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Tax Reform and *Split Payment*: Suppression of the *Olivera-Tanzi* Effect in Public Finance?

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ABSTRACT

This article examines whether the *split payment* mechanism introduced by Brazil's consumption tax reform may mitigate or suppress the *Olivera-Tanzi* effect in public finance. It argues that segregating and collecting IBS and CBS at the financial settlement stage reduces the time lag between the taxable transaction and revenue inflow, preserving the real value of tax receipts under inflationary conditions. The study adopts a qualitative, documentary and normative approach, complemented by a quantitative simulation comparing scenarios with and without *split payment*. It concludes that the mechanism may suppress inflationary erosion in transactions subject to immediate collection, but not universally, since other collection methods, payments outside the system, gradual implementation, residual balances and effects on cash flow, neutrality and tax credits remain relevant.

Keywords: Tax reform. *Split payment*. *Olivera-Tanzi* effect. Public finance. Dual VAT.

JEL Classification: H20; H21; E31.

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1. INTRODUCTION

The consumption tax reform, enacted by Constitutional Amendment No. 132 of December 20, 2023, and regulated in its core aspects by Complementary Law No. 214 of January 16, 2025, profoundly altered the architecture of Brazilian taxation on goods and services. The creation of the Tax on Goods and Services (IBS), the Contribution on Goods and Services (CBS), and the Selective Tax (IS) replaces the previous system—which was fragmented among the IPI, PIS, Cofins, ICMS, and ISS—with a dual value-added tax model based on broad non-cumulative taxation, destination-based taxation, neutrality, and digital mechanisms for calculation and collection (Brazil, 2023; Brazil, 2025). This change addresses long-standing concerns regarding the complexity, cumulative nature, litigiousness, and low transparency of consumption taxation in Brazil, as highlighted by specialized studies on the need for structural reform of the tax system (Appy, 2016; Orair; Gobetti, 2019).

The reform, however, is not limited to the nominal replacement of taxes. It reorganizes the flow of generation, calculation, collection, and distribution of public revenues. From a public finance perspective, this change is particularly relevant because tax collection represents not only the accounting inflow of funds but also the basis for financing public policies, achieving budgetary balance, ensuring federal coordination, and promoting macroeconomic stabilization. In this sense, taxation fulfills allocative, distributive, and stabilizing functions, in accordance with the tradition established by Musgrave, and its effectiveness depends on the state's ability to transform taxable economic events into timely and actual public revenues (Musgrave, 1959; Musgrave; Musgrave, 1989). This perspective is consistent with the Brazilian literature on public finance, which analyzes revenues, expenditures, debt, and the budget as interdependent dimensions of the state's fiscal activity (Giambiagi; Além, 2016).

In this context, *split payment* emerges as one of the most significant operational innovations of the new system. Complementary Law No. 214/2025 provides, among the methods for settling IBS and CBS debts, for payment at the time of financial settlement of the transaction, through the automatic segregation of amounts owed by electronic payment service providers and payment system operators (Brazil, 2025). In economic terms, this technique reduces the time lag between the payment made by the acquirer and the tax's entry into the public coffers, altering a critical aspect of tax collection dynamics: time.

The temporal dimension of tax collection is central to the phenomenon known in the literature as the *Olivera-Tanzi* effect. The concept is associated with the work of Julio H. G.

Olivera and Vito Tanzi, who examined how inflation and fiscal lags can reduce the real value of tax revenue. Tanzi demonstrated that, when inflation becomes high, inevitable delays in tax collection begin to play a significant role in eroding the real value of revenue collected by the government (Olivera, 1967; Tanzi, 1977). Although contemporary Brazil is not experiencing hyperinflation, the analysis remains relevant because the new dual VAT system will be implemented within a digital payment system, with the potential for nearly immediate collection in some transactions and the persistence of time lags in others.

The international literature on VAT and alternative collection mechanisms typically examines *split payment* as a tool for combating fraud, reducing the *VAT gap*, increasing *compliance*, and protecting tax revenue. The European Commission, in studying the mechanism as an alternative method of VAT collection, evaluated different implementation models covering B2B, B2C, and B2G transactions and various payment methods, recognizing potential benefits but also administrative, operational, and cash flow costs (European Commission, 2017). The OECD, in turn, notes that some countries have adopted *split-payment* mechanisms and highlights the expansion of digital tools for continuous transaction reporting to strengthen *VAT compliance* (OECD, 2024; OECD, 2026).

The recent Brazilian debate has also emphasized legal and operational challenges. Peroto and Conte (2025) analyze the barriers to implementing *split payment* in the context of Brazilian tax reform, while Teixeira (2022) discusses its potential impacts in Brazil based on international experience. However, the connection between *split payment* and the *Olivera-Tanzi* effect remains largely unexplored. The focus of this article lies precisely in this area: understanding whether tax collection at the time of financial settlement can function not only as an anti-fraud tool but also as a mechanism for preserving the real value of public revenue.

In light of this, the following research question is formulated: To what extent can the *split payment system* provided for in the Brazilian Tax Reform mitigate or eliminate the *Olivera-Tanzi* effect on public finances, considering the reduction in the time lag between the taxable transaction, the financial settlement, and the actual receipt of public revenue?

The central hypothesis is that *split payment* may mitigate or eliminate the *Olivera-Tanzi* effect in transactions where the segregation and remittance of IBS and CBS amounts occur at the time of financial settlement. However, this elimination is neither systemic nor universal—since Complementary Law No. 214/2025 itself provides for other methods of settling debts, gradual implementation, optional scenarios, potential balances to be collected, and situations in which the payment instrument does not allow for automatic segregation (Brazil, 2025).

The general objective of this article is to analyze the relationship between *split payment* and the *Olivera-Tanzi* effect in the context of Brazil's dual VAT system, assessing whether the new revenue collection technique can preserve the real value of public revenues in scenarios of positive inflation. The specific objectives are as follows: to examine the regulatory design of *split payment* under Constitutional Law No. 214/2025; to theoretically reconstruct the *Olivera-Tanzi* effect; to relate the revenue gap, inflation, and the real value of public revenue; to simulate comparative scenarios with and without *split payment*; and to identify legal, economic, and operational limits to the thesis that the effect can be eliminated.

The article's contribution occurs on two levels. First, it proposes an interpretation of *split payment* that goes beyond the agenda of combating tax evasion, highlighting its relevance to the temporal management of tax collection. Second, it updates the theory of the *Olivera-Tanzi* effect for the environment of digital payments, electronic tax documents, assisted tax assessment, and near-real-time tax collection. The practical relevance stems from the fact that, in a federal system dependent on consumption taxes, even small time lags—when applied to broad tax bases—can produce significant financial effects for the federal government, states, the Federal District, and municipalities.

2. METHODOLOGY

This study adopts a qualitative approach that is theoretical-documentary, normative, and interdisciplinary in nature, complemented by a quantitative simulation of a hypothetical case. The choice of a qualitative approach is justified because the central objective is not to empirically estimate, using post-implementation observed data, the revenue impact of *split payment*, but rather to critically understand its regulatory structure and its potential effects on the actual amount of public revenue, in light of the economic theory of the *Olivera-Tanzi* effect.

As for the objectives, the research is exploratory and explanatory in nature. It is exploratory because it examines a recent topic in the Brazilian legal system, currently in a phase of transition and operational regulation, especially following Constitutional Amendment No. 132/2023, Law No. 214/2025, Decree No. 12,955/2026, and the publication of the technical documentation for the *Split Payment* Public Platform by the Federal Revenue Service and the IBS Management Committee (Brazil, 2023; Brazil, 2025; Brazil, 2026a; Brazil, 2026b). It is explanatory because it seeks to relate the tax collection technique in financial settlement to the inflationary erosion of tax revenues caused by collection lags.

The method of analysis is analytical-deductive. It begins with a reconstruction of the theoretical foundations of the *Olivera-Tanzi* effect and the legal-institutional design of *split payment*, and then deduces its implications for preserving the real value of tax revenue. The analysis combines categories from tax law, public finance, and monetary economics, namely: the taxable event, financial settlement, methods of extinguishing tax liabilities, inflation, time lag, nominal revenue, and real revenue.

The technical procedures consist of a literature review, an analysis of normative documents, and quantitative simulation. The literature review covers classic and contemporary works on public finance, VAT, inflation, and tax revenue, including Musgrave (1959), Musgrave and Musgrave (1989), Tanzi (1977), Olivera (1967), Dornbusch and de Pablo (1990), Ebrill et al. (2001), Bird and Gendron (2007), Mihaljek (2023), the European Commission (2017), the OECD (2024; 2026), as well as recent Brazilian studies on *split payment* and tax reform, such as Appy (2016), Orair and Gobetti (2019), Teixeira (2022), and Peroto and Conte (2025).

The normative literature review focuses on the Federal Constitution of 1988, Constitutional Amendment No. 132/2023, Complementary Law No. 214/2025, Decree No. 12,955/2026, and institutional acts and documents issued by the Federal Revenue Service and the IBS Management Committee. The focus is on the methods for settling IBS and CBS debts, the standard *split-payment* procedure, the simplified procedure, collection by the acquirer, gradual implementation, and the deadlines for credit reimbursement.

The quantitative simulation uses a hypothetical case to demonstrate the economic mechanism of the *Olivera-Tanzi* effect. It is based on a transaction of R\$ 1,000,000.00, a hypothetical combined IBS/CBS tax rate of 28%, and a nominal tax due of R\$ 280,000.00. It compares the real value of revenue under scenarios of immediate payment, payment after 30, 60, and 90 days, and different monthly inflation rates. The formula used is:

$$Receita\ real = \frac{Receita\ nominal}{(1+i)^{\frac{d}{30}}}$$

where *i* represents monthly inflation and *d* represents the time lag in days.

The simulation is not intended to project the actual revenue from the reform or to estimate aggregate macro-fiscal impacts. Its role is educational and analytical: to highlight the relationship between the time lag, inflation, and real revenue loss. This limitation is relevant because the concrete effects of the new system will depend on subordinate regulations, technological integration, taxpayer behavior, inflation dynamics, the functioning of payment arrangements, and coordinated action by the Federal Revenue Service and the IBS Management Committee.

The study, therefore, seeks to avoid two oversimplifications. The first would be to assert that *split payment* completely eliminates the *Olivera-Tanzi* effect in the Brazilian tax system. The second would be to disregard the revenue-raising potential of a mechanism that reduces the time lag between payment and remittance. The article takes a middle ground: *split payment* may eliminate the effect in certain transactions, mitigate it in others, and have no impact in cases outside its scope of application.

3. TAX REFORM, DUAL VAT, AND THE TRANSFORMATION OF THE TAX COLLECTION CYCLE

Constitutional Amendment No. 132/2023 incorporated into the Constitution the foundations for a comprehensive reform of consumption taxation, keeping the debate within the constitutional limits of fiscal federalism and the tax powers established in the 1988 Constitution (Brazil, 1988; Brazil, 2023). The IBS, a tax under the shared jurisdiction of the states, the Federal District, and municipalities, and the CBS, under the jurisdiction of the federal government, were designed as general taxes on goods and services, guided by broad non-cumulative principles, a comprehensive tax base, transparency, and taxation at the point of destination. This structure brings Brazil closer to international VAT models, while preserving relevant federal characteristics.

The literature on VAT indicates that the efficiency of this type of tax depends on a broad tax base, few exceptions, effective input tax credits, timely refunds, and a tax administration capable of managing the chain of debits and credits (Ebrill et al., 2001; Bird; Gendron, 2007). Neutrality, in this context, does not mean the absence of economic effects, but rather a reduction in artificial distortions in the organization of productive activity and in consumption decisions. This assessment aligns with classic criteria of tax design, such as efficiency, equity, administrative simplicity, flexibility, and political accountability (Stiglitz, 2000). Article 2 of Constitutional Law No. 214/2025 specifies that the IBS and CBS are guided by the principle of neutrality, which reinforces the need for a joint assessment of both the legal design and the economic functioning of the system (Brazil, 2025).

The new design also transforms the tax collection cycle. Under the traditional system, the supplier often receives the full amount of the transaction—including the portion that economically corresponds to the tax—and only remits the amount due to the tax authorities at a later date, following a periodic calculation. This time lag creates opportunities for nonpayment,⁸

fraud, temporary financing by taxpayers using tax funds, and actual revenue loss in an inflationary environment. *Split payment* changes this logic by allowing the tax portion to be segregated at the time of the transaction's financial settlement.

Article 27 of Constitutional Law No. 214/2025 provides for five methods of settling IBS and CBS liabilities: offsetting against credits held by the taxpayer; payment by the taxpayer; remittance at the time of the transaction's financial settlement; remittance by the acquirer; and payment by a legally designated responsible party. The provision demonstrates that *split payment* is not the only method of settling the liability, but rather a specific method linked to the transaction and dependent on payment and information infrastructure (Brazil, 2025).

Article 31 establishes that, in payment transactions related to transactions involving goods or services, electronic payment service providers and payment system operators must segregate and remit the IBS and CBS amounts to the IBS Management Committee and the Federal Revenue Service at the time of financial settlement. The provision requires a link between electronic tax documents and the payment transaction, demonstrating that the effectiveness of the mechanism depends on interoperability among the tax document, the payment method, and the public communication platform (Brazil, 2025).

Decree No. 12,955/2026, which regulates aspects of the CBS, and the technical documentation published by the Federal Revenue Service and the IBS Management Committee in June 2026 reinforce this operational interpretation. According to the Ministry of Finance, the Public *Split Payment* Platform will function as a communication channel between payment system operators, electronic payment service providers, the Federal Revenue Service, and the IBS Management Committee, to enable the segregation and collection of CBS and IBS amounts during the financial settlement of consumer transactions (Brazil, 2026a; Brazil, 2026b).

This transformation links the Brazilian reform to a broader trend toward the digitization of VAT administration. The OECD (2026) describes continuous transaction reporting regimes as instruments that require near-real-time communication of invoices or transaction data to tax authorities, with the aim of strengthening VAT risk management and *compliance*. Although *split payment* should not be confused with continuous transaction reporting, both belong to the same institutional framework: the shift from *ex post* enforcement to digital systems capable of acting at the time of, or shortly after, the transaction.

The central point of this article is that digitization does not merely reduce fraud or improve *compliance*. It alters the temporal dimension of public finance. If the tax is collected at the time of financial settlement, public revenue aligns more closely with the economic timing of the

transaction; if the tax is collected only at the end of the tax period, a lag remains between the tax base and actual revenue. This temporal difference is the conceptual link between *split payment* and the *Olivera-Tanzi* effect.

4. SPLIT PAYMENT: APPLICATION, MODALITIES, AND SCENARIOS WHERE THE EFFECT IS NOT ELIMINATED

Split payment can be defined as a segregated payment technique whereby the amount corresponding to the tax is separated from the net amount owed to the supplier at the time of financial settlement. In its ideal form, the purchaser makes a single payment, but the payment system automatically directs one portion to the tax authority and another to the supplier. The supplier temporarily does not receive the tax portion, thereby reducing the risk of default and the cash lag between the transaction and tax collection.

International experience reveals multiple possible designs. The European Commission (2017) examined options involving B2B electronic transfers, blocked VAT accounts, expansion to B2C and B2G transactions, and card and cash transactions. The report recognized the potential for reducing fraud but also highlighted challenges related to cost, complexity, and the impact on business cash flow. The OECD (2024) notes that some countries apply *split-payment* mechanisms, in which the VAT paid by the customer—or a portion thereof—is deposited into a special VAT account, with use restricted to the payment of the tax itself.

In Brazil, Constitutional Law No. 214/2025 adopted its own structure. The standard procedure under Article 32 requires the supplier to include information in the electronic tax document that allows the transaction to be linked to the payment transaction and identifies the amounts of the IBS and CBS charges. Before making funds available to the supplier, the payment service provider or operating institution must consult the system of the IBS Management Committee and the Federal Revenue Service to determine the amounts to be segregated, taking into account the liabilities of the transaction and any amounts already settled through other methods (Brazil, 2025).

There is also a simplified procedure, provided for in Article 33, applicable—at the taxpayer's option—to transactions in which the acquirer is not an IBS and CBS taxpayer under the regular regime. In this case, the amounts to be segregated and remitted are calculated based on a pre-established percentage of the transaction value, which may vary by economic sector or taxpayer, according to a uniform methodology previously disclosed. The regulation specifies

that the simplified percentage is not necessarily related to the actual amount of taxes levied on the transaction, which may result in subsequent adjustments (Brazil, 2025).

Article 34 establishes rules relevant to this analysis. The segregation and remittance of the IBS and CBS will occur on the date of the financial settlement of the payment transaction; for transactions paid in installments, the segregation will be proportional to each installment; the early settlement of receivables does not alter the obligation to segregate and remit; and the mechanism does not relieve the taxpayer of liability for any balance due. These rules demonstrate that *split payment* can bring tax collection and payment closer together, but does not necessarily extinguish the entire debt at the same moment in all cases.

Article 35, in turn, provides for a budget for the development, implementation, operation, and maintenance of the system; simultaneous implementation in transactions with non-tax-paying acquirers for the main electronic payment instruments; gradual implementation; and the possibility of scenarios in which the adoption of *split payment* is optional. This provision is fundamental to the article's argument: if implementation is gradual and there may be optional scenarios, the elimination of the *Olivera-Tanzi* effect will also be gradual, partial, and dependent on the mechanism's effective scope of application (Brazil, 2025).

LC No. 214/2025 itself provides for an alternative for payment instruments that do not allow for segregation. Article 36 authorizes a taxpayer acquirer under the regular regime to pay the IBS and CBS levied on the transaction when payment to the supplier is made via an instrument that does not allow for segregation and collection under the standard or simplified procedures. This scenario is particularly important because it reveals that the law recognizes situations in which *split payment* will not be operationally applicable, shifting the settlement of the debt to another method.

Thus, it is possible to classify transactions into three analytical groups. The first encompasses transactions involving electronic payment, a linked tax document, system verification, and remittance upon financial settlement; in these cases, the *Olivera-Tanzi* effect tends to be eliminated or substantially mitigated. The second group involves transactions subject to a simplified procedure, installment payments, or subsequent adjustments; in these cases, the effect may be reduced but not necessarily eliminated. The third group encompasses transactions outside the *split-payment* framework, such as those subject to payment by the taxpayer, collection by the acquirer, specific liability, payment instruments without segregation, or optional scenarios; in these cases, the revenue gap may persist.

This classification avoids drawing absolute conclusions. *Split payment* should not be trea-

ted as a universal solution to the inflationary erosion of tax revenues, but rather as a mechanism for reducing the shortfall in a significant portion of transactions. The extent of this effect will depend on the effective coverage of payment methods, the quality of tax documents, the maturity of the public platform, the adoption rate among economic agents, and the speed of settlement and transfer to the relevant authorities.

There are also costs and risks. Teixeira (2022) and Peroto and Conte (2025) point out that the mechanism may affect corporate cash flow, particularly because the supplier temporarily loses access to a portion of funds that previously entered its cash flow until the payment due date. This effect is ambivalent: it improves the protection of public revenue but may impose a significant financial cost on the private sector, especially if there are delays in refunding credit balances, systemic inconsistencies, or the freezing of amounts exceeding the actual debt.

5. OLIVERA-TANZI EFFECT: INFLATION, TIME LAG, AND REAL VALUE OF REVENUE

The *Olivera-Tanzi* effect describes the loss of real value in tax revenue when inflation occurs between the time the tax liability arises and the time the tax is actually collected. The economic intuition is simple: if the government is entitled to receive a certain nominal amount but only receives it after a period of time during which prices rise, the purchasing power of the collected revenue will be lower than it would have been had the revenue been received immediately.

Olivera (1967) examined the relationship between money, prices, and fiscal lags in the context of South American inflation, noting that public expenditures tend to keep pace with rising price levels more rapidly than government revenues, which can lead to a passive fiscal deficit. Tanzi (1977), in turn, systematized the problem by demonstrating that, when inflation becomes high, revenue lags begin to have a decisive impact on the real value of public revenues.

Dornbusch and de Pablo (1990), in their study of high-inflation processes, emphasize that the *Olivera-Tanzi* effect is empirically relevant when inflation is high, tax collection lags are long, and there are no adequate indexation mechanisms. Subsequent literature has upheld this interpretation. Mihaljek (2023) notes that, although inflation can nominally increase broad tax bases, such as that of VAT, persistently high inflation combined with collection delays reduces tax revenue in real terms. The author illustrates that, with monthly inflation of 10% and a 60-day delay in VAT payments, the inflation-adjusted amount would be about 17% lower.

This phenomenon can be expressed by a simple formula. If R_n is nominal revenue, R_r is

real revenue, i is monthly inflation, and d is the time lag in days between the taxable event/assessment and the actual payment, the approximate real revenue is given by:

$$R_r = \frac{R_n}{(1+i)^{\frac{d}{30}}}$$

The real loss corresponds to the difference between nominal revenue and real revenue. The higher the inflation and the longer the payment period, the greater the erosion. If d equals zero, the loss associated with the time lag tends toward zero.

In consumption taxation, this problem is particularly relevant because transactions occur daily, while calculation and payment may be periodic. If the supplier receives payment for the transaction in January and remits the tax only weeks later, government revenue is subject to a time lag. In a moderate inflation environment, the per-unit loss may seem small; however, with broad tax bases, the sum of small losses can become fiscally significant. In a high-inflation environment, the effect becomes even more evident.

The modernization of tax collection systems changes this picture. Withholding taxes, electronic payments, electronic tax documents, assisted tax calculation, and *split payment* are mechanisms that can reduce the time lag between the economic event and the receipt of tax revenue. Contemporary literature on inflation and public finance recognizes that modern tax systems have become more flexible and technologically efficient, especially in the case of VAT, whose enforcement is facilitated by broad tax bases and digital tools (Mihaljek, 2023; OECD, 2026).

The argument of this article is that the Brazilian *split payment system* represents an institutionalized way of reducing the revenue lag. It does not combat the *Olivera-Tanzi* effect by indexing the tax or monetarily adjusting the liability, but rather by addressing the time dimension of the problem. If the real loss stems from cumulative inflation during the delay, reducing or eliminating the delay reduces or eliminates the loss. This is the core of the hypothesis of partial suppression of the effect.

However, this suppression depends on strict conditions: the segregated amount must adequately correspond to the tax due; financial settlement must occur without significant delay; the public platform must operate stably; the transfer to the IBS Management Committee and the Federal Revenue Service must be timely; and the transaction must fall within the effective scope of the *split payment system*. If any of these conditions are not met, inflationary erosion may not be fully mitigated.

6. QUANTITATIVE SIMULATION: SCENARIOS WITH AND WITHOUT SPLIT PAYMENT

To demonstrate the economic mechanism, a quantitative simulation was conducted using a hypothetical transaction of R\$ 1,000,000.00, subject to a hypothetical combined IBS/CBS tax rate of 28%. The nominal amount of tax due is, therefore, R\$ 280,000.00. , the choice of tax rate is purely for illustrative purposes and is not intended to predict the reform's final effective tax burden. The objective is to isolate the effect of the time lag and inflation on the real value of government revenue.

The simulation compares three scenarios. In Scenario A, there is no *split payment*, and the tax is paid after 60 days. In Scenario B, there is *split payment* with payment upon financial settlement, without a significant time lag. In Scenario C, the transaction is not subject to *split payment* and remains subject to payment through another method, also with a time lag. The comparison shows that the revenue gain from the mechanism stems from the elimination or reduction of the payment deadline, not from an increase in the tax rate or a broadening of the tax base.

Table 1 – Assumptions of the exploratory simulation

Variable	Assumption adopted
Transaction amount	R\$ 1.000.000,00
Hypothetical combined IBS/CBS tax rate	28%
Nominal tax due	R\$ 280.000,00
Actual revenue formula	$RR = RN / (1 + i)^{(d/30)}$
Monthly inflation rate assumed	0,5%; 1%; 2%; and 10% per month
Base lag without <i>split payment</i>	60 days
Base lag with <i>split payment</i>	0 days, due to payment upon financial settlement

Source: Author's own calculations.

Table 2 – Actual revenue loss over a 60-day lag

Monthly inflation	Actual revenue without split	Real loss without split	Loss %
0,5% per month	R\$ 277.220,86	R\$ 2.779,14	0,99%
1,0% per month	R\$ 274.482,89	R\$ 5.517,11	1,97%
2,0% per month	R\$ 269.127,26	R\$ 10.872,74	3,88%
10,0% per month	R\$ 231.404,96	R\$ 48.595,04	17,36%

Source: Author's own calculations, based on the real discounting formula used in the literature on the *Olivera-Tanzi* effect.

Table 3 – Sensitivity of real loss to 1% monthly inflation

Time lag in days	Estimated real revenue	Real loss	Loss %
0	R\$ 280.000,00	R\$ 0,00	0,00%
30	R\$ 277.227,72	R\$ 2.772,28	0,99%
60	R\$ 274.482,89	R\$ 5.517,11	1,97%
90	R\$ 271.765,24	R\$ 8.234,76	2,94%

Source: Author's own calculations.

7. ANALYSIS OF THE SIMULATION RESULTS

The simulation shows that the real loss increases in proportion to the delay period and the inflation rate. With monthly inflation of 1% and a 60-day delay, the nominal tax of R\$ 280,000.00 is equivalent, in real terms, to approximately R\$ 274,482.89 at the time of the transaction, resulting in a loss of R\$ 5,517.11. With monthly inflation of 2%, the loss rises to R\$ 10,872.74. In an extreme scenario of 10% monthly inflation—used solely to illustrate the classic logic of the *Oliveira-Tanzi* effect—the loss over 60 days reaches R\$ 48,595.04, or 17.36% of the nominal revenue.

In the *split-payment* scenario with immediate remittance, the lag considered is zero, and therefore the actual loss attributable to the delay in remittance is equal to zero. This comparison confirms the hypothesis that the mechanism can eliminate the *Olivera-Tanzi* effect in transactions where segregation and remittance actually occur at the time of financial settlement. The elimination is, in this case, economic: the government no longer bears the inflation risk between the transaction and the remittance.

The first consequence for public finances is the preservation of the real value of revenue. Instead of receiving tax revenue eroded by inflation, the tax administration begins to receive the tax portion at the time of payment. This increases financial predictability, improves cash management, and may reduce the need for subsequent correction, collection, or short-term financing mechanisms. In a federation heavily dependent on consumption-based revenues, the gain in timeliness can have budgetary significance.

The second consequence is a reduction in the risk of default. Under the traditional model, a supplier may receive payment for the transaction but fail to remit the tax on time. Under the *split payment system*, the tax portion is set aside before the full amount is made available to the supplier, reducing the opportunity for temporary or permanent misappropriation of the tax amount. This aspect brings the discussion closer to the debate on the *VAT gap*, but the article emphasizes that the same mechanism also preserves the real value of revenue in an inflationary environment.

The third consequence is a change in private cash flow. The elimination of the *Olivera-Tanzi* effect for the government may, conversely, mean the elimination of a source of temporary financing for companies, even though it is based on amounts economically associated with taxes. This change may be desirable from a fiscal perspective, but it requires caution when there is an accumulation of credits, reduced profit margins, long production cycles, or sectors that are intensive in working capital. VAT neutrality depends not only on timely collection but also on the timely refund of credits.

The fourth consequence is that the result is not universal. If the transaction falls outside the scope of *split payment*, if the payment method does not allow for segregation, if adoption is optional, or if there is a residual balance to be collected, the discrepancy may persist. Article 34 of Law No. 214/2025 explicitly states that the *split payment system* does not relieve the taxpayer of liability for any balance due, subject to the timing of the taxable event and the tax due dates (Brazil, 2025). Therefore, even in transactions covered by the mechanism, there may be balances that are not immediately settled.

The fifth consequence concerns gradual implementation. Article 35 provides that a joint resolution by the IBS Management Committee and the Federal Revenue Service will establish the gradual implementation of *split payment* and may provide for cases of optional adoption. Until the system's coverage is comprehensive and stable, the *Olivera-Tanzi* effect will remain relevant for a portion of transactions. The publication of the technical documentation for the Public *Split Payment* Platform in June 2026 indicates institutional progress, but also confirms that the effectiveness of the “ ” mechanism depends on technological development by payment agents and systemic integration (Brazil, 2026b).

Thus, the results confirm the hypothesis with some caveats. *Split payment* can eliminate the *Olivera-Tanzi* effect when it reduces the time lag to zero or to an economically irrelevant timeframe. However, the effect is not fully eliminated across the entire system, as the law retains other methods of settlement, simplified procedures, installment payments, cases where the acquirer makes the payment, and gradual implementation. The correct conclusion, therefore, is that of selective mitigation or conditional elimination.

8. LEGAL, ECONOMIC, AND INSTITUTIONAL LIMITS

Any analysis of the elimination of the *Olivera-Tanzi* effect must be accompanied by legal and economic considerations. Tax collection efficiency does not justify disregarding neutrality,

proportionality, legal certainty, credit refunds, and the protection of taxpayers' cash flow. Brazil's dual VAT system aims to reduce distortions, but the collection mechanism may create new asymmetries if implemented without proper calibration.

The first limitation is legal and operational. Provisional Law No. 214/2025 requires a link between the electronic tax document and the payment transaction. If there are documentation errors, discrepancies in registration data, communication failures, payments made via non-integrated instruments, or inconsistencies between the tax amount and the financial amount, the mechanism may collect an incorrect amount, prevent correct settlement, or necessitate subsequent adjustments. The system's success depends on the quality of the information.

The second limitation is financial. *Split payment* brings forward the outflow of the tax portion from the private cash flow. In operations with tight margins or long supply chains, this advance payment may increase the need for working capital. European literature has already pointed out that broad *split-payment* models can have significant impacts on cash flow and administrative costs (European Commission, 2017; Stolarski, 2017). In Brazil, the country's vast size, business heterogeneity, and technological inequality amplify this challenge.

The third limitation is the refund of tax credits. Article 39 of Constitutional Law No. 214/2025 establishes deadlines for reviewing refund requests, generally ranging from 30, 60, to 180 days, depending on the taxpayer's profile and the nature of the request, with rules for automatic payment in the absence of a response and for corrections in certain cases (Brazil, 2025). The effectiveness of these deadlines will be decisive. If the government collects quickly via *split payment* but is slow to refund legitimate credits, tax neutrality may be compromised.

The fourth constraint is federal in nature. The IBS will be administered by a Management Committee, while the CBS remains under federal jurisdiction. Revenue collection during financial settlement must be compatible with the timely distribution of funds to the relevant entities. Eliminating the *Olivera-Tanzi* effect for the Brazilian government, in a broad sense, will not be sufficient if there are significant internal delays between collection, calculation, offsetting, and federal transfers.

The fifth constraint is distributive. Improved tax collection in real terms can strengthen the state's fiscal capacity, but does not, by itself, guarantee distributive justice. Fiscal policy must be analyzed in terms of the interplay between revenue collection and spending. *Split payment* may preserve revenue, but its contribution to development and the reduction of inequalities will depend on the allocation of resources, the quality of spending, and the mechanisms designed to offset the regressive nature of consumption taxes.

The sixth limitation is macroeconomic. The *Olivera-Tanzi* effect is more pronounced in environments of high inflation. In low-inflation scenarios, the loss due to the lag is smaller, though not zero. This does not render the mechanism irrelevant, because preserving revenue on a broad tax base can have an aggregate impact; but it requires calibrating the approach to avoid excesses. Under normal conditions, the argument for combating fraud and tax evasion may be empirically more relevant than the inflationary argument, whereas in scenarios of higher inflation, the *Olivera-Tanzi* dimension takes center stage.

Finally, there is a methodological limitation. The simulation demonstrates the mechanism but does not measure the actual effects of the reform. To assess the aggregate impact, data would be needed on transaction volume, payment methods, actual collection deadlines, inflation, credit balances, reimbursements, offsets, delinquency, and the platform's coverage. However, this data is not yet publicly available, given the recent transition period that has begun. This article provides a theoretical and analytical foundation for future empirical research but does not replace a quantitative assessment following the system's full implementation.

9. CONCLUDING REMARKS

This article examined whether the *split payment* mechanism provided for in the Brazilian Tax Reform can mitigate or eliminate the *Olivera-Tanzi* effect on public finances. The investigation was based on the observation that the *Olivera-Tanzi* effect stems from the combination of inflation and a revenue collection lag: the longer the delay between the occurrence of the tax obligation and the actual payment, the lower the real value of the revenue received by the government.

The normative analysis demonstrated that Provisional Law No. 214/2025 established payment upon financial settlement as one of the methods for settling IBS and CBS debts. The mechanism requires a link between the electronic tax document and the payment transaction and assigns to electronic payment service providers and payment system operators the responsibility for segregating and remitting the amounts due on the date of financial settlement. This design reduces the time lag and, therefore, is capable of preserving the real value of tax revenue.

The exploratory simulation confirmed the central hypothesis under certain conditions. For a transaction of R\$ 1,000,000.00, with a nominal tax of R\$ 280,000.00, monthly inflation of 1%, and a 60-day delay, the estimated real loss is R\$ 5,517.11. With monthly inflation of 10%, the loss reaches R\$ 48,595.04. In the scenario of immediate payment via *split payment*, this loss due to the time lag is eliminated. Therefore, in transactions actually covered by the mechanism, the

elimination of the *Olivera-Tanzi* effect is theoretically plausible.

However, this conclusion cannot be generalized. The legislation itself provides for alternative methods of settling debts, a simplified procedure, payment by the acquirer using instruments that do not allow for segregation, liability for any balance due, gradual implementation, and optional scenarios. Thus, there will be transactions in which the *Olivera-Tanzi* effect can be eliminated, transactions in which it will be merely mitigated, and transactions in which it may persist.

The study's main contribution is to demonstrate that *split payment* should be understood not only as a tool for combating fraud or reducing the *VAT gap*, but also as a mechanism for the temporal management of public revenue collection. By reducing the time lag between private payments and tax revenue, it alters the government's exposure to inflation and improves cash flow predictability. This perspective brings tax reform closer to the field of public finance and updates the classic debate on inflation and tax revenues for the digital payments environment.

On the other hand, tax collection efficiency must be balanced against tax neutrality, corporate cash flow, and the timely refund of credits. If the government collects taxes in advance but delays refunding legitimate credits, financial costs may be passed on to the taxpayer, undermining the very logic of the VAT. Preserving the real value of public revenue should not come at the expense of economic cumulative effects, a disproportionate increase in working capital, or operational uncertainty.

It can therefore be concluded that *split payment* can eliminate the *Olivera-Tanzi* effect in the strict sense in transactions where payment is made in full, immediately, and correctly linked to the financial settlement. However, in the system as a whole, the most appropriate conclusion is that of selective mitigation and conditional elimination. Fiscal effectiveness will depend on the scope of the mechanism's coverage, the quality of the public platform, the integration of payment methods, the speed of transfers, the refund of credits, and the institutional capacity to implement the reform without creating new distortions.

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