@git Advances in Global Innovation & Technology

# Taxation on Consumption with Tax Reform

*A Tributação Sobre o Consumo com a Reforma Tributária*
*Tributación al Consumo con Reforma Tributaria*

**Natália Lucarelli Nunes de Farias Thomaz**[1]
natalia.thomaz@fatec.sp.gov.br

**Eli Carlos Pereira**[1]
eli.pereira@fatec.sp.gov.br

**Nathalia Santos Moreira**[1]
nathalia.moreira@fatec.sp.gov.br

**Marcelo de Paula Souza**[1]
marcelo.sousa26@fatec.sp.gov.br

**Francisco José Pereira de Carvalho**[1]
francisco.carvalho7@fatec.sp.gov.br

**1 – Faculdade de Tecnologia de Bebedouro – Fatec Bebedouro**

Recebido
*Received*
*Recibido*
**20 nov. 2024**

Aceito
*Accepted*
*Aceptado*
**20 mai. 2024**

Publicado
*Published*
*Publicado*
**28 jun. 2024**

https://git.fateczl.edu.br

e_ISSN
**2965-3339**

DOI
**10.29327/2384439.2.3-5**

**São Paulo**
**v. 2 | n. 3**
v. 2 | i. 3
**Junho**
*June*
*Junio*
**2024**



***Abstract***: *In December 2019, IPEA - Institute of Applied Economic Research presented work for the discussion on Tax Reform with number TD-Text for Discussion number 2530 where it compared the PEC - Constitutional Amendment Project 45/2019, presented in the Chamber of Deputies on 04/30/2019, and PEC 110/2019, presented in the Federal Senate on 07/09/2019. The work included discussions on the Reform that led to the approval in the Chamber of Deputies of the aforementioned PEC 45/19. The highlight of the work was VAT, dual VAT, the Regional Development Fund and, in particular, the reference rate, the percentage of which has not yet been defined. On the other hand, the Brazilian Institute of Geography and Statistics also developed and published in the period from October to December 2022, its own methodology for calculating Added Value. Regardless of the percentage of the reference rate to be approved by Congress, this work applied a VAT – Value Added Tax to carry out comparative simulations between the current tax burden and that which may be levied in the future on the consumption of goods and services, demonstrating that the accounting and tax work of companies will be simplified, however, it should not result in a significant reduction or increase in the tax burden with the advent of the Tax Reform, especially if the aforementioned VAT does not have a reference rate higher than 20%.*

***Keywords***: *Tax Reform; IVA; Tax Burden.*

**Resumo**: Em dezembro de 2019, o IPEA - Instituto de Pesquisa Econômica Aplicada apresentou trabalho para a discussão sobre a Reforma Tributária com o número TD-Texto para Discussão 2530 onde comparou a PEC – Proposta de Emenda Constitucional 45/2019, apresentada na Câmara dos Deputados em 30/04/2019, e a PEC 110/2019, enviada ao Senado Federal em 09/07/2019. O trabalho incluiu as discussões sobre a Reforma que levou a aprovação na Câmara dos Deputados da mencionadas PEC 45/19. O destaque do trabalho recaiu sobre o IVA o IVA-dual, o do Fundo de Desenvolvimento Regional e, em especial a alíquota de referência, cujo percentual ainda não foi definido. Por outro lado, o Instituto Brasileiro de Geografia e Estatística também desenvolveu e divulgou no período de outubro a dezembro de 2022, uma metodologia própria para calcular o Valor Adicionado. Independentemente do percentual da alíquota referencial a ser aprovada pelo Congresso, o presente

DOI: https://doi.org/10.29327/2384439.2.3-5
trabalho empregou um IVA – Imposto sobre o Valor Adicionado para realizar simulações comparativas entre a carga tributária atual e a que poderá vir a incidir futuramente sobre o consumo de bens, demonstrando que ocorrerá a simplificação dos trabalhos contábeis e fiscais das empresas, todavia, não implicará na redução ou elevação significativas da carga tributária com o advento da Reforma Tributária, especialmente se o mencionado IVA não tiver uma alíquota referencial superior a 20%.
**Palavras-chave**: Reforma Tributária; IVA; Carga Tributária.

***Resumen****: En diciembre de 2019, el IPEA - Instituto de Investigación Económica Aplicada presentó un documento para la discusión sobre la Reforma Tributaria con el número TD-Texto para Discusión 2530 donde comparó el PEC - Propuesta de Reforma Constitucional 45/2019, presentado en la Cámara de Diputados el 30/04/2019, y el PEC 110/2019, enviado al Senado Federal el 09/07/2019. Los trabajos incluyeron discusiones sobre la Reforma que condujeron a la aprobación en la Cámara de Diputados de la citada PEC 45/19. Los trabajos se centraron en el IVA, el doble IVA, el Fondo de Desarrollo Regional y, en particular, el tipo de referencia, cuyo porcentaje aún no se ha definido. Por otro lado, el Instituto Brasileño de Geografía y Estadística también desarrolló y lanzó en el período de octubre a diciembre de 2022, su propia metodología para calcular el Valor Agregado. Independientemente del porcentaje de la tasa de referencia a ser aprobado por el Congreso, en el presente trabajo se utilizó un IVA – Impuesto al Valor Agregado para realizar simulaciones comparativas entre la carga tributaria actual y la que se pueda aplicar en el futuro sobre el consumo de bienes, demostrando que habrá una simplificación del trabajo contable y tributario de las empresas. sin embargo, no implicará una reducción o aumento significativo de la carga tributaria con el advenimiento de la Reforma Tributaria, máxime si el citado IVA no tiene un tipo de referencia superior al 20%.*
***Palabras clave****: Reforma Tributaria; IVA; Carga fiscal.*

DOI: https://doi.org/10.29327/2384439.2.3-5

## 1. Introduction

Tax reform involves changing how the government charges or administers taxes. It must generally be done to improve tax management and generate economic or social benefits. In this sense, PEC 45/2019, being processed in the National Congress, aims to simplify taxation on consumption, which is the responsibility of the Union, states, and municipalities. The main change aims to implement a single tax, called VAT - Value Added Tax, with impactful changes to the current tax system, whose simulations developed in this work aim to demonstrate its practical effects in simplifying the work of professionals linked to the topic, such as accountants, workers in company tax departments; as well as buyers, operators in logistics processes, inventory managers and sellers due to changes that may occur in costs, profit margins and product sales prices.

### 1.1. The Difference Between Dual VAT And Single VAT

Two possibilities exist for implementing VAT – Additional Value Tax, dual and single. In the single or single VAT, the proposal is to create a single tax that would replace federal taxes such as PIS – Social Integration Program, COFINS – Contribution for the Financing of Social Security and IPI – Tax on Industrialized Products, as well as the ICMS – Tax on the Circulation of Goods which is of a state nature and the ISS – Tax on Services which is the responsibility of the municipalities. The dual VAT would be divided into IBS – Goods and Services Tax, which would absorb the ICMS and ISS. In addition to the IBS, the CBS – Contribution on Goods and Services would also appear, replacing the federal taxes IPI, PIS, and COFINS. It is assumed that VAT would have a reference rate of 20%, with IBS 8% and CBS 12%. That is, they will be the exact percentages used in the simulations in this work.

### 1.2. VAT Must Be Calculated "Out"

In the tax calculated "from the outside," the calculation basis is the net price of the product, and the value of the tax is added to this price, making the value of the tax evident to the consumer. On the other hand, the tax is calculated "inside," and the calculation base includes the tax itself. That is, it is embedded in the price of the product. Tables 1 and 2 illustrate the two ways of calculating the taxes levied on the sale.

The simulations presented in Tables 1 and 2 shows that the calculations carried out "from the outside" demonstrate that taxes on consumption are more transparent for the buyer and the final consumer. Therefore, the calculation of VAT must be carried out using the same methodology used for the IPI – Tax on Industrialized Products, as exemplified in Table 1 – "Outside" Tax Table.

DOI: https://doi.org/10.29327/2384439.2.3-5

Table 1 – Calculation of the "Extra" Tax

| | |
|---|---|
| Product Value | R$ 100,00 |
| IPI with a rate of 10% | R4 10,00 |
| Final sale price | R$ 110,00 |

Fonte: Elaborado pelos Autores

Table 2 – Calculation of the Tax "Inside"

| **Tax: ICMS** | |
|---|---|
| Sales Price | R$ 100,00 |
| ICMS with 18% tax rate included in the sales price | -R$ 18,00 |
| Stock Value | R$ 82,00 |
| **Accounting by the retailer upon purchase** | |
| C – Cash | R$ 100,00 |
| D – Stock | R$ 82,00 |
| D - ICMS to be recovered | R$ 18,00 |

Fonte: Elaborado pelos Autores

## 2. Theoretical Foundation

The theoretical foundation used in this work is based on the concepts of taxes and the modalities existing in the country. The VAT, a significant component of the tax system, will be levied on products and services. It is essentially composed of indirect taxes and not on direct taxes that affect, for example, the income and profit, as described below.

### 2.1. Concept of Taxes

According to Article 3 of the CTN – National Tax Code, the definition of tax is any compulsory pecuniary payment in currency or whose value can be expressed therein, which does not constitute a sanction for an illicit act established by law and charged through administrative activity fully linked. Article 5 of the National Tax Code also describes taxes as taxes, fees, and improvement contributions. Therefore, tribute is a genus whose species are taxes, fees, and contributions.

### 2.2. Direct and Indirect Taxes

Direct taxes, such as the IRPF - Personal Income Tax, the IRPJ - Income Tax of the Legal Entity, and the CSLL - Social Contribution on Net Profit, are those that do not have repercussions. Taxpayers bear the economic burden, which is applied in stages and according to progressive tables for the respective beneficiaries. These taxes, due in situations of income and profit, are fair and do not directly affect the costs and formation of the sales price of products and services.

Indirect taxes are those in which the tax burden is passed on to a third party, not absorbed by the generating event's creator. That is, they are included in the prices

DOI: https://doi.org/10.29327/2384439.2.3-5

of products and services, such as, for example, ICMS, PIS, COFINS, and the IPI. Indirect taxes appear when there is a legal-tax relationship established between the taxpayer and the State, in which the taxpayer pays the tax and is reimbursed by charging it to a third party through the inclusion of the tax in the price, such as, for example, the one already mentioned ICMS. Most indirect taxes are also considered multi-phase. They apply to all phases of the product's circulation, from its departure from the manufacturer to its purchase by the final consumer.

## 2.3. PÍS/PASEP

The contribution to the PIS: Social Integration Program was established through Complementary Law No. 7 of September 7, 1970, creating a required contribution to companies' gross revenue. The contribution to the Public Servants' Asset Formation Program (PASEP) was created by Complementary Law No. 8 of December 3, 1970. In Article 239, the Federal Constitution established that the resources collected would finance the insurance program—unemployment and employee benefits. According to Article 2 of Law 9,715/98, the contribution to PIS/PASEP will be calculated monthly: legal entities governed by private law and those equivalent to them under Income Tax Legislation, including public companies and companies with mixed economy and its subsidiaries; non-profit entities listed in Article 13 of Provisional Measure No. 2,037; Legal entities under domestic public law.

Law No. 9,718/98 changed the billing concept for this contribution from gross revenue from sales and services to total revenue, including all other revenue, regardless of the accounting classification method. Its original rate was 0.75% of revenue. However, Decree No. 2445/88 changed the calculation basis for companies taxed by real and presumed profit to gross operating revenue at 0.65% through monthly payment.

In Law No. 10637 of December 30, 2002, a non-cumulative law was created for companies taxed by real profit, with gross revenue as the calculation basis at 1.65% and 0.65% for companies taxed by Presumed Profit.

Therefore, PIS came into effect, coexisting in both the cumulative and non-cumulative systems, with rates of 0.65% and 1.65%, respectively, as shown in Table 3 – Incidence of PIS/PASEP.

Quadro 3 – Incidência do PIS/PASEP

| Type of Company PIS/PASEP | Incidence of PIS/PASEP |
|---|---|
| Companies taxed on Real Profit Non-cumulative | PIS/PASEP 1,65% |
| Companies taxed on Presumed Profit | PIS/PASEP revenue 0,65% |

Fonte: Adptado de OLIVEIRA, 2009, p. 315.

## 2.4. COFINS

Operationally similar to the PIS, the Social Contribution for the Financing of Social Security was established through Complementary Law No. 70 of December 30,

DOI: https://doi.org/10.29327/2384439.2.3-5

1991. The calculation basis is the revenue of companies taxed by actual or presumed profit at a rate of two percent.

Law No. 9718 of November 27, 1998, brought about a significant change in COFINS, increasing the rate from 2% to 3%. This change, similar to the one in PIS, was further developed on December 31, 2003, through Law No. 10833, which established the non-cumulative nature of COFINS for entities taxed by Real Profit at a rate of 7.6% and 3% for companies taxed by Presumed Profit. These changes had a substantial impact on companies' financial obligations.

Similar to what happened with PIS, COFINS began to coexist in both systems, the non-cumulative and the cumulative, with rates of 7.6% and 3%, respectively, adding all the complexity mentioned above.

Table 4 – Incidence of COFINS

| Type of Company | COFINS Incidence |
|---|---|
| Companies taxed by Real Profit | COFINS non-cumulative 7,6% |
| Companies taxed by Presumed | COFINS revenue 3,0% |

Source: Adapted from OLIVEIRA, 2009, p. 315

## 2.5. IPI

The IPI—Tax on Industrialized Products is regulated by Federal Decree No. 2637/98 and by Laws No. 4502/64 and 5172/66. The triggering event is the exit of the product from the industrial establishment. The calculation basis is the total invoice, the rate of which is established by TIPI (Tax Table on Industrialized Products) and calculated externally.

The Tax on Industrialized Products is a federal tax, and it's important to note that only the Union, as per Art.153, IV, of the Federal Constitution, has the power to institute it. This underscores the legality and authority of the IPI.

Decree 7212 of 06/15/2010 describes its provisions and regulates the Tax on Industrialized Products' collection, inspection, collection, and administration.

For commerce, except imports made directly by the trader, who in this case is equivalent to the local producer, the IPI becomes a cost component. Its amount must be included in the calculation of the tax cost and will not affect the sale or exit of the merchandise, as occurs with ICMS – Tax on the Circulation of Goods and Services.

The IPI-triggering event occurs at specific moments, which are crucial for understanding and compliance. These moments include:

- with customs clearance of the imported product.
- with the departure of the industrialized product from the importer's, industrialist's, trader's, or auctioneer's establishment.
- with the sale of the seized or abandoned product when it is auctioned.

Depending on the case, the taxpayers of the aforementioned tax may be the importer, the industrialist, the trader, the auctioneer, or to whomever the law equates them.

DOI: https://doi.org/10.29327/2384439.2.3-5

In an import situation, the calculation basis for the IPI is the sales price of the merchandise plus Import Tax and other required fees, such as freight and insurance. Understanding this calculation basis is key to managing the IPI in import situations.

## 2.6. ISS

The Tax on Services of Any Nature (ISS) is a municipal tax and is regulated by Decree-Law No. 406/68 and Complementary Law No. 116 of July 31, 2003, and is based on revenue from the provision of services, with rates established by the legislation of each municipality. The ISS is not a tax considered in the everyday activities of a business. It is levied on services provided by companies, legal entities, or self-employed professionals, provided that the event generating the service has yet to be under the jurisdiction of the State or the Union.

## 2.7. ICMS

The Tax on Transactions Related to the Circulation of Goods and the Provision of Interstate and Intermunicipal Transportation and Communication Services (ICMS) is regulated by Complementary Law No. 87/96 and by Decrees established by each State. Its calculation basis is the value of the transaction involving goods, including additional amounts, such as insurance and freight paid by the buyer, with a rate established by the legislation of each State. Therefore, each State of the Federation has its own RICMS – ICMS Regulation.

## 2.8. Real Income Tax Profit Regime

Income Tax calculation in Brazil follows three options: Real Profit, Presumed Profit, and Simples Nacional. The option for Real Profit, which is the most complete option, is that the taxpayer will only pay when a profit occurs. In this case, there will be a 15% Income Tax on Profit plus an additional 10% on any amount exceeding R$60,000.00 in the Quarter. The 9% CSLL rate will also be charged – Social Contribution on Net Profit, as shown in Table 5 – IRPJ and CSLL Calculation Simulation in the Quarter.

Quadro 5 – IRPJ and CSLL Calculation Simulation in the Quarter

| | |
|---|---|
| Quarterly profit before calculation of IPRJ and CSLL | R$ 500.000,00 |
| 15% IRPJ Rate (R$ 500,000.00 x 15%) | - R$ 75.000,00 |
| Additional 10% rate on amounts exceeding R$ 60,000.00 in the quarter (R$ 44,000.00 x 10%) | - R$ 44.000,00 |
| Total IRPJ in the quarter (R$ 75,000.00 + R$ 44,000.00) | - R$ 119.000,00 |
| 9% CSLL rate (R$ 500,000.00 x 9%) | - R$ 45.000,00 |
| Net Profit (R$ 500,000.00 - R$ 119,000.00 - R$ 45,000.00) | - R$ 336.000,00 |

Fonte: Elaborado pelos Autores.

DOI: https://doi.org/10.29327/2384439.2.3-5

The Real Profit Regime, a significant factor in the quarterly collection of IRPJ and CSLL, has a direct impact on the composition of the cost and the sales price due to the PIS and COFINS rates, as shown in Tables 3 and 4. Table 6 – Cost Formula for Commerce illustrates how the commercial systems of companies that operate in commerce (wholesale and retail) and that opt for the Real Profit Regime of Income Tax can be parameterized.

Table 6 – Cost to Trade Formula

| Formula for calculating the cost of goods by trade-dominant companies by real profit |
|---|
| Cost = purchase price - Discounts + IPI + Shipping + Additional Expenses - ICMS - PIS - COFINS - ICMS on additional expenses - ICMS on shipping.<br>Where:<br>PIS and COFINS on the purchase price + IPI + Freight (FOB) + Additional Expenses |

Fonte: Adaptado de Carvalho, 2011, p. 74

The formula presented in Table 6—Data for Simulating the Cost of Goods—can be used based on Table 7—Data for Simulating the Cost of Goods.

Table 7 – Data for the Simulation of the Cost of Goods

| **Data for purchases by retailers** | |
|---|---|
| Unit purchase price | R$ 100,00 |
| ICMS rate | 18% |
| IPI rate | 5% |
| PIS rate | 1,65% |
| COFINS rate | 7,6% |
| Freight is CIF, and there is no additional expense | |

Source: Prepared by the Authors.

Cost = R$ 100.00 + R$ 5.00 - R$ 18.00 - (R$ 105.00 x 1.65%) - (R$ 105.00 x 7.6%)
Cost = R$ 77.29.

Facilitating the calculation, freight was considered as CIF - “Cost, Insurance and Freight,” which occurs when the freight value is included in the sales price by the supplier and also without charging additional expenses that arise when the manufacturer charges separately for expenses such as packaging or when other expenses arise, such as customs clearance arising from imports. Considering a profit margin of 40% and taxes on sales of 27.25% represented by the sum of 18% of ICMS, 7.6% of COFINS, and 1.65% of PIS, the sales price of the same merchandise could be obtained by applying the formula described in Table 8 – Financial Pricing Formula, below.

DOI: https://doi.org/10.29327/2384439.2.3-5

Table 8 – Financial Pricing Formula

| |
|---|
| Selling Price = $\frac{Custo}{(1-\%\,TFM)\;x\;(1-\%TISV)}$ |
| Where:<br>• TFM = Tax-free margin<br>• TLS = Taxes levied on sales |

Source: Adapted from Carvalho, 2011, p. 87

Therefore, the sales price based on the cost of R$77.29 could be calculated as follows: PV = 77.29 / (1-0.4) x (1-0.2725) = R$177.07

## 2.9. Presumed Profit Regime Of Income Tax

The tax option for Presumed Profit corresponds to the taxation regime that simplifies the IRPJ and CSLL tax base calculation. It is intended for companies not required to adopt the Real Profit regime and with revenues of up to R$78 million per year. The tax base is the revenue (gross sales), regardless of whether the company made a profit or a loss in the calculation period. The IRPJ and CSLL rates are the same as those for Real Profit. However, they are applied to Presumed Profit, as shown in Table 9 – Presumed Profit Percentages.

Table 9 – Presumed Profit Percentages

| | |
|---|---|
| 8% | On the sale of goods and products |
| 1,6 | On the resale, for consumption, of petroleum-derived fuel, ethyl alcohol |
| 16% | • On the provision of transportation services, except for cargo, which is 8%;<br>• For financial institutions and similar institutions<br>• On the provision of services in general by legal entities with annual gross revenue of up to R$120,000, except hospital, transportation and regulated professions services |
| 32% | On the provision of other services |

Source: Prepared by the Authors.

Therefore, if a store (business) were to opt for the Presumed Profit and had a turnover of, for example, R$3,541,400.00, the calculation basis would be R$283,312.00 (R$3,541,400 x 8%). Thus, the calculation of the IRPJ for the month would be as follows:

- 15% on R$283,312.00 = R$42,496.80
- An additional 10% on anything over R$20,000.00 for the month = R$26,331.20
- Total IRPJ to be collected = R$68,828.00.

It is worth noting that the IRPJ collection for the Presumed Profit is also

DOI: https://doi.org/10.29327/2384439.2.3-5

quarterly. The rates are 15% plus an additional 10% on anything over R$60,000.00 in the quarter, equivalent to R$20,000.00 in the month.

Regarding CSLL – Social Contribution on Net Income, the Presumed Profit is 12% (twelve percent), or if it is already higher than the 8% percent applied to IRPJ for commerce. The CSLL rate is 9% of the presumed profit. Therefore, the following calculation is obtained:

- Revenue of R$3,541,499.00 x 12% = R$425,968.00.
- The amount of CSLL to be collected will be:
- R$424,968.00 x 9% = R$38,247.12.

Obtaining the cost of a product can be done using the formula in Table 10—Cost Formula in Presumed Profit.

Table 10 – Cost Formula in Presumed Profit

| |
|---|
| Cost = Purchase Price - Discounts - IPI + Freight + Additional Expenses - ICMS on freight. |
| Where: There are no PIS and COFINS credits in the Presumed Profit Regime |

Source: Adapted from Carvalho, 2011, p. 74

Using the information contained in Table 6 – Data for the Simulation of the Cost of Goods, the following value for the cost is obtained:

Cost = R$ 100.00 + R$ 5.00 - R$ 18.00 = R$ 87.00.

To calculate the sales price, the formula presented in Table 8—Financial Pricing Formula can be used, allowing the value of R$186.07 to be obtained, as shown below.

PV = R$ 87.00 / (1-0.4) x (1-0.2165) = R$ 186.07.

Taxes levied on sales are 21.65% and result from ICMS of 18%, PIS of 0.65%, and COFINS of 3%, as shown in Tables 3 and 4 of this work.

## 3. Materials and Methods

This work was developed based on a bibliographic survey of the subject, including books, articles, websites, magazines, and academic publications, which deal with Tax Legislation and Tax Reform that is being discussed in the National Congress and will affect the tax burden on consumption. It can also be considered an explanatory study as it attempts to connect ideas to explain a given phenomenon, that is, what leads to the proposals for changes in the Brazilian tax dynamics. On the other hand, it can also be exploratory in that it examines the occurrence of accounting issues in the formation of costs and sales prices of products through the simulations carried out in Chapter 4 and the impacts that may be addressed in future work.

DOI: https://doi.org/10.29327/2384439.2.3-5

## 4. Results and Discussion

The research and simulations involving the Tax Reform being discussed in the National Congress aim to evaluate the probable impacts that the changes may have on the costs and sales prices of products, as well as the entire volume of the tax burden of indirect taxes. The simulations considered the dual VAT with reference rates of 20% distributed in the IBS of 8% and in the CBS of 12%. The results verified are listed below and are accompanied by the respective analyses.

### 4.1. Diferenças no Cálculo do Custo

In calculating the cost under current legislation and after the implementation of the Tax Reform and under the Real Profit regime, the following data were used:

- Purchase Price = R$ 100.00.
- IPI rate = 10%.
- Unit freight = R$ 6.00.
- Additional expenses per unit = R$ 7.00.
- PIS rate = 1.65%.
- COFINS rate = 7.6%.
- ICMSA rate = 18%.

Through Table 11 – Cost Simulations Currently and After the Tax Reform described below, it is possible to note the differences that may occur in calculating the cost of a product, which may suggest an apparent increase in the tax burden.

Table 11 – Cost Simulation Currently and After the Tax Reform

| Current Systematics | | | Systematic after the Tax Reform | | |
|---|---|---|---|---|---|
| | BRL | Tax Credits | | BRL | Tax Credits |
| Net purchase price | 100,00 | | Net purchase price | 100,00 | |
| IPI rate of 10% | 10,00 | | CBS rate of 12% | 12,00 | 12,00 |
| Unit freight | 6,00 | 0,72 | IBS rate of 8% | 8,00 | 8,00 |
| | | | Total on Purchase | 120,00 | |
| ICMS rate of 18% | 18,00 | 18,00 | Ancillary Expenses of R$ 7.00 with CBS credit of 12% | 7,00 | 0,84 |
| Additional expenses with ICMS credit 18% | 7,00 | 0,49 | Ancillary Expenses of R$ 7.00 with IBS credit of 12% | | 0,56 |
| PIS credit of 1,65 | 2,03 | 2,03 | Freight Expenses (FOB) of R$ 6.00 with CBS credit of 12% | 6,00 | 0,72 |

DOI: https://doi.org/10.29327/2384439.2.3-5

| | | | | | |
|---|---|---|---|---|---|
| COFINS credit of 7,6% | 9,35 | 9,35 | Freight Expenses (FOB) of R$ 6.00 with CBS credit of 12% | | 0,48 |
| Cost = 100 + 10 + 6 + 7 - 18 - 0,72 - 0,49 - 2,03 - 9,35 | | | Cost = 120 + 7 + 6 – 12 – 8 – 0,84 – 0,56 – 0,72 – 0,48 | | |
| Cost | 92,41 | | Cost | 110,40 | |

Source: Prepared by the Authors.

Table 11: Cost Simulations Currently and After-Tax Reform shows that if the current system is adopted to calculate the cost of a product, the value obtained is R$91.41. After the advent of Tax Reform and with a reference rate of 20% for VAT, the cost is R$110.40. In other words, the new value will be approximately 21% higher. However, since tax credits will remain throughout the chain, it will be necessary to monitor how sales prices change, especially for the end consumer.

## 4.2. Calculation of Sale Price and Tax Burden within the Current System

The formation of the sales price with a suggested profit margin of 40% and the tax burden resulting from this sale are presented in Table 12 – Current Cost Simulation below.

Table 12 – Current Cost Simulation

| | |
|---|---|
| PV | $\dfrac{92{,}41}{(1-0{,}4)\times(1-27{,}25\%)} = 211{,}71$ |
| ICMS | 18,00% |
| PIS | 1,65% |
| COFINS | 7,6% |
| Preço de Venda | R$ 211,71 |
| ICMS on the sale | R$ 38,11 |
| PIS on the sale | R$ 3,49 |
| COFINS on the sale | R$ 16,09 |
| Total on the sale | R$ 57,69 |
| **Tribute to be collected** | |
| ICMS | R$ 18,90 |
| PIS | R$ 1,46 |
| COFINS | R$ 6,74 |
| Total to be collected | R$ 27,10 |

Source: Prepared by the Authors.

Through the preparation of the calculations contained in Table 12 – Current Cost Simulations, it is possible to show that the effective tax burden of Indirect Taxes for a retail company, without taking into account Direct Taxes (IRPJ and CSLL),

DOI: https://doi.org/10.29327/2384439.2.3-5

amounts to an amount of R$ 27.10, representing 12.8% of revenue (R$ 27.10 / R$ 211.71 = 0.128).

### 4.3. Calculation Of Sale Price After The Advent Of The Tax Reform

With the advent of tax reform, the formation of sales prices with a suggested profit margin of 40% and the tax burden resulting from these sales are presented in Table 13 – Simulation of Sales Price after Tax Reform, prepared below.

Table 13—Simulation of Sales Price after Tax Reform shows that the cost and sales price may increase after the advent of the proposed reform; however, the tax burden of indirect taxes based on CBS and IBS is lower due to companies' better use of tax credits, as recorded in Table 14—Taxes to be Collected for Commerce below.

Table 13 – Simulation of Sales Price after the Tax Reform

| **To calculate the selling price** | |
|---|---|
| Cost | R$ 110,40 |
| Sales Taxes: CBS of 9% and IBS of 12% | 20% |
| Profit margin | 40% |
| Sale price | $\frac{110{,}40}{(1-0{,}4)\times(1-0{,}2)} = R\$\ 230{,}00$ |
| CBS on the sale | R$ 27,60 |
| IBS on the sale | R$ 18,40 |
| Total | R$ 46,00 |
| **To calculate the taxes to be received** | |
| CBS on the sale (12%) | R$ 17,43 |
| IBS on the sale (8%) | R$ 9,36 |
| Total | R$ 26,79 |

Source: Prepared by the Authors.

Table 14 – Taxes to be collected by Trade

| In Commerce/Retail | |
|---|---|
| Current | R$ 27,10 |
| Future | R$ 26,79 |

Source: Prepared by the Authors.

The simulations prepared and valid for the Real Profit Income Tax Regime demonstrate that, in addition to simplifying accounting and tax operations, a slight reduction in the tax burden may occur. Adjustments are sufficient to avoid raising prices for end consumers and convey the idea that the proposed Tax

DOI: https://doi.org/10.29327/2384439.2.3-5

Reform has caused them losses in terms of purchasing power. It is essential to highlight that this will apply if the VAT reference rate is not higher than 20%.

### 4.4. Effects On Sales Costs And Prices In The Presumed Profit Regime And In The Simple Nacional

In the case of the tax option for the Presumed Profit, the same criteria as for the Real Profit can be used since there is already a differentiation of direct taxes (IRPJ and CSLL), requiring only adjustments. Considering that the tax base is revenue (gross sales), other adaptations also remain for companies opting for the Simples Nacional.

## 5. Conclusion

Through the simulations performed in Chapter 4 – Results and Discussion and the theoretical framework presented in Chapter 2, it is clear that the Tax Reform, if implemented without a large number of exceptions and differences in assessment criteria, could simplify the work of Accounting Departments, Tax Areas, Inspection Agents, and other professionals working on the subject. It will also reduce operational and administrative expenses for companies and bring greater transparency to consumers, given that there may be only one reference rate for VAT, even if it is dual VAT.

The PEC that is still being processed in the National Congress has not defined the reference rate, that is, whether it will be 20%, 25%, or even higher, nor has it detailed how it could be put into practice under the Presumed Profit and Simples Nacional regimes. Regarding the start of the implementation of the Tax Reform, even if it is gradual and starts in 2026, it will allow for an adequate period of adaptation for companies and accounting firms.

Therefore, the Tax Reform promises to bring great collaboration to companies and the Brazilian economy.

## Referências

CARVALHO, F. J. **Os efeitos dos tributos indiretos sobre os materiais para a construção civil**. 2011. 109 f. Dissertação (Mestrado em Ciências Cont. Atuariais) - Pontifícia Universidade Católica de São Paulo, São Paulo, 2011.

CONJUR – CONSULTOR JURIDICO. Disponível em https://www.conjur.com.br/2019-jul-18/sergio-rocha-justica-entre-pilares-reforma-tributaria-ideal. Acesso em: 09. outt. 2023.

CONSELHO FEDERAL DE CONTABILIDADE. Disponível em https://cfc.org.br/tecnica/normas-brasileiras-de-contabilidade/nbc-ta-de-auditoria-independente/. Acesso em: 10. out. 2023.

IBGE – INSTITUO BRASILEIRO DE GEOGRAFIA E ESTATISTICA; Disponível em https://biblioteca.ibge.gov.br/index.php/biblioteca-catalogo?id=26907&view=detalhes. Acesso em: 23.out.2023

DOI: https://doi.org/10.29327/2384439.2.3-5

IPEA – FUNDAÇÃO INSTITUO DE PESQUISA ECONOMICA APLICADA. Ddisponível em https://portalantigo.ipea.gov.br/agencia/index.php?option=com_content&view=article&id=35279&Itemid=444 .

OLIVEIRA, L.M. et al. **Manual de contabilidade tributária**. 14ª ed. São Paulo: Atlas, 2009.