

# **E TAX: THE FLAT TAX AS AN ELECTRONIC CREDIT VAT**

**By Daniel S. Goldberg\***

## **INTRODUCTION**

The Hall-Rabushka Flat Tax is a two-tier consumption tax that is based on a subtraction method VAT.<sup>1</sup> The Hall-Rabushka nuance, however, allows a deduction for wages as if they were purchases of materials by the employer.<sup>2</sup> Wage earners would be taxed on those wages at rates that could be set as graduated or flat, with or without a zero rate or bracket amount and with or without personal exemptions and deductions. Hall and Rabushka proposed a flat rate equal to the VAT rate, with a zero bracket amount, personal exemptions and limited individual deductions.<sup>3</sup>

David Bradford proposed another two-tier consumption tax, which he called the “X Tax”.<sup>4</sup> The X Tax also consists of a modified subtraction VAT on the business side, in which wages are allowed as deductions and the remaining base is taxed at a single rate.<sup>5</sup> The X Tax,

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<sup>1</sup> Appendix A, in a brief review, sets forth the methodology of a subtraction method VAT, as well as other forms of consumption tax, including the Flat Tax, and discusses the relationship among them.

<sup>2</sup> ROBERT HALL AND ALVIN RABUSHKA, *THE FLAT TAX*, 62 (1995).

<sup>3</sup> *Id.* at 55-64.

<sup>4</sup> David Bradford, *Blueprint for International Tax Reform*, 26 *BROOKLYN J. INT'L L.* 1449 (2001).

<sup>5</sup> *Id.* at 1451.

however, couples the subtraction VAT with a graduated rate wage tax on the individual side in which the top tax rate is set at the VAT rate.<sup>6</sup> Most recently, Bradford suggested that the compensation tax component depart from a wage tax and instead take the form of a cash flow consumed income tax.<sup>7</sup> As such, it could capture the draw-down of a worker's qualified retirement savings in the individual's tax base without having to view it as a type of deferred wages, which would be the case if the compensation tax component took the form of a wage tax under which investment returns were excluded from the tax base.<sup>8</sup>

Both the Flat Tax and the X Tax share a distinguishing feature. By allowing a deduction for wages at the business level, but taxing those wages at the individual wage earner level, the tax is divided into two distinct parts: a business level tax, which is imposed on a traditional VAT base but with the allowance of a deduction for wages, and a wage tax at the individual level. In this manner, progressivity can be built into the system by using a graduated rate system for the wage tax. The tax can also be personalized by allowing personal exemptions and tax expenditure deductions from the wage tax.

The problem with a subtraction method VAT is that it requires annual computation and collection. Under a pure subtraction VAT, the tax due at each stage is computed annually by multiplying the VAT rate by the excess of the taxpayer's gross receipts over its deductible

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<sup>6</sup> *Id.* at 1450. David Bradford has written extensively on this proposal, most recently in David Bradford, *A System for the Twenty-First Century in TOWARD FUNDAMENTAL TAX REFORM* 11, 13-29 (Alan J. Auerbach and Kevin A. Hassets eds., 2005). This was his last writing before his untimely recent death.

<sup>7</sup> David Bradford, *A System for the Twenty-First Century in TOWARD FUNDAMENTAL TAX REFORM* 11, 13-14 (Alan J. Auerbach and Kevin A. Hassets eds., 2005). *See* Appendix A for a brief review of the consumed income tax form of consumption tax.

<sup>8</sup> *Id.* at 18-19.

expenditures for the year. The cost of raw materials and capital are deductible in computing value added,<sup>9</sup> but the cost of labor and returns on capital are not.<sup>10</sup> The Flat Tax and X Tax build on this structure by modifying the treatment of wages, but retain the characteristic that the tax would be computed on an annual basis by the seller and wage earner, and would be collected annually from enterprises at each stage of production. Thus, a subtraction VAT must be computed and audited manually to ensure compliance, because there would be no automatic, authoritative compilation of the sales and purchases on which the taxing authorities could rely. Further, because sales and purchases do not involve the flow of tax funds collected at the time of sale, there would be no electronic trail left by the flow of funds. As such, a subtraction VAT would rely on taxpayer self-reporting.

These characteristics are failings shared with the current income tax. The failings have been controlled somewhat under the current income tax law by government reporting requirements on form W-2 for wages and form 1099 for other items of income, but that compliance solution is far from complete. For example, transactions whose tax consequences depend on basis, like sales of property, remain unverified absent IRS audit. Further, the reporting requirements generally do not extend to payments to corporations.

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<sup>9</sup>*See generally* U.S. DEP'T OF THE TREASURY, TAX REFORM FOR FAIRNESS, SIMPLICITY, AND ECONOMIC GROWTH, Vol. 3 (1984). The cost of capital is only fully deductible in a consumption style VAT, not a Gross Domestic Product (GDP) or Income Type VAT. *Id.* at 5-7.

<sup>10</sup>*Id.* *See also* Gilbert Metcalf, *The Role of a Value-Added Tax in Fundamental Tax Reform*, in FRONTIERS OF TAX REFORM (hereinafter "Frontiers") 97 (Michael J. Boskin ed., 1996) (pointing out that value added includes the value of labor and return to capital, and therefore would be included in the tax base).

## **THE E TAX PROPOSAL**

The administrative characteristic of annual accounting and collection can be eliminated by substituting a modified credit invoice VAT for a subtraction VAT.<sup>11</sup> Specifically, if the Flat Tax or X Tax proposals were modified by substituting a credit invoice business level VAT for the subtraction VAT, the business tax would become a point of sale or transaction tax, which could be collected in each transaction rather than annually. Thus, one could combine the credit invoice VAT, modified for wages (as discussed later), with a wage tax in order to build in progressivity, as the Flat Tax and X Tax proposals do. This modification to the two tier tax structures that have been proposed previously would both improve compliance and facilitate a pay-as-you-go collection system. Transaction taxes lend themselves to electronic tracking and tax collection, and therefore impose an automatic framework to the taxing process. “E Tax” would therefore be an appropriate name for the proposal.

A credit VAT, which is collected at the final stage of sale like a retail sales tax, can be inexpensive, accurate and virtually leak-proof in an economy in which money transfers take place electronically. To illustrate this point, assume a retail purchase transaction using a debit card under a VAT. When the customer’s debit card is swiped to make a purchase that is processed electronically, the retail merchant in effect gains access to the customer's bank account. The appropriate amount, including VAT, would be automatically withdrawn from the customer's account. The clearing bank which handles the transaction electronically would then make an automatic entry, debiting the customer's account for the purchase price plus the VAT,

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<sup>11</sup> Appendix A shows the substantive equivalence of the credit invoice VAT to a subtraction method VAT.

crediting the merchant's account for the purchase price, and crediting the government's tax collection account for the VAT. All of these operations would be programmed and be part of the clearing bank's normal operations. Other electronic funds transactions, between businesses, would work in this manner also, even without an actual debit card.

A credit card transaction would operate in much the same way from the consumer's and the merchant's point of view. The only difference would be that the clearing bank would charge the customer's credit account for that amount, thereby establishing a lending transaction, rather than make an immediate withdrawal from the customer's account. The customer's account would be charged with both the purchase price and the appropriate VAT. As in the debit transaction, the VAT would be immediately credited to the federal government's tax collection account. In that manner, the tax collection would be automatic.

The transmission of the VAT to the government is not the end of the process for the seller. The seller would be entitled to a credit on the VAT previously paid to its suppliers.<sup>12</sup> Records of the seller's allowable credits would have been kept by the financial institution's reporting to the seller and the taxing authority the VAT paid on the seller's initial purchases. As a result, the seller would not be required to file an annual tax return. Rather, the seller would only have to make sure that the tax collector's electronic records of sales and purchases and their corresponding VAT collections and payments match the seller's own records, which they would if all parties were following prescribed procedures. Presumably, this cross-checking would be done automatically and periodically as a matter of course.

A numerical example will illustrate the mechanics of the tax collection. A retail purchase in the amount of \$100 made by credit card would be subject to a VAT, set at a tax-inclusive rate

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<sup>12</sup> See Appendix A for an explanation of the mechanics of a credit invoice VAT.

of 20%, so that the stated purchase price would already include the \$20 VAT.<sup>13</sup> When the credit or debit card is used for the purchase, an amount equal to the \$100 purchase price of the item would be subtracted from the debit cardholder's account or charged to the credit cardholder's account. At that time, the \$20 tax portion of the charge would be credited immediately to a tax collection account of the government at the financial institution conducting the electronic bookkeeping. In the case of a VAT, the charge would be bookmarked with a tax identification number, to identify the purchaser for credit. The financial institution's tax collection account would be swept either immediately or at the end of each day to a Federal Reserve account. The procedure would be exactly the same, regardless of whether a debit card, credit card or other means of electronic funds transfer (EFT) were used. In all cases, the tax assessed at the point-of-sale on the transaction would be immediately charged to the purchaser and credited to the government's account. All of the parties would know the amount of the charge that represented the direct sales price and the amount of the charge that represented the tax.

This same system could be used if a retail sales tax were adopted in lieu of a VAT. The essential difference between a VAT and a retail sales tax, in terms of mechanics of collection, is that under a retail sales tax, the automatic payment method described above would be the end of the process. That is, tax would be collected only upon the final retail sale, not on the sale of intermediate goods, as would be the case under a VAT. In contrast, under a VAT, the seller would have to be given credit separately for the VAT it paid to its suppliers of raw materials. As illustrated above, the credit process would involve an additional step to complete the tax collection process. But, taxing the intermediate transactions under a VAT would reduce the risks

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<sup>13</sup> Appendix B sets forth a discussion of tax-inclusive and tax-exclusive tax rates and their algebraic relationship. This example could have used the economically equivalent tax-exclusive tax rate of 25%, with the VAT added on to the purchase price of \$80, also generating a VAT of \$20.

of evasion, because the failure to collect the tax at the point of the retail sale would result in forfeiture of the seller's credit for tax paid on the purchase and therefore would involve a smaller loss of revenue than would be the loss under a retail sales tax.<sup>14</sup> It would also avoid the evasion of tax that could result from a buyer mischaracterizing a purchase as a business purchase, upon which no retail sales tax is due, instead of as a consumption purchase. Under a VAT, the purchaser would be required to make that mischaracterization to the government in claiming its credit. Whereas the falsification under a retail sales tax would be one of non-reporting of the sale, the falsification under a VAT would involve an affirmative mischaracterization of an amount already reported to the government, thereby arguably making the claim easier for the government to review and verify.

At the business supplier level, one would expect that payment would be made by other electronic means besides a debit or credit card, such as electronic funds transfers (EFT). Indeed, even paper checks are now being cleared electronically,<sup>15</sup> and should also best be characterized as EFTs. Cash purchases at the non-criminal business level are rare, if they exist at all, but can be dealt with in the manner described below for cash retail purchases.

#### Anonymity

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<sup>14</sup> Reuven Avi-Yonah, *Risk, Rents, and Regressivity: Why the United States Needs both and Income Tax and a VAT*, 105 TAX NOTES 1651 (December 20, 2004).

<sup>15</sup> See generally, Catherine Lee Wilson, *Banking on the Net: Extending Bank Regulation to Electronic Money and Beyond*, 30 CREIGHTON L. REV. 671 (describing electronic checks as paper checks that are created and cleared electronically). The article foresaw that paper checks would also be cleared electronically in the near future due to the cost savings associated with electronic over manual clearing; it is estimated that banks save approximately 80 cents for every transaction eliminating paper checks. Christopher B. Woods, *Commercial Law: Determining Repugnancy in an Electronic Age: Excluded Transactions Under Electronic Writing and Signature Legislation*, 52 OKLA. L. REV. 411, 451 (1999).

It is anticipated that most retail transactions would be undertaken with either a credit card or a debit card. In some cases, however, the customer may desire a more de-personalized method of payment. For example, a taxpayer may desire confidentiality with regard to her purchases. This confidentiality could be achieved by allowing the customer to purchase a Stored Value Card. Furthermore, to prevent the substitution of these Stored Value Cards for currency, which could be used to avoid the VAT at the retail level, the holder's personal identification attribute,<sup>16</sup> such as currently a PIN and later a thumb print or retinal image, would be required to transfer funds from the unnamed account accessed by the card.

In addition, cash cards could be used for small incidental purchases, such as to satisfy a parking meter. Cash cards would be printed with magnetic strips like Washington Metro fare cards.<sup>17</sup> They would be subject to a VAT when purchased. For example, assuming again a VAT rate of 20%, the customer could purchase a \$80 bearer cash card by having \$100 debited to the customer's account but receiving a stored value amount of only \$80. The customer would only have the actual amount of the purchase (without the VAT amount) subtracted from the balance on the card. Correspondingly, the merchant would keep the entire proceeds of the sale, because

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<sup>16</sup> Currently, a personal identification number (PIN) is used. However, one can imagine that a thumb print or retinal image may be substituted as soon as technology allows. *See, e.g.* Randall W. Sifers, *Regulating Electronic Money in Small-value Payment Systems: Telecommunications Law as a Regulatory Model*, 49 FED. COMM. L.J. 701, 714, 724-25 (describing security measures for smart cards).

<sup>17</sup> For example, in Washington, D.C., metro riders purchase debit SmarTrip or fare cards and put a certain amount of cash on the card. The rider flashes the SmarTrip card or inserts the fare card upon entry into the station, and then reinserts the card upon departure. The amount debited is based upon the distance traveled. The difference between the cards lies in the central repository nature of the SmarTrip card for keeping track of any remaining value on the account, whereas the fare card uses only a magnetic strip on the card itself to keep track of value. *See generally*, Washington Area Metropolitan Transit Authority (WMATA), "SmarTrip: More than a smart card--It's pure genius" at <http://www.wmata.com/riding/smartrip.cfm> (last visited July 11, 2005).



the government would have already received its VAT or sales tax when the customer purchased the cash card.

The key to enjoying the speed and convenience of stored value and cash cards without facilitating the easy avoidance of tax is to ensure that the cards themselves cannot become a medium of exchange. This can be accomplished by personalizing the cards to make them usable by only the purchaser and by preventing transfer of the value embedded in the card to another card.

### Cash Transactions

This system is also adaptable to an economy in which some transactions still take place using cash. In those transactions, the merchant would be required to record the transaction in the same manner as a debit or credit card transaction, but would direct the payment of tax electronically from its own funds. The merchant would have already collected from the customer a sufficient amount of cash to pay the tax. This payment of tax could occur automatically by the merchant electronically reporting the sale as a cash transaction. Tax collection on cash transactions, accordingly, would be heavily dependent upon compliance by the merchant. Indeed, some merchants may run their businesses entirely with cash or checks and never use credit cards or other EFT modes. Collection of tax from those merchants would require paper reporting and auditing and could result in compliance problems. As cash payments are replaced in the economy by electronic payments,<sup>18</sup> however, compliance issues would decline. Further, to the extent there is a compliance problem, it would likely be limited to small business retailers. The retail layer of the VAT may be at risk, but it is likely that the VAT would

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<sup>18</sup> See generally, Daniel Garcia Swartz, Robert W. Hahn, and Anne Layne-Farrar, *The Economics of a Cashless Society: An Analysis of the Costs and Benefits of Payment Instruments*, AEI-BROOKINGS JOINT CENTER FOR REGULATORY STUDIES, RELATED PUBLICATION 04-24 (September, 2004).

be reliably collected by large business suppliers, so the tax gap would be limited to the retail level. Revenue auditors, freed from the income tax, should be available to ensure reasonable compliance.

#### Sales Tax as an Alternative to a VAT

This article advocates a credit style VAT over a retail sales tax, because the VAT collects tax at all stages of production and is therefore less easily evaded. In other respects, however, a retail sales tax lends itself to automatic point-of-sale implementation as well as does a VAT. Disregarding this one point, arguments made in favor of a VAT should apply equally to a retail sales tax.

#### **TREATMENT OF WAGES**

As discussed earlier, progressivity and any desired personalizing of the tax would be introduced at the wage earner level, as it would be with the Flat Tax and X Tax proposals. The mechanics of the wage tax collection, however, would be slightly different than under those proposals. This point can be illustrated using the previous example, but assuming a credit VAT in which wages are subject to a VAT. A business paying wages would be entitled to a credit for the VAT on those wages against the VAT collected upon sale of its products. No separate withholding, however, would have to be made with regard to wages. The employee would be taxed on the full amount of her wages under the wage tax. The wage tax could be designed with a zero rate amount, graduated rates and personal exemptions and deductions.

Alternatively, the system can build in a tax collecting mechanism at the business employer level that would systematically and periodically collect taxes with respect to wages. This can be done under the modified credit invoice VAT by not permitting the employer to take an actual credit on VAT paid with respect to employees. Instead, only an accounting would be

required of the VAT paid by the business on wages paid to each worker. The taxes paid by the business firm would become the taxes paid on behalf of the employee and would be credited to the employee's account.

Again, the employee would compute a tax on her wage income at either a flat rate or graduated rate, with or without a zero rate amount, exemptions and deductions, as the case may be. The VAT collected from her employer attributable to the wages would be available as a refundable credit against any wage tax liability. In concept, the VAT collected on wages would serve as an advance collection of her tax on her wage income. Under a system of electronic payments, the VAT amount on wages would be credited, automatically and electronically, to a tax payment from the employee on wages through a tax credit account for the individual employee. As a result, when the employee reports her wages, grossed-up by the VAT computed on those wages,<sup>19</sup> she will also report the VAT credited to her account by the business firm that paid the compensation. If the VAT charged to the employer on the wages and the wage tax assessed on the employee were the same, no additional payments would be required. If the VAT charged to the employer exceeded the employees' wage tax liability, the employee would be entitled to a refund. If the wage tax liability exceeded the VAT, additional tax would be due from the employee.

For example, assume a tax-inclusive VAT of 20% and a wage tax at that same tax-inclusive rate.<sup>20</sup> If the company that has collected the tax pays wages in the amount of \$8, that \$8 wage amount, plus the \$2 VAT on that amount, would be taxable to the employee. The employee, however, would be entitled to a refundable credit equal to the \$2 VAT that had been

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<sup>19</sup> See Appendix C for an explanation of the concept of gross-up.

<sup>20</sup> See Appendix B, which demonstrates the equivalence of a 20% tax-inclusive rate to a 25% tax-exclusive rate.

paid by the employer on the employee's wages. Conceptually, this amount can be viewed as the amount collected by the employer from its customer with respect to that \$10 grossed-up wage amount. That amount, \$2, represents the VAT on the portion of the employer's sale price attributable to the employee's wage. Thus, if the employee's wage tax, computed by subtracting from wages the applicable zero rate amount, personal exemptions and personalized deductions, was less than \$2, no additional tax would be due and, depending upon the rate structure, some of the tax credit could be refunded to the employee. On the other hand, if the employee's wage income were high and the applicable tax rate on such income exceeded 20%, the employee would still have additional tax liability after taking into account the \$2 credit. (It should be noted that the wage earner's tax could be computed with or without a gross-up of the \$2; the choice would simply reflect the desired effective rate of the tax on the employee.)<sup>21</sup> In this manner, by engrafting a wage tax onto the VAT, the tax system could be personalized for wage earners even though substantially all of the tax due would have been collected at the point-of-sale by means of a VAT.

This system could also be implemented in a slightly different way. The wage earner's tax could be enacted as an income tax on wages subject to employer withholding. The employer, in turn, could be allowed a VAT credit for wage taxes withheld. This system would function mechanically, however, in the same manner for the employer as the payment of a VAT on wages. The wage withholding on the personal services income of an employee would generate a credit to the employer company, but an equivalent amount would be subtracted from the employee's wages and automatically paid to the government. If the employee were then taxed on a base measured by wages in a manner similar to a personalized income tax, with a zero rate

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<sup>21</sup> See Appendix C.

amount, graduated rates and personal exemptions and deductions, then the withholding with respect to the employee's wages would serve as an offset to her wage income tax. This amount could be refunded for a low wage employee (figured as an aggregate of all of the employee's wages for the year). A high wage employee would have to pay additional tax if his tax liability exceeded the withheld amount.

Both conceptualizations of systematically collecting, at the business level, the tax attributable to wages described above are economically equivalent. They differ only in the technical description and legal incidence<sup>22</sup> of the tax on wage earnings. In the first system, the legal incidence of the tax is on the employer, and the tax paid by the employer is available, computationally, as a refundable credit to the employee. In the second system, the legal incidence of the tax is on the employee, but the tax is satisfied on behalf of the employee automatically through withholding by the employer.

Moreover, this system of refundable credits for employees would serve as a substitute for the current earned income tax credit, although in a substantially simplified form. Low wage earners would in effect receive a wage subsidy, which would be computed annually, but could be converted to periodic payments in the same manner as under the current EITC.

## **CONCLUSION**

The E Tax differs from the Hall-Rabushka Flat Tax and the Bradford X Tax in that it employs a credit method VAT instead of the subtraction type VAT advocated by Hall, Rabushka and Bradford. In almost all respects, it will not alter the macro-economic conclusions of Hall,

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<sup>22</sup> For a discussion on the difference between economic incidence and legal incidence, see Daniel Goldberg, *E-Tax: Fundamental Tax Reform and the Transition to a Currency-Free Economy*, 20 VA. TAX REV. 1 (2000).

Rabushka and Bradford regarding the shift to the tax, with the exception of ease of border adjustments inherent in the credit VAT over the subtraction VAT.<sup>23</sup>

The E Tax, however, in contrast to the Flat Tax and X Tax, is a transaction tax and therefore facilitates point-of-sale collection. Nevertheless, like the Flat Tax and the X Tax, it still permits greater progressivity than a straight business level VAT, because the separate wage tax component of the tax allows for flexibility in tax rates, exemptions and deductions. Although this characteristic may appear to be a simple detail without a great conceptual difference, the characteristic of taxing transactions and dispensing with annual accounting in fact makes an enormous practical difference. It would facilitate electronic collection and auditing to ensure compliance. It thereby should reduce costs of compliance after initial start-up expenses of programming, and significantly reduce the tax gap.

The E Tax takes advantage of computer technology that will only get better as the twenty-first century progresses and the shift continues away from cash transactions to electronic transactions, including debit cards, credit cards and EFTs. These methods of payment have become not only common place but dominant in commerce. Accordingly, the time has come for its serious consideration.

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<sup>23</sup> Charles E., McLure, Jr., *State and Local Implications of a Federal Value-Added Tax*, 38 TAX NOTES 1517, 1530, (1988). See also Frederick Bradshaw, *Tax Relief and the Competitiveness of U.S. Exporters*, 97 TAX NOTES 129, 130 (Oct 7, 2002) (pointing out that indirect taxes like the credit invoice VAT are eligible for border tax adjustments under the current international trade regime, while direct taxes like the subtraction VAT are not).