

CRS Report for Congress

Received through the CRS Web

Transaction Tax: General Overview

December 2, 2004

Maxim Shvedov
Analyst in Public Sector Economics
Government and Finance Division

Transaction Tax: General Overview

Summary

In recent years a number of alternative taxation mechanisms have been proposed to augment or replace income taxes and other traditional revenue sources. This report describes the economics of one of the proposals — a broad-based transaction tax or fee. On February 3, 2004, Representative Fattah introduced H.R. 3759 (“Transform America Transaction Fee of 2004”) that required a study of replacing current federal taxes with a broad-based transaction fee. This report provides relevant background information on transaction taxes or fees in general and discusses some of their more notable economic aspects.

A broad-based transaction fee or tax is triggered by any transaction and is imposed either as a percentage of a transaction’s full value, or as a flat fee. Most items are resold several times during the production process, and every such transaction would be taxed. This pyramiding effect makes the tax different from other consumption-based taxes, such as sales and use taxes or value-added taxes.

Historically, transaction taxes have been applied to a limited number of transactions, such as trades in various financial instruments. While they were used in the United States and abroad, they were never a major revenue source.

A transaction tax or fee may generate additional revenues for the federal government or substitute for existing ones. In doing so, it may reduce or eliminate existing distortions in the economic system, but introduce distortions of its own. For example, a transaction tax burden would fall more heavily on industries that involve large numbers of transactions. Its introduction might induce firms to vertically integrate production, which may not be beneficial from a social standpoint. Imposing the transaction tax in the financial market could possibly cause a significant loss of trading volume to competing overseas markets.

On the other hand, the transaction tax or fee might eliminate a great deal of complexity from the taxation system. It could be easier to administer and result in lower compliance and other related social costs. It may also prevent excessive speculative trading in financial instruments. In addition, it would be a means to tax underground economic activities.

Several tentative revenue estimates included in this report illustrate the revenue-generating potential of a broad based tax. For example, a 0.5% tax on stock transfers would yield no more than \$65.6 billion a year, and a 0.00006% tax on foreign exchange transactions would bring in just \$4.3 billion. In order to replace all federal receipts with the transaction tax revenues, the rate would have to be set at about 4.3% per transaction, possibly more. This estimate does not account for new federal programs envisioned by H.R. 3759.

This report provides general background information, but it does not evaluate any specific legislative proposal. The report will not be updated.

Contents

Introduction	1
Mechanics of the Transaction Tax	1
Background and Historical Information on Transaction Taxes	2
Impact of a Transaction Tax on Economic Behavior	4
The Transaction Tax's Revenue-Raising Potential	7

Transaction Tax: General Overview

Introduction

In recent years a number of alternative taxation mechanisms have been proposed to augment or replace income taxes and other traditional revenue sources. This report describes the economics of one of them — a broad-based transaction tax. On February 3, 2004, Representative Fattah introduced H.R. 3759 (“Transform America Transaction Fee of 2004”) that required the Department of the Treasury to study replacing the current federal taxes with a broad-based transaction fee. This report provides background information on transaction taxes and fees. It uses these terms interchangeably, since their economic impacts are identical.

Mechanics of the Transaction Tax

The transaction tax is triggered by a transaction that uses any kind of a payment instrument: check, cash, credit card, or anything else. The tax may be collected on retail and wholesale sales, purchases of intermediate goods, and financial or other intangibles’ transactions. Taxpayers would become liable for the tax at the moment they are able to exercise control over a piece of property or a service regardless of the payment method.

The transaction tax may appear similar to the sales and use tax — one of the major revenue sources for state and local governments — but there is a major distinction: sales tax is charged only on sales to the final consumer of the product, while the transaction tax would apply to intermediate users as well. It also differs from a value added tax (VAT), commonly used by European countries, since the VAT is imposed only on a portion of a transaction’s value, roughly the difference between an item’s selling price and its cost, thus avoiding multiple layers of taxation.¹

Transaction taxes may be assessed as a percentage of the value of the transaction (ad valorem) or as a flat fee per transaction. For example, when a person buys \$100 worth of groceries under the fixed rate transaction tax, the tax due would amount to \$5, using a 5% rate for illustration. By the same token, a money management firm buying \$1 million worth of bonds would incur a \$50,000 liability. An example of a fixed fee would be \$1 fee for any transaction, whether valued at \$100 or \$1 million. Computation of tax liabilities may become more cumbersome in the case of a

¹ For further information, see CRS Issue Brief IB95060, *Flat Tax Proposals and Fundamental Tax Reform: An Overview*, by James M. Bickley.

complex multi-party transaction, such as a real estate purchase financed through a bank, where several transactions may be required to complete the sale.

The tax could be collected by the seller or financial institution servicing the transaction and transferred to the U.S. Treasury just as sales and use taxes are transferred to state treasuries today, or handled in some other manner prescribed by law. Economic theory suggests that who bears the burden of the tax (i.e. whose income is effectively reduced) depends on market forces and not on whether the buyer or seller is legally responsible for the tax.

The transaction tax does not have to be as broad as described above. It may be limited to certain segments of the economy. There is some history of imposing transaction taxes on narrowly-defined segments of the economy.

Background and Historical Information on Transaction Taxes

Transaction taxes have some precedents in the United States and abroad, although the existing transaction taxes are limited in scope. No major industrialized nation has adopted a broad-based transaction tax.

At the federal level one of the historical examples of a transaction tax was a stock transfer tax (STT) effective from 1914 to 1966. In 1966 the rates were 0.1% at security issuance and 0.04% on transfer. At the present time the federal government still levies a small tax on share issuance and transfers at the rates of 0.028% and 0.0033%, respectively, for the primary purpose of financing the activities of the Securities and Exchange Commission (SEC). In 2000 this tax raised revenues of \$2.2 billion,² although after recent enactment of rate reductions, the revenues are expected to drop.³

In the late 1980s and early 1990s, several ideas to introduce additional securities transaction taxes in the U.S. were floated, though none was implemented.⁴ Some of the proposals were targeted to narrow segments of financial markets, such as trades in derivatives, while others were broader and covered most financial transactions.

² Robert Pollin and James Heintz, *Evaluation of a Proposal to Reinstate the New York Stock Transfer Tax*, research report (Political Economy Research Institute, University of Massachusetts, Amherst, April 2003), p. 5.

³ For further information see CRS Report RS20953, *Reducing Securities Transaction Fees: Effects on Collections of H.R. 1088 and S. 143*, by Mark Jickling.

⁴ For further information see CRS Report 90-415, *Taxation of Securities Transactions to Discourage Short-Term Investment: a Selected Bibliography*, by Louis Alan Talley; CRS Report 90-350, *The Securities Transactions Tax: an Overview of the Issues*, by Donald W. Kiefer; and CRS Report 93-474 E, *A Tax on Large-Dollar Wire Funds Transfers?*, by William Jackson. These reports are archived, but available on request.

Other federal taxes on transactions include excise taxes, such as the 3% tax on telephone services and the 3% luxury passenger vehicle tax. Some excise taxes are levied on a per-transaction or per-unit basis, irrespective of an item's value, such as alcohol or tobacco taxes.⁵ Unlike the transaction tax, the existing excise taxes apply only once for each product, avoiding a pyramiding effect.

In addition to federal taxes, many state and local governments impose levies on such transactions as sales of real property and vehicles or provision of telecommunication services. The rates and exact definitions of taxable events differ by jurisdiction.

Worldwide, many governments impose some kinds of transaction taxes, for example, on securities transfers. Specifics vary by country.⁶ In many cases revenues raised are insignificant, but in some instances they become noticeable. For example, the STT generated 4.2% of the government general account revenue in Japan in 1988.⁷ However, by 1993 this share fell back to 0.96% as most of the speculative trading moved to the trading floors in much-less-taxed locations. In many countries STTs were either reduced or completely eliminated over the last decade.

Recently, the Peruvian government imposed a temporary 0.10% tax on banking transactions. The tax became effective in March 2004 and was expected to raise revenues equal to about 0.7% of the country's gross domestic product (GDP).⁸

The ongoing discussions in the economic literature on transaction taxes are focused in narrow areas such as currency exchange or the STT. For example, James Tobin put forward an idea of taxing currency transactions, which came to be known as the "Tobin tax," in order to stabilize exchange rates, not to raise revenues.⁹ However, other proponents of the tax would like to tap its revenue potential. Most

⁵ CCH Editorial Staff Publication, *2003 U.S. Master Tax Guide* (Chicago: CCH Incorporated, 2002), pp. 46-48.

⁶ See Appendix in CRS Report 90-350 and Table 1 in Bob Pollin, "Applying a Securities Transactions Tax to the US: Design Issues, Market Impact, Revenue Estimates," in *Debating the Tobin Tax*, James Weaver, Randall Dodd, and Jamie Baker, eds. (Washington, DC: New Rules for Global Finance Coalition, 2003), p. 122, visited online on Feb. 20, 2004, at [<http://www.new-rules.org/Docs/tobintax/debatingthetobintax.pdf>].

⁷ Peter M. Garber, "Issues of Enforcement and Evasion in a Tax on Foreign Exchange Transactions," in *The Tobin Tax: Coping with Financial Volatility*, Mahbub ul Haq, Inge Kaul, and Isabelle Grunberg, eds. (New York, Oxford: Oxford University Press, 1996), p. 130.

⁸ Robin Emmott, "Bank Tax Seen as Little Help for Peruvian Economy," Reuters, Dec. 5, 2003; "Peru Cabinet May Propose Bank Tax Changes Soon-PM," Reuters, March 1, 2004; Lucien O. Chauvin, "Peruvian Finance Minister Says New Tax On Banking Transactions Revealing Evasion," *Daily Tax Report*, No. 106, June 3, 2004, p. G-3.

⁹ James Tobin, "Prologue," in Mahbub ul Haq, Inge Kaul, and Isabelle Grunberg, pp. ix-xviii.

recently Belgian Parliament approved a national Tobin tax, but it is unclear whether it would ever become effective.¹⁰

Impact of a Transaction Tax on Economic Behavior

Generally speaking, any tax changes behavior of economic agents since it alters costs and benefits associated with decisions they make. Consequently, imposing taxes in a competitive market typically leads to economic inefficiency. However, the taxation mechanism does affect how economic agents respond to it, and tax burden per se is just one part of the equation. Different tax structures can raise exactly the same revenues, and yet create very different sets of incentives.

If the transaction tax revenues replace some other federal receipts, the aggregate tax burden on the U.S. economy as a whole would remain constant. At the same time separate taxpayers' burdens may end up higher or lower.

By eliminating or reducing some existing federal taxes, the transaction tax may cut efficiency losses and distortions associated with them. For example, if revenues from the new tax allow a reduction in marginal income tax rates, firms might be willing to undertake projects that were not economically profitable in the past and workers would be more willing to supply labor than before. On the other hand, the transaction tax would introduce its own distortions into the economic system. Its burden would still fall on both labor and investment income, although burden shares may shift.

A transaction tax may be imposed several times on an item as manufacturers and distributors buy and sell it before it finds its way to the final consumer. This pyramiding effect occurs because the tax applies to the full transaction value, without any credit for the previously paid taxes. At every stage of the production chain the tax becomes a cost ultimately incorporated in the output prices. Therefore, even though the nominal tax rate can be set at a relatively low level, the effective rate may end up being a multiple of that rate.

These multiple layers of taxation would affect different sectors of the economy in different ways. For example, offering legal services may require a minimal supply chain, with a correspondingly low total transaction tax bill. In contrast, an aircraft manufacturer would have to include in the final price transaction taxes paid by all of its suppliers, from mining companies to electronics vendors. Thus the effective tax rate would differ across goods, and generally such variation is likely to create more distortions than a tax imposed at a uniform effective rate.

A transaction tax creates incentives to minimize the number of transactions necessary to manufacture a product and bring it to the final consumer. One of the fundamental tenets of economics suggests that specialization and trade are two of the key driving forces of economic development, because through specialization

¹⁰ "Belgium Set to Approve 'Tobin Tax' Despite Protests From EU Officials," *Daily Tax Report*, No. 228, Nov. 29, 2004, p. G-4.

resources are used efficiently. Taxing transactions discourages economic agents from gaining specialized skills. In the absence of transaction taxes, each firm can choose between in-house production or outsourcing, taking into account actual costs associated with every option. After imposition of a transaction tax, this choice would become artificially skewed towards internalizing production, even though there is no advantage to the society as a whole in this mode of operation.

Transaction tax liability is present regardless of whether a company makes or loses money. Many sectors of the economy are cyclical in nature. The necessity to pay the tax may become a significant burden for companies, especially in cyclical industries and start-ups. Knowing that they have to pay the tax even if the venture is unprofitable may discourage companies from taking entrepreneurial risks. In addition, companies would have to keep larger cash reserves to service their tax liability in a bad year, which implies a lower return on capital and economic inefficiency.

Many of the problems discussed above are present regardless of changes in individual taxpayers' absolute tax liabilities. Their total transaction taxes may be lower than the taxes they currently face, yet this lower absolute burden would not eliminate the above distortions.

Imposition of the tax may put at a disadvantage domestic financial markets that compete internationally. In essence, the largest financial centers in New York, Tokyo, and London operate globally around-the-clock, and geographic location of buyers and sellers is of little importance. The industry turnovers are huge. For example, average daily foreign exchange gross turnover in the U.S. was \$287 billion in April of 2001.¹¹ In the same year, total market value of equity and options sales on the U.S. exchanges exceeded \$13 trillion.¹² Tiny fluctuations in securities' prices generate huge cross-border capital flows.

As a result of a transaction tax, trading activity might flee the U.S. in favor of other sites. For example, Umlauf¹³ cites the historical example of Sweden, which increased its STT to 2% in 1986. By the end of the decade, half of the volume in Swedish shares traded in London. Furthermore, attracting back once-lost activity may be extremely difficult after alternative trading sites emerge.

On the positive side, introduction of the transaction tax, if accompanied by complete elimination of income taxation, might create an opportunity to address a major concern with the existing law: its complexity, reflected in high compliance,

¹¹ Bank for International Settlements, Statistical Annex in *Triennial Central Bank Survey 2001*, March 2002, visited on Feb. 20, 2004, at [<http://www.bis.org/publ/rpfx02a.pdf>].

¹² U.S. Securities and Exchange Commission, Appendix in *2002 Annual Report*, visited on Feb. 20, 2004, at [<http://www.sec.gov/pdf/annrep02/ar02appendix.pdf>].

¹³ Steven R. Umlauf, Transaction Taxes and the Behavior of the Swedish Stock Market, *Journal of Financial Economics*, vol. 33, issue 2, April 1993, pp. 227-240 as cited in R. Glenn Hubbard, "Securities Transactions Taxes: Tax Design, Revenue, and Policy Considerations," *Tax Notes*, Nov. 22, 1993, pp. 985-1000, also available at [<http://www.taxanalysts.com>].

administration, and other costs. The Internal Revenue Service (IRS) net cost of operations in 2002 was over \$10 billion,¹⁴ but this is just a part of the total economy-wide cost. While estimates vary, most show that the societal total compliance costs are much larger than the IRS budget. The Office of Management and Budget estimates that taxpayers spend 6.7 billion hours annually to comply with the Internal Revenue Code.¹⁵ Assuming labor at \$30 an hour, it implies a cost in excess of \$200 billion.¹⁶ Scott Moody of the Tax Foundation estimated the 2001 compliance burden at \$140 billion in his testimony to the House Ways and Means Committee.¹⁷ The Office of Tax Policy Research at the University of Michigan Business School, directed by Joel Slemrod, provides an estimate of over 3 billion hours and as much as \$100 billion annually.¹⁸

Replacing federal individual and corporate taxes with a transaction tax may eliminate substantial portions of this burden to society. For example, most individual taxpayers may no longer need to file an annual federal tax return. The magnitude of this cost reduction would depend on exact implementation of the reform and on other factors, such as whether states follow suit and repeal their income taxes or whether any tax preferences remain under the new system.

A transaction tax would discourage short-term speculative trading in financial markets in favor of long-term investments. In any time period short-term traders execute far more trades than long-term investors, and therefore would pay proportionately more in transaction taxes. This was the rationale behind the “Tobin tax.” Tobin first proposed it to prevent short-term trading that led to excessive exchange rate volatility and by many accounts exacerbated currency crises. To the extent these assertions are valid, a transaction tax could improve overall welfare. At the same time many researchers believe that frictionless financial markets are essential to an efficient allocation of resources.

A transaction tax may capture some of the revenues from an underground economic activity that currently evades taxation. Since illicit income remains undeclared, the federal government does not collect any taxes on it. However, proceeds from illegal operations eventually are used to buy legitimate goods and

¹⁴ U. S. General Accounting Office, *Financial Audit. IRS's Fiscal Years 2002 and 2001 Financial Statements*, GAO Report to the Secretary of the Treasury, GAO-03-243 (Washington: Nov. 2002), p.74.

¹⁵ U.S. Office of Management and Budget, Office of Information and Regulatory Affairs, *Managing Information Collection and Dissemination (Fiscal Year 2003)*, visited on Feb. 20, 2004 at [http://www.whitehouse.gov/omb/inforeg/2003_info_coll_dism.pdf].

¹⁶ Methodology follows Chris Edwards, *Simplifying Federal Taxes: the Advantages of Consumption-Based Taxation*, *Policy Analysis*, No. 416, Oct. 17, 2001, visited on Feb. 20, 2004, at [<http://www.cato.org/pubs/pas/pa416.pdf>].

¹⁷ Tax Foundation, “Cost of Complying with Federal Income Tax Will Reach \$140 Billion in 2001,” July 17, 2001 release, visited on Feb. 20, 2004, at [<http://www.taxfoundation.org/pr-compliance-testimony.html>].

¹⁸ The Office of Tax Policy Research, “Hot Topics in Taxation, Compliance Costs,” visited on Feb. 20, 2004 at [<http://www.otpr.org>] or [http://www.otpr.org/compliance_costs.html].

services that would become subject to the tax under the plan. On the other hand, the transaction tax may induce broader use of undocumented cash payments to reduce tax liability.

The Transaction Tax's Revenue-Raising Potential

How much revenue can be raised by applying the tax to specific sectors of the economy, that either were subject to such taxes historically, or were considered as candidates for this tax? What would be the transaction tax rate necessary to substitute all current federal revenue sources as envisioned by H.R. 3759? The analysis in this section attempts to provide some ballpark estimates to answer these questions.

In a static world estimating the revenue potential would be as simple as multiplying the tax rate by the total domestic transactions turnover. In reality, however, the tax would alter economic agents' behavior, with a corresponding change in the total volume of transactions. The response to the levy would not be uniform across economic sectors, and would depend on specifics of the law. Thus, the rate estimates in this section try to capture just the most potent dynamic effects and are highly tentative.

One of the industries historically subject to transaction taxes is the financial sector. Imposition of the tax may cause a dramatic reduction in its transaction volumes. The most sensitive markets are likely to be foreign exchange. A number of estimates of the maximum rate that does not shut down trading in the market were developed in the past. For example, Garber points out that for a tax on transactions in foreign exchange markets imposed unilaterally, 6/1000 of a basis point (or 0.00006%) is a realistic maximum magnitude.¹⁹ Assuming that the rate of 0.00006% causes no reduction of trading volume, the tax on foreign currency exchange transactions would yield just \$4.3 billion a year, despite an annual turnover in dozens of trillion dollars.

Other financial markets are somewhat less prone to cross-border migration and therefore the tax rate ceilings are higher. As mentioned above, the United States currently imposes the tax on securities transactions at a 0.0033% rate. In the U.K. a similar tax, known as a stamp duty, has a 0.5% rate²⁰ and in some countries it is even higher than that. It is unclear, though, if these rates are sustainable in the long run, given increasing economic openness worldwide.

Assuming a 0.5% rate on over \$13 trillion in stock and options transactions, the static revenue estimate is \$65.6 billion, but most likely actual revenues would fall far short of this figure. The revenues depend on transaction volume, and it would fall because of the negative relation of turnover to transaction costs, described

¹⁹ Garber, p. 135.

²⁰ Stephany Griffith-Jones, "Institutional Arrangements for a Tax on International Currency Transactions," in Mahbub ul Haq, Inge Kaul, and Isabelle Grunberg, p. 147.

numerically by elasticity. Elasticity is (a negative of) a ratio of relative change in turnover to relative change in transaction costs. The value of an elasticity of 1.5 means that, say, a 5% increase in transaction costs would result in a 7.5% reduction in transaction volume. Hubbard lists some of the elasticity estimates ranging from 0.26 to 1.7, with the 0.26 estimate being obtained in 1976 before industry deregulation.²¹ Since the elasticity value typically is not constant across cost ranges, the estimates would work well only for a relatively small change in transaction costs. By contrast, a 0.5% tax can easily exceed the bid-ask spread (the difference between a stock's selling and buying prices), implying a percentage change in transaction costs of more than 100%. Therefore, one might expect a significant turnover reduction and lower federal revenues.

Trading in other financial assets, such as non-governmental bonds and swaps, would generate additional revenue. However, it may be difficult to establish a rate pattern that would treat all financial instruments equally. Without such an equality trading is likely to concentrate in the most-favored market, since it is often possible to substitute one type of security for another. For example, an investor can buy a derivatives portfolio that would replicate a regular stock share. This tax-minimization behavior would further drain revenues.

The rates of 0.00006% and 0.5% were selected as illustrations of realistic rates for the unilaterally imposed tax. Setting higher rates might virtually shut down financial markets in the United States and move the activity abroad. However, in the case of a coordinated international tax policy, it could be possible to set them higher.

From the technical standpoint, the tax on financial instruments would be relatively easy to implement. It can piggyback on the existing tax on share issuance and transfers levied by the federal government or on similar taxes levied by individual states. In fact, the ease of a transaction tax's technical implementation and enforcement attracted some of the countries with weak collection enforcement systems.

Levying the tax on transactions going through the Federal Reserve Bank system (Fed) would be one of the most technically feasible implementation options for a broad-based transaction tax described in H.R. 3759. The Fed estimates the daily volume of payments at more than \$3 trillion, which puts the annual total at over \$750 trillion.²² However, this is the composite of all payments, including Fedwire and Clearing House Interbank Payment System, two payment systems used primarily by the banks and other participating institutions for large-value funds transfer and U.S. government securities transactions. In 2000 such payments totaled \$671.9 trillion.²³

²¹ R. Glenn Hubbard, 1993, Appendix.

²² The Federal Reserve Board, "Payment Systems," visited on Feb. 20, 2004 at [<http://www.federalreserve.gov/paymentsys.htm>].

²³ Geoffrey R. Gerdes and Jack K. Walton II, "The Use of Checks and Other Noncash Payment Instruments in the United States," *Federal Reserve Bulletin*, Aug. 2002 and The Federal Reserve Board, "Payment Systems," visited on Feb. 20, 2004 at [http://www.federalreserve.gov/pubs/bulletin/2002/0802_2nd.pdf], p. 370.

The total of these transfers is so large in part because many members engage in overnight transactions, which probably would not become a part of the taxable base. Such transactions are performed every business day, and since every one of them would carry a tax or a fee, the effective levy rate may get prohibitively high, even though the nominal rate is set low. For example, at the nominal rate of 0.01%, the effective annual rate ends up at 5%, rendering many transactions useless.²⁴

One of the less elastic parts of the daily turnover is retail noncash payments. “Retail” in this context means payments made by individuals, businesses and government entities, but not large-value funds transfers discussed above. Gerdes reported that in 2000 the value of retail noncash payments was \$46.6 trillion.²⁵ This figure does not include “on us” checks — checks deposited at the same institution on which they were drawn — estimated at 29% of the total check transactions, or about \$11.4 trillion.

There are two more missing parts. Some portion of payments in the United States are processed by private networks and may never pass through the Fed. It is difficult to put a specific number on the value of these transactions, due to the lack of consistent data and potential double-counting.

Another missing piece is cash payments. According to some estimates, retail cash transactions equaled less than \$1 trillion in 1999.²⁶ In addition, they are predominantly small payments that are most likely to be underreported. For this reason and due to the lack of data on total cash transactions value, the estimate does not account for them.

In 2000 federal government payments that presumably would not be subject to the transaction tax constituted about 1.5% of all retail non-cash payments.²⁷ Subtracting them from the sum of reported retail noncash payments and “on us” checks gives the taxable base of \$57.3 trillion, more than five and a half times the annual GDP. The Congressional Budget Office (CBO) reported federal revenues of \$1,991.2 billion in 2001.²⁸ A transaction tax at the flat rate of 4.3% would theoretically raise sufficient revenues to replace existing taxes, based on the debatable assumption that there would be little reduction in retail transaction volume in response to the tax introduction. This estimate does not account for new federal programs envisioned by H.R. 3759.

²⁴ For further information see CRS Report 93-474 E, *A Tax on Large-Dollar Wire Funds Transfers?*, by William Jackson. This report is archived, but available on request.

²⁵ *Ibid.*, p. 361.

²⁶ Ronald J. Mann, *Credit Cards and Debit Cards in the United States and Japan*, *Vanderbilt Law Review*, vol. 55, No. 4, May 2002, p. 1,072.

²⁷ Geoffrey R. Gerdes and Jack K. Walton, p. 369.

²⁸ U.S. Congressional Budget Office, Appendix F in *The Budget and Economic Outlook: Fiscal Years 2005-2014*, Jan. 26, 2004, visited on Feb. 20, 2004, at [<http://www.cbo.gov/showdoc.cfm?index=1821&sequence=0#table1>].

A flat fee approach probably would not yield much revenue. The bulk of all transactions are relatively low in value. For example, almost half of all checks in 2000 were written for \$100 or less, about 87% did not exceed \$1,000, and over 98% were below \$10,000.²⁹ Therefore, even a relatively low fee may become a prohibitive tax burden on low-value transactions. For example, a person buying a bottle of soda for \$1.50 would face a 67% tax, if the fee was set at just \$1.00 per transaction. These considerations put a cap on the revenue potential under this approach.

Introducing a progressive fee schedule would also not solve the problem. Most taxpayers would be able to avoid higher fees by splitting up their transactions into small payments, subject to lower fees. On the other hand, technical implementation of such a mechanism becomes considerably more difficult.

The general nature of this report does not allow an evaluation of each option in greater detail. For the same reason it is difficult to address some of the important issues, such as tax preferences or distributional effects. Implementation of the transaction tax would represent a major change of the taxation system and it would require a careful study to make sure its implications are well understood.

²⁹ Geoffrey R. Gerdes and Jack K. Walton, p. 367.