A study by Duong, T.T.T & Phuong, D.N.T (2024) found that PCI components such as market entry, access to land, transaction costs, business support, human resources and legal institutions play a critical role in attracting FDI to the Mekong Delta area during the 2013-2023 period.

In addition to quantitative research on the impact of PCI to investment efficiency, another research approach has focused on enterprises' awareness and evaluation of the index. Son, L.H et al. (2017), in a study conducted in Quang Ngai, examined enterprises' awareness of the PCI and found that while most firms were aware of the index, their in-depth understanding of its structure and implications remained limited. PCI is considered a useful reference source but has not demonstrated a clear influence on investment behaviour. The study emphasized the importance of strengthening communication efforts and enhancing the transparency of reform content in order to improve the effectiveness of the PCI's impact.

Nam, N.V (2020) in Can Tho province, using linear regression model, demonstrated that greater awareness of PCI indicators, particularly transparency, government competency, and informal costs, contributed to greater trust in the investment environment and encourages business operation expansion. Ha, P.T.T (2021), focusing on small and medium-sized enterprises (SMEs) in Binh Duong, found that while these firms often face difficulties in accessing PCI-related information, they respond very sensitively to changes in the indicators, especially those related to administrative procedures and informal costs. The study therefore emphasized the need for communication strategies tailored to specific groups of enterprises, and for enhancing the role of business associations in facilitating access to PCI information.

Although the PCI has been implemented for nearly two decades and has become a critical instrument in administrative reforms and improving investment environment in Vietnam, most existing studies focus on analyzing the impact of PCI on economic outcomes such as investment attraction, GRDP growth, public investment efficiency. These studies often use quantitative data to determine the relationship between PCI points and socio-economic indicators, at provincial level or within key economic regions.

Several recent studies have approached PCI from the perspective of enterprises' awareness and perception. However, research in this direction remains limited in both quantity and scope, with most only describing general levels of knowledge without delving into the differences in perceptions across types of business, operation sector or scales of business – production. In addition, the relationship between the awareness level of PCI and business investment behaviors, particularly in localities with distinctive conditions for development like Ninh Binh provinces, has not been studied thoroughly.

Moreover, existing studies have not clarified the relationship between awareness of PCI and their assessment of importance of component indicators. They have also not systematically analyzed the enterprises' response to each specific indicator of the PCI. The absence of research that dives into this cognitive structure limits the ability to design a suitable communication strategy. It also limits the practical application of PCI in guiding investment behavior.

Therefore, it is necessary to have more in-depth exploratory studies, to clearly identify factors affecting the level of awareness of PCI, the difference between groups of businesses, and the impact of such awareness on enterprises' evaluation and agreement regarding PCI component indicators, as well as their investment behavior and interaction with local authorities. This represents an academic gap of high practical significance, contributing to both theoretical advancement and policies in improving local business environment.

3. RESEARCH MODEL, RESEARCH METHODOLOGY AND DATA COLLECTION

3.1 Theoretical research model

Previous studies have highlighted theoretical aspects and emphasized the importance of PCI and business environment in attracting investment, showing that businesses often rely on this information when making investment decisions. However, there is a research gap in enterprises' response and assessment toward PCI component indices – factors that may directly influence enterprise's investment behavior.

Based on the theoretical framework, the study focuses on three main aspects: (i) identifying and objectively evaluating level of business awareness of PCI; (ii) analyzing enterprises' assessment of the importance of 10 PCI component indices; and (iii) investigating the agreement level of businesses regarding specific criteria within each component index.

These analyses aim to provide a practical and scientific foundation for local policy-making, particularly in enhancing governance effectiveness and improving policy communication. Ultimately, the goal is to strengthen investment attraction and support enterprises in their decision-making processes.

Based on the PCI component index system and survey data published by the Vietnam Chamber of Commerce and Industry (VCCI), the study establishes a theoretical framework consisting of 10 PCI component indices, including 43 evaluation criteria, which are used to measure the level of business agreement regarding criteria with lowest scores or ranking, specifically:

- For the component indices with highest weighting (15%), the study selects 5 representative criteria, which are criteria with lowest rankings based on VCCI survey results (lowest percentage of response from enterprises).
- For the remaining component indices, the study selects 4 representative criteria, those with lowest average scores nationwide based on PCI and VCCI's ranking.

The selection of these criteria aims to identify specific weaknesses in the local business environment that are most easily recognized and directly impact enterprises. This allows for an assessment of the level of business agreement regarding the local government's efforts to improve the business environment, thereby influencing enterprises' intentions to maintain or expand their investments.

PCI component index	Component criteria
1. Market entry costs	i. Procedures at the one-stop service counter are publicly posted ii. Staff at the one-stop service counter are enthusiastic and friendly iii. Enterprises have to cancel their business plans due to difficulties encountered when carrying out procedures to amend business registration iv. Enterprises have to cancel their business plans due to difficulties encountered when carrying out procedures to request a conditional business license
2. Access to land and stability in land use	i. Private enterprises do not encounter obstacles in accessing land or expanding business premises ii. Enterprises face difficulties of lack of clean land iii. The processing time for land-related documents is longer than the timeframe publicly listed in official documents iv. Officials receiving documents and handling administrative procedures do not provide detailed and complete instructions
3. Transparency	i. Information on the provincial website about administrative procedure regulations is useful ii. Information on provincial websites about provincial legal documents is useful iii. Enterprises receive necessary information and documents when requested from provincial agencies iv. The role of local business associations in formulating and reviewing provincial policies and regulations is important
4. Time costs	i. Enterprises do not need to travel multiple times to get stamps and signatures ii. Fees and charges are publicly disclosed iii. Enterprises are inspected more than 3 times a year iv. Enterprises find that inspectors take advantage of their official duties to harass enterprises
5. Informal costs	i. Corruption in handling procedures for enterprises is common ii. Informal costs are at an acceptable level iii. Enterprises have to spend more than 10% of revenue on informal costs iv. Enterprises pay informal costs to inspectors v. Although there are disputes, enterprises avoid going to courts to resolve due to concerns about common practice of bribery in legal cases
6. Fair competition	i. The attention of the provincial government does not depend on the enterprise's contribution to the locality, such as the number of employees, the amount of taxes paid or other funding/support ii. Faster administrative procedure is a privilege for large enterprises iii. Convenient access to information is a privilege for large enterprises iv. Exemption and reduction of corporate income tax are a privilege for large enterprises
7. Proactiveness and pioneering nature of the provincial government	i. The province's response to unclear points in central policies/documents: "delay implementation and seek further instructions" or "do nothing" ii. The provincial People's Committee is flexible within the legal framework to create a favorable business environment iii. The provincial People's Committee is proactive and creative in solving newly arising problems iv. Difficulties and obstacles are promptly resolved through dialogues and meetings with businesses in the province v. The policies and guidelines of the province and city on facilitating business operations are stable and consistent
8. Business support policies	i. Procedure for reducing rental prices in industrial parks/clusters is easy to implement

	ii. Procedure for exemption and reduction of costs for participating in government-funded training courses business start-up and business administration is easy to implement iii. The quality of information provided by local state agencies related to FTAs meets the needs of businesses iv. Difficulties in implementing documents related to free trade agreements (FTAs) are effectively resolved by local state agencies v. Service providers account for a large proportion of total number of enterprises
9. Labor training	i. Vocational education in the province is of good quality ii. Labors in enterprises have graduated from vocational education institutions iii. Local labor fully/mostly meet the demand of enterprises iv. General education in the province is of good quality
10. Legal institutions	i. Enterprises trust the ability of the law to protect copyright or contract enforcement ii. Provincial courts at all levels handle economic lawsuits in accordance with the law iii. Court decisions are enforced promptly iv. Local police agencies handle enterprises' cases effectively

Enterprise awareness and assessment of PCI and component criteria

Figure 1. Theoretical research model (Author, 2025)

3.2 Research methodology and data collection

The research applies qualitative and quantitative methods with descriptive statistics to explore the awareness and assessment of enterprises regarding PCI component indices. To collect primary data, a survey questionnaire is designed with input and consultation from local government officials, policy makers, as well as business managers and enterprise owners.

The questionnaire has 3 main sections, with a total of 70 questions, focusing on the following areas:

- Section 1: General information about the enterprise, including company name, position of respondent, type of ownership, area of operation, workforce size, total capital and revenue.
- Section 2: Enterprise awareness of PCI, enterprise perception of the importance of PCI component indices (using dichotomous questions and multiple-choice questions)
- Section 3: Measuring the agreement level of enterprises regarding statements in each PCI component criteria, using a 5-point Likert scale.

The survey was conducted with 300 enterprises in Ninh Binh province from January to end of March 2024, using two methods: face-to-face interviews and online questionnaires. A total of 235 valid responses were collected, resulting in a response rate of 78%. The sampling method applied was controlled convenience sampling, chosen to optimize cost, ensure feasibility, and enable quick access to the sample within a limited timeframe.

To calculate and ensure accuracy in assessing enterprise awareness and agreement level regarding PCI component indicators, the study applies the weighted average method.

$$\bar{X} = \frac{\sum_{i=1}^n x_i u_i}{\sum_{i=1}^n u_i}$$

In which: x_i represents the assessment level of component indices on a scale from 1 to 5; u_i is the number of enterprises giving rating x_i .

The interval value is calculated as (maximum-minimum)/n. In this case, the interval value is (5 - 1)/5 = 0,8. This approach allows for a more accurate evaluation of the survey results.

Table 1. Qualitative interpretation of 5-point Likert scale

Scale	Likert score	Likert score range
Strongly disagree	1	1.00 - 1.80 (very unimportant/strongly disagree)
Disagree	2	1.81 - 2.60 (unimportant/disagree)
Neutral	3	2.61 - 3.40 (neutral)
Agree	4	3.41 - 4.20 (important/agree)
Strongly agree	5	4.21 - 5.00 (very important/strongly agree)

4. RESEARCH RESULTS

4.1 Research sample characteristics

Structure by economic sector:

Domestic private enterprises make up the majority of the sample population, accounting for 77%. It shows that this is the dominant economic force in the locality. Meanwhile, enterprises with foreign investment capital (FDI) account for 22%, a relatively significant proportion that reflects a positive trend of attracting FDI in the province. State-owned enterprises only account for 1%, indicating that this sector no longer has influential role in the local economy. Notably, FDI enterprises often have a professional management system and have better access to information. This may influence their level of awareness and response in surveys related to business environment.

Structure by type of business:

Limited liability enterprises account for 60%, indicating the popularity of this business type due to flexible scale and suitability with local conditions. Joint-stock companies and 100% foreign-owned enterprises each account for

16%, indicating parallel growth between domestic joint stock companies and international investors. Private enterprises account for 7%, while other types of business are rarely encountered (1%).

Structure by business sector:

Enterprises operate mainly in service/ trade sector (45%) and industrial/manufacturing sectors (36%), reflecting an economic development orientation toward industry and trade. Although Ninh Binh province has recently invested heavily in infrastructure and high-tech agriculture development, the percentage of enterprises in construction (14%) and agriculture – forestry – fishery (5%) remains modes. This indicates that the development potential in these sectors has not been effectively used or has not attracted many businesses.

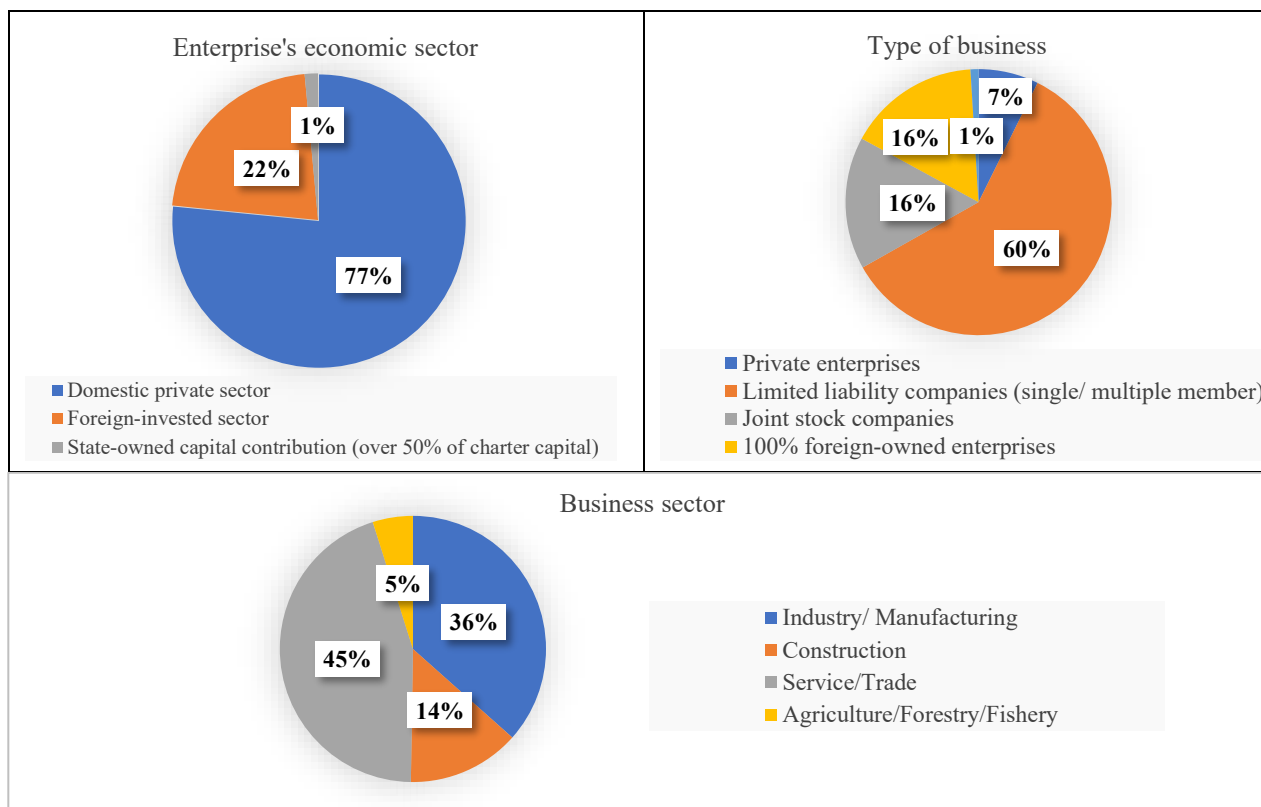


Figure 2. Structure of surveyed enterprises (Author, 2024)

4.2 Enterprise awareness of PCI

The survey results from 235 enterprises in Ninh Binh province indicate that overall awareness of PCI - a key tool for assessing the quality of local economic governance and the investment environment – remains limited and inconsistent across different business groups. This reflects differences in economic structure characteristics and levels of access to policy information among economic sectors.

- Differences by type of ownership

Although PCI has been published since 2006, as of 2024, 69% of enterprises still have no knowledge of very limited knowledge of this index, only 2% are well aware of it, and 29% are partially aware. This shows that enterprises have little exposure to PCI-related information, especially enterprises in domestic private sector – mostly small and micro-sized businesses.

On the contrary, foreign-invested enterprises and join-stock companies have a higher level of awareness, due to their operations within tightly regulated legal environments, supported by specialized departments of legal and policy compliance. Meanwhile, small private enterprises or limited liability companies often operate relying on experiences and informal networks, have little access to macroeconomic indicators, thereby having significantly lower ability to access PCI-related information.

- Differences by legal type of business

Analysis based on legal types of business shows that joint-stock companies and foreign-invested enterprises (FDIs) (each account for 16% of sample population) show greater interest in PCI, due to their larger scales, stronger financial capacity, and long-term development strategies. On the contrary, limited liability companies (accounting for 60%) and private firms (7%) are more localized in nature, smaller in scale, and have little incentive to monitor investment climate indicators. Notably, while 49% of enterprises express interest or strong interest in PCI, the majority of such enterprises are larger firms (FDIs or joint-stock companies), rather than small-scale businesses – which makes up higher proportion of the local economy.

- Differences by business sector

In terms of business sector, most businesses operate in service/trade (45%) and industrial/manufacturing sectors (36%) – two sectors that have direct relationships with administrative reform agendas, land access, taxation, licensing procedures, etc. However, the level of awareness in both business sectors is not low, indicating a gap between policy implementation and the actual reception of information.

Notable, enterprises in construction (14%) and agriculture (5%) sectors – despite being prioritized areas for development of the province – have a low awareness level of PCI and insignificant representation in the survey sample. This highlights a weak connection between the province’s development strategy and the local business community, particularly the effectiveness of policy communication to business groups outside of industrial and trade sectors.

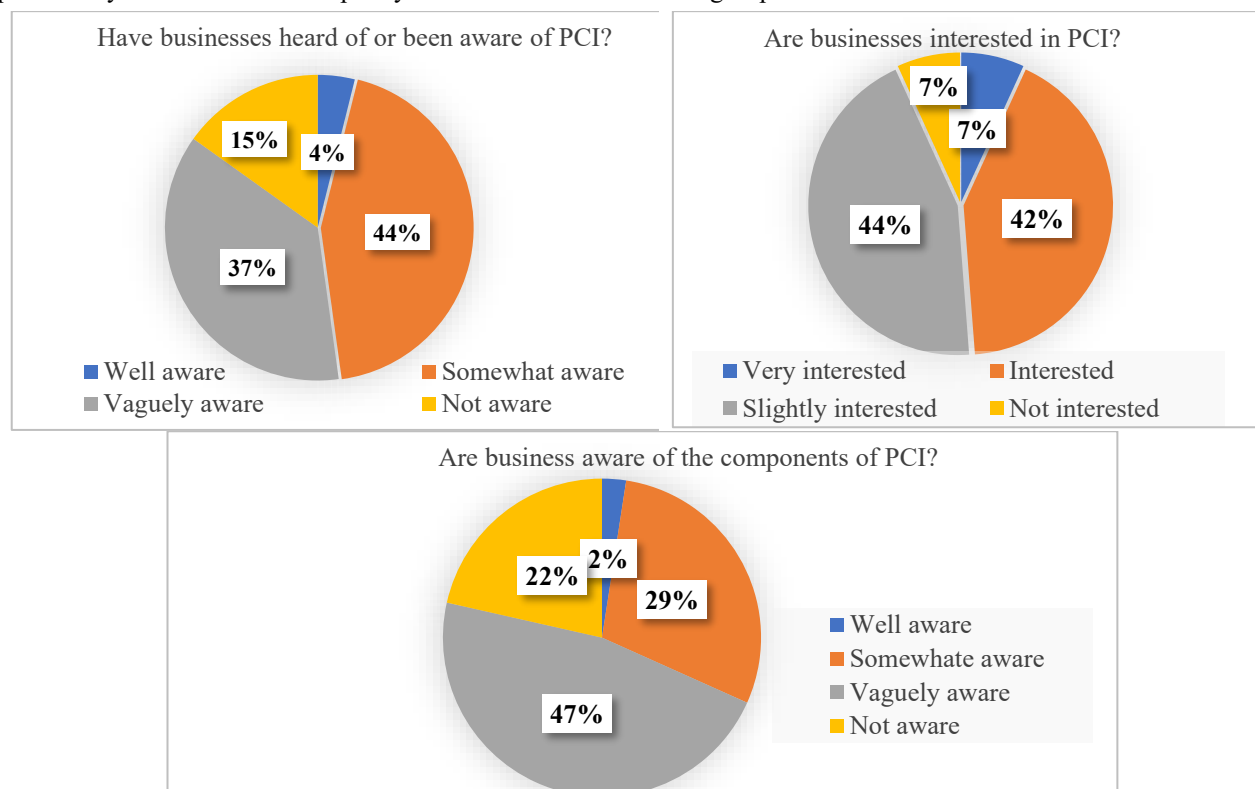


Figure 3. Proportion of enterprises aware of Provincial Competitiveness Index (PCI) (Author, 2024)

4.3 Analysis of enterprise assessment of the importance of ten PCI component indices

Based on survey results of enterprises, the study examines the importance of 10 PCI component indices by applying a scoring and ranking method based on mean values.

Table 2. Importance level (mean value) of PCI component indices

Component indices	N	Minimum	Maximum	Mean	Std. Deviation
Component index 1: Market entry costs	235	1	5	3.95	.933
Component index 2: Access to land and stability in land use	235	1	5	4.08	.703
Component index 3: Transparency	235	1	5	4.37	.773
Component index 4: Time costs	235	1	5	3.93	.926
Component index 5: Informal costs	235	2	5	4.00	.952
Component index 6: Fair competition	235	1	5	4.29	.736
Component index 7: Proactiveness and pioneering nature of the provincial government	235	1	5	3.99	.780
Component index 8: Business support policies	235	1	5	4.46	.757
Component index 9: Labour training	235	1	5	4.27	.708
Component index 10: Legal institutions	235	1	5	4.20	.770

The survey results from 235 enterprises in Ninh Binh province shows that all 10 component indices of PCI are evaluated as important or very important, with mean value ranges from 3.93 to 4.46 (Table 2).

Indices that are evaluated as “very important” (mean > 4.25) are: (i) *Business support policies* (mean = 4.46). This is the highest rated index, reflecting businesses’ strong expectations for active support and cooperation from local authorities; (ii) *Transparency* (mean = 4.37) - enterprises highly value openness and transparency in accessing policy

and legal information; (iii) *Fair competition* (mean = 4.29), this indicates an expectation of a fair and non-discriminating business environment; (iv) *Labor training* (mean = 4.27) – enterprises highly appreciate the role of skilled workforce in improving productivity and long-term development.

Indices evaluated as “important” (mean value from 3.93 to 4.24) include: (i) *Legal institutions and social order* (mean = 4.20), enterprises place strong emphasis on a clear legal framework and a safe environment; (ii) *Access to land and stability in land use* (mean = 4.08), long-term stability in land access is important for business to operate and expand; (iii) *Informal costs* (mean = 4.00), enterprises still have concerns about informal costs and express a desire for cost reduction; (iv) *Proactiveness and pioneering nature of provincial authorities* (mean = 3.99), this indicates expectations for reforms and prompt support from local authorities; (v) *Market entry* (mean = 3.95), business registration and investment licensing procedures still need improvement to create more favorable conditions for enterprises; (vi) *Time costs* (mean = 3.93), although administrative procedures have improved, they still consume considerable time for businesses.

All 10 indices were rated above average level, indicating that local businesses have strong interest in various aspects of business environment – including institutions, land, labor, transparency, and governance effectiveness.

Local enterprises highly appreciate the issues that regulatory agencies prioritize concerning businesses. Regulatory agencies have truly accompanied enterprises throughout their production and business operations and have shown a commitment to improving the business environment in line with businesses’ expectations.

4.3 Analysis of enterprise assessment of local authority’s implementation of PCI component indices

The survey of 235 enterprises in Ninh Binh shows that the average level of agreement toward ten PCI component index range from 3.49 to 3.83 (Table 3), indicating a positive perception and significant improvement in local investment environment. No indicators were evaluated as “neutral”, indicating that most enterprises have perceived positive changes, although the agreement level has not reached “very high”.

Table 3. Business agreement level

Component criteria/ Measurement scale	N	Minimum	Maximum	Mean	Std. Deviation
<i>Component index 1. Market entry costs</i>				3.57	
Procedures at the one-stop service counter are publicly posted	235	3	5	4.42	0.542
Staff at the one-stop service counter are enthusiastic and friendly	235	2	5	3.83	0.914
Enterprises have to cancel their business plans due to difficulties encountered when carrying out procedures to amend business registration	235	1	5	3.00	1.059
Enterprises have to cancel their business plans due to difficulties encountered when carrying out procedures to request a conditional business license	235	1	5	3.04	1.122
<i>Component index 2. Access to land and stability in land use</i>				3.49	
Private enterprises do not encounter obstacles in accessing land or expanding business premises	235	1	5	2.81	1.262
Enterprises face difficulties of lack of clean land	235	1	5	3.98	0.813
The processing time for land-related documents is longer than the timeframe publicly listed in official documents	235	1	5	3.77	0.997
Officials receiving documents and handling administrative procedures do not provide detailed and complete instructions	235	1	5	3.40	0.973
<i>Component index 3: Transparency</i>				3.74	
Information on the provincial website about administrative procedure regulations is useful	235	2	5	3.82	0.673
Information on provincial websites about provincial legal documents is useful	235	2	5	3.81	0.696
Enterprises receive necessary information and documents when requested from provincial agencies	235	2	5	3.51	0.784
The role of local business associations in formulating and reviewing provincial policies and regulations is important	235	2	5	3.81	0.717
<i>Component index 4: Time costs</i>				3.64	
Enterprises do not need to travel multiple times to get stamps and signatures	235	1	5	3.10	1.465

Fees and charges are publicly disclosed	235	1	5	4.37	0.648
Enterprises are inspected more than 3 times a year	235	1	5	3.28	1.158
Enterprises find that inspectors take advantage of their official duties to harass enterprise	235	2	5	3.80	0.972
<i>Component index 5: Informal costs</i>				3.52	
Corruption in handling procedures for enterprises is common	235	2	5	3.70	0.982
Informal costs are at an acceptable level	235	1	5	3.31	1.047
Enterprises have to spend more than 10% of revenue on informal costs	235	1	5	3.47	1.227
Enterprises pay informal costs to inspectors	235	1	5	3.67	1.123
Although there are disputes, enterprises avoid going to courts to resolve due to concerns about common practice of bribery in legal cases	235	1	5	3.43	1.172
<i>Component index 6: Fair competition</i>				3.67	
The attention of the provincial government does not depend on the enterprise's contribution to the locality, such as the number of employees, the amount of taxes paid or other funding/support	235	1	5	3.21	1.048
Faster administrative procedure is a privilege for large enterprises	235	1	5	3.71	0.834
Convenient access to information is a privilege for large enterprises	235	1	5	3.80	0.833
Exemption and reduction of corporate income tax are a privilege for large enterprises	235	1	5	3.94	0.960
<i>Component index 7: Proactiveness and pioneering nature of provincial government</i>				3.67	
The province's response to unclear points in central policies/documents: "delay implementation and seek further instructions" or "do nothing"	235	1	5	3.56	0.83
The provincial People's Committee is flexible within the legal framework to create a favorable business environment	235	2	5	3.81	0.668
The provincial People's Committee is proactive and creative in solving newly arising problems	235	2	5	3.58	0.735
Difficulties and obstacles are promptly resolved through dialogues and meetings with businesses in the province	235	1	5	3.50	0.872
The policies and guidelines of the province and city on facilitating business operations are stable and consistent	235	2	5	3.90	0.700
<i>Component index 8: Business support policies</i>				3.70	
Procedure for reducing rental prices in industrial parks/clusters is easy to implement	235	2	5	3.85	0.694
Procedure for exemption and reduction of costs for participating in government-funded training courses business start-up and business administration is easy to implement	235	1	5	3.51	0.844
The quality of information provided by local state agencies related to FTAs meets the needs of businesses	235	2	5	3.61	0.788
Difficulties in implementing documents related to free trade agreements (FTAs) are effectively resolved by local state agencies	235	2	5	3.56	0.818
Service providers account for a large proportion of total number of enterprises	235	2	5	3.95	0.87
<i>Component index 9: Labor training</i>				3.66	
Vocational education in the province is of good quality	235	2	5	3.90	0.707
Labors in enterprises have graduated from vocational education institutions	235	1	5	3.29	1.03
Local labor fully/mostly meet the demand of enterprises	235	2	5	3.61	0.977
General education in the province is of good quality	235	1	5	3.83	0.841
<i>Component index 10: Legal institutions and social order</i>				3.83	

Enterprises trust the ability of the law to protect copyright or contract enforcement	235	2	5	3.88	0.615
Provincial courts at all levels handle economic lawsuits in accordance with the law	235	1	5	3.94	0.669
Court decisions are enforced promptly	235	1	5	3.37	1.019
Local police agencies handle enterprises' cases effectively	235	2	5	4.13	1.123

Source: Author, 2025

* *Indices with highest level of agreement from enterprises:*

○ *Legal institutions and social order (mean = 3.83):* This index has the highest level of agreement among businesses. Enterprises particularly appreciate the effectiveness of police agencies (mean = 4.13), the protection of intellectual property rights and contract execution (3.88), legal compliance in court decisions (mean = 3.94). These findings indicate that trust in the legal system and business security plays a vital role in enterprises' decisions regarding business and investment environments.

Transparency (mean = 3.74): Enterprises express a high level of agreement with the transparency in administrative and legal information via official online portals (mean = 3.74). However, the provision of requested information remains with limitations (mean = 3.51).

Transparency reflects the degree of openness, clarity, and fairness in access to information related to legal regulations, administrative procedures, as well as the policy making process at the local level. Transparency requires that local authorities provide information without discrimination, ensuring all enterprises – regardless of size or type – have equal access to legal regulations and public policies. This is particularly important in building business trust in insitutional environment, reducing compliance costs and legal risks during business operations.

○ *Business support policies (mean = 3.70):* Procedures regarding rental discount, provision of information about FTA, and the quality of support service were rated relatively positive. The highest level of agreement was observed in critieria regarding a large proportion of service providers (mean = 3.95).

Business support policies reflect the extent of support from local authorities to business production and operations. Enterprises expressed the highest level of appreciation for support service providers, followed by the convenience in procedures for receiving rental discounts in industrial zone and clusters, and the ability to access information about Free Trade Agreements (FTA).

○ *Fair competition (mean = 3.67)* reflects the level of fairness in accessing resources and policies among businesses. Enterprises are particularly concerned with the non-discrimination in corporate income tax exemption (mean = 3.94), and the transparency of information access (mean = 3.80).

○ *Proactiveness and pioneering nature of provincial government (mean = 3.67)* represents the role of local authorities in creating a favorable business environment. Enterprises particularly emphasize the stability and consistency of provincial policies and directives (mean = 3.90), along with the flexibility of Provincial People's committee in support businesses within the legal framework (mean = 3.81).

* *Indices positively rated but still need improvement:*

○ *Time costs (mean = 3.64):* Enterprises show highest level of agreement with the transparency of fees and charges (mean = 4.37), however, there are concerns about corruption during inspection and audit process (mean = 3.0)

○ *Market entry (mean = 3.57):* Enterprises show highest interest in publicly posted procedures at one-stop service counter (mean = 4.42) and Staff at one-stop service counter are friendly and enthusiastic (mean = 3.83), however, there are limitations in the simplicity and speed of handling complex administrative procedures.

○ *Informal costs (mean = 3.52):* Enterprises are most concerned with common practice of corruption in handling business procedures (mean = 3.70), and informal charges paid to inspectors and audit officers (mean = 3.67). As long as the issues of informal costs and corruption in administrative procedures exist, transparency in business environment will remain hindered.

○ *Access to land and stability in land use (mean = 3.49),* is the index with lowest mean value. Enterprises are most concerned with the difficulty of lacking clean land (mean = 3.98) and processing time for land related documents is longer than the time publicly posted in official documents (mean = 3.77)

In general, enterprises place particular importance on fair treatment and active support from local authororities in matters regarding legal protection, transparent access to information and land use. The attitude and behaviors of officials at public administrative agencies are also of significant concern to businesses. Thefefore, ensuring a clear, transparent, effective, and convenient administrative procedures is essential for improving business environment and attracting investment.

5. RESEARCH CONCLUSIONS AND POLICY IMPLICATIONS

The structure of the survey sample have partially reflected the actual business structure in the locality: the private sector holds dominant proportion, limited liability companies are the most common type, and the trade and industrial sector are two main pillars in the local economy. Despite FDI sector's engagement, the construction and agriculture sectors need further development to align with the province's development strategy. These characteristics provide

important basis for better understanding of the local business context, thereby suggesting appropriate policies to enhance competitiveness, improve investment environment and support more effective policy communication.

The survey results of 235 enterprises in Ninh Binh province reveals that awareness of PCI in the business community remains limited, with up to 69% of enterprises have no or very little knowledge, and only 2% have a clear understanding of PCI index. This is shown particularly in small, private enterprises and enterprises outside the industrial and trade sectors. These results are consistent with a study by Pham Thi Thanh Ha (2021), focusing on small and medium-sized enterprises, highlighting the businesses' difficulty in accessing PCI-related information, despite their sensitivity to changes in component indices.

The level of awareness varies significantly by business ownership type, scale and business sector, reflecting disparities in access to policy information and the demand to such information among business groups. Nevertheless, 49% of enterprises expressed interest in PCI, showing potential for increased awareness in near future. This result is similar to a study by Le Hong Son et al. (2017) also focusing on enterprises perception of PCI, the study found that while businesses are aware of PCI, the understanding of this index is limited.

These findings have highlighted an urgent need for local authorities to enhance communication, dissemination and explanation of PCI in a clear, approachable manner, especially targeting small and medium-sized enterprises, which account for a large proportion of businesses but have limited access to information.

At the same time, it is essential to strengthen the connection between province's development strategy and actual demand of businesses, so that PCI can become an effective tool for guiding improvements in the business and investment environment. A clear understanding of the PCI's role will help businesses build greater confidence in the investment climate and support their decisions to expand operations (Nguyen Van Nam, 2020).

The survey results indicate that enterprises in Ninh Binh province value all ten components of the PCI, with particular emphasis on the importance of *business support policies*, *information transparency*, *fair competition* and *labor training*. This shows strong consensus between business expectations and the orientation of local authorities in improving governance capacity and improving investment environment. While management agencies have demonstrated a supportive and collaborative role with enterprises, continued efforts are needed to streamline administrative procedures, reduce informal costs, and enhance the effectiveness of policy implementation. These findings provide a critical foundation for Ninh Binh Province to continue adjusting and prioritizing areas highly valued by businesses, thereby further improving the PCI in the coming period.

The findings of the study also show that enterprises in Ninh Binh province highly appreciate improvements in investment environment, especially in *legal institutions*, *information transparency*, and *support policies*. However, there are bottlenecks in *informal costs*, *land access* and *administrative procedures* that need further improvements. These results are consistent with a study by Ho Chi Dung et al. (2018), emphasizing the role of indices such as transparency, informal costs, business support in influencing business behaviors and satisfaction.

Component indicators that enterprises place special emphasis on include: legal protection and fair enforcement; prompt and transparent access to information; attitude, competence, and proactiveness of administrative officials; and clear, public and efficient administrative procedures. This indicates that improving the quality of economic governance, administrative reforms and more effective policy communication is essential for local authorities to attract investment capital, build trust, and establish sustainable partnerships with businesses.

6. CONCLUSION

The research results indicate that enterprises' awareness of PCI in Ninh Binh province remains limited, especially among small and private enterprises. However, relatively high levels of interest suggest potential for improvement in the future. Enterprises highly appreciate factors such as information transparency, support policies, fair competition and governance quality of local authorities. At the same time, several limitations remain including informal costs, administrative procedures and access to land, which require continued improvement. The findings from this study confirm the proposed hypotheses, not only contribute to filling the academic gap regarding PCI on a local level, but also provide practical basis for policy making, improving governance quality and attracting investment effectively and sustainably. However, limitations remain as the study only applies basic descriptive and quantitative analysis and have not fully quantified related aspects and variables. In addition, the survey was conducted on a small sample population (300 out of a total of 6,208 enterprises in the province in 2024). The research team intends to address these limitations in future studies.

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