

Business Inspection Burdens and Business Plan Disruptions: Evidence from Vietnamese Provinces

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Abstract—This study examines the relationship between business inspection burdens, informal charges, and business-plan disruption across Vietnam's 63 provinces. Using secondary data from the 2024 Provincial Competitiveness Index, the study applies ordinary least squares regression to evaluate whether frequent inspections, tax-inspection hours, and informal payments are associated with the proportion of firms postponing or cancelling business plans because of difficulties in business-registration procedures. The findings show that longer tax inspections are positively and marginally associated with business-plan disruption, while informal charges have a positive and statistically significant relationship with this outcome. In contrast, the frequency of inspections is not statistically significant. These results suggest that the time intensity and informal costs of regulatory interactions may be more relevant to firms' business decisions than inspection frequency alone. The study provides province-level evidence for improving inspection coordination, shortening unnecessary procedures, and reducing opportunities for informal payments in Vietnam.

Keywords—Frequent inspections; Tax-inspection hours; Informal charges; Business plan delay.

I. INTRODUCTION

Business inspections are necessary for monitoring regulatory compliance and protecting public interests. Their efficacy, nevertheless, hinges on how they are designed and put into practice. Repeated, overlapping, or lengthy inspections may interrupt normal operations and increase firms' administrative costs. These pressures are particularly serious for small and medium-sized enterprises because they often lack specialised staff and financial resources for dealing with complex regulations. In addition, regulatory initiatives don't always result in the expected improvements in company compliance, according to research (Huizingh & Mulder, 2015).

Vietnam offers a valuable setting for examining inspection burdens because business governance is decentralised across 63 provinces and centrally governed cities. Although firms operate under the same national laws, provincial authorities differ in regulatory implementation, inspection practices, and interactions with businesses. Previous research using the Provincial Competitiveness Index has identified substantial provincial differences in corruption and red tape, supporting the use of PCI data to investigate firms' experiences with local institutions and informal payments (Bai et al., 2019).

The literature indicates that the business environment influences firm performance through several connected channels. Regulatory compliance may consume managerial time and resources, while unclear implementation increases uncertainty. Inspections can encourage compliance, but excessive enforcement may create additional burdens. Informal payments may further increase operating costs and discourage investment. More broadly, research based on business-climate surveys shows that infrastructure, finance, security, competition, and regulation are important factors associated with enterprise performance in developing economies (Dethier et al., 2011).

Nevertheless, three research gaps remain. First, most studies measure firm outcomes through revenue, productivity,

employment, or profitability rather than the postponement or cancellation of business plans. Second, inspection is commonly measured by whether it occurred, without distinguishing its frequency from the time required for each visit. Third, limited evidence jointly considers inspection burdens and informal charges at the local level in Vietnam. These gaps matter because business-environment constraints may affect firms differently according to their size and institutional exposure (Aterido et al., 2011).

This study therefore examines whether the proportion of firms inspected more than three times per year, the median number of hours spent on each tax inspection, and the proportion of firms paying informal charges are associated with the proportion of firms postponing or cancelling business plans because of difficulties in business-registration procedures across Vietnam's 63 provinces. Using secondary data from the 2024 Provincial Competitiveness Index, the study applies ordinary least squares regression to estimate these relationships. This specification combines formal inspection burdens and informal payments in a single empirical framework, based on evidence that inspections, bribes, and firms' tax obligations may be closely related in Vietnam (Lahiri & Ali, 2022).

This study makes three contributions. First, it treats the proportion of firms postponing or cancelling business plans because of business-registration difficulties as an early indicator of regulatory disruption. Second, it measures inspection burden through both the proportion of firms inspected more than three times per year and the median number of hours spent on each tax inspection. Third, it provides evidence for provincial policy reform. The results show that tax-inspection hours have a positive and marginally significant relationship with business-plan disruption at the 10% level, while the proportion of firms paying informal charges has a positive relationship at the 1% level. By contrast, the proportion of firms inspected more than three times per year is not statistically significant. These findings

suggest that administrative intensity and informal costs may matter more than inspection frequency alone, consistent with evidence that bureaucratic red tape and regulatory implementation are closely related to corruption risks (Duvanova, 2014).

The remainder of this paper is organised as follows. Section 2 reviews the relevant literature on business inspections, regulatory burdens, informal charges, and business decisions and develops the research hypotheses. Section 3 describes the Provincial Competitiveness Index data, the measurement of the variables, and the empirical methodology. Section 4 presents and discusses the descriptive statistics, regression estimates, diagnostic tests, and robustness results. Finally, Section 5 summarises the main findings, proposes policy implications for improving provincial inspection practices and the business environment, discusses the study's limitations, and suggests directions for future research.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Theoretical foundation

Transaction cost theory provides a useful foundation for explaining how government regulation may influence firms' business decisions. In addition to production and market costs, firms must spend resources on collecting regulatory information, preparing documents, meeting officials, and responding to inspections. These activities do not always create direct business value, but they require managerial time and administrative capacity. Their burden may be particularly serious for small and medium-sized enterprises because these firms usually have fewer specialised employees and more limited financial resources. Evidence from developing economies indicates that regulation, access to finance, infrastructure, security, and competition jointly shape firm performance. However, the effects are not uniform across firm sizes and institutional environments. Smaller firms often face proportionally higher compliance costs, while the relationship between business constraints and firm growth may also be nonlinear. Therefore, the burden generated by inspections should be assessed through both inspection frequency and the amount of time required for each interaction, rather than through a simple inspected-or-not indicator (Aterido et al., 2011; Dethier et al., 2011).

Regulatory interactions can affect business decisions through both formal and informal mechanisms. Formal mechanisms include inspection procedures, document requirements, working hours, penalties, and requests for corrective action. When these procedures are clear and consistently implemented, inspections can provide information, improve compliance, and reduce uncertainty about future regulatory obligations. However, when enforcement is discretionary or repetitive, inspections may create red tape and make the timing and cost of regulatory compliance difficult to predict. Informal mechanisms arise when firms believe that unofficial payments are required to reduce delays, avoid penalties, or obtain favourable treatment. Research distinguishes formal regulatory rules from their actual implementation and shows that administrative

discretion can increase opportunities for bureaucratic corruption. Evidence from Vietnamese enterprises also suggests that inspections, unofficial payments, and tax payments may be jointly determined: informal payments may change both the frequency and outcomes of inspections. Consequently, formal inspection burdens and informal charges should not be treated as completely separate institutional problems, even though their individual relationships with business decisions can still be empirically examined (Duvanova, 2014; Lahiri & Ali, 2022).

2.2. Frequent inspections and business-plan delay

Frequent inspections may discourage firms from carrying out planned business activities because each additional inspection creates preparation, coordination, and follow-up requirements. Managers may need to assign employees to collect documents, answer questions, and communicate with public officials. If inspections are repeated by different agencies or are conducted without a predictable schedule, these requirements can reduce the time available for investment preparation and normal operations. Firms may consequently postpone or cancel expansion, registration, or restructuring plans until regulatory uncertainty has been resolved. This mechanism is particularly relevant when inspections are connected with administrative discretion. Firm-level evidence from Vietnam indicates that inspection frequency, informal payments, and tax obligations are interrelated, raising the possibility that repeated inspections reflect more than ordinary monitoring. More broadly, evidence from post-communist economies shows that *de facto* administrative red tape and discretionary implementation may be more important sources of corruption than formal regulatory requirements themselves. Nevertheless, the observed relationship may partly reflect selection because more complex or non-compliant firms may be inspected more often (Duvanova, 2014; Lahiri & Ali, 2022).

However, the relationship between inspection frequency and business-plan delay may not be uniformly positive. A moderate and predictable level of inspection can clarify legal requirements, identify problems at an early stage, and encourage firms to maintain appropriate records. Research on regulatory enforcement indicates that expected inspections can improve compliance because firms consider both the probability of detection and the cost of possible sanctions. At the same time, compliance sometimes remains high even when formal penalties are rare, suggesting that information, reputation, and continuing relationships with regulators also influence firm behaviour. These findings imply a possible nonlinear relationship. Moving from very weak enforcement to a reasonable inspection level may improve predictability and reduce future regulatory risk, whereas moving from moderate to excessive inspection may increase disruption without producing equal compliance benefits. The provincial indicator used in this study captures the proportion of firms inspected more than three times, which represents relatively intensive exposure rather than routine inspection. Therefore, the expected burden of repeated inspections is likely to

outweigh their informational benefit (Gmeiner & Gmeiner, 2022; Nyborg & Telle, 2006).

H₁: Frequent inspections positively influences business-plan delay.

2.3. Tax-inspection hours and business-plan delay

The duration of tax inspections represents another dimension of the regulatory burden. Even when inspections are not frequent, a lengthy meeting may require senior managers and accounting employees to suspend their normal duties. Firms must prepare invoices, contracts, tax records, and explanations before and during an inspection, while additional time may be required to correct documents after the meeting. These activities create an opportunity cost because managerial attention is redirected from customers, employees, production, and investment decisions toward regulatory compliance. International evidence shows that tax-administration quality is associated with firm performance and that tax-compliance costs are proportionally greater for small and young firms. Onerous tax administration may also be connected with weaker investment incentives, corruption, and tax avoidance. Similarly, cross-country evidence on new firm formation demonstrates that administrative tax burdens matter separately from statutory tax rates. Thus, the number of hours spent on each tax inspection may capture a practical burden that cannot be adequately measured by inspection frequency alone (Braunerhjelm & Eklund, 2014; Dabla-Norris et al., 2020).

Nevertheless, longer tax inspections do not necessarily indicate inefficient administration in every case. Some inspections take more time because tax officials provide detailed guidance or resolve complicated records in a single meeting. A complete inspection may prevent repeated visits and reduce later uncertainty, while a very short meeting may leave important issues unresolved. This possibility again suggests a nonlinear relationship in which additional hours initially improve clarification but become burdensome beyond a reasonable level. Evidence from developing countries indicates that enabling tax administration and effective business-licensing systems can support firm performance, whereas poorly implemented procedures can create obstacles. Business-climate research likewise shows that the effects of regulation depend on the quality of implementation and the characteristics of individual firms. However, the present provincial indicator measures the median number of hours per tax inspection and does not identify whether those hours involve useful guidance or avoidable waiting. Given this limitation, the study expects the opportunity-cost mechanism to dominate on average, while acknowledging that the estimated linear association may hide beneficial effects at lower levels (Dethier et al., 2011; Hansen-Addy et al., 2024).

H₂: Tax-inspection hours positively influences business-plan delay.

2.4. Informal charges and business-plan delay

The “sanding-the-wheels” perspective argues that informal charges obstruct business activity by increasing costs, uncertainty, and legal risk. Unlike official fees, unofficial

payments are rarely governed by transparent schedules. Firms may therefore be unable to predict the amount, frequency, or result of such payments when preparing future investments. Informal charges can also encourage officials to create or maintain administrative difficulties, because complicated procedures increase opportunities to request payments. Firm-level evidence shows that bribery can be more harmful to enterprise growth than formal taxation, indicating that the uncertainty surrounding corruption may be more damaging than a known statutory cost. Evidence from Vietnam further suggests a systematic relationship between firm growth and the share of revenue paid as bribes. This relationship highlights the importance of firm characteristics and provincial institutional conditions when studying corruption. Together, these findings imply that informal charges can reduce expected returns and confidence in public administration, making firms more likely to delay or abandon business plans (Bai et al., 2019; Fisman & Svensson, 2007).

The competing “greasing-the-wheels” perspective proposes that informal payments may help firms overcome rigid rules, administrative delays, or inefficient public services. Under this view, a payment may shorten processing time and allow a transaction to proceed when formal institutions work poorly. Cross-country evidence provides limited support for this mechanism in environments where institutional quality is especially weak. However, the same literature shows that any apparent benefit is conditional and should not be interpreted as evidence that corruption generally improves economic performance. Disaggregated evidence also finds that some forms of corruption may facilitate individual transactions, while the broader and more consistent effect remains harmful to development. In Vietnam, informal payments may occasionally accelerate a specific procedure, but they also create continuing uncertainty about future demands and unequal treatment among firms. At the provincial level, a high proportion of firms paying informal charges is therefore more likely to indicate a weak and unpredictable administrative environment than an efficient shortcut. For this reason, the sanding effect is expected to dominate the possible short-term greasing effect (Méon & Weill, 2010; Nur-tegin & Jakee, 2020).

H₃: Informal charges positively influences business-plan delay.

2.5. Conceptual model

The conceptual model proposes that business-plan delay across Vietnam’s 63 provinces is associated with three dimensions of administrative burden: the proportion of firms inspected more than three times, the median number of hours spent on each tax inspection, and the proportion of firms paying informal charges. The first two variables capture the frequency and time dimensions of formal enforcement, while the third represents informal institutional costs. The dependent variable is the provincial proportion of firms postponing or cancelling business plans because of business-registration difficulties. The baseline model estimates these relationships using provincial-level OLS. Because the sample contains only 63 observations, additional controls should be parsimonious.

Regional indicators or selected measures of provincial economic development may be included in robustness tests if reliable data are available, but they should not replace the three main explanatory variables.

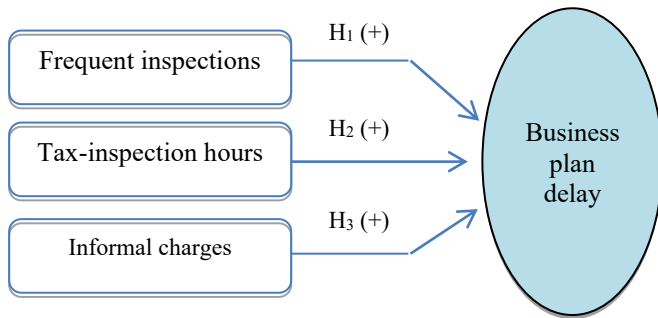


Fig. 1. Conceptual model

Source: Proposed by the author

III. DATA AND METHODOLOGY

The study uses provincial-level indicators from the 2024 Provincial Competitiveness Index (PCI), implemented by the Vietnam Chamber of Commerce and Industry with support from the United States Agency for International Development. The PCI survey collects firms' assessments of local economic governance, administrative procedures, regulatory inspections, informal charges, and business conditions. Individual responses are aggregated by the PCI research team to construct comparable indicators for each province. Therefore, the dataset contains 63 observations, corresponding to Vietnam's 63 provinces and centrally governed cities, rather than individual enterprises.

The four indicators required for the analysis were matched by province. All 63 provinces had usable observations; therefore, no missing values were imputed. The indicators expressed as percentages were converted into proportions ranging from zero to one, while tax-inspection time remained measured in hours. Boxplots, descriptive statistics, and studentised residuals were used to identify unusual observations. Observations were retained unless there was clear evidence of a recording error because extreme provincial values may represent genuine institutional differences. A major limitation is that provincial aggregation removes firm-level variation and may produce ecological bias. The cross-sectional data also restrict causal interpretation and do not capture changes in governance over time.

The dependent variable is the proportion of firms postponing or cancelling business plans because of difficulties associated with business-registration procedures. It measures an observable business response to administrative constraints rather than firms' general satisfaction with provincial governance. A higher value indicates that a larger share of surveyed firms in a province experienced difficulties serious enough to affect intended business activities. Nevertheless, the indicator does not distinguish between a temporary postponement and a permanent cancellation. It may also reflect unobserved provincial conditions, such as market demand, administrative capacity, or local economic uncertainty. Accordingly, the empirical results are interpreted

as provincial-level associations rather than direct causal effects.

The first explanatory variable is the proportion of firms inspected more than three times during the relevant period. It represents relatively frequent inspection exposure and is expected to have a positive relationship with business-plan delay. The second variable is the median number of hours devoted to each tax inspection. This measure captures the time intensity of regulatory interaction and the potential opportunity cost of managerial and accounting resources. Using frequency and duration together provides a broader assessment of the formal inspection burden. Frequent inspections may be short, whereas less frequent inspections may require many working hours. However, the aggregate indicators cannot determine whether longer inspections arise from inefficient administration, complicated firm records, or useful guidance provided by tax officials.

The third explanatory variable is the proportion of firms reporting informal charges. A higher provincial value indicates that unofficial payments are more widespread in firms' interactions with public authorities. Informal charges may increase operating costs, reduce predictability, and weaken confidence in administrative procedures. They may consequently be positively associated with the proportion of firms delaying or cancelling business plans. However, this indicator is potentially affected by reporting sensitivity because respondents may be unwilling to disclose unofficial payments. It also measures the prevalence rather than the monetary value of informal charges. The estimated coefficient should therefore be interpreted as the association between the reported provincial prevalence of informal payments and business-plan delay.

TABLE I. Research variables

Variable	Definition	Scale/unit	Expected sign	Data source
Business-plan delay (BPD)	Proportion of firms postponing or cancelling business plans because of business-registration difficulties	Proportion, 0–1	Dependent variable	PCI 2024
Frequent inspections (FI)	Proportion of firms inspected or examined more than three times	Proportion, 0–1	+	PCI 2024
Tax-inspection hours (TH)	Median number of hours spent on each tax inspection	Hours per inspection	+	PCI 2024
Informal charges (IC)	Proportion of firms reporting the payment of informal charges	Proportion, 0–1	+	PCI 2024

Source: Summarized by the author

The control vector may include a limited number of provincial characteristics, such as regional location, economic development, firm density, or the structure of the local enterprise sector, provided that comparable data are available. These factors may influence both regulatory implementation and business planning. Because the dataset contains only 63 observations, including many controls would substantially

reduce the degrees of freedom and could produce unstable estimates. The three explanatory variables are therefore examined in the baseline model, while a small number of theoretically relevant controls may be introduced sequentially in extended robustness specifications.

For province (i), the extended empirical specification is expressed as follows:

$$BPD_i = \beta_0 + \beta_1 * FI_i + \beta_2 * TH_i + \beta_3 * IC_i + \varepsilon_i \quad (1)$$

The baseline specification excludes the control vector and estimates the relationships between the dependent variable and the three main explanatory variables. In the equation, β_0 is the intercept; β_1, β_2 and β_3 represent partial associations; and ε_i represents unobserved provincial factors.

Ordinary least squares is used because it provides a transparent estimate of the conditional mean relationship and allows coefficients to be interpreted as changes in the provincial proportion of firms delaying business plans. It is also suitable for an exploratory model with a small cross-sectional sample and continuous provincial indicators.

IV. EMPIRICAL RESULTS

Table II presents descriptive statistics for the 63 provinces.

TABLE II. Descriptive Statistics

	BPD	FI	TH	IC
Mean	0.161414	0.059367	25.53968	0.394295
Median	0.111100	0.053400	24.00000	0.366100
Maximum	0.750000	0.188100	80.00000	0.666700
Minimum	0.000000	0.006500	3.000000	0.222900
Std. Dev.	0.178608	0.036117	16.59948	0.116183
Skewness	1.695670	1.399818	0.687661	0.755517
Kurtosis	5.374614	4.968278	3.130022	2.588223
Jarque-Bera	44.99244	30.74420	5.009592	6.438560
Probability	0.000000	0.000000	0.081692	0.039984
Sum	10.16910	3.740100	1609.000	24.84060
Sum Sq. Dev.	1.977843	0.080874	17083.65	0.836913
Observations	63	63	63	63

Source: Summarized by the author

Table II reveals substantial differences in regulatory conditions and business responses across Vietnam's 63 provinces. Business-plan delay (BPD) averaged 16.14%, but its median was only 11.11%, while the maximum reached 75%. Its standard deviation of 17.86 percentage points exceeded its mean, indicating considerable provincial heterogeneity. Frequent inspections (FI) were less prevalent, with a mean of 5.94% and a median of 5.34%, although the provincial rate ranged from 0.65% to 18.81%. Tax-inspection hours (TH) averaged 25.54 hours per inspection, with a wide range of 3–80 hours, suggesting marked differences in the time burden imposed on firms. Informal charges (IC) were relatively widespread: on average, 39.43% of firms reported such payments, with provincial values ranging from 22.29% to 66.67%. BPD and FI were strongly right-skewed and failed the Jarque–Bera normality test at the 1% level. IC also departed from normality at the 5% level, whereas normality

could not be rejected for TH ($p=0.0817$). These distributional features support the use of heteroskedasticity-robust inference and sensitivity checks for influential provincial observations.

The correlation matrix in Table III shows that informal charges (IC) had the strongest positive association with business-plan delay (BPD) ($r=0.391$, $p=0.0015$). Tax-inspection hours (TH) were also positively related to BPD, although the relationship was only marginally significant at the 10% level ($r=0.232$, $p=0.0668$). Frequent inspections (FI) displayed a negligible and statistically insignificant negative correlation with BPD ($r=-0.035$, $p=0.783$). Correlations among the explanatory variables were weak, with the largest absolute coefficient being 0.184. Thus, serious multicollinearity is unlikely, although these bivariate results remain preliminary and do not establish causality by themselves.

TABLE III. Correlation matrix

Correlation Probability				
Observations	BPD	FI	TH	IC
BPD	1.000000			

	63			
FI	-0.035373	1.000000		
	0.7831	-----		
	63	63		
TH	0.232420	0.024147	1.000000	
	0.0668	0.8510	-----	
	63	63	63	
IC	0.390987	-0.184160	0.034804	1.000000
	0.0015	0.1485	0.7865	-----
	63	63	63	63

Source: Summarized by the author

The OLS model in Table IV is jointly significant ($F=4.970$, $p=0.0038$) and explains approximately 20.17% of the provincial variation in business-plan delay, although the adjusted (R^2) is 16.11%. Informal charges (IC) have the strongest positive association with business-plan delay ($\beta_3=0.598$, $p=0.0017$). Holding other variables constant, a 10-percentage-point increase in IC is associated with a 5.98-percentage-point increase in business-plan delay. Tax-inspection hours (TH) also have a positive coefficient ($\beta_2=0.00235$), but the relationship is significant only at the 10% level ($p=0.066$). Ten additional inspection hours are associated with an increase of approximately 2.35 percentage points in business-plan delay. Frequent inspections (FI) have a positive but statistically insignificant coefficient ($\beta_1=0.153$, $p=0.794$); therefore, the evidence does not support a systematic relationship between FI and business-plan delay. Overall, the results support the hypothesis concerning IC, provide weak support for TH, and do not support the hypothesis concerning FI. These estimates should be interpreted as provincial-level associations rather than causal effects.

TABLE IV. Estimation results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.143491	0.092099	-1.558008	0.1246
FI	0.153394	0.585517	0.261981	0.7942
TH	0.002347	0.001253	1.873230	0.0660
IC	0.598172	0.182072	3.285369	0.0017
R-squared	0.201736	Mean dependent var		0.161414
Adjusted R-squared	0.161147	S.D. dependent var		0.178608
S.E. of regression	0.163585	Akaike info criterion		-0.721583
Sum squared resid	1.578840	Schwarz criterion		-0.585511
Log likelihood	26.72987	Hannan-Quinn criter.		-0.668065
F-statistic	4.970142	Durbin-Watson stat		2.217568
Prob(F-statistic)	0.003841			

Source: Summarized by the author

V. CONCLUSIONS AND POLICY IMPLICATIONS

This study examined whether frequent inspections, tax-inspection hours, and informal charges were associated with firms' decisions to postpone or cancel business plans across Vietnam's 63 provinces. The findings provide a differentiated answer. Frequent inspections showed no statistically reliable association with business-plan delay. Tax-inspection hours displayed a positive but only marginal relationship, suggesting that the time required for regulatory interaction may matter more than the number of inspections alone. Informal charges produced the clearest positive association with business-plan delay. Overall, the findings suggest that the quality, duration, and predictability of administrative interactions may be more relevant to business planning than inspection frequency considered separately.

The insignificant coefficient for frequent inspections should not be interpreted as evidence that repeated inspections never burden firms. The indicator measures only the proportion of firms inspected more than three times and does not reveal whether those inspections were duplicative, adversarial, unexpected, or administratively demanding. Some inspections may be routine, brief, or helpful in clarifying regulatory obligations. In addition, the aggregation of firm responses into provincial proportions removes substantial enterprise-level variation. Firms facing serious inspection burdens may therefore coexist with firms experiencing efficient procedures within the same province. This averaging process can weaken the estimated relationship and conceal differences across firm sizes, industries, and compliance histories.

The positive coefficient for tax-inspection hours provides weak or suggestive evidence that longer regulatory interactions are associated with a higher incidence of business-plan delay. This result is statistically significant at the 10% level, but not at the conventional 5% level, and should not be described as strongly significant. Longer inspections may divert managers and accounting employees from production, customers, investment preparation, and other value-creating activities. They may also indicate complicated documentation or prolonged administrative uncertainty. However, longer meetings can sometimes help resolve complex tax matters and prevent repeated visits. The result therefore suggests a possible time burden, but its statistical fragility and the potential for nonlinear effects require cautious interpretation and further robustness analysis.

Informal charges represent the strongest result in the baseline model. Provinces with a higher proportion of firms reporting unofficial payments also tend to record a higher proportion of firms postponing or cancelling business plans. This finding is consistent with transaction cost theory because unpredictable payments increase the cost of completing administrative procedures. It also supports the "sanding-the-wheels" view of corruption, under which informal payments create uncertainty, unequal treatment, and institutional risk rather than reliably accelerating transactions. Nevertheless, the baseline OLS estimate may be affected by heteroskedasticity, influential observations, omitted variables, or the bounded dependent variable. Its robustness must therefore be evaluated using HC3 standard errors and a fractional logit specification before drawing firm conclusions.

The study offers three academic contributions. First, it examines business-plan postponement or cancellation as a behavioural outcome, whereas much of the related literature concentrates on sales, employment, productivity, or general assessments of the business environment. Second, it combines formal administrative burdens, represented by inspection frequency and tax-inspection hours, with the informal institutional burden represented by unofficial payments. This approach provides a more complete account of firms' regulatory interactions. Third, the analysis uses differences across all 63 Vietnamese provinces to show that administrative experiences and business responses vary within one national legal system. Although exploratory, this provincial perspective provides a foundation for more detailed research on how subnational governance shapes firms' strategic decisions.

The first policy implication is the need for stronger coordination among inspection authorities. Provincial governments should establish shared inspection plans and exchange information about firms that have already been examined. A coordinated system could reduce overlapping visits, repeated document requests, and inconsistent instructions, while preserving the legitimate monitoring role of public agencies and limiting unnecessary disruption to firms.

Second, inspection selection should become more risk-based. Authorities can use compliance histories, sectoral risks, tax records, and evidence of previous violations to identify firms requiring closer supervision. Low-risk and consistently compliant firms should face fewer routine visits. Such targeting would allow limited administrative resources to concentrate on serious risks without imposing equal burdens on all enterprises.

Third, provinces should digitalise inspection scheduling and case management. A unified online platform could notify firms of inspection dates, responsible agencies, legal grounds, required documents, and case status. Except for investigations requiring confidentiality, advance information would help firms prepare efficiently. Digital records would also reveal repeated inspections and improve accountability across departments and administrative levels.

Fourth, inspection authorities should publish expected durations, standard procedures, and the scope of each examination. Officials should record starting and finishing

times and explain why an inspection exceeds its expected duration. Clear service standards would help distinguish necessary technical work from avoidable delay. They would also provide measurable evidence for evaluating administrative performance and redesigning procedures.

Fifth, accessible and protected reporting mechanisms are required to address informal charges. Firms should be able to report unofficial payment requests through confidential digital channels managed by an independent or higher-level authority. Reports should receive tracking codes, defined response deadlines, and protection against retaliation. Aggregated complaint outcomes should be publicly disclosed to strengthen institutional trust.

The study has several limitations. It relies on only 63 observations, uses cross-sectional data, and measures firm experiences through aggregated provincial proportions. Consequently, the analysis cannot identify firm-level mechanisms, control fully for unobserved heterogeneity, or establish temporal causality. Possible spatial dependence may also arise because neighbouring provinces share markets, administrative practices, infrastructure, labour, and regional institutions. Future research should construct a multi-year PCI dataset and estimate panel models with province fixed effects. Access to enterprise-level observations would permit analysis of heterogeneity by firm size, ownership, industry, and compliance history. Instrumental-variable designs or identifiable policy changes could strengthen causal inference. Spatial econometric models should also be applied to test whether regulatory burdens and business-plan delays spill across provincial boundaries.

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