Value Added Tax (VAT) and Retail Sales Tax (RST): A Comparative Analysis on the Two Tax Methodologies in the U.S.

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Resumo:

O artigo aponta as diferenças entre o imposto sobre o valor agregado (IVA) e o imposto sobre vendas no varejo (IVV), considerando a possibilidade da adoção de um imposto sobre o consume na esfera federal nos Estados Unidos da América (EUA), e suas repercussões nacionais e internacionais. Tanto o IVA quando o IVV são tributos indiretos sobre o consumo, que podem ser cobrados de diversas maneiras com diferentes conseqüências legais e econômicas.

Primeiramente o artigo distingue as diferenças entre imposto sobre a renda e imposto sobre o consumo considerando os seus aspectos mais importantes (cobrança, lançamento, origem ou destino, tributação de serviços, alíquota zero, imposição federal, estadual ou local, aspectos e auditagem e cumprimento da legislação). O artigo então discute esses aspectos para fazer uma análise das vantagens e desvantagens do IVA e do IVV, assumindo a possibilidade de implementação de tributação indireta sobre o consumo nos EUA. Ao final, o artigo conclui que a melhor opção é o IVA, e mesmo que o IVA não vá substituir o imposto sobre a renda ou outro imposto qualquer, o IVA deveria ser implementado deforma a aumentar a eficiência do sistema tributário por permitir que o Governo simplifique as outras formas de tributação (e também diminuendo as alíquotas) Empregando mais modalidades tributárias, o Governo pode simplificar cada tipo de tributo individualmente.

Palavras-chaves: Imposto sobre valor agregado. OVA. Imposto sobre vendas no varejo. Reforma tributária. Simplificação do sistema tributária. Tributação e federalismo.

Abstract

The paper points out the principal features of the value added tax (VAT) and the retail sales tax (RST), considering the possibility of adopting a consumption tax at the federal level in he US, and its internal and international repercussion. Both the VAT and RST are indirect taxes on consumption, and can be levied in a variety of manners, with different legal and economic consequences.

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The text first makes a necessary distinction between income tax, consumption tax, direct and indirect taxation. Further, it addresses both VAT and RST, considering their most important aspects (assessment, levying methods: destination or origin problem, services taxation, “zero rate”, federal, state or local imposition, audit, and compliance). The paper discusses these subjects in order to make a comparison between the advantages and disadvantages of the VAT and RST, considering the implementation of federal indirect consumption tax in the U.S. Finally, the paper comes to the conclusion that VAT is the best option, and that even though VAT will not substitute income tax or other, it should be implemented, improving the tax system efficiency by allowing Government to simplify other taxes (also decreasing tax rates). By employing more tax forms Government can easier simplify each tax form *per se*.

Keywords: Value added tax. VAT. Retail sales tax. RST. Tax Reform. Simplification of the Tax System. Taxation and federalism.

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I. INTRODUCTION

Considering the ongoing and continuous process of proposing tax reforms in the U.S., and the possibility of adopting a consumption tax at the federal level, which can be either a value added tax (VAT) or a retail sales tax (RST).[1] The purpose of this paper is to point out the principal aspects of the VAT and RST, and the distinctions between them.

Both the VAT and RST are indirect taxes on consumption,[2] and can be levied in a variety of manners. For example, they can be applied on a narrow basis (goods) or a broad basis (services and goods). However, they are different in respect to the methodology of imposition. This difference will provoke distinct effects within the economic environment and will reflect differently in other features, like tax exemptions, tax evasion, tax compliance, and tax administration. Regarding the simpler structure of the RST, the text will be more detailed when addressing VAT.

This paper will discuss these subjects and finally make a comparison between the advantages and disadvantages of the VAT and RST, considering the case for implementation of a federal indirect consumption tax in the U.S.

I.A. Necessary Distinction Between Income Tax, Consumption Tax, Direct and Indirect Taxation

This distinction is necessary because common sense says "consumption tax" is levied when an individual (or an enterprise) buys something (candies, clothes,

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[1] Almost five years ago Peggy B. Musgrave asserted: "In the United States and elsewhere, much interest has developed in the use of broad-based consumption taxes as alternatives to the traditional comprehensive income taxes (both corporate and individual). This interest has spread from academia into the political arena, and a number of such plans are likely to be given serious consideration by legislative leaders in the future." Peggy B. Musgrave, *Consumption Tax Proposals in an International Setting*, 54 Tax L. Rev. 77, 77 (2000). Indeed, the subject remains in the agenda. *See* Stewart Karlinsky & Hughlene Burton, *America's Inexorable Move to a Consumption-Based Tax System, or Why Warren Buffett Is Winning The Class Tax War*, 2004 TNT 212-26 (showing a current strong movement toward a broad federal consumption tax, which was part of the 2004 presidential election's agenda, and includes also radical proposals, such as extinguishing the IRS).

[2] *See* infra Section I.A.

equipments, cars etc), or pays for a service (haircut, car repair, equipment repair etc).[3] But this is not true.

Income tax is levied on all income and gain, and allows deductions representative of certain consumption items (i.e., tends to exclude consumption, becoming similar to a "savings" or "net profit" tax). The terminology "consumption tax", under an economic approach, means taxation on earnings that are not saved.[4] In other words, how much a taxpayer consumes depends on both taxpayer's earnings and savings. It does not matter when the "consumption" occurs (if it is not saved, then it is expenditure). It is the same to say that consumption equals income minus savings.[5] In this sense, tax on wages,[6] when all the wages of the employees are spent, becomes a consumption tax.

Consumption tax can be levied in two forms. The basic difference between these two forms is that they may be collected from the consumer or from the provider (of goods and services). The former is called direct consumption tax and the latter indirect consumption tax.[7] Under a direct consumption tax, the burden falls on the consumer, who will also pay the tax. Under an indirect consumption tax, the taxpayer is the provider, who does not assume the fiscal burden shifted to the consumer (the real taxpayer).[8] Thus, both RST and VAT are indirect tax.

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[3] About the different aspects between consumption tax and income taxation *see* generally BORIS I. BITTKER & LAWRENCE LOKKEN, FEDERAL TAXATION OF INCOME ESTATES & GIFTS ¶ 3.7 (2002), that also brings a huge list of references to the issue. Only the aspects that are important to compare the VAT and RST systems of consumption tax are addressed in this subsection.

[4] It can also be affirmed also that "The major difference between the consumption and income models is that a consumption tax does not distort the choice between current and future consumption (that is, saving); in other words, it is intertemporally efficient." ECONOMIC REPORT OF THE PRESIDENT, 208 (Transmitted to the Congress February 2003) (hereinafter ECONOMIC REPORT 2003).

[5] *See* ECONOMIC REPORT 2003, 181, 184-190. *See* also, ROBERT E. HALL & ALVIN RABUSHKA, THE FLAT TAX 40 (2 ed. 1995).

[6] This sometimes is named "income tax".

[7] *See* ALAN SCHENK & OLIVER OLDMAN. VALUE ADDED TAX: A COMPARATIVE APPROACH IN THEORY AND PRACTICE 7-18, 65-69 (2001).

[8] For a general distinction on direct and indirect taxes, and the relevance of such distinction, see RICHARD W. LINDHOLM, VALUE-ADDED TAX AND OTHER TAX REFORMS 28-30 (1976). The author stressed the legal importance of the distinction on constitutional grounds. *Id*. at 28. Indeed, some models for tax reform may face fundamental constitutional problems for implementation (that is not the case for the VAT and the RST). *See* Erik M. Jensen, *The Apportionment of "Direct Taxes": Are Consumption Taxes Constitutional?*, 97 COLUM. L. REV. 2334 (1997), *but see* Lawrence Zelenak,

VAT and RST are, in their essence, consumption taxes, because they are usually assessed at the moment of consumption.[9] The seller of goods or services is the taxpayer but the consumer bears the cost. Under a VAT or RST system, the final outcome, regarding revenue, is the same.[10]

The assumption here is that VAT will be levied throughout the entire production-consumption chain, considering that models which levy sales tax only at production and wholesale levels (preretail taxes) are not feasible to the U.S.[11]

I.B The Importance of the Issue and Important General Aspects

In the United States, the discussions about Tax Reform[12] considered consumption tax substituting income tax or payroll tax. This is very complex debate. Both VAT and RST are taxes on consumption and it is appropriate to make a comparative analysis.

The importance of the issue also can be perceived by the fact that most of the countries in the world have adopted VAT.[13] It is also difficult to find a country that

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Radical Tax Reform, the Constitution, and the Conscientious Legislator, 99 COLUM. L. REV. 833 (1999).

[9] However, according to John K. McNulty "it is an "income-type" VAT if it requires capitalization and amortization of such costs [expensing of capital assets]". *See* John K. McNulty, *Flat Tax, Consumption Tax, Consumption-Type Income Tax Proposals in the United States: A Tax Policy Discussion of Fundamental Tax Reform*, 88 CAL. L. REV. 2095, 2114 (2000).

[10] *See* BITTKER & LOKKEN, *supra* note 3, at ¶ 3.7 item 2.

[11] "Exclusion of the retail stage from a national sales tax, though sometimes necessary in a developing country for administrative reasons, would be unnecessary and a serious mistake in a developed country such as the United States. First, it would create substantial economic distortions. Industries in which a high proportion of value is added at the retail stage would be favored over other in which relatively more value is added at earlier stages. . . . Goods characterized by high retail margins would also be given a tax advantage. . . . Normal business decisions would also be distorted by such a tax. The natural tendency would be to shift as much value added as possible to stages not covered by preretail tax." *See* CHARLES E. MCLURE JR., THE VALUE-ADDED TAX: KEY TO DEFICIT REDUCTION? 107 (1987).

[12] There is a lot of material about tax reform, opinions, proposals (Sales Tax, VAT, Flat Tax, X-Tax, etc), etc. For an overview *see*, *inter alia*, ECONOMIC REPORT 2003, 175-211; John K. McNulty, *supra* note 9; David Bruce Spizer, *The Value Added Tax and Other Proposed Tax Reforms: A Critical Assessment*, 54 TUL. L. REV. 194 (1979); http://www.treas.gov/offices/tax-policy; http://www.cato.org/current/fiscal-policy/index.html; and http://www. taxreform.com. *See also supra* note 1.

[13] *See* LIAM EBRILL *AT EL*., THE MODERN VAT 2 (2001). Where one can read: "Today it [VAT] is a key source of government revenue in over 120 countries. About 4 billion people (70

does not have RST, or did not previously have it.[14] The current trend to form "common markets" or "free trade areas" (e.g., NAFTA, FTAA, MERCOSUL, and EU)[15] brings the necessity of harmonization of the tax systems. Globalization (the development of international trade) implies the interpenetration of economies and brings more problems if the tax systems of the countries involved are not harmonized.[16]

Regardless which system to be adopted as indirect consumption tax–either RST or VAT–, local and state tax systems (heavily based on sales tax) will be affected. Furthermore, increased prices, and the final tax rate (combination of federal, state and local tax rate) for certain products may affect consumption, and ultimately affect state and local policies.[17]

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percent of the world's population) now live in countries with a VAT, and it raises about $18 trillion in tax revenue—roughly one-quarter of all government revenue. Much of the spread of the VAT, moreover, has taken place over the last ten years. From having been largely the preserve of more developed economies in Europe and Latin America, it has become a pivotal component of the tax systems of both developing and transition economies." *Id*, at 2.

[14] *See* SCHENK & OLDMAN, *supra* note 7, at 26-27.

[15] European Union (EU) is more than a free trade market, it is an economic and political union. But the assumption is still valid. At the early stages, EU had to promote tax harmonization and it is not yet concluded, but is a long process.

[16] *See* GEN. DEP'T OF TREASURY, EXPLANATIONS OF THE ADMINISTRATION'S FISCAL YEAR 2004 REVENUE PROPOSALS 147-148 (February 2003), available at http://www.treas.gov/offices/tax-policy/library/bluebk03.pdf (last visited Oct. 24, 2004); GEN. DEP'T OF TREASURY, EXPLANATIONS OF THE ADMINISTRATION'S FISCAL YEAR 2004 REVENUE PROPOSALS 187-189 (February 2004), available at http://www.treas.gov/offices/tax-policy/library/bluebk04.pdf (last visited Oct. 24, 2004); *see also* Jack M. Mintz, *National Tax Policy and Global Competition* 26 Brooklyn J. Int'l 1285 (2001); Jane L. Seigendall, *A Framework on Consumption Taxes and Their Impact on International Trade*, 18 DICK. J. INT'L L. 575 (2000), and *infra* Section IV.B.

[17] *See* Douglas Holtz-Eakin, *Consumption-Based Tax Reform and The State-Local Sector: A Study for The American Tax Policy Institute*, 13 AM. J. TAX POL'Y 115 (1996) (considering how state and local governments in the U.S., will be affected by a consumption-based tax reform, which includes RST and VAT). Addressing how states' tax systems would be affected if income tax were replaced by a consumption tax, the author stated: "Administering either a personal income tax or a business income tax at the state level would be substantially more difficult in the absence of a federal income tax system. States benefit from federal-level reporting of income and expenses, federal audits, and other aspects of federal level compliance as inputs to the state-level tax system. It would be costly (and socially inefficient) for each state to individually replicate this infrastructure. Moreover, to the extent that states do so in a non-uniform fashion, individual and business taxpayers will likely face an increase in the compliance cost and complexity of state level tax systems. In the extreme, the current infrastructure is unlikely to be sufficient to implement a national sales tax or VAT-based tax at the state level." *Id*., at 129.

II. THE RETAIL SALES TAX (RST)

Sales tax, generally speaking, is primarily tax on consumption, i.e., it is not specific. Considering that both goods and services represent consumption, both may be taxed. But, retail sales tax commonly does not tax services, due to some particular aspects.[18]

Two main systems of sales tax are possible:

a) Single-stage levies (referring to stage of production or distribution); and

b) Multiple-stage levies.[19]

The single stage levy is divided into three sub systems:

a. At the manufacturer's level;
b. At the wholesale level (a wholesale tax); and
c. At the retail level (retail sales tax: RST).

In this paper, the focus is on retail tax, but is important to point that there are other ways to levy sales tax. If one thinks about expanding the RST scope, it must be remembered that it may be applied to all stages (manufacturing-wholesale-retail).[20] However, this kind of sales tax would have the highly undesirable result of industry verticalization (due to the cascading effect), thus becoming unfeasible. For this reason it will not be addressed here.

Retails sales tax, at the federal level, has been considered a viable alternative for a long time,[21] despite the fact that preference to VAT increased in recent years. Considering state and local levels, forty-five states and the District of Columbia, and thousands of local administrations impose RST. Implementation of RST at the federal level will have an impact on both state and local RST.[22] However, it is feasible to

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[18] *See infra* Subsection II.B.3.

[19] The multiple-stage tax may be a cascade system or a non-cumulative system. The latter is also named VAT, which will be addressed below. *See* Section III *infra*.

[20] *See* CHARLES E. MCLURE JR., *The Value-added Tax…supra* note 11, at 107.

[21] *See, e.g.,* ALAN A. TAIT, VALUE ADDED TAX: INTERNATIONAL PRACTICE AND PROBLEMS 162-4 (1988); and CHARLES E. MCLURE JR., *The Value-added Tax…supra* note 11, at 152-7.

[22] Nevertheless, it may be affected by the implementation of a national RST. *See* Douglas Holtz-Eakin, *supra* note 17.

have both federal and state, and even local RST at the same time[23]–of course, coordination between tax administrations is needed.[24]

II.A. Levy Methods

If one assumes that wholesalers and manufacturers may also sell directly to private consumers, RST is levied, or should be levied, on all enterprises that deal directly with private consumers (i.e., retailers, wholesalers and manufacturers).

The RST basis is the sale price at the retail level. In general, the tax burden can be exactly calculated in this system. It does not discriminate between different forms of distribution, and does not show problems of valuation, as the wholesalers and manufacturer's sales tax may show.[25]

Generally, the RST, within the United States, is levied mostly on goods. It is not very common to tax services, although one may find RST levied on some services. Only individual states and local administrations levy RST. So one may assume that within the United States, RST is a state or local form of taxation, and it is levied primarily on the consumption of goods.

II.B. Some Aspects of RST

In spite of the RST's "simplicity", there are some troublesome aspects in this kind of tax.[26]

II.B.1. Compliance

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[23] *See* ALAN A. TAIT, *supra* note 21, at 161-171; CHARLES E. MCLURE JR., *The Value-added Tax… supra* note 11, at 152-159. For a general approach, *see* EBRILL ET AL., *supra* note 13, AT 176-196; and ALAN A. TAIT, at 155-161.

[24] "The idea of a national sales tax has been considered by governments and academics for many years. Perhaps it always will be nothing more than an idea. If enactment of national sales tax should come about, however, both the revenues and the administration of state sales taxes will be affected. The continuation of sales taxes as the chief revenue source of the states may depend upon the states' ability to accommodate their systems to the federal tax. Combined administration at the state level of both the state and federal taxes represents one possible accommodation.

Combined administration by the states of both their own retail sales taxes and a federal retail sales tax is feasible. The experience of the European Community with a value-added tax has demonstrated this."

John A. Miller, *State Administration of a National Sales Tax: A New Opportunity for Cooperative Federalism*, 9 VA. TAX REV. 243, 270 (1989).

[25] *See* BEN TERRA, *supra* note 28, at 22-24.

[26] *See id.*, at 24-25.

RST taxpayers, economically, are not the strongest within the "commerce chain". Considering that tax is passed forward to consumer, the retailer must have a reliable accounting system for tax purposes, but not all retailers are able to do this. By applying high tax rates, self-compliance of small retailers may be reduced.

II.B.2. Unavoidable Cascading Effect

Sales to non-consumers buyers should not be taxed. But the distinction between which sales are directed to consumers and which are to non-consumers is very complex to make at retail level. This should be made based on accounting. This would put a charge of complexity on the RST that is not desirable. As a result, *every* retail sale is levied by the RST. This fact turns RST into a cascading tax. In other words, it is accumulated along the "commerce chain" and may provoke economic distortion.[27]

II.B.3. Taxing Services

It is difficult to tax services. As a practical matter, it is very difficult to separate which services are bought buy individuals as private persons or as part of business activities. One may mention at least more three sources of problems for taxing services: a) difficulty of selecting services; b) the notion that taxing services would be tantamount to taxing labor; and c) a tax on service tends to be discriminatory because services are provided by one-man enterprises, some of which might escape "detection".[28]

II.B.4. Rate Issue

The rate necessary for the RST to generate sufficient revenue to fund the federal government would be highly distortionary, and also vulnerable to evasion.[29]

II.B.5. International Trade

[27] CHARLES E. MCLURE JR. proposed that, in this case, the RST should be exempt, "[o]therwise the retails sales tax will contain elements of a gross receipts tax and share its defects: investment will be penalized; discrimination will occur between various domestically produced goods and services; vertical integration will be encouraged; and accurate border adjustments (BTAs) will be impossible because of taxes paid on inputs at earlier stages and incorporated in prices. *See* CHARLES E. MCLURE JR., *The Value-added Tax… supra* note 11, at 105.

[28] BEN TERRA, SALES TAXATION: THE CASE OF VALUE ADDED TAX IN THE EUROPEAN COMMUNITY 6-8 (1988).

[29] *See* BITTKER & LOKKEN, *supra* note 3, at ¶ 3.7, footnote 16.

RST, due to its nature, is imposed on a destination basis. As a consequence, tax will be collected by the selling business. However, for imported goods and services (depending on the case), the importer (consumer) would be responsible for the tax. This collection is necessary because otherwise imports would have a comparative advantage to domestic products. However, it may difficult to collect.[30] Exports would be exempt. In general, contemporaneous economies do not levy indirect taxes on exports because it carries a disadvantage (for the exporting country in the highly competitive international trade market).[31] Nevertheless, RST cannot be completely exempted from exports.[32]

These aspects lead to the problem of border tax adjustments (BAT).[33] It is possible to implement BAT on imports, but it would be very difficult on exports (considering that, in the U.S., the RST is levied at local and state levels, it is almost impossible). If RST were a "pure RST", there would be no problem,[34] however, that doesn't happen in the real world.

Furthermore, imported products cannot be subject to tax rates in excess of the rates applied to domestic products.[35]

III. THE VALUE ADDED TAX (VAT)

Value Added Tax is an indirect consumption tax,[36] which basically is levied on the "value added" to each economic phase of the chain production-consumption. The

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[30] *See* Stephen E. Shay, *Victoria P. Summers, Selected International Aspects of Fundamental Tax Reform Proposals*, 51 U. MIAMI L. REV. 1029, 1040 (1997).

[31] Economic theory asserts that in a market with flexible exchange rates, this disadvantage would be equalized. *Id*. at 1047-8. However, international exchange rate markets are not fully flexible, because governments control it through market and money tools, also with non-traditional policies (e.g., China), and furthermore an equalization effect would only be fulfilled in the long run, but the market does not wait for anybody. *See also* Seigendall, *supra* note 16, at 593-4.

[32] *See supra* Subsection II.B.2.

[33] *See* Jane L. Seigendall, *supra* note 16, at 593-5.

[34] *See* CHARLES E. MCLURE JR., THE VALUE-ADDED…, *supra* note 11, at 19-20.

[35] The principle of national treatment or non-discrimination that governs the WTO/GATT system does not allow a country to apply higher tax rates of internal taxes (as RST and VAT) to imported products than the rate applied to domestic products. General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194, art. III (2); the Marrakesh Agreement Establishing the World Trade Organization, April 15, 1994 incorporated the general rules of the GATT into the new organization [GATT 1994]. This Article uses the term GATT/WHO to refer to such rules.

VAT system eliminates the so-called "cascading" tax[37], so there will be no incentive for vertically integrated businesses. As result of the "value added" system, the tax base is the personal consumption of individuals, as measured by the price paid for goods and services.[38] VAT is normally levied on a broad base, i.e., goods and services. Some services, however, are difficult to tax under VAT, e.g., financial services. Although some services provided by financial institutions may be taxed, e.g., box rentals and others services for which financial institutions impose fixed charges (specific fees or other charges), normally, financial services are exempted.[39] There are other sectors and items that are particularly complicated to tax under VAT.[40] The insurance sector, real state transactions, electronic commerce, telecommunications, and transportation are problematic issues.[41] These particular aspects will not be addressed here, considering the scope of this paper, but they are important issues to note.

By means of VAT, taxation may not provoke distortion in economic allocation of capital, i. e., it should be neutral.[42] There are several ways to achieve this objective, depending on how the imposition is made.

III. A Levying Methods

VAT may be calculated through different methods: addition, sales-subtraction, and credit-invoice.

Tax-inclusive price and tax-exclusive price

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[36] *See supra* Section I.A, and generally *see* BITTKER & LOKKEN, *supra* note 3, at ¶ 3.7 item 3.

[37] *See* LIAM EBRILL ET AL., *supra* note 13, at 3-7.

[38] *See* SCHENK & OLDMAN, *supra* note 7, at 28. If capital goods or depreciation is included in the tax base, the base would become the gross national product or net national product. *Id*, at 32.

[39] *See* SCHENK & OLDMAN, *supra* note 7, at 335-387.

[40] Accordingly BITTKER & LOKKEN said: "Lawmakers have found it difficult to impose a VAT on financial services, and in most countries, these services are exempted from the VAT. Scholars have also struggled with the issue." *See* BITTKER & LOKKEN, *supra* note 3, at ¶ 3.7, item 3.

[41] *See id*., at 389-432, 483-503.

[42] A tax imposition shall be neutral. Neutrality may be considered from the internal and external points of view. The internal aspects may be legal, competitive and economic. The economic neutrality means that the imposition does not distort capital allocation, i.e., "a sales tax is considered neutral if the tax does not interfere with the optimal allocation of the means of production." *See* BEN TERRA, SUPRA note 28, at 15-19.

The tax rate may be applied under two systems: **tax-inclusive price** and **tax-exclusive price**. The first means that the tax base contains the tax, and the latter means that the tax is outside its bases. For instance, if the price of a purchased good is $100, and the tax rate is 10%, in a tax-inclusive price system the consumer will pay 100, but the seller will have a $10 liability (before credit deduction). If it was a tax-exclusive price, the consumer will pay $110 ($100 + 10% tax), and the tax liability of the seller will also be $10 (before credit deduction).

III.A.1. Addition Method

The addition method taxes the sum of all economic factors of production (wages, royalties, interest, etc) and profit. The addition method can be used alternatively as an income-type of VAT, depending on how it is computed. It is not common, and only has been adopted in Michigan.[43]

Example[44] :
Wages: $500
Interest: $1000
Profit: $500[45]
Tax base: ($1500 + $1000 + $500) = $3000; tax rate = 10%, VAT (tax due) = $300

III.A.2 Sales-subtraction Method

The sales-subtraction method (subtraction method), obtains the tax base by subtracting taxable purchases of produced goods and services (including purchases of equipment and structures) from taxable sales in a tax period. This type of VAT, with slight modification, becomes very similar to income tax and has received a lot of attention in tax reform discussions.[46]

Example:[47]

Taxable receipts (in the tax period):	$8000
Taxable purchases:	$(5000)
Net value-added (tax base)	$3000
Tax rate	10%
VAT (tax due)	$300

[43] *See* SCHENK & OLDMAN, *supra* note 7, at 35-36.
[44] *Id*, at 43-44.
[45] Profit = $2000 (sales) + $6000 (rentals) – $5000 (purchase of car) – $1500 (wages) – $1000 (interest) = $500.
[46] *See* ECONOMIC REPORT 2003, 186-190.
[47] *See* SCHENK & OLDMAN, *supra* note 7, at 43-44.

III.A.3. Credit Method

The credit method is the most common for assessing Value Added Tax.[48] The credit method may be applied under two submethods: the *credit-invoice method*, and the *credit-subtraction VAT without invoices*. The methods are similar. Under the *credit-invoice method* (also known as credit-invoice or invoice VAT),[49] the taxpayer calculates the tax due within a tax period. This is the difference between the tax debit for taxable sales (the sum of the debit as stated in the invoices "output tax liability") minus the credit for taxable purchases ("input credits"). The *credit-subtraction VAT without invoices* does not use tax-invoices, i.e., the invoices do not show the tax paid for each purchase (but it may be calculated by the purchaser). In this case, the paid price falls necessarily under the tax-inclusive price system.

Example of *credit-invoice method*[50] *(assuming a 10% tax rate)*:

Receipts of taxable tax period:	$8000	tax liability:	$800
Taxable Purchases of the tax period:	$5000	tax credit:	$(500)

VAT (tax due): $300

III.A.4. The Three VAT Methods Compared

As aforementioned, the addition method is used only in Michigan, and the sales-subtraction method is not used much. The most utilized method is the credit-invoice method. Neither the addition method nor the sales-subtraction methods show an important enforcing tool of surveillance within the "trade chain". These two methods (addition method and sales-subtraction) increase the number of taxpayers (in comparison to RST), but do not have the advantage of the credit method (i.e., tax enforceability). Under these other two methods, each taxpayer is taken individually and not necessarily as part of a chain.

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[48] *See* BEN TERRA, *supra* note 28, at 34. This method presents more advantages than the other two. It is almost universally used and feasible for monthly or lesser tax periods, while the other methods are suitable for year periods. "[T]he tax credit method makes an important contribution to enforcement of the value added tax, but also can be used by taxing authorities for income purposes." *Id*, at 34.

[49] "The credit-invoice VATs in use today tax international transactions under the destination principle (imports are taxed and exports are relieved of tax) and almost universally have bases measured by personal consumption…". SCHENK & OLDMAN, *supra* note 7, at 36.

[50] *Id*, at 44.

Considering the two credit submethods: *credit-invoice* method and the *credit-subtraction* VAT *without invoice*, the first is assumed to be better than the latter because the tax accounting based in the tax invoices is more reliable. Furthermore, the *credit-subtraction* VAT *without invoice* is applied only Japan.[51]

III.B. Some aspects of VAT

Considering that VAT encompasses the entire "trade chain", some problems may arise. For instance, an exemption or a different tax rate, applied at the beginning of the commerce chain, may bring impact on the price formation along the chain. Further, this paper will address some important questions, considered by authorities on VAT. The fact that VAT presents more complexities than RST does not mean that it is worse than RST. It will be demonstrated below that VAT is more efficient and more neutral than RST.

III. B.1. Exemption and "Zero Rate"

If government grants an exemption within the commercial chain taxed under VAT, the tax burden increases (instead of decreasing) because the tax will be levied on the rest of the commerce chain (but without credit) and thus increasing the total tax burden. Unless the exemption is at the retail level, the tax burden will increase. On the other hand, if exemption is applied a "zero rate", then the tax credit of the seller would be refunded, and the total tax burden will be the same, i.e., it acts as if there was no tax relief (considering the total tax burden). Again, if the "zero rate" is applied at the retail level, there will be a tax relief.[52] J. Reugebrink said:

> The VAT is a paradox: (using the credit method) the VAT is a tax in which those who believe themselves exempt are taxed, and those who believe themselves taxed, are generally exempt. This is not valid at the retail level; a retailer who is believed exempt is nevertheless taxed, and indeed taxed, when subject to taxation. Whoever grasps the meaning of this, will not have any trouble understanding VAT.[53]

[51] Japanese Consumption Tax – CT. *See* SCHENK & OLDMAN, *supra* note 7, at 36-38.
[52] Of course, an exemption that grants the refund will have the same effect as the "zero rate".
[53] Quoted by BEN TERRA, SUPRA note 28, at 43.

The following exemplifies what happens (tax rate = 10%)[54]:

No exemption:

Commerce chain	Sales	Tax on sales	Tax Credit	Tax paid
Forester	$1000	$100	0	$100
Pulp Factory	$2100	$210	$100	$110
Paper Factory	$3100	$310	$210	$100
Wholesaler	$4100	$410	$310	$100
Retailer	$5100	$510	$410	$100
			TOTAL	**$510**

Exemption at the pulp factory level:

Commerce chain	Sales	Tax on Sales	Tax Credit	Tax paid
Forester	$1000	$100	0	$100
Pulp Factory	$2100	**Exemption**	0	**0**
Paper Factory	$3100	$310	$210	$310
Wholesaler	$4100	$410	$310	$100
Retailer	$5100	$510	$410	$100
			TOTAL	**$610**

As the tables above demonstrate, an exemption in the middle of the chain increases the tax burden instead of decreasing it, unless the exemption is at the retail level (no "recouping effect").

If it was "zero rate", instead of exemption, in the second table, the Pulp Factory would be entitled to a refund of $100,[55] and the total burden would be ($610 – $100) = $510, i.e., no effect on the total tax burden. A "true" relief occurs only if the "zero rate" is applied at the retail level.

Basically, under VAT system, exemptions and "zero rates" should be avoided, in order to preserve tax neutrality and the "cascading" problem.[56]

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[54] Adapted from BEN TERRA, *supra* note 28, at 46. Of course, this is a simplified example.

[55] The presumption is that tax law allows the credit. However, tax law may state differently–it is question of conception.

[56] "The VAT will cease to be a tax on consumption if it is not levied, and appropriately recovered, throughout the production chain. […]. In particular, if the "invoice credit" method is used–under which each trader passes to the purchaser an invoice showing the amount of tax charged–a break

III.B.2. VAT Audit

VAT promotes self-assessment. The taxpayer, who is a link in the long commerce chain, files a tax return at the tax office (or by mail), and sends his payment to the tax administration.[57] Also, VAT promotes self-enforcement because “businesses can claim a credit against their tax bill only if another business has previously paid tax on the sale”.[58] VAT auditing is more complex than RST, and VAT audits consider more elements with more taxpayers included.

Under VAT audits, some issues–like credit-invoice fraud–must be comprehensively investigated. The control of cross-border transactions also increases the costs and complicates verification parameters. Refund audits may have two focuses: the taxpayer and the internal procedures. Without going to further details, it is clear that VAT audits are complex[59] (at least more complex than RST audits).

If the country adopts both income tax and VAT, income tax liability and VAT liability can be verified by a single audit.[60] However, VAT audit has an important “by product”: it creates links between the customs service (regarding tariffs) and the internal revenue service (regarding income tax). These links integrate these activities, making them more efficient.

III.B.3 Federal, State or Local Imposition?

Imposition of the VAT in federal states may bring problems if the states or local authorities can levy it. Because of repercussions along the commerce chain, the VAT is a kind of taxation that should be imposed by the central government, i.e., the federal government (the Union, in federal states).[61] Problems that arise from trade among countries[62] will also arise from trade among states in a federal country.[63]

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in the chain will mean that part of the tax paid on intermediate inputs is not recovered, so that part of the value added in final consumption is taxed more than once.” *See* EBRILL ET AL *supra* note 13, at 18.

[57] *See* EBRILL ET AL., *supra* note 13, at 210-211.

[58] *See* ECONOMIC REPORT 2003, 186.

[59] *See* EBRILL ET AL., *supra* note 13, at 146-154.

[60] *See* BITTKER & LOKKEN, *supra* note 3, at ¶ 3.7, item 3.

[61] *See* SCHENK & OLDMAN, *supra* note 7, at 433-480.

[62] *See supra* Section III.B.2.

Additionally, a VAT model applied to the states within a federation would face the problem of interstate commerce taxation, affecting the overall federal balancing. The problem of origin and destination, i.e., where the goods or services are taxed, would induce disputes between states. The problem of physical presence related to interstate commerce, as resolved in the *National Bellas Hess, Inc. v. Illinois*[64] and *Quill Corporation v. North Dakota*[65] would arise again, stressed by an incredible and increasing amount of internet sales.[66]

If the U.S. is willing to adopt a form of VAT, it must be a federal tax. The states must be not allowed to do it. Otherwise it would be a source of unending problems. In spite of this fact that there are some models to accommodate these problems.[67] The assumption here is that the adopted VAT model is supposed to be a national tax,

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[63] *See* Walter Hellerstein, *Jurisdiction to Tax Income and Consumption in The New Economy: A Theoretical and Comparative Perspective,* 38 GA. L. REV. 1 (2003) (comparing the American RST and European VAT). In Brazil, which is a federation, the ICMS (tax on circulation of goods and services), which is the most important tax (in terms of total revenue) is a state VAT, and the problems of taxation on destination (without tax revenue at origin) or taxation at the origin (which provokes a decrease of tax revenue at destination because of tax credit) is a source of problems. Brazilian Constitution brings several dispositions to "put some order" among the states. *See* SCHENK & OLDMAN, *supra* note 7, at 455-468.

[64] *National Bellas Hess, Inc. v. Department of Revenue of the State of Illinois* 386 U.S. 753 (1967).

[65] *Quill Corporation v. North Dakota* 504 U.S. 298 (1992).

[66] *See* Todd Stanford Snyder, *Ending the Internet Tax Moratorium*, 60 J. MO. B. 66, 67-68 (2004). Regarding the problem of taxing internet sales, considering particular aspects of the VAT and the RST, *see* Charles E. McLure, Jr., *Rethinking State and Local Reliance on The Retail Sales Tax: Should We Fix the Sales Tax or Discard It?*, 2000 BYU L. REV. 77 (2000).

[67] For instance: in case of goods, would interstate commerce be taxed? If it is possible, would it be allowed tax credit? Could the tax rates for the same product be different in internal and interstate commerce? Etc, etc. In the case of services: for transportation services, where shall it be deemed to begin or finish? Would the mere transit by a state would allow the levying of the tax? Etc, etc. In the European Union, which is almost a federation, this problems, and others have been under debate for decades, in order to harmonize the VAT within the EU. For an approach to European problems *see* DAVID W. WILLIAMS, EC TAX LAW (1998); A. P. LIER (Ed.), TAX AND LEGAL ASPECTS OF EC HARMONIZATION (1993); BEN J.M. TERRA & JULIE KAJUS, INTRODUCTION TO VALUE ADDED TAX IN THE EC (1991), and BEN TERRA, *supra* note 28. For an approach to the American aspects *see* SCHENK & OLDMAN, *supra* note 7, at 468-480; ALAN A. TAIT, *supra* note 21, at 161-171; and CHARLES E. MCLURE JR., *The Value-added Tax…supra* note 11, at 152-159. For a general approach *see* EBRILL ET AL., *supra* note 13, at 176-196, ALAN A. TAIT, *supra* note 21, at 155-161. *See also* Sijbren Cnossen, *Taxation Panel: Coordination of Sales Taxes in Federal Countries and Common Markets*, 9 CONN. J. INT'L L. 741 (1994) (analyzing the interplay between RST and VTA, under the U.S./RST and EU/VAT experience).

instead of a state tax,[68] without modifying the current state and local tax systems. At least theoretically, remodeling state and local systems to better adapt a VAT system may be considered. It has been said that adopting a VAT system where there are state and local taxes (which is the case for the U.S.) may be problematic and that state RST should be encompassed by the national VAT.[69]

Considering the sovereignty of the U.S.' states (including historical formation of the American federation), it is not feasible to propose a system where all the revenues of sales tax would go first to the federal government and then to be further distributed to the states (revenue sharing).[70] There is a myriad of tax rates and tax definitions[71] applied by states and local administrations[72] for particular reasons and public policies (such as tobacco and alcohol control) which make it virtually impossible to coordinate and harmonize all of them within a tax sharing plan. For these reasons, one has to consider the federal VAT as being added to the local[73] and state taxes as the only possible way to implement a federal VAT system in the U.S.

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[68] The problems that arise from state VAT models are more crucial than the national ones because fiscal federalism will be challenged by the origin and destination dilemma, which brings several issues to discussion. Federal countries that apply the state VAT approach have to face these problems, which are stressed when the VAT is adopted as state tax (as in Brazil). *See* ALAN A. TAIT, VALUE ADDED TAX: INTERNATIONAL PRACTICE AND PROBLEMS 155-158 (1988).

[69] For a comprehensive approach to alternative solutions at federal and state levels see ALAN A. TAIT, *supra* note 21, at 161-9. The proposed model includes adoption of the VAT at state and federal levels. *Id*., at 67-69. *See also* CHARLES E. MCLURE JR., *supra* note 11, at 157. Which one may not be consider feasible given the aforementioned reasons.

[70] "A more extreme solution to the issue of intergovernmental relations would be tax sharing, under which a fraction of receipts from the federal sales tax (a VAT or retail sales tax) would be shared with the states on the basis of a formula. In return, the states would vacate the sales tax area, leaving it exclusively to the federal government. Such an approach would involve complete loss of state fiscal sovereignty in the sales tax area . . . [T]his does not seem to be an appropriate or politically viable solution to the issues of intergovernmental relations" *See* CHARLES E. MCLURE JR., *supra* note 11, at 156-7.

[71] Regarding tax basis, exemptions, etc.

[72] Around 7,500 tax jurisdictions.

[73] *But see* ALAN A. TAIT, when he affirms: "[t]he obvious solution is to abolish such minor taxes at the time the VAT is introduced and settle with local authorities to share in the VAT revenue by a formula or straight percentage. Other tax bases might be transferred to the localities (for example, property and vehicle licenses)". *See* ALAN A. TAIT, *supra* note 21, at 171.

Combination of the VAT at federal level and the RST at state level may be feasible, although it is not insulated from problems.[74]

III.B.4. The rates issue

Sometimes tax policymakers who want to make the VAT less regressive (being a regressive tax is a common attribute of consumption taxes), introduce different rates of VAT for certain products or activities. VAT with more than a single rate may introduce distortion. It can create a necessity for tax refund (sale rate lesser than input rate) or increase the costs of administration, especially if the different rates are applied to products and services at the same level of the "commerce chain". Different rates also break the neutrality of the system. Liam Ebrill et al. concluded:

> Support for setting only a single positive rate is based both in experience with the administrative and compliance difficulties associated with multiple rates and on the realization that the amount of redistribution that can be achieved through indirect taxation is inherently limited. This position is matched by in increasing tendency to VATs to be introduced with only a single rate.[75]

One may say that these problems are not present in the RST. That's not true. Different tax rates under the RST also means lack of neutrality, high costs and distortion, maybe, however, in lesser proportion than a VAT system.

III.B.5. International Trade Issues. Destination or Origin?

The "principle of country of destination" allocates tax jurisdiction to the country of consumption. Under the destination principle, a country that imports goods and services taxes those items and country that export does not tax them. [76] Under the

[74] Coordination of policies among federal, state and local government is possible and recommended. Although it is considered easier to coordinate between similar taxes, "combined administration of a federal VAT combined and a state RST is technically feasible." *See* John A. Miller, *supra* note 24, at 252. Commenting on VAT on RST levied on different levels. Charles E. McLure Jr. said it is problematic but mention that "Bird and Gendron contend that arrangements in Canada have not proven as problematic as feared. Richard M. Bird & Pierre-Pascal Gendron, Dual VATs and Cross-Border Trade: Two Problems, One Solution? 18-19 (June 1997)," quoted from Charles E. McLure, *The U.S. Debate on Consumption-Based Taxes: Implications for the Americas*, 29 U. MIAMI INTER-AM. L. REV. 143, 185 note n.131 (1998).

[75] *See* EBRILL ET AL., *supra* note 13, at 82.

[76] There will be double taxation, if a consumer in one country exports goods to a consumer in another country, both countries relying on the destination principle, if the first country fails to rebate

principle of country of origin, goods and services are taxed in the country where they are produced, regardless of the country of destination, where such goods and services will be consumed. [77]

Considering customs controls, enforcing tax legislation on goods is much easier than enforcing on services.[78] The destination principle makes imported services easier to administrate by VAT taxpayers because the importer will have credit based on the VAT that was paid at the time of importation.

As aforementioned, economic theory says that if a country taxes exports (transferring the tax burden to other country), the exchange rates will change in order to compensate the bias. At the end of the day, everything comes back to the initial level. But there is some criticism against this conclusion.[79]

In the destination principle, border tax adjustments for VAT are implemented by taxing imports and rebating exports (exports are "zero rate" taxed, and the tax

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any tax on export and the second country doesn't allow the free tax credit. *See* SCHENK & OLDMAN, *supra* note 7, at 264.

[77] *Id.*, at 262.

[78] For a discussion on cross-border aspects of the VAT and service sector *see* SCHENK & OLDMAN, *supra* note 7, at 257-298. Intangible goods are also difficult to control. As stated Walter Hellerstein: "Despite the general recognition that border controls are an effective method for enforcing collection of consumption taxes on cross-border supplies of goods, they also have their limits, particularly in the new "borderless" economy. Specifically, border controls have never been an effective method for enforcing consumption taxes on cross-border transactions involving supplies other than goods (e.g., services, digital products, and intangibles) for the simple reason that such supplies as a practical matter cannot be stopped at the border." Walter Hellerstein, *supra* note 63, at 29 (2003).

[79] "Under these circumstances, adoption of an origin-type VAT would call for a devaluation of the currency to restore the trade balance and the effects of the tax would be equivalent to a destination-type VAT without exchange rate adjustment. In practice, however, the conditions for this equivalence are unlikely to be met and use of the origin principle may lead to distortions in international trade patterns, or to burden export. For these reasons, the World Trade Organization rules call for use of the destination principle in a world in which rates of VAT are not equal. Furthermore, depreciation of the currency, while neutralizing tax effects on trade flows, also might serve to discourage capital inflow, offsetting to some degree the tax incentive to equity capital inflow caused by dropping of the income tax. Unfortunately, the trade neutrality attached to use of the destination principle comes at the cost of imposing border tax adjustments to allow for crediting of the tax on exports at the border. No fully satisfactory method has been devised to minimize this administrative cost. Nor is application of the destination principle, whether via a VAT or a retail sales tax, immune to the distortions and tax avoidance involved in cross-border shopping." Peggy B. Musgrave, see *supra* note 1, at 89. *See also* ECONOMIC REPORT 2003, 186-190; and *supra* note 31.

paid within the domestic production chain is refunded to the exporter).[80] This method is used by all countries that apply a VAT system. Actually, it is the best known feature the VAT allows to international trade.[81]

Disregarding economic theory which suggests that either destination or origin principle leads to the same economic outcome, the general rule is that countries establish the VAT under the destination principle.[82] This allows a refund to the exporter by taxing imports with VAT common tax rates and applying "zero rate" to exports. Furthermore imported products cannot be subject to VAT rates in excess of the rates applied to domestic products (principle that also applies to RST).[83]

IV. ADVANTAGES AND DISADVANTAGES BETWEEN RST AND VAT

IV.A Advantages of RST over VAT

From the taxpayers' point of view, the VAT is more complicated to collect than the RST. They need to employ special accounting practices, and retain acquisition and sales documentation for tax purposes. With RST, the taxpayers worry only about the turnover.

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[80] This is not considered prohibited subsidy, because the VAT is indirect tax. GATT/WTO rules allows indirect tax rebate on exports. *See* GATT 1994, *supra* note 35, art. XVI; Agreement on Subsidies and Countervailing Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization; Annex 1A, Multilateral Agreements on trade in Goods, 33 I.L.M. 1154 (1994). *See also* MARC BENIATH, THE LAW OF SUBSIDIES UNDER THE GATT/TWO SYSTEM 74 (2001). Regarding setbacks the U.S. faced due to prohibited subsidies related to direct tax (income tax) at the WTO, see, e.g., Stuart Smith, *Fishing For Rainbows, The FSC Repeal And Extraterritorial Income Exclusion Act*, 5 SAN DIEGO INT'L L.J. 503 (2004).

[81] Seigendall, *supra* note 16, at 593-5; CHARLES E. MCLURE JR., *The Value-added Tax…supra* note 11, at 17-20.

[82] "Despite the long-term theoretical economic equivalence of uniform origin and destination-based taxes with respect to trade flows (assuming adjustment of wages or exchange rates), adjustability versus non-adjustability has been both a source of contention between trading partners and of political palatability with respect to the introduction of certain taxes. Irrespective of economic theory, the widespread misconception that the destination-based VAT constitutes some sort of export subsidy and import protection has often been more persuasive to policy makers than have arguments concerning the long-run economic effects." Stephen E. Shay & Victoria P. Summers, *supra* note 30, at 1055.

[83] *See supra* note 35. Regarding the use of different VAT rates for different purposes, such as regulatory tax (e.g., environmental protection), it also seems to violate the GATT/WTO rules. *See* Reinhard Quick & Christian Lau, *Environmentally Motivated Tax Distinctions And WTO Law*, 6 J. INT'L ECON. L. 419 (2003) (discussing the compatibility of a reduced VAT rate for "environmentally friendly" products, as it was proposed by European Commission, and the GATT/WTO system).

The RST has a lower cost of compliance than the VAT.

From the point of view of the tax administration, the VAT is more complex to administer than the RST. Government, in order to enforce the tax law, must look into the entire production-consumption chain. Because RST is enforceable only at the end of the chain (i.e., regarding retailers), its enforceability is easier and cheaper. Under RST, the number of taxpayers is less than under VAT.

The RST audit costs of for tax administration are less than for the VAT.

To implement exemptions (or "zero rates") is easier under the RST than under the VAT because there are no recouping effects or necessary refunds.

IV.B Advantages of VAT over RST

The VAT does not stimulate economic concentration of business (verticalization) because the tax burden is distributed along the production-consumption chain. In certain circumstances, the RST may provoke this distortion because it is levied on "cascade" and is not suitable for high tax rates. It is hard to exclude the RST from affected business inputs–it is estimated that in United States, 40% of the RST revenue is from business purchases.[84]

The RST places a greater burden on retail sales than the VAT. In this case, if the tax rates are high, then tax evasion of the RST becomes higher.[85] On the other hand, as the VAT distributes the tax burden along the trade chain, tax evasion is lower. In other words, VAT may be levied with high rates, without compliance problems, considering that the taxpayer pays the tax only on the "value added" to

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[84] *See* EBRILL ET AL., *supra* note 13, at 23.

[85] It is also in accordance with the well known "Laffer curve", developed by the economist Arthur Laffer. It shows that revenues collected equal the GNP x the Tax Rate x the Compliance Rate. He demonstrated that if tax rates are very high, an increase in the tax rate, instead of increase in revenue might provoke a decrease in revenue. Other approach to the curve is that compliance rate is 100% when tax rates are zero, and 0% when tax rates are 100% (the extreme limits), and so an "optimal tax rate" lies somewhere in between 0% and 100% rates. Considering that sales tax is levied one time at the retailer sale, and that the VAT is levied within the whole production and trade chain, the "true tax rate" for each transaction under the VAT is lower than the "full" tax rate for the retailer under the RST (the VAT tax only added value to the transaction). And so, according to this rationale, assuming the same tax burden, the retailer compliance rate will be lower under the RST in comparison to the VAT.

each transaction. RST may become unfeasible at high tax rates and raise difficult administrative and compliance issues.[86]

Despite VAT accounting being more complex, the tax burden for each taxpayer within the "commerce chain" is smaller than at the retailer (the only taxpayer under RST). As a consequence, assuming the same tax burden, taxpayers have less propensity to evade under the VAT than under the RST.[87]

The VAT may be levied on a broad base, while the RST is usually levied on a narrow base, considering that it hardly covers services. This makes the RST less neutral than the VAT.[88]

The VAT promotes self-assessment and self-enforcement, which compensates the complexity of the VAT auditing.

The VAT can be levied on goods and services without distinction, while it is difficult to levy RST on services, as discussed above. In other words, the VAT applies to a broader basis of consumption than the RST.

Regarding international trade and border tax adjustments (BAT), the VAT supersedes the RTS for two basic reasons:

(1) The VAT can be eliminated from the export price (by credit allowance or refund), and the RST, whenever it is a part of the production costs, may not be separated, and thus cannot be eliminated from the export price.[89] The VAT is external neutral, while the RST is not. As a consequence, under the WTO/GATT

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[86] Some have suggested that a national retails sales tax "may become infeasible at a rate above 10 percent." *See* ECONOMIC REPORT 2003, 186.

[87] "[W]hile the RST may work well at relatively low rates, below say 5-10 percent, at higher rates it proves to vulnerable. This has certainly been widely argued by FAD: Tanzi (1955, pp. 50-51), for instance, believes that '10 percent may well be the maximum rate feasible under RST." There are of course those who argue for the superiority of the RST over the invoice-credit VAT, **including those who currently advocate it to United States**. On balance, however, the judgment appears to be expressed by Zodrow (1999): ' …although… some of the advantages of the VAT have been exaggerated by its proponents, it seems difficult to argue that the VAT is not on balance superior to the standard RST.' In any event, it is indeed notable that very few RSTs are set rates above 10 percent while few VATs are set at rates below." (emphasis added). EBRILL ET AL., *supra* note 13, at 23-24. *See also* BEN TERRA, *supra* note 28, at 149-150.

[88] "Both the 'general' character and the internal neutrality require that a sales tax is a broad based tax. Notwithstanding the many similarities between the RST and VAT, it is precisely the (more) limited coverage of services in a retail sales tax, that makes this form of taxation less attractive both from a neutrality point of view, and as viewed from the 'general' character." BEN TERRA, *supra* note 28, at 146.

[89] *See* CHARLES E. MCLURE JR., *The Value-added Tax…supra* note 11, at 39-42.

treaties, the VAT is refundable without breaching the WTO rules. On the other hand, the RST, which is incorporated to costs within the “commerce chain”, may not be calculated accurately, and as a consequence cannot be refunded; and

(2) The VAT is easily imposed on importation (as a refundable duty), while the RST presents some practical difficulties with import levied at the time of importation. By these means, national goods may be taxed (RST imposition) more than imported goods (non-RST). Under the VAT this distortion does not exist.

IV.C. RST, VAT, and Inflation

In high inflation conditions, taxation under the RST is less efficient than the VAT. Under the VAT, the tax levied and collected before the goods reach the retailer compensates for the devaluation of currency. Furthermore, the tax credits (from purchases) are devalued, but not the tax liability (due to the later in time sales). As a result, government revenue may not be affected under these conditions.[90]

V. Conclusion and Comments

One can conclude, based on the aforementioned arguments, that, in spite of its complexity, the VAT is a better way to tax consumption than the RST. However, it must be highlighted that some precautions must be taken, e.g., adopt simplified procedures for refunding, avoid the use of different tax rates, limit exemptions, etc.[91] Otherwise, the VAT may lose its efficiency due to complexity.[92]

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[90] Under high inflation periods, another aspect to consider is the Tanzi effect. The delay between assessment and collection implies a substantial loss because of the currency devaluation within its period. In this case, public revenue would be less affected under a VAT system than under RST because the distribution of tax payment throughout the “commerce chain” tends to compensate the effect.

[91] There some problems with the VAT, e.g., those related to electronic commerce and trans-border services and tax harmonization, all very important, considering the expansion of the former and that the latter is becoming the most important economic sector. The deeper discussion of these issues, in spite of being very interesting and necessary, is not within the objective of this article.

[92] “Non uniform rates and extensive exemptions destroy neutrality and affect patterns of consumption, as well as patterns of production and distribution, while greatly increasing administrative and compliance costs.” SCHENK & OLDMAN, *supra* note 7, at 28.

Most of the criticism against the VAT that appears within the debates on tax reform is not reasonable.[93] One can say that it seems inevitable the VAT will be adopted in the long run.[94]

Putting aside concerns about how much revenue the government will have from taxpayers (i.e., the fiscal burden),[95] one may be convinced that a good tax system, which balances the three goals of efficiency, neutrality and equity, is necessarily a complex system because it must impose taxation on a broad economic base. That is to say, it must tax income, must tax wealth, and must tax consumption (preferably within the economic circulation cycle, by means of the VAT, and not only at retailer level). To achieve the goal of simplicity, one must take into consideration each tax form *per se*, and not the entire system. It is the balance of the tax forms that guarantee viability of high tax burden, with reasonable tax rates and without large scale economic distortion. On the other hand, a "simplified system" would bring problems. First, very high tax rates[96] applied on a single base would raise tax evasion to very high levels.[97] Second, it would introduce distortion in economy (no efficiency) because investors would consider tax assessment and its enforceability as the first matter, for the reason that taxation would be centralized in a specific aspect of the economic phenomenon (that may be stocked wealth, income, or circulation of

[93] "Here in the United States, the problem with VAT is that we have a set of politicians who do not like the initials V-A-T. We need someone in Congress to propose a tax called the "business cash-flow tax", which will be identical to a value-added tax, but will have different initials." *See* Lawrence J. Kotlikoff, *Perspective: Consumption Taxation – The A, B, C's that Every Politician Should Know*, 48 Emory L.J. 823, 828 (1999).

[94] It is not for any other reason that the book "Value Added Tax: A Comparative Approach in Theory and Practice" (written by Professor ALAN SCHENK and Professor OLIVER OLDMAN) is dedicated to "The future payers of the VAT." *See* SCHENK & OLDMAN, *supra* note 7, at iv. BEN TERRA finishes his book with this phrase: "It is my firm belief that for most tax jurisdictions, still relying on a RST, the question is not if, but when they will introduce a VAT. Like the cold in winter, VAT is hard to keep away from." BEN TERRA *supra* note 28, at 143. However, in 1987, CHARLES E. MCLURE, JR. had already affirmed: "I've always said we're one President away from VAT." Quoted by ALAN A. TAIT, *supra* note 21, at 172.

[95] Public expenditure is the measure of public revenue. This question that directly impacts the fiscal policy, thus the taxation policy. But it is more a political matter than a fiscal one.

[96] In order to keep the same tax burden.

[97] As predicted by Laffer's Curve. It is easy to imagine what would happen if all the public revenues in the U.S. (federal, state and local) were based only on a retail tax with a tax rate of 30% (approximately the total U.S. tax burden).

wealth, i.e., consumption) using high tax rate. As always in life, and in economy and law… *in medium virtus*.

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