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DESIGNING A FEDERAL VAT: SUMMARY AND RECOMMENDATIONS

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For the past thirty-five years, the debate on fundamental tax reform in the United States has centered on whether some type of consumption tax would replace all or part of the federal income tax. In my opinion, this debate has now been decided. Given recent budgetary developments and the impending eligibility of the baby boom generation for Social Security and Medicare, we cannot dispense with the revenue from the corporate and individual income tax. Moreover, we will need huge amounts of additional revenue, and most informed observers believe that the only plausible source for such revenues is a federal Value Added Tax (VAT) enacted in addition to, and not as a replacement of, the federal income tax.

When a federal consumption tax is considered as an addition to, and not as a replacement of, the existing income tax, it becomes clear that a lot of the discussion of consumption taxes in the preceding US debate has been misguided. Consumption tax advocates typically began by asking how the income tax should be modified to reach only consumption. As a result, consumption tax proposals centered on features that derive from the income tax, such as progressivity and entity-based taxation. The resulting proposals bore little resemblance to existing VATs around the world. They were designed in large part to look more like income taxes and therefore perhaps be more politically acceptable.

Once this central complication is abandoned, it becomes clear that the US should not reinvent the wheel. For example, most earlier consumption tax proposals were subtraction based (i.e., based on inclusions and deductions, like the income tax) rather than credit-invoice based (i.e., based on transactions). Almost all existing VATs, however, are credit-invoice based, for good reasons (explored below in Itai Grinberg's article). Another example is that many consumption tax proposals (like David Bradford's X-Tax and the Flat Tax) are origin based, while all VATs are destination based. This feature stems in part from the need to make a subtraction-method consumption tax WTO compatible. But as Keen and Hellerstein explain in this volume, destination based taxes are clearly superior, and once the US tax is a "normal" credit-invoice VAT, it can be destination based as well. Finally, if progressivity issues are addressed by the income tax, then the consumption tax can be applied at a single rate, like most modern VATs.

¹ Irwin I. Cohn Professor of Law and Director, International Tax LLM, the University of Michigan. I would like to thank all the participants in the American Tax Policy Institute conference on Structuring a Federal VAT: Design and Coordination Issues (Washington, DC, Feb. 18-19, 2009), for their contributions to this project. Like many others, I have learned most of what I know about VATs from the late Prof. Oliver Oldman, and this article is respectfully dedicated to his memory.

This volume contains articles and commentary that were originally written for a conference sponsored by the American Tax Policy Institute and held in Washington, DC in February 2009. The idea behind the conference was that if the US were to adopt a VAT as an addition to, and not a replacement for, the existing federal income tax, we should begin to consider what such a VAT might look like. Thus, the conference featured some of the leading VAT experts from around the world, and focused on two main themes: How to design a federal VAT, and how to coordinate it with existing state retail sales taxes (RST).

In this article I will try to summarize the preceding contributions and offer recommendations for designing an add-on federal VAT. Part I of the article explains why the US needs a federal VAT. Part II summarizes the articles dealing with design features of the federal VAT, and Part III addresses coordination issues. Part IV concludes by offering specific recommendations.

1. Why the US Needs an Add-On Federal VAT

The economic crisis of 2008 has significantly worsened the long-term federal budgetary outlook. Auerbach and Gale have estimated that without any new spending programs being enacted, the US faces deficits of over \$1 trillion in each of the next ten years. Over the longer term, the US faces deficits (in current 2009 dollar terms) of \$1 to \$1.3 trillion each year, or 7-9% of GDP.²

Rudolph Penner's article in this volume clarifies the source and significance of these numbers. Fundamentally, they result from the aging of the baby boomer generation. The first baby boomers became eligible for Social Security in 2008 and will become eligible for Medicare in 2011. At the same time, medical costs grow at a rate that exceeds growth in income per capita by about 2 percent each year.³

Before the current recession, these numbers meant that debt to GDP ratios would be 40% by 2019. However, the financial crisis has meant that under current projections debt to GDP ratios would exceed 80% of GDP in 2019. At these heights, interest payments begin to dominate federal spending. Clearly, that path is unsustainable. If nothing is done, investors will balk at buying thirty year Treasury bonds as early as 2012, because when these bonds mature in 2042 Social Security, Medicare and Medicaid will consume the entire federal budget and nothing will be left over to pay interest.

There are three possible solutions to this situation. The first is to enact drastic cuts in the entitlement programs. But that is politically unacceptable and will not happen. In fact, if President Obama has his way, spending on health care is likely to go up rather than down as more Americans obtain health insurance. The cost of

² Auerbach and Gale (2009).

³ Penner (2009).

insuring every US resident has been estimated to add an additional \$1 trillion to the deficit over the next decade.

The second possibility is to raise additional revenues from the existing income and payroll taxes. This can be done by raising the rates, broadening the base, or both. But both base broadening and higher rates are very unpopular politically, and high income tax rates cause familiar economic distortions and lead to increased evasion and avoidance. At a time where other countries are cutting income tax rates, this seems a very implausible choice.

The third option is to enact a VAT. This is what every other OECD member country has chosen to do under similar circumstances. The VAT is a proven revenue generator and can, in combination with spending cuts, resolve our budgetary problem. I believe it is the only realistic solution.

Enacting a VAT will not be easy. Democrats tend to dislike it because it is regressive, and Republicans because it is a “money machine.” Moreover, past US experience and experience overseas has indicated that proposing a VAT is politically perilous. Ways and Means Chair Al Ullman is said to have lost his seat in 1980 over such a proposal, and in Canada the Conservative Party went from governing to total defeat over the VAT.

But introducing a VAT need not be political suicide. Ullman was probably defeated for other reasons, and the Conservatives rebounded to govern Canada again. More importantly, with good leadership a party can win after introducing the VAT, as evidenced by John Howard in Australia, who decisively won two elections after the VAT was introduced.

Australian political scientist Richard Eccleston has shown that two elements are necessary for the successful introduction of a VAT.⁴ The first is a consensus by the policy making elite that this is the right way to go. Building such a consensus was a major goal of the ATPI conference, and recent editorials in the NY Times and the Washington Post indicate some measure of success. The second is either a strong push by a politically popular president, preferably in his second term, or a financial crisis that persuades the majority of the voters that the VAT is inevitable. I believe that both of these conditions are likely to be fulfilled by the end of the next decade, and that the US will then join the rest of the OECD in enacting a federal VAT.

The remainder of this article will focus on two issues: First, how to structure an add-on federal VAT, building on the experience of other OECD countries in designing their VATs. Second, since the US is a federal country, how can a federal VAT be coordinated with state-level RSTs, building on the experience of federal countries like Canada that have both federal and provincial consumption taxes.

⁴ Richard Eccleston (2008); Kathryn James (2009).

2. Structural Features

The first two articles in this volume focus on two fundamental design issues that need to be faced when adopting a VAT: Whether the VAT should be based on the subtraction or on the credit-invoice method, and whether it should be destination or origin based. As will be seen, there is a consensus in favor of credit-invoice, destination-based VATs. However, given the plethora of past proposals for subtraction and/or origin-based consumption taxes for the US, we thought that it is necessary to address these issues up front.

The other three articles in this section address three fundamental problems that have faced VATs in other countries: how that VAT should treat the financial services sector, the housing sector, and the governmental and nonprofit sector. In each of these areas, older VATs (like the ones in the EU) adopt exemptions that are rejected by more modern VATs like the ones in Australia, New Zealand, and South Africa.

There are two other structural features that are not addressed in this volume. The first is whether the VAT should have multiple rates or exemptions based on the type of good or service being provided. Such multiple rates and exemptions are common as a way to relieve the regressivity of the VAT. However, the better practice is to not have multiple rates or exemptions, because these apply to the rich as well as to the poor and lead to endless litigation around item classification (is a donut more like bread or more like candy?). Regressivity should be addressed in the spending side of the budget (and progressivity should be left to the income and estate taxes).

The second issue is whether to have a small trader exemption. The standard practice is to have such an exemption on administrative grounds, but permit small traders to register for VAT whenever they have significant input credits (which they cannot recover if they are exempt). The level of the exemption, like the precise rate of VAT, are best left to the political process.

a. Subtraction vs. Credit-invoice Method

In theory, a VAT can be either credit-invoice, subtraction, or addition-based, and these three methods will reach identical results. However, with the exception of Japan, every other country that has adopted that VAT uses the credit-invoice method. Even Japan, which began by using a version of the subtraction method, has adapted its VAT over time so that it became a hybrid of the subtraction and credit-invoice methods.

Given this state of affairs, it would seem highly unlikely for the US to consider any other method than the credit-invoice method. However, most consumption tax proposals in the US have in fact been based on the subtraction method. The reason is, as Michael Graetz has observed, that “a subtraction-method VAT...has the political virtue of looking more like a corporate income tax,” and proponents have wanted to use the VAT as a replacement of the corporate income tax (as well as part of the individual income tax).⁵

Once the VAT is envisaged as an addition to the existing personal and corporate income taxes, there is no good reason to adopt a subtraction-method VAT. The credit-invoice method is superior for many reasons, explained by Itai Grinberg in his article in this volume.⁶ These include the following:

1. Because a subtraction method VAT is perceived to be entity-based while the credit-invoice VAT is transaction-based, the former is more likely to include exemptions for broad sectors of the economy, such as financial institutions or nonprofit entities, while the latter is more likely to have exemptions for specific goods and services, as well as multiple rates. However, the former type of exemption is much more pervasive and has significant negative effects (discussed in other articles in this volume), while experience has shown that it is relatively easy to curtail the latter type (many recently introduced VATS have quite broad bases with minimal exemptions for specific goods and services and a single rate).
2. In order to function properly, a subtraction-method VAT must be “sophisticated”, i.e., deductions should be allowed only for payments to registered VAT traders. But sophisticated VATs cannot be based on simple summary accounts of sales and purchases, as envisaged by advocates of the subtraction method. That is why most US proposals are for naïve or open VATs in which deductions are allowed for any purchase, but these types of VATs are fatally flawed and open to abuse.
3. While it is clear that credit-invoice VATs are WTO compatible, there are significant problems regarding the WTO compatibility of subtraction-method VATs that are also destination-based. One solution, adopted by some advocates of subtraction method consumption taxes in the US, has been to propose origin-based taxes, but those are inferior for the reasons discussed below. The alternative, adopted for instance by the President’s Advisory Panel in 2005, is to propose a destination-based consumption tax and hope that it will be found to be WTO compatible. However, even the Advisory Panel had doubts, as evidenced by their refusal to take the revenue gains from adopting destination basis into account in estimating the revenue impact of their “Growth and Investment Tax” proposal (which is essentially a subtraction VAT with an added tax on capital).⁷

⁵ Graetz (2008), 78.

⁶ Grinberg (2009).

⁷ Advisory Panel on Tax Reform (2005).

Grinberg concludes that:

Credit-invoice method VATs thus seem, on balance, more likely than subtraction-method VATs to be adopted with VAT design best practices. This is perhaps unsurprising, as those practices were developed based on fifty years of worldwide experience with credit-invoice method VATs. As one author at this conference has written previously, if a VAT were to be adopted to supplement or partially replace the income tax, it is not clear why it would be desirable to try to “reinvent the wheel.”⁸

b. Destination vs. Origin Basis

In theory, a VAT can be either destination or origin based. In a destination base VAT imports are taxable while exports are zero-rated. In an origin-based VAT imports are exempt and exports are taxable.

Every VAT in the world is destination-based. At one point, the EU considered switching to a modified origin-based system, but that has been abandoned. A major reason for using the destination basis is that such border adjustments are WTO compatible for the standard credit-invoice VAT. In fact, the principal reason why some leading US consumption tax proposals such as the Flat Tax and the X-Tax were origin based was that they were subtraction-based and also allowed a deduction for wages, which made them WTO incompatible if they were destination-based. Once the VAT is not considered as a replacement for the income tax, there is no reason to allow a deduction for wages and the tax can be made destination-based.

Keen and Hellerstein in their article for this volume explain some of the reasons to prefer the destination based VAT. They conclude that:

What though does economic theory say of the appropriate choice of principle? For once, as will now be seen, it gives a reasonably clear answer: though the case is not unambiguous, the destination principle is noticeably the more attractive.⁹

The reasons are (1) that destination basis preserves production efficiency while origin basis preserves consumption efficiency, and the former is generally regarded as more important than the latter; (2) that while origin basis taxes solve the “tourism problem” (shopping abroad to get lower rates under the destination basis) it suffers from the same transfer pricing issues as the income tax. The latter is a very important problem that has bedeviled international taxation for decades, and it seems advisable to avoid it at all costs.

⁸ Grinberg (2009).

⁹ Keen and Hellerstein (2009).

The remainder of Keen and Hellerstein's article is devoted to exploring some of the issues that arise once the destination basis is adopted. In general, for a country with customs enforcement at the border like the US, destination-basis taxation of goods is not problematic. Serious issues remain regarding the taxation of services, but the OECD has been making significant progress in this area. The conclusion of the OECD is that both B2B and B2C services should be taxed where the recipient resides, and Keen and Hellerstein suggest that the US follow this norm, despite the enforcement difficulties in taxing B2C transactions.¹⁰

c. Taxation of Financial Services

The VAT treatment of financial services is important because the financial sector represents 7.9% of US GDP, and because it is crucial to the functioning of the rest of the economy. Older VAT systems, such as that of the EU, exempt financial services and insurance from tax because it is administratively difficult to disaggregate the services element included in intermediation transactions from other elements like interest which are not subject to VAT. However, as Alan Schenk points out in his contribution to this volume, exempting financial services and insurance leads to several distortions:

1. The under-taxation of the household consumption of financial services compared with the consumption of other goods and services because the value added by financial institutions is not taxed;
2. The over-taxation of the consumption of financial services by VAT-registered businesses because any VAT buried in the costs of financial services is not recoverable as input tax. There likely is a cascade of tax resulting when any VAT buried in these costs is included in the prices of goods and services sold by the business users of these exempt financial services;
3. The incentive for a financial service provider to vertically integrate and self-supply services in order to avoid some or all of the VAT on its purchases from registered domestic traders that would not be recoverable;
4. There is a competitive advantage to an offshore financial service provider if it can render services to domestic household consumers or other domestic purchasers free of VAT.¹¹

Schenk then points out that newer VATs, such as those of New Zealand, South Africa, Singapore and Australia have succeeded in taxing financial services under an invoice credit method VAT. Specifically, the South African and Singapore experiences show that fees for intermediation services can be subject to VAT without leading banks to bundle them with interest charges that are not subject to tax.

¹⁰ Keen and Hellerstein (2009).

¹¹ Schenk (2009).

Based on these experiences, Schenk suggests extending the VAT to financial services and insurance to the extent possible. For financial services, he proposes that the United States tax all (or almost all) fee-based financial services, exempting only pure intermediation services and other financial services buried in bank charges. Zero rating should apply to exported financial services. For insurance, Schenk recommends including in the VAT base intermediation services rendered by an insurer under both life and non-life policies.¹²

d. Treatment of Housing

The tax treatment of housing is crucial because of the importance of this sector of the economy (housing and related expenditures account for about 25% of US consumption) and because of its political sensitivity. Historically, real estate transactions were exempt from VAT (as in the EU), but this treatment has resulted in significant complexities and distortions. As in the case of financial services, the exemption system leads to cascading and to the blockage of VAT on inputs going into the construction of commercial real properties.¹³

Modern VATs like those of Canada, South Africa, Australia and New Zealand do not exempt real estate except for resale of used residential property (whether owner-occupied or rented) and long-term residential rentals. All other supplies of real property are taxable, including first sales of residential properties and short-term rentals. Construction, repair and renovations of residential property are taxable with no right to deduct input tax.¹⁴

In his article in this volume, Satya Poddar concludes that:

The objectives of tax neutrality and simplicity require that the base for the US VAT be comprehensive and include housing services. While home ownership is viewed as a desirable policy objective, an exemption for housing services is not necessarily the most efficient incentive for home ownership. Exemptions under a VAT lead to distortions as their benefit can vary significantly depending upon how the construction and sale of homes is structured. They also create a bias for horizontal and vertical integration.

Historically, the scope of VAT was limited to goods and services, with real property transactions generally exempted from the tax. However, increasingly such transactions are being brought within the ambit of VAT. Under modern VAT, all sales and rentals of commercial real property attract tax. In the case of residential properties, the application of tax is limited to the first sale of new residential dwellings. Long-term rentals and resale of

¹² Schenk (2009).

¹³ Poddar (2009).

¹⁴ Poddar (2009).

residential dwellings are exempted from tax. For dwellings constructed after the commencement of VAT, this system is tantamount to pre-collection of tax on future consumption of housing services from such dwellings, resulting in little or no erosion of the tax base. This is not the case for existing dwellings constructed before the introduction of VAT. Housing services flowing from such dwellings remain tax free, which constitutes an erosion of the tax base.

No country has gone beyond taxation of first sale of new residential dwellings. While this option could be viewed as a reasonable compromise, purely from a technical and tax design perspective, there are options available for extension of tax to the existing stock of housing. Under a comprehensive taxation option, all sales, resales, and rentals of real property (whether residential or commercial) would be subject to VAT, with the exception of imputed rental value of owner-occupied homes. Such an option warrants a serious consideration in advanced economies such as the USA where taxpayers (both individuals and corporations) are already used to reporting residential rental activities for income tax purposes.¹⁵

e. Treatment of Governmental and non-Profit Bodies

The prevalent treatment of government entities, public sector bodies, non-profit and charitable organizations, and similar entities (the PNC sector) under an credit-invoice VAT is exemption. In his article in this volume, Pierre-Pascal Gendron concludes that this treatment is wrong and leads to significant distortions since the PNC sector amounts to one fifth of US GDP.¹⁶ He surveys the treatment of the sector in modern VATs and concludes that the best practice is that of Australia and New Zealand, which treats essentially all supplies of goods and services by the PNC sector as taxable, with almost no zero rating or exemption. He prefers this option to the treatment in Canada, which involves ex post rebates of VAT paid by the PNC sector.

Gendron concludes as follows:

The main lessons for the U.S. are the following. First, the case for full taxation of the PNC sector under the VAT is strong. Second, the Australian-New Zealand model emerges as the best alternative to the exempt treatment of PNC sector supplies. Under this model, essentially all the goods and services supplied by PNC bodies are within the scope of the VAT and treated like any supplies from the private sector. The Australian- New Zealand model features few instances of zero-rating or exemptions. While the Canadian rebate model works reasonably well, it

¹⁵ Poddar (2009), 24-25; see also Conrad (2009).

¹⁶ Gendron (2009).

is complex, it gives rise to several non- neutralities, and is too gradualist.

Were the U.S. to adopt a federal VAT, it would be well advised to get the design right from the start and subject the sector to VAT along the lines of the Australian-New Zealand model and stay as close as possible to full taxation of the PNC sector -- and others -- under the VAT. To address the issue of states as taxable persons, it should modify the model slightly to provide state and local governments (and only those) with the option to collect tax. In comparison with the alternatives, this design would result in the system with the lowest efficiency costs, and possibly the lowest compliance and administrative costs.¹⁷

3. Coordination Issues

a. The Canadian Example

Canada has four main types of consumption tax:

1. The federal VAT introduced in 1991 -- the Goods and Services Tax (GST);
2. The extension of the GST in 1997 to three small eastern provinces -- the Harmonized Sales Tax (HST), which will also apply from 2010 in Ontario;
3. The unique provincial VAT introduced in 1991 in the province of Québec -- the Québec Sales Tax (QST);
4. The provincial sales tax that continues to exist in most other provinces -- the retail sales tax (RST).¹⁸

Bird and Gendron argue in this volume that this combination of consumption taxes has important lessons for the US were it to adopt an add-on federal VAT. Specifically, they note that--

For decades, academics had argued almost unanimously that one could not impose a standard credit-invoice destination-based value added tax (VAT) at the subnational level of government. Canada's almost two decades of experience demonstrates conclusively that this view is incorrect: not only can it be done, but it has been done, and done well. Moreover, Canadian experience also demonstrates that a federal VAT can work perfectly well in a country in which some subnational units have their own VATs, some have their own retail sales taxes (RSTs), and some

¹⁷ Gendron (2009), 2; see also Aujean (2009).

¹⁸ Bird and Gendron (2009).

have no sales tax at all.¹⁹

Thus, the main lesson to be drawn from the Canadian experience is that “the existence or non-existence of subnational retail sales taxes is, in both technical and economic terms, a matter of indifference when considering a federal VAT.”²⁰

This lesson from a neighboring country with extensive historical, cultural and trade links to the US is extremely important. For a long time, the argument that a federal VAT would be inconsistent with or preempt the state and local RST has been a major obstacle in adopting a federal VAT in the United States. The Canadian experience shows that this argument is simply wrong. There is nothing about the fact that most US states rely on the RST to prevent the federal government from adopting a VAT.

Given the historical traditions of federalism and the strong desire of the states to maintain their tax sovereignty, it seems likely that at least in the short run most states would wish to keep their existing tax structure that relies on the RST even as the federal government adopts the VAT. The Canadian example shows that they can do so with no significant economic problems.

Nevertheless, given that the state RSTs are deeply flawed taxes, it would make sense for states to ultimately use the opportunity afforded by the federal VAT to also switch to a state VAT. The experience of Ontario, the largest Canadian province, shows that this is a viable option.

b. Lessons from Other Economic Unions and Federations

In contrast with Canada, the lessons that can be learned from other economic unions and federations seem less relevant to the US. Cnossen’s article in this volume reviews the experience of the EU, while Perry surveys other federal countries such as Brazil and India.²¹ The EU experience is with a harmonized VAT, since under the EU directives each member state has to adopt a VAT and follow the general framework of the directives in designing the base and rates of the tax. This seems an unlikely model for the US to follow. The EU experience is, however, important in pointing out some of the pitfalls that like in the way of designing VAT where there are no borders, which McLure builds upon in his recommendations for the states. Importantly, most of the fraud problems that plague the EU, such as carousel fraud, arise because of open borders and are not relevant to the federal VAT.

c. How to Coordinate State and Local RSTs with Federal VAT

¹⁹ Bird and Gendron (2009), 1.

²⁰ Ibid.

²¹ Cnossen (2009); Perry (2009).

McLure's article in this volume represents a comprehensive attempt at envisaging how the US states that wish to switch from the RST to a VAT could do so once a federal VAT is in place.²² McLure concludes as follows:

1. The VAT is clearly superior to the RST for the federal government.
2. States may switch to the VAT over time.
3. States that do not switch to the VAT may benefit from implementing the "integrated sales tax", an RST administered by the federal government.
4. Conformity of requirements for registration is crucial for administrative cooperation.
5. Administrative cooperation would be enhanced if the bases of the federal VAT and state RST were conformed.
6. Local reliance on RST is not a barrier to state adoption of a VAT.
7. The federal government could encourage state conformity by overriding the constitutional limits on state taxation of remote sellers for those states that conform to the VAT base.

5. Conclusion and Recommendations

The recommendations reached by the previous articles in this volume can be summarized as follows:

1. The United States should adopt a federal VAT in addition to, and not as a replacement of, the federal income tax (Avi-Yonah). It should not adopt a federal RST (McLure, Cnossen).
2. The federal VAT should be based on the credit-invoice method, not the subtraction method (Grinberg).
3. The federal VAT should be destination-based, not origin-based (Keen and Hellerstein).
4. Fee-based financial services and intermediation services by insurers should be taxable (Schenk).
5. All supplies of real estate other than resales of residential property and long-term rentals should be taxable (Poddar).
6. Goods and services supplied by public sector bodies, non-profit organizations and charities should be taxable (Gendron).
7. The federal VAT can be adopted without regard to whether the states maintain the RST or switch to a VAT (Cnossen, McLure).

Of these, I believe the most important conclusion is the last one, because the belief that adopting a federal VAT would harm the states has long been an impediment to federal tax reform. Of the others, the second and third represent a clear consensus,

²² McLure (2009); see also Duncan (2009).

and once the federal VAT is seen as a stand alone tax and not as a replacement for the income tax, they should follow without much debate. The fourth, fifth and sixth recommendations are on the other hand likely to be the subject of intense lobbying and therefore less likely to be adopted. Nevertheless, it is important to establish best practices in these areas as a beginning point for future legislative efforts.

Whatever the outcome at the detail level, I believe that the time has clearly come for US tax policy makers to focus on the best way to design a federal VAT. The most likely scenario for such a move would be a fiscal crisis caused by the exploding federal deficit. In such a crisis there will not be a lot of time to get the details right, and the VAT would be rushed through Congress. Thus, we should not wait for a crisis to occur to think about the details. This volume represents an attempt to start planning for such an eventuality. Hopefully, it will mark the beginning of a fruitful discussion.

REFERENCES

- Advisory Panel on Federal Tax Reform (2005) Simple, Fair, and Pro-Growth (Washington: US Government Printing Office)
- Auerbach and Gale (2009) Alan Auerbach and William Gale, The Economic Crisis and the Fiscal Crisis: 2009 and Beyond, <http://www.taxpolicycenter.org/publications/url.cfm?ID=411843>
- Aujean (2009) Michel Aujean, The Treatment of Government Entities, Non-Profit Organizations, and Other Exempt Bodies under a VAT: A Discussion Paper, Tax L. Rev.
- Bird and Gendron (2009) Richard M. Bird and Pierre-Pascal Gendron, Sales Taxes in Canada: The GST-HST-QST-RST "System", Tax L. Rev.
- Cnossen (2009) Sijbren Cnossen, VAT Coordination in Common Markets and Federations: Lessons from European Experience, Tax L. Rev.
- Conrad (2009) Robert F. Conrad, Comments on VAT and Housing, Tax L. Rev.
- Duncan (2009) Administrative Issues from the Adoption of a Federal VAT in addition to Existing Federal and State Taxes, Tax L. Rev.
- Eccleston (2008) Richard Eccleston, Taxing Reforms
- Gendron (2009) Pierre-Pascal Gendron, How Should the US Treat Entities, Nonprofit Organizations, and Other Tax-Exempt Bodies under a VAT, Tax L. Rev.
- Graetz (2008) Michael J. Graetz, 100 Million Unnecessary Returns: A Simple, Fair, and Competitive Plan for the United States.
- Grinberg (2009) Itai Grinberg, Where Credit is Due: Advantages of the Credit-Invoice Method for a Partial Replacement VAT, Tax L. Rev.
- James (2009) Kathryn James, The Politics of Tax Law Reform: A Comparative Analysis of the Adoption of Value Added Taxes in Australia, Canada and the United States
- Keen and Hellerstein (2009) Michael Keen and Walter Hellerstein, Interjurisdictional Issues in the Design of a VAT, Tax L. Rev.
- McLure (2009) Charles E. McLure Jr., How to Coordinate State and Local Taxes with a Federal Value Added Tax, Tax L. Rev.
- Penner (2009) Rudolph Penner Do We Need a VAT to Solve our Long-Run Budget Problems? Tax L. Rev.
- Perry (2009) Victoria J. Perry, VAT Coordination in Economic Unions and Federations, Tax L. Rev.
- Poddar (2009) Treatment of Housing under VAT for the US, Tax L. Rev.
- Schenk (2009) Alan Schenck, Taxation of Financial Services (Including Insurance) under a United States Value Added Tax, Tax L. Rev.