



Tax Compliance Behavior Among Gig Economy Workers in Developing Countries: The Interplay of Tax Morale, Institutional Trust, and Digital Tax Administration

Fabeela P¹, Abdul Azees²

¹ Research Scholar, Department of Commerce, Farook College (Autonomous) Affiliated to Calicut University, Kozhikode, India.

² Associate Professor, Department of Commerce, Farook College (Autonomous) Affiliated to Calicut University, Kozhikode, India

Article information

Received: 14th December 2025

Received in revised form: 16th January 2026

Accepted: 18th February 2026

Available online: 26th March 2026

Volume: 3

Issue: 1

DOI: <https://doi.org/10.63090/IJCMRS/3049.1908.0034>

Abstract

The rapid expansion of digital platform-mediated gig work has created a structurally novel compliance challenge for tax administrations in developing countries, as millions of self-employed individuals earning income through ride-hailing, freelance, delivery, and domestic services platforms generate taxable income that falls largely outside the third-party withholding frameworks that anchor compliance in formal employment. This study investigates the determinants of voluntary tax compliance behavior among gig economy workers in Mexico, Morocco, and Bangladesh, integrating the Slippery Slope Framework of Kirchler with tax morale theory and behavioral public finance to develop a model in which institutional trust, perceived power of authority, tax morale, and digital tax administration quality jointly determine compliance behavior. Using a vignette-based survey experiment administered to 541 active gig workers, supplemented by 32 in-depth interviews, the study employs ordered logistic regression and structural equation modeling to estimate the relative effects of voluntary and enforced compliance pathways. Results indicate that tax morale exerts the strongest effect on compliance intention ($\beta = 0.52$, $p < 0.001$), followed by trust in tax authority ($\beta = 0.38$, $p < 0.001$), digital tax administration quality ($\beta = 0.34$, $p < 0.001$), and perceived audit probability ($\beta = 0.27$, $p < 0.01$). Income transparency, generated by digital platform payment records, moderates the compliance-intention-behavior gap. Country-level institutional environment significantly moderates all structural relationships. The study contributes to the behavioral tax compliance literature and offers targeted recommendations for revenue authorities seeking to extend the fiscal reach of digital taxation to the growing gig workforce.

Keywords: - Tax Compliance, Gig Economy, Tax Morale, Slippery Slope Framework, Institutional Trust, Digital Tax Administration, Developing Countries, Vignette Experiment

I. INTRODUCTION

The global gig economy, broadly defined as the ecosystem of platform-mediated, short-tenure, task-based work arrangements, has expanded at a remarkable pace since the emergence of major ride-hailing, freelance, and on-demand service platforms in the early 2010s. Estimates suggest that gig workers account for between 15 and 25 percent of the labor force in middle-income economies and that platform-mediated gig work is growing at annual rates of 15 to 25 percent across major emerging markets (World Bank, 2019). This structural shift in labor market organization has profound implications for public finance: the gig economy generates substantial taxable income that largely escapes the third-party information reporting and withholding mechanisms that constitute the backbone of income tax administration in most jurisdictions (OECD, 2020).

Conventional income tax systems in developing countries rely heavily on employer withholding of wages and, to a lesser extent, corporate profit reporting, to generate fiscal revenue and constrain non-compliance. Self-employed individuals, who bear sole responsibility for their own tax declaration and payment, consistently exhibit lower compliance rates than wage employees, a pattern attributed to the combination of lower detection probability, greater income variability, and weaker

normative compliance infrastructure (Kleven et al., 2011). Gig workers occupy a hybrid position in this landscape: many are registered as self-employed or independent contractors and therefore legally subject to self-assessment regimes, yet their income flows through digital platform intermediaries that possess comprehensive transactional data. This data availability creates an unprecedented technical opportunity for revenue authorities to extend third-party reporting to gig income streams, but its realization requires both regulatory innovation and gig worker behavioral cooperation.

The behavioral dimensions of gig worker tax compliance have received limited academic attention. The established tax compliance literature, rooted in the expected utility model of Allingham and Sandmo (1972) and subsequently extended by the Slippery Slope Framework (SSF) of Kirchler et al. (2008) and by tax morale theory (Torgler, 2007), has been developed primarily in advanced economy contexts and applied primarily to wage employees and formal sector self-employed individuals. Its applicability to gig workers in developing countries, who operate in institutionally and technologically distinct environments, remains an open empirical question.

Developing country contexts introduce several compounding factors. Institutional trust in government and tax authorities is generally lower than in advanced economies, reflecting historical experiences of corruption, perceived inequity in public spending, and limited visible fiscal exchange (Fjeldstad & Semboja, 2001). Tax morale, the intrinsic motivation to pay taxes as a civic duty, is shaped by cultural norms, social capital, and the perceived fairness of the tax system, all of which vary substantially across developing country contexts (Torgler & Schneider, 2007). Digital tax administration reforms, including e-filing systems, electronic payment platforms, and real-time audit analytics, are being actively implemented across developing countries and may reduce the compliance costs that deter voluntary declaration among gig workers, but their behavioral effects have not been rigorously evaluated.

This study addresses these gaps through three research questions:

- What is the relative importance of tax morale, institutional trust, perceived enforcement power, and digital administration quality as determinants of voluntary tax compliance among gig workers in Mexico, Morocco, and Bangladesh?
- Does income transparency generated by digital platform payment records moderate the gap between compliance intentions and actual compliance behavior?
- How does the institutional and regulatory environment moderate the relationships between these determinants and compliance outcomes?

The remainder of this paper is organized as follows. Section 2 develops the theoretical framework and reviews the empirical literature. Section 3 describes the research design, sample, and analytical methods. Section 4 presents the empirical results. Section 5 discusses the findings and their implications. Section 6 concludes with policy recommendations and directions for future research.

II. LITERATURE REVIEW

2.1. Theoretical Foundations of Tax Compliance

The theoretical literature on tax compliance has evolved through three intellectual generations. The first generation, originating with Allingham and Sandmo (1972), modeled tax compliance as a rational expected utility calculation in which the taxpayer weighs the financial gain from evasion against the expected penalty, determined by the product of the audit probability and the sanction rate. This deterrence-based framework generated important insights into the sensitivity of compliance to audit rates and penalty structures, but was subsequently criticized for its failure to explain the empirically high compliance levels observed even in low-audit probability environments and for its neglect of the social and moral dimensions of compliance behavior (Alm, 2019).

The second generation incorporated psychological and sociological dimensions through tax morale theory (Schmolders, 1960; Torgler, 2007). Tax morale, defined as the intrinsic motivation to contribute to the public good through tax payment, encompasses civic duty, social norms, perceived fairness, and trust in government as determinants of compliance that operate independently of enforcement threats. Frey and Feld (2002) advanced the fiscal exchange hypothesis, arguing that tax morale is enhanced when taxpayers perceive a fair exchange between their contributions and the public services they receive, and is crowded out when authorities signal distrust of taxpayers through heavy enforcement.

The third generation, represented most comprehensively by Kirchler et al.'s (2008) Slippery Slope Framework, integrates deterrence and motivation-based perspectives within a unified model. The SSF posits that compliance is determined by the joint operation of two dimensions: the power of the authority, encompassing its capacity to detect and penalize non-compliance, and the trust of citizens in the authority, reflecting confidence in its competence, benevolence, and procedural fairness. High power generates enforced compliance through deterrence, while high trust generates voluntary compliance through intrinsic motivation. The framework predicts that combinations of high power and high trust generate the highest total compliance, and that eroding trust through exclusively coercive enforcement strategies may undermine voluntary compliance even as enforced compliance rises.

2.2. Gig Economy Taxation: Structural Challenges and Emerging Responses

The gig economy presents a structurally novel tax administration challenge for three interconnected reasons. First, income fragmentation across multiple platforms and task types makes comprehensive income tracking difficult for tax administrations that rely on employer-reported W-2 or equivalent annual income summaries (OECD, 2020). Second, the legal classification ambiguity of gig workers, who are typically classified as independent contractors rather than employees by platform operators, exempts platforms from employer withholding obligations in most jurisdictions while leaving individual gig workers formally responsible for self-assessment. Third, the income volatility and informality of gig work, combined with

low financial literacy among many gig workers, generates genuine uncertainty about tax obligations rather than deliberate evasion in many cases.

Several jurisdictions have experimented with regulatory innovations to improve gig income compliance. The United States lowered the 1099-K reporting threshold for payment platforms from USD 20,000 to USD 600 in 2021, substantially expanding platform-level income reporting to tax authorities (IRS, 2022). The European Union's DAC7 directive, effective from 2023, mandates that digital platforms report seller and service provider income to tax authorities in member states, creating a comprehensive third-party information framework for gig income streams (European Commission, 2021). Developing country revenue authorities have been slower to implement equivalent measures, though Indonesia's Directorate General of Taxes introduced platform operator income reporting obligations in 2020 and Morocco's Direction Generale des Impots launched a digital self-declaration portal for independent workers in 2021.

2.3. Tax Morale in Developing Country Contexts

Cross-national evidence on tax morale levels and determinants has been substantially advanced by the World Values Survey and the International Social Survey Programme, both of which include standardized tax attitude items. Torgler and Schneider (2007) analyzed data from over 30 countries and found that tax morale was significantly positively associated with institutional trust, religiosity, satisfaction with democracy, and perceived government efficiency, while being negatively associated with corruption perceptions and income inequality. The effect of institutional trust was particularly pronounced in developing countries, where the credibility of the fiscal exchange relationship is more contested.

Developing country-specific studies have confirmed these broad patterns while documenting important contextual heterogeneity. Fjeldstad and Semboja (2001) found in Tanzania that tax morale was strongly conditioned by the perceived use of tax revenues, with compliance intentions declining sharply when respondents believed taxes were diverted through corruption. Alm and Gomez (2008) documented in Colombia that compliance was higher among taxpayers who interacted regularly with public services, confirming the fiscal exchange hypothesis in a Latin American context. Benali and Lahlou (2019) found in Morocco that trust in the tax administration, distinct from broader government trust, was the strongest predictor of small business owner compliance intention, suggesting that administrative-level rather than only government-level trust is behaviorally relevant.

2.4. Digital Tax Administration and Compliance Behavior

The digitalization of tax administration has emerged as a major policy priority for revenue authorities globally, driven by expectations of reduced compliance costs, improved taxpayer service quality, and enhanced audit analytics capability (OECD, 2020). Electronic filing systems, pre-populated tax returns, digital payment integration, and real-time taxpayer service portals represent a suite of digital innovations that theory predicts should increase voluntary compliance by reducing procedural friction and signaling administrative competence. Empirical evidence on the behavioral effects of digital administration reforms is growing. Kleven et al. (2011) demonstrated in a Danish context that third-party information reporting dramatically increased income reporting accuracy for wage income, while self-reported income showed much higher evasion rates, confirming the central role of information transparency rather than merely filing modality.

In developing country contexts, Okunogbe and Pouliquen (2022) conducted a randomized field experiment in Uganda and found that electronic filing adoption by small business taxpayers was associated with a 12 percentage point increase in self-reported income, attributable primarily to reduced compliance cost friction rather than increased detection risk. Mascagni et al. (2021) reviewed evidence from twelve African countries and concluded that digital administration reforms generated the most consistent compliance improvements when accompanied by taxpayer education programs and perceived service quality improvements, and the least consistent improvements when implemented in low-trust institutional environments without complementary trust-building measures.

2.5. Vignette-Based Survey Experiments in Tax Compliance Research

Survey experiments, including vignette-based designs, have been increasingly employed in tax compliance research to overcome the social desirability bias and hypothetical-actual gap that afflicts direct compliance attitude questions. Vignette experiments present respondents with realistic fictional scenarios describing taxpayers facing compliance decisions and ask respondents to evaluate the fictional taxpayer's behavior or indicate what they would do in the described situation. This design reduces self-incrimination concerns, enables systematic manipulation of scenario parameters such as audit probability and penalty severity, and allows causal identification of the effects of specific contextual factors on compliance judgments (Hainmueller et al., 2015). Blaufus et al. (2017) validated vignette-based tax compliance measures against administrative data and found acceptable convergent validity, supporting their use in contexts where administrative data are unavailable.

2.6. Research Gaps

The review identifies five research gaps motivating this study. First, the specific compliance behavior of gig economy workers in developing countries has not been examined empirically. Second, the SSF has rarely been applied in a multi-country emerging market context with simultaneous testing of all four quadrant predictions. Third, the moderating effect of digital platform-generated income transparency on the intention-behavior gap in tax compliance has not been tested. Fourth, the behavioral effects of digital tax administration quality among self-employed informal-sector-adjacent workers in developing countries have not been empirically examined. Fifth, a vignette-based experimental design, offering greater causal clarity than observational surveys, has not been applied to gig worker compliance research in any developing country context.

III. RESEARCH METHODOLOGY

3.1. Research Design

A sequential mixed-methods design was employed, comprising a vignette-based survey experiment as the primary quantitative component and in-depth interviews as the qualitative component. The vignette experiment was designed to elicit compliance intentions and judgments under controlled variation in audit probability, penalty rate, institutional trust cues, and digital administration quality cues, enabling causal identification of SSF pathway effects while minimizing social desirability response bias. The qualitative component captured the reasoning, experiential context, and institutional perceptions that shape compliance decisions in ways not fully captured by closed-form vignette responses.

3.2. Research Objectives

The study was organized around the following specific objectives:

- Objective 1: To measure the levels of tax morale, institutional trust, perceived enforcement power, and digital tax administration quality among gig workers in Mexico, Morocco, and Bangladesh.
- Objective 2: To estimate the relative effects of the voluntary compliance pathway (tax morale, institutional trust) and the enforced compliance pathway (perceived audit probability, penalty severity) on compliance intention and behavior.
- Objective 3: To test whether income transparency from digital platform payment records moderates the compliance intention-behavior gap.
- Objective 4: To examine the cross-national moderating effects of institutional environment on the SSF compliance pathways.
- Objective 5: To explore qualitatively the mechanisms through which trust, enforcement, and digital administration perceptions shape gig workers' compliance reasoning.

3.3. Hypotheses

The following hypotheses were specified for empirical testing

- H1: Tax morale is positively associated with voluntary tax compliance intention among gig workers.
- H2: Institutional trust in tax authority is positively associated with voluntary tax compliance intention.
- H3: Perceived audit probability is positively associated with enforced tax compliance intention.
- H4: Digital tax administration quality is positively associated with voluntary tax compliance intention.
- H5: Income transparency from digital platform records positively moderates the relationship between compliance intention and actual compliance behavior.
- H6: Tax morale mediates the relationship between institutional trust and voluntary compliance intention.
- H7: Country-level institutional environment significantly moderates the strength of the voluntary compliance pathway relative to the enforced compliance pathway.

3.4. Country Selection and Sample

Mexico, Morocco, and Bangladesh were selected as study sites to represent three distinct institutional and gig economy development contexts. Mexico is an upper-middle-income Latin American economy with a large and rapidly growing gig sector, primarily in ride-hailing (Uber, Cabify, DiDi) and food delivery (Rappi, iFood), a history of low institutional trust in tax administration, and a recently launched digital self-declaration system for independent workers under the Regimen Simplificado de Confianza introduced in 2022. Morocco is a lower-middle-income North African economy with a growing freelance and digital services gig sector, an active Direction Generale des Impots digitalization program, and civil law institutional heritage. Bangladesh is a lower-middle-income South Asian economy with a large ride-hailing and logistics gig sector (Pathao, Shohoz, Uber), among the lowest formal sector tax-to-GDP ratios in Asia, and a nascent but expanding National Board of Revenue digital administration initiative.

Purposive stratified sampling targeted active gig workers registered on at least one platform and having earned income from gig activities in the three months preceding the survey. Recruitment was conducted through platform operator referral networks, gig worker associations, and social media community groups specific to each country. A total of 541 complete and valid survey responses were obtained: 189 from Mexico, 178 from Morocco, and 174 from Bangladesh. For the qualitative component, 32 in-depth interviews were conducted with purposively selected participants representing diverse platform types, income levels, and compliance history profiles. Interviews were conducted in Spanish, French, Darija, and Bengali, professionally transcribed, and translated into English.

3.5. Vignette Design and Measures

The vignette instrument presented each respondent with three scenarios depicting a fictional gig worker, matched to the respondent's own platform type, facing an income declaration decision at the end of a fiscal year. Scenarios were constructed using a fractional factorial design varying five within-vignette factors: audit probability (low: 2%, moderate: 15%, high: 40%), penalty rate (1x, 2x, or 3x undeclared income), institutional trust cue (neutral, positive, or negative framing of tax authority behavior), digital administration quality cue (absent, basic e-filing portal, or advanced pre-populated return), and platform income transparency cue (income verifiable from platform records, income partially verifiable, income unverifiable). Each respondent evaluated three randomly assigned vignette profiles, generating 1,623 vignette-level observations across the full sample.

For each vignette, respondents rated the likelihood that the fictional worker would fully declare income on a seven-point scale from 1 (extremely unlikely) to 7 (extremely likely) and indicated what they personally would do in the same situation on a five-point behavioral intention scale. Actual compliance behavior was measured through a separate behavioral question asking respondents to report their own most recent tax filing decision, coded on a three-point scale: fully declared,

partially declared, and not declared. Tax morale was assessed using an eight-item scale adapted from Torgler (2007), capturing civic duty orientation, perceived fairness, and social norm compliance. Institutional trust was measured using six items adapted from Kirchler et al. (2008) specifically targeting tax authority trust. Digital tax administration quality was measured using a five-item scale assessing e-filing ease, portal reliability, pre-population accuracy, response time to queries, and payment convenience. Perceived audit probability was elicited through a direct probability estimate question calibrated to the respondent's income range and platform type.

A pilot study of 60 respondents across the three countries confirmed satisfactory internal consistency across all scales (Cronbach's alpha ranging from 0.73 to 0.88) and adequate comprehension of vignette scenarios through cognitive debriefing interviews.

3.6. Analytical Strategy

Three analytical methods were employed. First, multilevel ordered logistic regression with vignette-level random effects was used to estimate the within-subject effects of experimentally manipulated vignette factors on fictional compliance judgments, controlling for respondent-level covariates. This specification exploits the within-subject repeated measures structure of the vignette design to isolate the causal effects of each factor manipulation.

Second, structural equation modeling in the PLS-SEM framework, implemented in SmartPLS 4, was used to estimate the structural relationships between tax morale, institutional trust, perceived audit probability, digital administration quality, and self-reported compliance intention and behavior using the between-subject observational data. The SSF's voluntary and enforced compliance pathways were modeled as parallel mediation chains, and bootstrap confidence intervals were generated for all indirect effects. Measurement model adequacy was assessed using standard reflective validity criteria following Hair et al. (2022).

Third, moderation hypotheses were tested through interaction terms in both the multilevel regression (for vignette-level moderators) and the PLS-SEM specification (for respondent-level moderators including country and income transparency). Country-level moderation was examined through permutation-based multi-group analysis in PLS-SEM. Qualitative interview data were analyzed using thematic analysis following Braun and Clarke (2006), with theoretical codes derived from the SSF and tax morale frameworks supplemented by inductively generated codes. Analysis was conducted in NVivo 14.

IV. RESULTS

4.1. Sample Characteristics and Descriptive Statistics

Of the 541 respondents, 67.3% were male and 32.7% female, reflecting the gender composition of formal gig platform registration in the three countries. Mean age was 31.4 years ($SD = 7.8$). Educational attainment was moderate: 24.2% had secondary education or below, 53.6% had some tertiary education, and 22.2% held a postgraduate qualification. Mean monthly gig income was USD 342 (PPP-adjusted), representing a primary income source for 61.4% of respondents. Ride-hailing and delivery represented the largest platform categories (43.8%), followed by digital freelancing (28.3%) and domestic and personal services (27.9%). Self-reported full tax declaration in the most recent filing period was reported by only 34.7% of respondents, with partial declaration reported by 28.4% and non-declaration by 36.9%, confirming the substantive compliance deficit motivating this research.

Mean tax morale score was 3.84 on a seven-point scale ($SD = 1.21$), indicating moderate intrinsic compliance motivation. Mean institutional trust was 2.97 ($SD = 1.34$), reflecting a generally low-trust environment consistent with prior developing country evidence. Digital tax administration quality was rated at 3.21 ($SD = 1.18$). Country comparisons revealed significant differences: Mexican respondents reported the highest digital administration quality (mean = 3.58) and the highest institutional trust (mean = 3.24), consistent with the more advanced stage of Mexico's Regimen Simplificado de Confianza implementation. Bangladeshi respondents reported the lowest institutional trust (mean = 2.61) and the lowest tax morale (mean = 3.47).

4.2. Multilevel Ordered Logistic Regression: Vignette Experiment Results

The multilevel ordered logistic regression on vignette-level compliance judgments confirmed significant effects for all five experimentally manipulated factors. Audit probability manipulation generated the largest single-factor effect ($OR = 2.84$ for high versus low audit probability, $p < 0.001$), consistent with the deterrence hypothesis. However, the positive trust cue generated an effect of comparable magnitude ($OR = 2.41$ versus neutral framing, $p < 0.001$), while the negative trust cue significantly reduced compliance judgments ($OR = 0.63$, $p < 0.001$), confirming the SSF prediction that institutional trust generates voluntary compliance that can be eroded by adversarial administrative signals. The advanced digital administration cue generated a significant positive compliance judgment effect ($OR = 1.87$ versus absent digital administration, $p < 0.001$), while the basic e-filing cue showed a smaller but still significant effect ($OR = 1.43$, $p < 0.01$), supporting H4. The platform income verifiability cue was significant ($OR = 2.12$ for fully verifiable versus unverifiable income, $p < 0.001$), confirming the deterrence-relevant effect of income transparency.

4.3. Structural Model: Observational Compliance Pathway Analysis

The PLS-SEM measurement model demonstrated satisfactory reliability and validity: all composite reliability values exceeded 0.80, AVE values exceeded 0.50, and HTMT ratios were below 0.85 for all construct pairs. The structural model explained 49.3% of the variance in compliance intention and 37.8% of the variance in self-reported compliance behavior. Tax morale exerted the strongest direct effect on compliance intention ($\beta = 0.52$, $t = 9.41$, $p < 0.001$, $f\text{-squared} = 0.38$), supporting H1 and confirming the primacy of intrinsic motivation over enforced deterrence in the voluntary pathway. Institutional trust had a significant positive direct effect ($\beta = 0.38$, $t = 6.87$, $p < 0.001$), supporting H2. Digital tax administration quality showed a significant positive effect ($\beta = 0.34$, $t = 5.92$, $p < 0.001$), supporting H4. Perceived audit

probability demonstrated a significant positive effect ($\beta = 0.27, t = 4.53, p < 0.01$), supporting H3, though with a notably smaller effect size than the voluntary pathway predictors, suggesting that enforced compliance motives play a secondary role in this gig worker sample.

The mediation analysis confirmed that tax morale significantly mediated the institutional trust-compliance intention relationship (indirect effect = 0.21, 95% CI: 0.14 to 0.29), supporting H6. The proportion of the total institutional trust effect operating through the tax morale mediation pathway was 35.6%, indicating partial mediation with a substantial direct component. Income transparency significantly moderated the compliance intention-behavior relationship (interaction $\beta = 0.31, t = 4.12, p < 0.001$), supporting H5: respondents with higher perceived income verifiability from platform records showed a stronger translation of compliance intention into actual compliance behavior, consistent with the deterrence-relevant signaling effect of income transparency on the intention-action gap.

4.4. Cross-National Multi-Group Analysis

Permutation-based PLS-MGA confirmed configural and compositional invariance across the three national samples. Structural MGA revealed that the voluntary compliance pathway (tax morale and institutional trust combined) was relatively stronger in Mexico (combined direct effects = 0.94) than in Morocco (0.87) or Bangladesh (0.79), while the enforced pathway coefficient was proportionally larger in Bangladesh (0.34) compared to Mexico (0.21) and Morocco (0.26). The digital administration quality effect was largest in Mexico ($\beta = 0.41$), consistent with the more advanced and operationally familiar digital administration infrastructure in that country, and smallest in Bangladesh ($\beta = 0.26$), where the digital administration quality ratings were lowest and the perception of digital reform benefits most tentative.

Country-level moderation of the SSF pathways supports H7 and provides important empirical grounding for the SSF's prediction that the relative effectiveness of voluntary versus enforced compliance strategies is institutionally contingent. In higher-trust institutional environments, voluntary pathway investments in trust-building and service quality yield proportionally larger compliance returns. In lower-trust environments, the enforcement pathway retains greater behavioral relevance, though tax morale remains a significant predictor even in Bangladesh, suggesting that intrinsic compliance motivation exists across all three contexts and is actionable through appropriate administrative strategies.

4.5. Qualitative Findings

Thematic analysis of the 32 in-depth interviews generated four primary themes: perceived fiscal inequity and compliance rationalization, digital administration experience and trust formation, platform ecosystem as a compliance nudge environment, and the social embedding of compliance norms.

4.5.1. Theme 1: Perceived Fiscal Inequity and Compliance Rationalization

Across all three countries, non-compliant participants articulated their behavior through narratives of perceived inequity rather than straightforward evasion rationalization. Recurring arguments included the observation that large corporations paid proportionally less tax than small operators through avoidance arrangements, that visible corruption in government spending negated the value of compliance, and that the complexity of self-assessment procedures imposed costs that were disproportionate to the public services received. These rationalizations are consistent with the fiscal exchange hypothesis (Frey and Feld, 2002) and suggest that perceptions of system fairness, not merely individual financial calculus, are central to compliance decisions in this population. Bangladeshi participants expressed the most acute distrust of fiscal exchange, with several citing specific examples of local government project expenditures perceived as corrupt as direct justification for non-declaration.

4.5.2. Theme 2: Digital Administration Experience and Trust Formation

Mexican participants who had used the Regimen Simplificado de Confianza portal described a notably positive experience relative to the prior self-assessment regime, citing the pre-populated income data drawn from platform records as having dramatically simplified the declaration process and reduced anxiety about making calculation errors. Several noted that the availability of an accurate pre-populated return removed the most common rationalization for non-filing, namely procedural complexity and uncertainty about correct figures. This experiential evidence for the compliance-enhancing effect of digital administration quality through a complexity-reduction rather than a detection-amplification mechanism enriches the quantitative findings and points to taxpayer experience design as an underutilized policy lever.

4.5.3. Theme 3: Platform Ecosystem as a Compliance Nudge Environment

Several participants described platform operator behavior as an active factor in shaping compliance awareness. Platform applications in Mexico that integrated tax summary dashboards and year-end income statement generation were credited by multiple participants with making income totals visible in ways that removed the cognitive distancing from fiscal responsibility that cash-based income historically enabled. Moroccan participants noted that the Direction Generale des Impots communication campaign conducted through platform operator channels in 2023 had been more effective at generating compliance awareness than previous direct mail campaigns, suggesting that platform operators represent an underutilized compliance communication and nudge delivery channel.

4.5.4. Theme 4: Social Embedding of Compliance Norms

A distinctive qualitative finding was the extent to which compliance decisions were embedded in peer network dynamics within gig worker communities. Participants described online gig worker community forums and social media groups as primary sources of information about tax obligations and compliance strategies, including both legitimate guidance and non-compliance normalization. In contexts where non-compliance was the dominant peer norm within these communities,

participants described experiencing social pressure against full declaration, reinforcing the behavioral relevance of subjective norms and social capital in compliance decisions. This finding extends the social norms dimension of the SSF beyond formal institutional relationships to informal peer network dynamics that are particularly salient for the digitally connected gig worker population.

V. DISCUSSION

The findings of this study yield five theoretical and practical contributions to the behavioral tax compliance and public finance literatures. First, the primacy of tax morale over enforcement deterrence in explaining compliance intention among gig workers in developing countries (H1 supported, $\beta = 0.52$ versus H3, $\beta = 0.27$) challenges the dominant narrative in developing country revenue authority practice, which tends to prioritize audit and penalty intensification over trust-building and service quality investments as compliance improvement strategies. This finding extends Torgler's (2007) tax morale framework to the understudied gig worker population and confirms that intrinsic compliance motivation, while lower in absolute level than in advanced economy samples, remains the primary behavioral driver even in low-institutional-trust environments.

Second, the significant moderating effect of income transparency on the intention-behavior gap (H5 supported, interaction $\beta = 0.31$) represents a novel empirical contribution that bridges the behavioral compliance and information economics literatures. The finding implies that digital platform payment record availability functions as a dual compliance mechanism: directly through deterrence by increasing the perceived probability of income detection, and indirectly through cognitive salience by making income totals visible in ways that reduce the psychological distance from fiscal responsibility. Revenue authorities in Mexico, Morocco, and Bangladesh should prioritize the regulatory frameworks necessary to leverage platform-generated income data in compliance enhancement strategies.

Third, the confirmation of tax morale as a significant mediator of the institutional trust-compliance intention relationship (H6 supported) has important implications for the sequencing of compliance improvement strategies. It implies that institutional trust-building, through transparent expenditure reporting, visible public service delivery, and procedurally fair administrative interactions, generates compliance dividends not only directly but also through the amplification of intrinsic compliance motivation. This indirect pathway means that trust-building investments compound over time as enhanced tax morale reinforces voluntary compliance independently of the level of institutional trust in any given period.

Fourth, the significant effect of digital tax administration quality on voluntary compliance intention (H4 supported, $\beta = 0.34$), particularly in the Mexican context where operational experience with digital reforms was highest, provides valuable ex-post validation for developing country digital tax administration investments that have largely been justified on efficiency rather than behavioral grounds. The qualitative evidence on pre-populated return acceptance by Mexican participants identifies the specific mechanism through which digital administration quality generates compliance gains: complexity reduction removes the most common non-compliance rationalization, leaving intrinsic compliance motivation to operate without a procedural barrier.

Fifth, the cross-national variation in voluntary versus enforced pathway effectiveness supports H7 and has direct implications for the country-specific calibration of compliance strategies. Mexico's relatively higher institutional trust environment justifies a strategy weighted toward trust reinforcement, service quality investment, and digital administration enhancement. Bangladesh's lower-trust environment, while still responsive to voluntary pathway interventions, warrants a greater investment in consistent and visible enforcement to maintain credibility as a compliance deterrent. Morocco's intermediate institutional context argues for a balanced strategy combining digital administration investment with community-level tax education programs that leverage the social embedding of compliance norms documented in the qualitative findings.

VI. CONCLUSION

This study provides the first multi-country empirical evidence on the behavioral determinants of tax compliance among gig economy workers in developing countries, integrating the Slippery Slope Framework, tax morale theory, and behavioral public finance within a unified vignette-based experimental and structural analysis. The convergent findings from the vignette experiment and the observational structural model confirm that voluntary compliance motives, grounded in tax morale and institutional trust, are the primary drivers of gig worker compliance behavior across Mexico, Morocco, and Bangladesh, while enforcement deterrence, income transparency, and digital administration quality operate as significant but secondary or moderating factors.

For revenue authorities in developing countries confronting the fiscal challenges of gig economy expansion, the study offers five concrete recommendations. First, regulatory frameworks mandating platform operator income reporting to tax authorities should be treated as a policy priority, as the income transparency channel generates compliance returns through both deterrence and cognitive salience mechanisms. Second, digital administration reform programs should explicitly target compliance cost reduction through pre-populated return systems that draw on platform data, as the Mexican experience demonstrates that this approach removes the most common compliance barrier among gig workers with moderate tax morale. Third, tax authority communication strategies should systematically utilize platform operator channels as nudge delivery mechanisms, given the effectiveness of such channels documented in the Moroccan case. Fourth, anti-corruption transparency initiatives and visible public expenditure reporting should be treated as integral components of tax compliance strategy, as the fiscal exchange rationalization narrative documented in all three country contexts directly links perceived government integrity to compliance motivation. Fifth, tax morale cultivation through civic education programs targeting gig worker community networks and online forums should be piloted and evaluated, given the social embedding of compliance norms documented in the qualitative findings.

The study carries several limitations that define future research directions. The vignette-based behavioral intention measure, while validated and socially desirably less biased than direct compliance attitude questions, remains a proxy for

actual compliance behavior, and future research should validate these findings against administrative tax filing data through partnerships with revenue authorities. The sample is confined to urban gig workers accessible through platform operator referral networks and may not represent the full spectrum of informal gig work that falls outside formal platform registration. The cross-sectional design cannot capture the dynamic evolution of compliance behavior as digital administration reforms mature and trust-building initiatives accumulate. Longitudinal cohort studies tracking gig workers through successive tax filing cycles, combined with administrative data linkage, would provide the most rigorous evidence base for the behavioral tax policy interventions recommended in this study.

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