VAT Exemptions: Principles and Practice

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KPMG LLP's Washington National Tax Office is conducting an initiative to inform the debate over a VAT as a tax reform option in the United States. The project comprises webcasts, publications, speaking engagements, and university instruction, all designed to inform professionals, academics, and policymakers about VAT issues. Hellerstein has been engaged by KPMG to assist in this effort.

A key part of this project is Views on VAT, a yearlong series of articles in *Tax Notes* on the VAT regimes in foreign countries, comparisons of VAT and U.S. retail sales taxes, VAT administration and compliance issues, how a U.S. national VAT would theoretically be administered, and other issues related to VAT.

One of the key issues in the design of any tax is determining the tax base or what is subject to tax and what is exempt from tax. The issues raised by VAT exemptions are in many ways different and more complex than those raised by sales tax exemptions which most Americans are familiar with. This article reviews the nature and operation of exemptions in a VAT system and explores some of the issues of principle and practice related to VAT exemptions, including the types of exemptions commonly implemented in VAT regimes around the world and alternatives to exemptions.

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Exemptions raise some of the most controversial and complex issues bearing on the design and implementation of a VAT. For a reader in the United States, this controversy and complexity can be exacerbated by confusion over the very meaning of a VAT exemption. Although we have touched on the concept of VAT exemptions in previous Views on VAT articles[1] and have compared VAT exemptions to retail sales tax exemptions which U.S. readers are presumably more familiar with,[2] we thought it would nevertheless be appropriate to begin this article, which is devoted to VAT exemptions, by refreshing our recollections about the nature of VAT exemptions. We then turn to the key issues of principle and practice raised by such exemptions.

A. What Is a VAT Exemption?

To understand how an exemption functions within a VAT system, we need to start by examining the basic operation of the credit invoice VAT regime without any exemptions. To return to the simple example we employed in an earlier article,[3] let us assume that a 10 percent VAT is applied to the production and sale of notepads. We further assume that a tree farmer, who makes no purchases,[4] harvests trees and sells them to a paper mill for $100, plus a $10 VAT; the paper mill, in turn, produces paper that it sells to a printer for $150, plus a $15 VAT against which it credits the $10 VAT it paid, remitting the $5 balance to the government; the printer, in turn, binds and colors the paper, selling it to the retailer for $300 plus a $30 VAT against which it credits the $15 VAT it paid, remitting the $15 balance to the government; and the retailer sells the notepads to consumers for $500 plus a $50 VAT against which it

[1]*See* Harley Duncan and Jon Sedon, "How Different VATs Work," *Tax Notes*, Dec. 21, 2009, p. 1367, *Doc 2009-26730*, or *2009 TNT 243-3*.

[2]*See* Leah Durner and Bobby Bui, "Comparing Value Added and Retail Sales Taxes," *Tax Notes*, Feb. 22, 2010, p. 983, *Doc 2010-2923*, or *2010 TNT 35-7*.

[3]Duncan and Sedon, *supra* note 1, at 1368.

[4]This unrealistic (but harmless) assumption simply allows us to start the VAT chain with the tree farmer's sale rather than further "upstream" in the economic process (*i.e.*, suppliers who sell to the tree farmer).

Table 1. Operation of Credit Invoice VAT Without Exemptions (VAT rate = 10%)

	Purchases	Sales	Input Tax Credit	Output Tax	VAT Liability
Tree Farmer	$0	$100	$0	$10	$10
Paper Mill	$100	$150	$10	$15	$5
Printer	$150	$300	$15	$30	$15
Retailer	$300	$500	$30	$50	$20
Total					**$50**

Table 2. Operation of Credit Invoice VAT With Exemptions (VAT rate = 10%)

	Purchases	Sales	Input Tax Credit	Output Tax	VAT Liability
Tree Farmer	$0	$100	$0	$10	$10
Paper Mill	$100	$150	$0	$0	$0
Printer	$150	$300	$0	$30	$30
Retailer	$300	$500	$30	$50	$20
Total					**$60**

credits the $30 VAT it paid, remitting the $20 balance to the government. These transactions are illustrated in Table 1.

Now let us introduce an exemption into the picture. Let us assume that, for whatever reason, a tax jurisdiction has decided to exempt some suppliers or supplies from a VAT that previously applied to all suppliers and all supplies.[5] In our case, we will assume that the taxing jurisdiction has exempted paper mills from the VAT. As a consequence, paper mills will no longer be required to collect VAT on their sales, a position that, at first glance, looks like an economic benefit to the mills.[6] However, under the VAT there is a catch — or several catches.

First, when VAT professionals talk about exemptions, they typically mean ''exemption *without input tax credit*.''[7] In other words, while the paper mill may appear to enjoy an economic advantage because it can sell its output VAT-free, it also suffers an economic disadvantage because the VAT it paid on its purchases is not recoverable or creditable against the VAT it would have charged but for the exemption.[8]

Second, if the VAT is imposed on suppliers further down the economic chain, the exemption can result in a *net increase* in total VAT paid through final consumption. If we assume the same basic facts from the previous example, the tree farmer would sell the trees to the paper mill for $100, plus a $10 VAT; the paper mill would sell the paper to the printer for $150, with no VAT, and would not be entitled to an input tax credit[9]; the printer would sell the notepads to the retailer for $300 plus a $30 VAT, but would have no input tax for which it could take a credit; and the retailer would sell the notepads to consumers for $500 plus a $50 VAT against which it would credit the $30 VAT it paid, remitting the $20 balance to the government. The total VAT paid on the notepads with the exemption would thus be $60 rather than the $50 that would be collected under the VAT without exemptions, as illustrated by Table 2.

In substance, the exemption results in taxing the $100 of value added by the tree farmer twice — once when the tree farmer collects the $10 tax from the paper mill and again when the printer collects the $30 tax from the retailer, because the $300 reflects the aggregate amount of value added by all previous suppliers (including the $100 added by the tree farmer) and there is no credit for any VAT previously paid. Accordingly, a VAT exemption effectively disrupts the VAT chain and imposes a tax on business inputs.

None of the foregoing should be taken to suggest that one cannot create a VAT ''exemption'' (the way U.S.

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[5]A VAT exemption may apply either to a class of suppliers (such as small traders) or to a class of supplies (such as financial services).

[6]If one considers, for example, the position of the Internet retailer vis-à-vis the main street retailer, the benefit of not having to collect tax is self-evident, whatever may be the justification for the different treatment.

[7]*See, e.g.*, Liam Ebrill, Michael Keen, Jean-Paul Bodin, and Victoria Summers, *The Modern VAT*, IMF (2001), at 83 (emphasis added). (''An exemption occurs when output is untaxed but input tax is not recoverable.'') By contrast, when output is untaxed and input tax is recoverable, the transaction would be characterized as ''zero-rated'' or an ''exemption *with input tax credit*.''

[8]For the American mindset, this is a significant difference that needs to be understood fully. In the U.S. sales tax system, we tend to think of exemptions from the purchaser's point of view because the exempt purchaser enjoys an economic benefit and there is no adverse impact on the seller. In a VAT system,

(Footnote continued in next column.)

however, the tax professional must also appreciate the seller's point of view because the inability to recover input tax has an adverse impact on the seller.

[9]It would be more realistic to assume that the paper mill would attempt to pass on a portion of the unrecoverable VAT rather than simply absorb it all as reduction in profit. The gain in accuracy in making such an assumption is far outweighed by the complexity it would add to the example (and the illustrative table below). The basic point remains the same, however: More VAT will be paid with the exemption than without the exemption regardless of who bears its economic incidence.

Table 3. Operation of Credit Invoice VAT With Zero-Rating (or Exemption With Input Tax Credit) (VAT rate = 10%)

	Purchases	Sales	Input Tax Credit	Output Tax	VAT Liability
Tree Farmer	$0	$100	$0	$10	$10
Paper Mill	$100	$150	$10	$0	($10)
Printer	$150	$300	$0	$30	$30
Retailer	$300	$500	$30	$50	$20
Total					**$50**

Table 4. Operation of Credit Invoice VAT With Zero-Rating (or Exemption With Input Credit) of Retail Sale (VAT rate = 10%)

	Purchases	Sales	Input Tax Credit	Output Tax	VAT Liability
Tree Farmer	$0	$100	$0	$10	$10
Paper Mill	$100	$150	$10	$15	$5
Printer	$150	$300	$15	$30	$15
Retailer	$300	$500	$30	$0	($30)
Total					**$0**

readers normally think about that term) that really ''exempts'' the suppliers or supplies in question from VAT. Such an exemption would be an exemption *with input tax credit*. Another common way of describing those exemptions is to characterize the supply as zero-rated. The supply is taxable (and the supplier is thus eligible for an input tax credit for the supply) but the supply is taxable at a rate of zero, so no tax is collected on the sale. In fact, zero-rating (or exemption with input tax credit) is commonly employed in VAT systems, both in connection with cross-border transactions (exports are zero-rated to assure that the VAT is imposed only on final consumption at destination)[10] and in connection with necessities (such as food for home consumption, healthcare, and medicines) to soften the distributional consequences (that is, the regressivity) of the VAT.[11]

To illustrate the operation of a VAT exemption with input tax credit or zero-rating, let us return to the previous example. If the paper mill's supplies were exempt with input tax credit or zero-rated, the tree farmer would sell the trees to the paper mill for $100, plus a $10 VAT; the paper mill would sell the paper to the printer for $150, with no VAT, but would be entitled to an input tax credit or, assuming the mill had no taxable sales, to a refund of the $10 VAT it paid to the tree farmer; the printer would sell the notepads to the retailer for $300 plus a $30 VAT, but would not have paid any input tax for which it could take a credit; and the retailer would sell the notepads to consumers for $500 plus a $50 VAT against which it would credit the $30 VAT it paid, remitting the $20 balance to the government. The total VAT paid on the notepads with the exemption would thus be $50, exactly what it would have been under a VAT without exemptions, as illustrated by Table 3.

Two additional points should be kept in mind in thinking about the distinction between (1) VAT exemptions (as commonly understood, that is, without input tax credit), which are the primary focus of this article; and (2) exemptions with input tax credit or zero-rating. First, providing an exemption with input credit or zero-rating does not always lead to the same result as having no exemption at all. While our illustrative examples show that the result can be the same, assume, for example, that the retailer's sale (rather than the paper mill's sale) is zero-rated (perhaps because notepads are viewed as a consumer necessity). There would be no net VAT collected under a 10 percent VAT with zero-rating as compared with the $50 collected under a 10 percent VAT with no exemptions, as Table 4 reveals.

Finally, it is worth noting that if one zero-rates all sales except the final sale to a consumer under a VAT, the VAT resembles a retail sales tax with collection at only the final stage of the process,[12] as Table 5 reveals.

While exemptions with input credits represent an important alternative to exemptions without input credits, the balance of this article focuses on VAT exemptions as they are generally understood — namely, exemptions without input credits — and we use the term ''VAT exemptions'' with that understanding in mind.

B. What's Wrong With VAT Exemptions?

From a policy perspective, the short answer to this question is ''just about everything.'' As the IMF's leading

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[10] *See, e.g.*, Walter Hellerstein and Timothy H. Gillis, ''The VAT in the European Union,'' *Tax Notes*, Apr. 26, 2010, p. 461, *Doc 2010-7537*, or *2010 TNT 79-8*.

[11] *See* Ebrill et al., *supra* note 7, at 74-77 and 105-110.

[12] *Cf.* Charles E. McLure Jr., ''How to Coordinate State and Local Sales Taxes With a Federal Value Added Tax,'' in draft form, *available at* http://www.americantaxpolicyinstitute.org/pdf/VAT/McLure.pdf (forthcoming in 63 *Tax L. Rev.* ___ (2010)) (suggesting zero-rating of all sales except those to final consumers as possible alternative for implementing a VAT at the state and local level in the United States).

Table 5. Operation of Credit Invoice VAT With Zero-Rating (or Exemption With Input Tax Credit) of All Intermediate Sales (VAT rate = 10%)

	Purchases	Sales	Input Tax Credit	Output Tax	VAT Liability
Tree Farmer	$0	$100	$0	$0	$0
Paper Mill	$100	$150	$0	$0	$0
Printer	$150	$300	$0	$0	$0
Retailer	$300	$500	$0	$50	$50
Total					**$50**

text on VAT puts it, "exemptions are abhorrent to both the logic and the functioning of the VAT."[13] They undermine its economic neutrality by distorting input choices and creating an incentive to self-supply; they frustrate the destination principle by failing to remove the tax on exports systematically; they create administrative complexity by requiring differential treatment of taxable and exempt commodities and suppliers; they have uncertain revenue consequences; and they commonly lead to "exemption creep" or appeals for more exemptions.[14] We elaborate on each of these problems in turn.

1. Exemptions and economic neutrality. One of the notable features of a VAT, at least in its ideal form, is its economic neutrality. Because an ideal VAT is ultimately levied only on final consumption (even though collected in a staged process),[15] it does not distort the prices at which goods or services are exchanged between businesses.[16] This, in turn, tends to preserve "production efficiency," a Pareto-efficient condition[17] in which the economy cannot produce more of any good without producing less of some other good.

Exemptions undermine a VAT's economic neutrality in several ways, producing "economic effects that can usefully be organized in a handful of categories, now quite standard."[18]

a. Distorted input choices. The exemption of inputs in the economic process — such as the paper mill's sales in our example above[19] — eliminates the key feature of the VAT, namely, maintaining undistorted prices at which goods or services are exchanged between firms. If certain inputs are exempt from VAT, the inability to recover tax associated with those inputs will induce purchasers to seek a taxable substitute for those inputs. For example, exempting the paper mill's production of paper will not only distort the production decision of printers, perhaps inducing them to purchase taxable spunbonded polypropylene[20] for their notepads,[21] the impact of the exemption on the price of paper notepads may disadvantage those items (as compared with substitutes, for example, digital notepads). Accordingly, as *The Modern VAT* observes:

> Exemption may thus render the impact of the VAT system far more opaque, with effective rates of VAT — in the sense of the difference between the price at which goods finally sell and the value of the underlying resources used in their production — potentially differing greatly, and in nontransparent ways, from the statutory rates of VAT applied to final output.[22]

b. Incentive to self-supply. Because a trader that is producing exempt supplies is not entitled to a credit for the VAT that it pays on the goods and services it purchases, it has an incentive to produce these taxable inputs itself to avoid payment of unrecoverable VAT to others. In VAT parlance, VAT traders are said to have an incentive to vertically integrate, or "self-supply."[23] Thus, a hospital providing exempt medical services has an incentive to supply its own laundry or food services to avoid paying the unrecoverable VAT it would otherwise pay to third parties if it outsourced these services. Similarly, banks providing exempt financial services have an incentive to self-supply security services rather than hiring third-party providers of security services for which they would have to pay VAT that they could not recover.

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[13] Ebrill et al., *supra* note 7, at 100; *see also* OECD, *Consumption Tax Trends 2008* 53 (2008). ("Exemption . . . is a significant departure from the basic logic of VAT.")

[14] Ebrill et al., *supra* note 7, at 83-100; OECD, *supra* note 13, at 53-65.

[15] There remains, however, a full right to a credit for or refund of taxes imposed at the intermediate stages of the economic process.

[16] Ebrill et al., *supra* note 7, at 15.

[17] Michael Keen and Walter Hellerstein, "Interjurisdictional Issues in the Design of a VAT," in draft form *available at* http://www.americantaxpolicyinstitute.org/pdf/VAT/Hellerstein-Keen.pdf (forthcoming in 63 *Tax L. Rev.* ___ (2010)) (meaning that no tax change can be found that would make one person better off without making someone else worse off).

[18] Pierre-Pascal Gendron, "How Should the U.S. Treat Governmental Entities, Nonprofit Organizations, and Other Tax-Exempt Bodies Under a VAT?" American Tax Policy Institute, May 27, 2009, p. 12, *available at* http://americantaxpolicyinstitute.org/pdf/VAT/Gendron.pdf (forthcoming in 63 *Tax L. Rev.* ___ (2010)).

[19] *See supra* Part A.

[20] Spunbonded polypropylene is a paper substitute.

[21] Although it may seem counterintuitive to suggest that a purchaser (as distinguished from a seller, see *supra* note 8) might prefer to engage in a taxable rather than an exempt transaction, the possibility makes more sense when one considers that the purchaser of the exempt commodity may well be bearing the economic burden of a tax imposed at an earlier stage of the economic process, but will be unable to offset that economic burden against the output tax it collects, because it has not paid a "tax" on its exempt inputs.

[22] Ebrill et al., *supra* note 7, at 86.

[23] *See, e.g.*, OECD, *supra* note 13, at 64.

Table 6. Operation of Credit Invoice VAT With Exemptions and Cross-Border Transaction (VAT rate = 10%, in both country of export and import)

	Purchases	Sales	Input Tax Credit	Output Tax	VAT Liability
Tree Farmer	$0	$100	$0	$10	$10
Paper Mill	$100	$150	$0	$0	$0
Printer (*Exporter*)	$150	$300	$0	Zero-rated	$0
Retailer (*Importer*)	$300	$500	(*Import Tax*) $30	$50	$50[a]
Total					**$60**

[a]The retailer has $50 of net VAT liability ($30 of import tax and $50 of output tax ($80) reduced by $30 of input tax credit for import tax paid).

Certainly not every business is in a position to vertically integrate or to provide substantial self-supplies of its otherwise taxable inputs. Nevertheless, insofar as the opportunity for self-supply exists, it creates a significant incentive that can distort choices that would, in principle at least, be made on the basis of tax-neutral economic criteria if there were no exemption. Consequently, the entity that produces exempt supplies will have an incentive to provide its own goods and services, even if it is less efficient at producing them than some third party, as long as the savings in VAT is greater than the efficiency loss from the self-supply. The resulting distortion in economic decision-making supports the case against VAT exemptions.

c. Undermining the destination principle. There is a broad consensus that consumption should be taxed where consumption occurs[24] and that a VAT should be applied on a destination basis in connection with cross-border trade.[25] This means that exports should be zero-rated (with exporters entitled to a credit or refund for any VAT they have incurred in connection with the exported goods or services) and imports should be taxed at the VAT rate in the destination country. Exemptions, however, undermine the operation of the destination principle with respect to cross-border trade.

We can illustrate this point by introducing a cross-border element into the supply chain of our earlier example of the paper mill exemption in Part A. The first part of the economic chain of events would remain the same, with the tree farmer selling the trees to the paper mill for $100, plus a $10 VAT, and the paper mill making the exempt sale to the printer for $150, with no VAT and no right to an input tax credit. Now let us assume, however, that the printer exports the notepads it produces to a foreign retailer for $300. The sale would be zero-rated in the printer's country, but the printer would have no input tax for which it could take a credit. Assuming that the retailer's country (the country of destination) also had a 10 percent VAT, the retailer would pay a $30 VAT on importation of the $300 purchase.[26] When the retailer sold the notepads to consumers for $500, it would collect a $50 VAT against which it would credit the $30 VAT it paid at import, remitting the $20 balance to the government, which would receive a total VAT of $50. However, because there is still $10 of embedded VAT associated with the exempt sale in the country of origin that was never credited or recovered, the total VAT paid on the notepads with the exemption would be $60 rather than the $50 that would be collected in the destination country under a VAT imposed on the same transactions (assuming no exemptions). This chain of events is illustrated by Table 6.

In short, exemptions undermine the destination principle because "it is not possible to remove the consequences of exemption at an earlier stage in the production chain,"[27] even with zero-rating. An analogous problem occurs in connection with imports. Firms that use inputs that are exempt from domestic VAT (and therefore bear VAT imposed on the suppliers of those inputs) have an incentive to import those inputs from foreign suppliers, because they will be zero-rated rather than exempted in the country of export.[28]

2. Exemptions and tax administration. Exemptions add considerably to the complexity of VAT administration. First, the very existence of exempt suppliers or supplies means that taxpayers and tax administrators have to struggle with the inevitable line-drawing problems of determining who or what is exempt. For example, case law in the EU (both in the European Court of Justice and in member state courts) is replete with controversies over the scope of exemptions for such items as medical care, education, and goods and services provided by charitable organizations.[29] As well-respected observers have

[24]OECD, *Taxation and Electronic Commerce: Implementing the Ottawa Framework Conditions* 5 (2001).

[25]*See* Keen and Hellerstein, *supra* note 17.

[26]If the transaction occurred between registered traders within the European Union, there would be a "reverse charge" of $30 for the "intra-community acquisition of goods" by the trader in the country of destination rather than a tax on importation. *See* Hellerstein and Gillis, *supra* note 10, but the basic pattern of taxes and credits would otherwise be the same as that described in the text and Table 6.

[27]OECD, *supra* note 13, at 64.

[28]Ebrill et al., *supra* note 7, at 88.

[29]*See, e.g.*, Alan Schenk and Oliver Oldman, *Value Added Tax: A Comparative Approach* 276 (2007) (describing "extensive litigation" over the scope of exemptions under the EU VAT); Sigrid Hemels, "Effectiveness of the Current VAT Treatment of Charities: Are the Objects of the VAT Exemptions in the Public Interest Being Achieved and If Not, How Can This Be Improved Within the Restriction Imposed by EU Legislation?" (paper presented at Joint Conference of the Centre for Business Taxation, Oxford University and Fiscal Institute, Tilburg University, "VAT Exemptions: Consequences and Design Alternatives,"

(Footnote continued on next page.)

noted regarding the EU VAT, the "multiple exemptions . . . made the tax terribly confusing."[30]

Second, the introduction of exemptions into a VAT creates the problem of "mixed," "composite," or "bundled" supplies.[31] If a bundle of goods and/or services is sold for a single price, and the bundle contains both taxable and exempt components, it becomes necessary either (1) to separate the components into their respective taxable and exempt parts, for purposes *both* of the proper output tax *and* the recoverable input tax; or (2) to treat the bundle as a single, inseparable supply (either taxable or exempt) under some standard for determining whether the bundle should be characterized as either taxable or exempt.

This can be a daunting inquiry, with guidance that often seems indeterminate if not impenetrable. For example, the Australian approach is to distinguish between "disaggregatable" supplies, which have to be "unbundled" because they contain "separately identifiable taxable and non-taxable parts that need to be individually recognised,"[32] and "supplies that appear to have more than one part but that are essentially supplies of one thing."[33] The latter type of supply "contains a dominant part and . . . includes something that is integral, ancillary or incidental to that part."[34] The distinction between these two types of supplies "is a question of fact and degree" to be ascertained by a "commonsense approach,"[35] which takes account of "all the circumstances of the transaction,"[36] including the "relative significance"[37] of the supply in terms of "value and function."[38]

Other countries have their own rules (often embodied in case law) on these questions, and the guidance appears to be as indeterminate as that emanating from Australia.[39] Indeed, the problem, which is analogous to the intractable problem U.S. state tax professionals confront under state retail sales tax statutes and case law in attempting to determine the treatment of "bundled sales" of taxable tangible personal property and nontaxable sales of services,[40] is that in many cases the purchaser's needs cannot be satisfied without having the benefit of the combination of the taxable and the exempt items. Consequently, the effort to characterize the taxable and exempt components as "essentially" (and predominantly) "supplies of one thing" or as "separately identifiable . . . elements" is hopeless, because they are both.

Third, there is the related problem of partially exempt suppliers, that is, suppliers who sell both taxable and exempt outputs and who must (like the vendors of "bundled" but "disaggregatable" supplies described above) allocate their input tax payment between the two types of sales by some form of apportionment of their input taxes to the respective values of their taxable and exempt outputs.[41] Not only does this add a layer of complexity to VAT administration, it also introduces into the VAT regime an element of "rough justice"[42] associated with any form of apportionment — a familiar point to U.S. state tax practitioners.[43]

3. Exemptions and revenue. Exemptions can lead to either an increase or a decrease of revenues as compared with VAT revenues raised in the absence of exemption. With no exemption, the revenue raised by a VAT for any good or service that is sold for final consumption is simply the product of the final sales price and the statutory rate, because all previous VAT payments in the chain will be recovered. However, once the chain is broken, revenues will either increase or decrease, depending on where in the chain the exemption occurs.

As we observed in Part A, a break in the VAT chain at an intermediate stage of production (the sale by the paper mill to the printer) will lead to an increase in VAT revenues. That was because a portion of the upstream VAT — the $10 VAT on the $100 sale by the tree farmer to the paper mill — will not be recoverable even though the VAT on the final sale remains the same (the $50 VAT on the $500 sale).[44] Hence $60 of VAT revenues would be raised under the regime with the exemption as compared with the $50 of VAT revenues that would be raised under the exemption-free regime.[45]

Apr. 16, 2010, Worcester College, Oxford University (revised version on file with the authors)).

[30]Peter Merrill, Itai Grinberg, Nigel Mellor, Marie Pallot, and Greg R. Prow, "VAT-Practical Considerations and Lessons Learned," in Tax Council Policy Institute, 11th Annual Tax Policy and Practice Symposium, 88 *Taxes* (No. 6) 65, 68 (2010) (remarks of Marie Pallot, Policy Manager, Policy Advice Division, New Zealand Inland Revenue Department).

[31]We put these terms in quotations because they are not used consistently and their inconsistent use can lead to confusion as to precisely what is meant. The key distinctions are set forth in the ensuing text, with the word "bundle" used as a generic term to describe supplies sold for a single price but containing taxable and exempt components, which may either be disaggregated into their component parts (taxable and exempt) or treated as a single, inseparable supply (taxable or exempt).

[32]Goods and Services Tax Ruling, GSTR 2001/8, goods and services tax: apportioning the consideration for a supply that includes taxable and nontaxable parts, para. 16, *available at* http://law.ato.gov.au/atolaw/DownloadNoticePDF.htm?DocId=GST%2FGSTR20018%2FNAT%2FATO%2F00001&filename=pdf/pbr/gstr2001-008c2.pdf&PiT=99991231235958.

[33]*Id.* at para. 2.

[34]*Id.* at para. 17.

[35]*Id.* at para. 20.

[36]*Id.* at para. 19.

[37]*Id.* at para. 52.

[38]*Id.* at para. 59.

[39]*See* Schenk and Oldman, *supra* note 29, at 130-136.

[40]*See* Jerome R. Hellerstein and Walter Hellerstein, *State Taxation* para. 12.08 (3d ed. 1998 and Cum. Supp. 2010); *see also id*. at para. 12.06[2].

[41]OECD, *supra* note 13, at 65.

[42]Ebrill et al., *supra* note 7, at 88.

[43]*See, e.g., Illinois Central R.R. v. Minnesota*, 309 U.S. 157, 161 (1940). ("That the apportionment may not result in mathematical exactitude is certainly not a constitutional defect. Rough approximation rather than precision is, as a practical matter, the norm in any such tax system.")

[44]*But see supra* note 9 on the artificiality of the numerical and economic assumptions, even though the basic point about the increase in VAT revenues and overall burdens remains true.

[45]*See* Table 2.

Table 7. Operation of Credit Invoice VAT With Retail Exemption (VAT rate = 10%)

	Purchases	Sales	Input Tax Credit	Output Tax	VAT Liability
Tree Farmer	$0	$100	$0	$10	$10
Paper Mill	$100	$150	$10	$15	$5
Printer	$150	$300	$15	$30	$15
Retailer	$300	$500	$0	$0	$0
Total					**$30**

Table 8. Operation of Credit Invoice VAT With Wholesale and Retail Exemptions (VAT rate = 10%)

	Purchases	Sales	Input Tax Credit	Output Tax	VAT Liability
Tree Farmer	$0	$100	$0	$10	$10
Paper Mill	$100	$150	$10	$15	$5
Printer	$150	$300	$0	$0	$0
Retailer	$300	$500	$0	$0	$0
Total					**$15**

However, VAT revenues can also decrease with an exemption. If the exemption is at the very end of the chain, that is, if notepads are exempt from VAT, only $30 of VAT revenues will be raised under the regime with an exemption as compared with the $50 that would be raised under the exemption-free regime. Table 7 illustrates this result.

In short, another objection to the introduction of exemptions into a VAT is that they add uncertainty regarding the revenues that the VAT will raise, especially when one considers that most VAT regimes employ a variety of exemptions that apply at different stages of the economic process.

4. Exemption creep. Although perhaps not a problem by itself — at least if one's *ex ante* position is neutral regarding the desirability of VAT exemptions — is exemption creep.[46] It is not just that "one exemption leads to another," but rather that "each exemption creates direct pressures for further exemptions both upstream and downstream."[47] For example, to return to our familiar example illustrated in Table 7, if the government has decided to remove the burden on the sale of notepads by exempting their retail sale, notepad printers may argue that the burden should be lightened even further by exempting wholesale sales of notepads as well, thereby reducing the VAT burden from $30 (in Table 7) to $15 (in Table 8).[48]

A similar pressure operates for expanding exemptions "downstream." To return to our original example of an exemption for the paper mill (Table 2), we have already seen that failure to exempt downstream purchases of the paper mill's output results in taxing the value added by the paper mill as well as the downstream users. Consequently, downstream users can argue that if the government is really serious about the exemption, it should extend it downstream.

C. Why Do VATs Have Exemptions?

If exemptions create all of the problems of principle and practice described in the preceding section, then why do all VATs have at least some exemptions and many VATs have substantial exemptions?[49] Most VATs exempt health, education, and financial services, as well as small traders[50]; other common exemptions (which may overlap with those already described) include goods and services provided by public sector bodies, nonprofit organizations, and charitable bodies. Many VATs also exempt real estate and construction, agricultural products and inputs, cultural and merit items (such as books and newspapers), passenger transport, fuels, and capital goods.[51]

Broadly speaking, there are two justifications for VAT exemptions: First, the supply or supplier is hard to tax; second, the supply or supplier is worthy of public support in the form of a reduced tax burden. We briefly describe the rationale for some of the most significant

[46]Ebrill et al., *supra* note 7, at 89.

[47]*Id.*

[48]Certainly the printer will now have unrecoverable VAT, but, assuming it can pass some of the VAT on in its price, the net result for the printer may be improved if its increase in sales revenue resulting from the exemption offsets whatever VAT it incurs as a real cost.

[49]Ebrill et al., *supra* note 7, at 83-85; OECD, *supra* note 13, at 52-53; Schenk and Oldman, *supra* note 29, at 48-50, 52-54.

[50]As we have already noted, exemptions may be defined by reference to the supply (financial services, for example) or to the supplier (such as small traders).

[51]For example, in its summary of exemptions of member countries, the OECD lists the following as "standard exemptions":

> postal services; transport of sick/injured persons; hospital and medical care; human blood, tissues and organs; dental care; charitable work; education; non-commercial activities of non-profit making organizations; sporting services; cultural services (except radio and television broadcasting); insurance and reinsurance; letting of immovable property; financial services; betting and gambling; supply of land and buildings; certain fund raising events.

OECD, *supra* note 13, at p. 53, Table 3.10, n.2.

VAT exemptions below, along with the arguments for taxing or zero-rating them (as an alternative to exemption). We leave a more thorough consideration of particular exemptions (for example, financial services, public sector bodies, and housing) to a future Views on VAT article.

1. Exemptions based on tax administration considerations. However inconsistent VAT exemptions may be with the theoretical underpinnings of an ideal VAT, if taxing particular suppliers or supplies would create even more serious problems than those created by their exemption or if taxation of such suppliers or supplies is simply not feasible, exemption may well be justified.

a. Exemption of suppliers that are difficult to tax. Exemption of small traders is a quintessential example of an exemption for a class of suppliers based on administrative considerations. Indeed, the ''main reason for excluding 'small' taxpayers from VAT is that administrative and compliance costs exceed the revenues from their activity.''[52] For this reason, countries typically remove firms from VAT registration and collection requirements when their annual sales fall below a defined threshold.[53] Among OECD countries (as of 2008), these thresholds ranged from a low of a few thousand dollars to more than $90,000, and several countries had no thresholds at all.[54]

The lack of consensus on the level of thresholds — and, indeed, even as to their need — reflects a tension between the administrative concerns identified above and the countervailing concern that thresholds provide a competitive advantage to small traders and distort competition with larger ones. Moreover, if the threshold is set too high, there are revenue concerns as well, because lost revenues might well exceed administrative costs. Thus, the level of threshold often amounts to a compromise between these competing concerns.[55]

b. Exemption of supplies that are difficult to tax. In addition to exempting *suppliers* that are difficult to tax, VATs typically exempt *supplies* that are difficult to tax. Financial services are a quintessential example of such supplies.[56] The problem is not with the ''fees for service'' that financial institutions charge for such services as safe deposit box rentals, returned checks, and financial advice. VAT can be charged on these services as it is charged on other services. The problem is with the value added by financial intermediation, namely, the value added in accepting deposits, making loans, and otherwise facilitating transactions between lenders and borrowers.

The basic difficulty with applying a VAT to financial intermediation is not so much identifying the value, but rather allocating it between two sides of the transaction.[57] For example,[58] if a bank pays interest to depositors at the rate of 7 percent and charges interest to borrowers at the rate of 15 percent, its margin of 8 percent represents the value of its financial intermediation services, or its ''value added.'' But how should one allocate that value between services provided to the lender and services provided to the borrower? The ''standard conceptual approach to the issue has been to imagine a hypothetical 'pure' interest rate at which the lender could have lent . . . and at which the borrower could have borrowed''[59] with neither enjoying the services of the financial intermediary that actually allowed the lending and borrowing to occur. Assuming this pure rate of interest were 12 percent, this would mean that the borrower would have effectively been paying an extra 3 percent for the bank's intermediation services (15 percent less the ''pure'' 12 percent) and the lender would effectively be paying 5 percent for the bank's intermediation services (the 12 percent ''pure'' interest rate it might in theory have received less the 7 percent it actually received). Based on this analysis, a VAT should be collected on the 8 percent value of the financial intermediation services provided to the borrower and lender according to their respective shares, 3 and 5 percent. The VAT would be credited in the usual way, assuming the businesses were both registered.[60] It is the difficulty of creating an administrative framework that would bring about this result and, ''in particular,

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[52]*Id.* at 65 (footnote omitted).

[53]Schenk and Oldman, *supra* note 29, at 49. Many countries, however, permit small traders that fall below the threshold to register voluntarily and collect VAT, see OECD, *supra* note 13, at 50 (Table 3.9), thereby allowing them to claim input credits on their purchases. *See also* ''Value-Added Taxes: Lessons Learned From Other Countries on Compliance Risks, Administrative Costs, Compliance Burden, and Transition,'' Government Accountability Office, GAO-08-566 (Apr. 2008), at 28-29, *Doc 2008-9950*, *2008 TNT 88-18* (noting that more than one-third of all registered traders in Canada and Australia were below the threshold of required registration and had voluntarily registered due in part to a desire to claim input tax credits and to enable them to do business with firms that will conduct business only with VAT-registered traders).

[54]OECD, *supra* note 13, at 50 (Table 3.9).

[55]Ebrill et al., *supra* note 7, at 90; OECD, *supra* note 13, at 65. *See* Michael Keen and Jack Mintz, ''The Optimal Threshold for a Value-Added Tax,'' 88 *J. Public Econ*. 559 (2004) (developing a formula for determining the optimal VAT threshold in light of tax rates, compliance costs, business size, and other considerations).

[56]There is an extensive literature on the complex problems raised by financial services under a VAT and how to deal with them. *See, e.g.*, Harry Grubert and James Mackie, ''Must Financial Services Be Taxed Under a Consumption Tax?'' 53 *Nat'l Tax J.* 23 (2000); Satya Poddar and Morely English, ''Taxation of Financial Services Under a Value-Added Tax: Applying the Cash-Flow Approach,'' 50 *Nat'l Tax J.* 89 (1997); Donald Roussiang, ''Should Financial Services Be Taxed Under a Consumption Tax? Probably,'' 55 *Nat'l Tax J.* 281 (2002); Schenk and Oldman, *supra* note 29, ch. 10; Howell Zee, ''A New Approach to Taxing Financial Services Under a Value-Added Tax,'' 58 *Nat'l Tax J.* 77 (2005). As noted above, in this survey of exemptions we can barely scratch the surface of these issues, but we hope to return to them in more detail in a future Views on VAT article.

[57]*See* Ebrill et al., *supra* note 7, at 95 (''the aggregate value added created by intermediation can be identified,'' but it is ''difficult'' to ''allocate the aggregate value added between the sides of the transaction''); Schenk and Oldman, *supra* note 29, ch. 10.

[58]The example is taken from Poddar and English, *supra* note 56, at 93.

[59]Ebrill et al., *supra* note 7, at 95.

[60]Schenk and Oldman, *supra* note 29, at 313.

identifying a 'pure' interest rate, that has led most countries to exempt financial intermediation.''[61]

Because of its pervasive impact on the operation of VAT regimes — the financial services sector accounts for more than 25 percent of valued added (as a percentage of GDP) in most developed countries[62] — consideration of alternatives to the exemption of financial institutions has been a subject of great interest for many years.[63] Although several countries (including Argentina, Australia, Israel, New Zealand, and South Africa) have moved away from the general exemption model (which prevails in the EU) through various forms of taxation, zero-rating, or granting of input credits for financial services,[64] ''the potential effect on revenue often prevents countries from making radical change,''[65] and exemption of financial services remains the norm.

Other common exemptions that may be defended on the grounds that the suppliers or supplies are difficult to tax[66] include those relating to contexts in which output is sold at prices below fair market value,[67] such as education and health provided by public sector bodies; gambling, lotteries, and other games of chance, in which ''a significant portion of the business inputs are obtained from consumers who are not registered for VAT purposes,''[68] and the value added by the casino cannot be determined until after winners are determined and winnings paid out[69]; and insurance and reinsurance, at least when it contains a savings element.[70]

Because of the problems these exemptions raise,[71] proposals for taxing, zero-rating, or otherwise addressing the difficulties created by supplies abound, and many countries have embraced these alternatives. Several distinguished commentators have urged broad taxation of goods and services supplied by public-sector bodies,[72] and Australia and New Zealand have in fact adopted widespread taxation of public-sector bodies.[73] The case for taxing insurance intermediation services, like the case for taxing financial intermediation services generally, is strong as a matter of principle,[74] and some countries (among them Australia, New Zealand, and South Africa) tax some forms of insurance. However, as in the case of financial services generally, exemption remains the norm.

2. Exemptions based on social policy considerations. Many of the most common exemptions reflect social policy concerns, as distinguished from the administrative or practical concerns we have discussed above. Thus, ''all OECD countries exempt a few specific sectors considered essential for social reasons: health, education, and charities.''[75] The basic rationale for these exemptions is fairly simple: by removing the VAT burden from essential or desirable goods and services, the exemptions reduce the cost of such supplies and make them more accessible to those who otherwise might be unable to enjoy them.[76] What is not so simple is determining whether these exemptions actually accomplish their purpose and, even if they do, whether there may be better ways of achieving it without undermining the basic operation of the VAT.

The answer to the first question — whether exemptions reduce the cost of the goods or services in question — depends, as we have seen above, on where the exemption occurs in the chain of economic activity. If it occurs at an intermediate stage of the economic process, the exemption might actually increase the ultimate cost of the goods or services to the consumer.[77] If the exemption occurs at the end of the economic chain, however, the cost of the goods or services to the consumer is likely to be less than it would have been if the supply had been taxable.[78]

The more important question, however, is the second one: whether there are better ways of achieving the goals underlying exemptions designed to encourage some activities (for example, charities) or to reduce the cost of some goods and services (for example, books or medical care) than exempting them, given the general inconsistency of exemptions with the logic of a VAT. The answer, in general, is ''yes,'' although the case for the alternatives (and the choice among them) may be stronger or weaker depending on the particular context.

The basic alternatives to exempting ''merit'' goods, services, or activities under a VAT assuming that one wants to support them are to (1) zero-rate them (that is, provide an exemption *with* input tax credit), thereby preserving the basic integrity of the VAT regime while removing a tax burden from the favored supplies; (2) reduce the rates for these supplies, which (like zero-rating) maintains the basic VAT regime while providing some tax relief; or (3) fully tax the supplies, but provide

[61] Ebrill et al., *supra* note 7, at 95.

[62] Zee, *supra* note 56, at 78.

[63] *See, e.g.*, sources cited in *supra* note 56.

[64] Schenk and Oldman, *supra* note 29, at 327-335. For a review of recent discussions on the application of VAT to financial services in the EU, Australia, New Zealand, and South Africa, see ''Lessons from the Frontline of VAT on Financial Services,'' KPMG Global Indirect Tax Brief, Issue No. 17, Mar. 2010, at 3-10, *available at* http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Global-indirect-tax-brief/Documents/Global-Indirect-Tax-Brief-issue17.pdf.

[65] OECD, *supra* note 13, at 56.

[66] As we have already noted, these are not airtight categories, that is, exempt suppliers may be providing supplies that are themselves exempt, regardless of by whom provided (for example, public-sector bodies providing education).

[67] Ebrill et al., *supra* note 7, at 90.

[68] Schenk and Oldman, *supra* note 29, at 301; *see generally id.* at ch. 10.

[69] *Id.*

[70] Ebrill et al., *supra* note 7, at 96-97; Schenk and Oldman, *supra* note 29, ch. 11.

[71] *See supra* Part B.

[72] Michel Aujean, Peter Jenkins, and Satya Poddar, ''A New Approach to Public Sector Bodies,'' 10 *International VAT Monitor* 144 (1999); Gendron, *supra* note 18.

[73] Gendron, *supra* note 18, at 22; Schenk and Oldman, *supra* note 29, at 289-290.

[74] *See* Ebrill et al., *supra* note 7, at 96-97; Schenk and Oldman, *supra* note 29, ch. 11.

[75] OECD, *supra* note 13, at 53.

[76] Ebrill et al., *supra* note 7, at 85, 91; Hemels, *supra* note 29, at 15; Schenk and Oldman, *supra* note 29, at 282-283.

[77] *See supra* Table 2.

[78] *See supra* Table 7.

a direct subsidy to those purchasing the favored supplies or to the favored supply-producing activities outside of the VAT system.[79] In evaluating the relative merits of these different options, one needs to balance the negative consequences of introducing exemptions into the VAT system (such as distorting input choices, creating an incentive to self-supply, and increasing administrative complexity) against the drawbacks of the various alternatives (loss of revenues from reduced rates, and increased complexity from the introduction of multiple rates,[80] and administrative issues associated with refunds or with subsidies).[81]

On the assumption that subjecting merit goods or services to VAT is feasible, that is, assuming these supplies are associated with observable prices,[82] the fundamental question is whether it "can . . . *ever* be the case that granting the exemption would be the preferred course of action"[83] to a zero or reduced rate, or to full taxation with a subsidy. At least in the eyes of some expert observers, the somewhat understated answer to this question is that "on balance, this is not obvious, even though exemptions do avoid some problems."[84] Thus, exemptions avoid the administrative problems associated with the payment of refunds associated with zero-rating or reduced rates, namely, the monitoring of output tax and the recovery of input tax, which is endemic to the VAT system.[85] However, as suggested above, in most instances, these advantages of exemptions are likely to be outweighed by their disadvantages.

The more important inquiry, at least from the standpoint of normative VAT design, is which of the alternatives to exemptions — zero-rating, reduced rates, or direct subsidies — is preferable? In many respects, zero-rating would appear to be the obvious solution to the exemption problem. This would create the true exemption (as U.S. readers normally think about exemptions), by relieving the favored supplies of tax and, at the same time, preserve the integrity of the VAT by allowing recovery of input taxes by the supplier of the goods or services in question.[86]

Zero-rating, however, is not a panacea to the problems raised by exemption of merit goods and services. First, there are revenue concerns. Removing an entire class of goods or services from the tax base may simply be too high a price to pay for reducing the costs of these supplies without undermining the basic operation of the VAT regime. In this sense, exemption may be viewed as simply an untidy, but politically expedient, way to provide relief — but not too much relief — to the favored sectors. Zero-rating can also create distortions, at least in some sectors, in which not all suppliers are taxable persons. For example, in the charitable sector, an entity that makes no charges for its services may not be a registered trader, and thus may be ineligible for an input tax credit even if its supplies were zero-rated, whereas an entity making a modest charge for the same supplies would be entitled to deduct input tax under a zero-rating regime.[87] Finally, zero-rating may create administrative difficulties regarding refunds, particularly in developing countries.[88]

Reduced rates may appear to be an attractive alternative to zero-rating. They offer a key advantage of enabling suppliers of the merit goods and services to recover input taxes, while mitigating one of the key disadvantages of zero-rating, namely, revenue losses. The obvious problem with reduced rates, however, is that they create additional administrative complexities that one does not encounter in connection with zero-rating. First, unless every reduced rate is identical, the use of reduced rates creates a system with multiple rates, which makes tax compliance more difficult for taxpayers and tax administrations.[89] Reduced rates also exacerbate the problem of classifying goods and services into the appropriate rate category and create additional opportunities for misclassification.[90] Because reduced rates are nevertheless positive rates, they require suppliers to account for the output tax on these supplies, in contrast to the zero-rate alternative.

The third alternative to exemptions — direct subsidies for the merit supplies or suppliers — lies outside the VAT system.[91] Indeed, this is its key advantage. Under a subsidy regime, the VAT system is, in principle, left to do

[79]For an excellent analysis of these alternatives in the context of the exemption for charities under the EU VAT, see Hemels, *supra* note 29, on which the following discussion relies.

[80]One can get a taste of that complexity from the dazzling array of rates for various goods and services in the member states of the European Union. *See* European Commission, "VAT Rates Applied in the Member States of the European Union (Situation at 1st July 2010)," taxud.c.1 (2010) 477911.

[81]*See* Hemels, *supra* note 29, at 17-22.

[82]*See* Ebrill et al., *supra* note 7, at 91. Indeed, if they are not, the justification for and the case against exemption is likely to be based on the practical administrative concerns we considered in *supra* Part C.1. We do not repeat these here.

[83]*Id.* (emphasis supplied).

[84]*Id.* The precise question in the cited text was limited to a comparison between exemptions and zero or reduced rates, but adding the alternative of full taxation with subsidy would presumably elicit the same response.

[85]*See* Michael Keen and Stephen Smith, "VAT Fraud and Evasion: What Do We Know, and What Can Be Done," IMF Working Paper WP/07/31 (2007).

[86]*See supra* Table 3.

[87]Hemels, *supra* note 29, at 18, compares the example under the EU VAT of a museum that charges no entry fees and is not treated as a taxable person entitled to deduct input tax under a zero-rate regime with a museum that charges entry fees and would be entitled to such a deduction. As she observes, "charities would therefore have an incentive to charge fees even though the object of the exemption [with input tax deduction] is to reduce the costs of charities' activities, not to increase them." *Id.*

[88]Ebrill et al., *supra* note 7, at 94.

[89]*Id.* at 78; *see also* European Commission, *supra* note 80.

[90]Ebrill et al., *supra* note 7, at 79.

[91]In Canada, for example, there are 13 separate "rebates" that are used to reduce the effect of the goods and services tax on various supplies and suppliers. They range from rebates in the housing, governmental, and charitable sectors as well as a "general credit" calibrated by income and household size to deal with overall distributional issues. *See* Richard M. Bird and Pierre-Pascal Gendron, "Sales Taxes in Canada: The GST-HST-QST-RST 'System,'" American Tax Policy Institute, May 29, 2009

(Footnote continued on next page.)

what it does best: raise revenue in an economically neutral manner. Insofar as practicable, all goods and services are fully taxed and all suppliers are entitled to recover the VAT they pay. None of the problems associated with exemptions, zero-rating, or reduced rates exists because there are, in principle, no exemptions, zero-rating, or reduced rates, at least insofar as merit goods are concerned.[92] To be sure, direct subsidies, like zero and reduced rates, have fiscal costs. However, those costs are more transparent and predictable when they are provided directly than when provided indirectly through a tax reduction mechanism. Direct subsidies can also be more accurately targeted toward their intended beneficiaries than exemptions, zero-rating, or reduced rates.[93] Perhaps the most serious drawback associated with subsidies is political. Their very transparency can make it more difficult to provide support for favored activities than to provide such support through the more opaque mechanism of exemptions or reduced rates.

It is worth keeping in mind that the various approaches to merit goods and services are not mutually exclusive. Exemptions, zero-rating, reduced rates, and subsidies can (and do) coexist in varying degrees of comfort in most countries with VATs.

D. What Should Be Done About VAT Exemptions?

We come finally to the question of what should be done about VAT exemptions. Although exemptions may be appropriate in limited circumstances — even New Zealand, the country with perhaps the broadest VAT base and fewest exemptions, exempts small traders — there is a strong consensus, at least among tax policy professionals, that VAT exemptions should be minimized. Certainly, current practice does not fully reflect this consensus and probably never will. However, ''the rationale for many standard exemptions is increasingly being questioned,'' and ''a main item on the VAT reform agenda in many developed countries over the coming years is likely to be a movement from exemptions to full taxation in a number of . . . areas, such as the treatment of the public sector and financial services.''[94] Perhaps the Swiss Federal Council's recent announcement that it will move ahead to simplify Switzerland's VAT system by adopting a uniform VAT rate and removing 21 of the 29 exemptions in the Swiss VAT system[95] is a harbinger of things to come.

at 27, *available at* http://www.americantaxpolicyinstitute.org/pdf/VAT/Bird-Gendron.pdf (forthcoming in 63 *Tax L. Rev.* ___ (2010)).

[92]Needless to say, exemptions or zero rates would presumably remain even in such an idealized system, for example, exemptions for small traders, see *supra* text accompanying notes 50-55, and zero-rating of exports.

[93]Hemels, *supra* note 29, at 20. This is particularly important if one is attempting to reduce the tax burden for a particular type of individual or group (*e.g.*, low-income households). Targeted subsidies of this nature do not come without administrative costs of their own, because they require some type of administrative apparatus to assure that the subsidies reach their intended beneficiaries, based on information that is reasonably available and verifiable.

[94]Ebrill et al., *supra* note 7, at 100.

[95]*See* Charles Gnaedinger, ''Switzerland Proceeds With Plan for Uniform VAT Rate,'' *Tax Notes Int'l*, July 5, 2010, p. 33, *Doc 2010-14353*, or *2010 WTD 124-2*.