European Journal of Economics and Management Sciences 2026, No 4
ISSN 2310-5690

PREMIER Publishing
ppublishing.org

Section 2. Finance, monetary circulation and credit

DOI:10.29013/EJEMS-26-4-7-11

CONSUMER INCENTIVES AND THE LAST MILE OF VAT ENFORCEMENT

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Cite: *Mikel Alla (2026). Consumer Incentives and the Last Mile of VAT Enforcement. European Journal of Economics and Management Sciences 2026, No 4.* https://doi.org/10.29013/EJEMS-26-4-7-11

Abstract

This integrative review examines why value-added tax (VAT) self-enforcement weakens at final consumption and which enforcement functions can address that gap. It compares purposively selected theoretical and empirical studies and uses Albanian official documentation as an institutional illustration. The synthesis distinguishes invoice demand induced by input credits, consumer verification, independent payment records and administrative follow-up. Receipt rewards can improve reporting, but electronic payment adoption does not consistently improve compliance, and higher declared liabilities need not increase collections. The contribution is a diagnostic framework connecting each intervention to the information it supplies and the outcome it can affect. For Albania, verification infrastructure provides a basis for evaluation, not evidence of revenue effects.

Keywords: *VAT; consumer incentives; tax compliance; electronic payments; fiscalisation*

Introduction

VAT gives registered purchasers an incentive to document eligible purchases because invoices support input-tax deductions. Paper trails and remittance arrangements can strengthen enforcement (Pomeranz, 2015; Waseem, 2022). At final consumption, purchasers ordinarily lack this credit entitlement, although receipts retain commercial value. Upstream compliance is also conditional: fraud and unclaimed credits can weaken the chain (Keen & Smith, 2006; Brockmeyer et al., 2024).

Which enforcement functions can compensate for the final-consumer incentive gap? Reviews explain information-based enforcement and consumer participation (Slemrod, 2019; Naritomi et al., 2025), but policy assessment also requires distinguishing record creation from administrative use and revenue collection. This paper connects those stages in a diagnostic framework and applies it to

Albanian fiscalisation. Its contribution is a synthesis linking interventions to observable outcomes and unresolved information gaps.

Method

Following integrative-review principles (Torraco, 2005; Snyder, 2019), the study purposively combines theory, empirical evaluations and official documentation. Sources are selected for relevance to invoice incentives, consumer monitoring, payment information or administrative use. Studies are compared by intervention, setting, research design and outcome; heterogeneous effects are not pooled. The review creates no dataset and estimates no new effects. Income-tax and online-experiment findings inform behavioural mechanisms without being treated as VAT field evaluations; Albania is examined through documentary evidence.

The unit of analysis is the information relationship surrounding a transaction: who creates evidence, why they have an incentive to do so, and which declaration it can constrain. Peer-reviewed studies provide the principal research evidence; the Tanzania working paper is identified separately. Theoretical studies explain incentives, while official sources establish institutional arrangements. Experimental and quasi-experimental findings retain their original scope; associations and theoretical predictions are not treated as equivalent causal evidence. This purposive synthesis does not claim systematic coverage or a formal risk-of-bias assessment.

Evidence and analytical findings

Third-party information matters because declarations can be checked against independently held records. Denmark's income-tax audit experiment and a theory of firms as fiscal intermediaries support this mechanism (Kleven et al., 2011, 2016). Consumer incentives remain context-dependent. Immordino and Russo (2018b) model receipt rebates that discourage evasion but also reward already compliant purchases. Doerr and Necker's (2021) German field experiment shows that collaborative evasion varies with anonymity and consumer signals. Burgstaller and Pfeil (2024) find that information about others' evasion increases collusion in an online experiment. This supports attention to consumer beliefs, without establishing a VAT revenue effect.

In São Paulo, reported sales increased by at least 21% over four years and tax revenue net of rewards by 9.3% under a combined consumer-reward and verification programme (Naritomi, 2019). These are programme effects, not separately identified effects of rebates, lotteries or complaints; net-of-reward revenue does not deduct every social cost. In a Tanzania working paper, Buluba et al. (2026) report higher recorded sales and VAT liability after a receipt lottery, alongside offsetting seller behaviour, including reduced voluntary receipt issuance and informal receipts.

Payment evidence is mixed. Cross-country card-use associations (Immordino & Russo, 2018a) and responses to Italy's cash threshold (Russo, 2022) do not establish a universal VAT yield from cashless payments. India's demonetisation increased electronic payments, reported sales and tax payments in more exposed areas (Das et al., 2023). Uruguay's VAT rebates increased card transactions by about 50%, without a detected firm-compliance improvement (Brockmeyer & Sáenz Somarriba, 2025). Different policies and settings preclude attributing this contrast to one mechanism. Uruguay's response reflected greater use among existing card-machine users, while India's cash restriction affected several economic margins. Payment substitution alone is therefore an insufficient measure of enforcement effectiveness.

Peru's e-invoicing rollout raised reported sales, purchases and VAT liabilities by more than 5% in the first year, but accumulated credits limited collections (Bellon et al., 2022). Valid credit offsets are not evasion. Trading-network spillovers extend effects beyond mandated firms (Bellon et al., 2023). In Pakistan, risk-based, real-time validation of credit claims outperformed conventional matching and recovery (Shah, 2026). Income-tax evidence from Ecuador and US payment reporting shows that higher reported receipts can accompany higher expenses (Carrillo et al., 2017; Slemrod et al., 2017). Such responses justify examining the full tax calculation, without assuming every expense adjustment is false. The Peru and Pakistan findings concern firm networks and input-credit administration, so they support administrative

mechanisms rather than directly measuring final-consumer interventions. Similarly, expense responses under income taxation cannot be transferred mechanically to VAT, whose purchase and credit rules differ.

The Last Mile VAT Enforcement Framework

The framework separates four functions. Invoice demand induced by input credits is the benchmark. Consumer verification supplements it through receipt requests, checks or complaints. Payment intermediaries generate an external transaction record. Administrative use combines matching records to returns with follow-up on discrepancies. These functions need not occur sequentially: invoice data can reach the administration without a consumer request. Receipts, payment records, declared sales, liabilities and collections measure different stages and cannot serve interchangeably as compliance indicators.

Each function has a distinct condition for effectiveness. Invoice demand depends on usable credits and credible buyer–seller reporting links. Consumer checks must reveal information absent from seller reporting. Payment records need coverage and attribution to the taxable seller. Administrative matching requires substantive follow-up. Registration and record transmission alone do not establish these conditions. The framework identifies where an intervention acts without assigning scores or ranking instruments.

Discussion and the Albanian application

The synthesis explains why digital adoption alone is an incomplete policy target. A transmitted invoice confirms the existence of a submitted record, not the completeness or accuracy of all sales. Matching two systems populated by the same seller entry provides weaker evidence of completeness than comparison with an independent source. Effective verification therefore requires reliable taxpayer attribution, sufficient coverage and action on discrepancies. Consumer rewards, payment records and e-invoicing address different weaknesses; combining them is not automatically effective or cost-efficient.

Behavioural offsets differ from accounting offsets. Sellers may shift concealment towards less-observed transactions or expenses; legitimate VAT credits may delay collections despite more accurate reporting. Broader verification addresses the former, whereas denying valid credits would undermine the tax mechanism. This distinction explains why a weak revenue response alone cannot establish enforcement failure.

Albania's Law No. 87/2019 establishes invoice and turnover-monitoring arrangements (Republic of Albania, 2019). Tax-administration guidance describes electronic reporting, the unique invoice number (NIVF) and consumer QR-code verification (General Directorate of Taxation of Albania, n.d.). This documents infrastructure, not measured compliance effects. The guidance also distinguishes payment-reporting obligations by invoice type and permits delayed transmission during connectivity failures. Consequently, a digital payment need not imply a matched fiscal record, and a temporarily unconfirmed invoice need not indicate evasion.

Evaluation should connect resolved discrepancies to additional liabilities and collections against a credible counterfactual. Fiscal yield should deduct rewards and implementation costs; broader assessment should consider compliance burdens, access and privacy. Rewards are transfers, not necessarily resource costs in welfare analysis. Linking Albanian invoice, return, eligible payment and audit records would allow testing whether consumer checks add information beyond fiscalisation.

An Albanian evaluation could randomise consumer information or rewards where feasible, or exploit a policy rollout with credible comparison groups. Outcomes should separate additional reporting from real sales growth and account for invoice corrections, outages, sector and firm size. Before-and-after revenue comparisons cannot isolate fiscalisation from inflation or other enforcement changes. Participation needs a defined transaction denominator; collections should be measured after credits and programme costs over a specified period.

Purposive selection risks omission and publication bias; heterogeneous settings limit transferability. The framework is a conceptual synthesis, not a validated causal model. Future evaluations should isolate each intervention's incremental contribution, account

for spillovers and seller adaptation, and measure persistence across consumer groups. The Albanian documentary evidence cannot establish implementation quality or revenue effects. Additional verification must be assessed against what existing systems already achieve.

Conclusion

VAT's final-consumer weakness arises from the loss of the input-credit incentive, while enforcement throughout the chain remains conditional on usable information. The framework clarifies how consumer verification, independent payment records and administrative matching can address distinct reporting gaps. The evidence supports evaluating additional reporting and collections rather than treating receipt counts or payment adoption as sufficient outcomes. For Albania, the next empirical step is to connect verification activity to resolved discrepancies and net fiscal results. Policies should address specific reporting weaknesses and be assessed against measurable costs; greater digitalisation does not necessarily produce stronger compliance.

The conceptual contribution is to distinguish incentives to create evidence from the capacity to use it, while separating behavioural evasion from legitimate credit offsets. This directs policy evaluation towards the missing function: receipt demand, independent corroboration or administrative resolution. Reward costs include payments for already compliant transactions; payment records need usable coverage; digital invoices require validation. The appropriate combination remains an empirical question. For Albania, the practical priority is to test whether consumer checks reveal additional discrepancies and whether their resolution generates collections that justify programme costs. This makes consumer participation an assessable component of enforcement rather than an assumed source of fiscal gains.

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submitted 24.09.2026;
accepted for publication 08.10.2026;
published 30.10.2026
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