

[The Automated Payment Transaction Tax](#)

[Taxation for the 21ST Century](#)

[Edgar L. Feige](#)

[Abstract](#)

[This paper examines the desirability and feasibility of replacing the present system of personal and corporate income, sales, excise, capital gains, import and export duties, gift and estate taxes with a single comprehensive revenue neutral Automated Payment Transaction \(APT\) tax. In its simplest form, the APT tax consists of a flat tax levied on all transactions. The tax is automatically assessed and collected when transactions are settled through the electronic technology of the banking/payments system. The APT tax introduces progressivity through the tax base since the volume of final payments includes exchanges of titles to property and is therefore more highly skewed than the conventional income or consumption tax base. The wealthy carry out a disproportionate share of total transactions and therefore bear a disproportionate burden of the tax despite its flat rate structure. The automated recording of all APT tax payments by firms and individuals creates a degree of transparency and perceived fairness that induces greater tax compliance. Also, the tax has lower administrative and compliance cost. Like all taxes, the APT tax creates new distortions whose costs must be weighted against the benefits obtained by replacing the current tax system.](#)

[References:](#)

[“Taxation for the 21st Century: The Automated Payment Transaction \(APT\) Tax” **Economic Policy**, October, 2000](#)

[“Rethinking Taxation: The Automated Payment Transaction Tax”, **Milken Institute Review: A Journal of Economic Policy**, First Quarter, 2001](#)

Rethinking Taxation: The Automated Payment Transaction (APT) tax By Edgar L. Feige

Edgar L. Feige is professor-emeritus of economics at the University of Wisconsin (Madison)

Existing tax systems aren't popular. They are viewed as overly complex, inefficient, inequitable, and costly to administer. American politicians entertain broad fixes such as flat rate consumption taxes, Europe debates the wisdom of 'fiscal harmonization,' and Japan muddles through a seemingly endless recession in which tax policy is episodically a major bone of contention. The contemporary debate on tax policy remains mired in the mentality of the industrial age, failing to recognize the implications of information age technology.

Innovations in finance, communications and transportation have dramatically cut the cost of doing business across national frontiers. Capital mobility, transfer pricing, offshore tax havens, Internet commerce and the creation of global equity exchanges make it ever more difficult to identify and assess the national origins of income and profits. Yet today's taxation schemes remain firmly based on assessing personal incomes, corporate profits and expenditures generated within national borders.

I think the time is ripe to reconsider taxes in the context of the digital revolution and the and globalizing economy – a context in which it makes sense to look at broad-based transactions taxes, which may prove to be a more efficient and equitable replacement for the hodge-podge of government revenue schemes found around the world. I am under no illusion that such a radical proposal will be readily implemented. But I do hope my proposal will spark international debate and research on a fresh set of issues in public finance and monetary economics.

The Automated Payment Transactions Tax: How it Works.

The foundations of the APT tax proposal – a small, uniform tax on all economic transactions -- involve simplification, base broadening, reductions in marginal tax rates, the elimination of tax and information returns and the automatic collection of tax revenues at the

payment source. The APT approach would extend the tax base from income, consumption and wealth to all transactions. Such a uniform tax might not, on its face, look progressive, but would be since the volume of taxed transactions rise disproportionately with personal income.

By eliminating tax breaks –so-called “tax expenditures” - used to encourage everything from home ownership or the production of alcohol from corn, it forces government to utilize direct expenditures to incentivize those activities it chooses to favor. The APT tax can be viewed as a public brokerage fee accessed by the government to pay for the provision of the monetary, legal and political institutions that protect private property rights and facilitate market trade and commerce.

The new tax system would be designed solely to raise government revenue. I intentionally avoid the contentious issue of how large the government should be by conceiving it as a revenue-neutral tax that would replace other taxes. Simplicity is achieved by requiring that all final party transactions be taxed, and at the same rate.

Since every transaction is settled by some means of final payment, taxes would be assessed and collected at the source, through the automated banking/payment clearing system at the moment the exchange is completed. This automatic collection feature would eliminate the need for individuals and firms to file tax and information returns. Real-time tax collection at source of payment would apply to all types of transactions, thereby reducing administration and compliance costs as well as opportunities for tax evasion.

The APT tax would permit a dramatic reduction in the marginal tax rates on currently taxed incomes and expenditures by greatly broadening the tax base. It would therefore reduce the distortions caused by taxing productive activity, recapturing much of what economists call the “deadweight” efficiency losses created by the current tax system. Most important among these is a reduction in marginal tax rates on wages and salaries that creates a wedge between the cost of labor and the returns to work.

These efficiency gains would be offset in part by the distortions created in taxing transactions that are now not taxed. Among the possible distortions one must include incentives to vertically integrate businesses, a reduction in the liquidity of financial instruments used to hedge business risk, a lengthening of the term structure of debt and the holding period of financial assets, and incentives to seek payment substitutes and offshore tax havens. Some

economists have suggested that the painlessness of APT tax collection could also reduce public resistance to the growth in government – the Leviathan issue in public choice theory.

But as I discuss below, there is every reason to believe that the net effect would be a substantial gain in efficiency. Some of the distortions created by a transactions tax might even increase overall efficiency: James Tobin, the Nobel Prize winning economist has long argued that very low transactions costs in financial markets can result in excessive volatility.

The equity and fairness of the APT tax system also deserve a critical look. But the bottom line is reassuring: The wealthiest portion of the population executes a disproportionate share of total transactions.

The APT tax reform would create winners and losers – but along lines that most people would find desirable. The greatest beneficiaries will be those whose current level of taxes are considerably reduced, primarily wage and salary earners with modest assets. Those most likely to perceive themselves as losers are individuals and financial institutions that make markets for assets, along with those who sell advice on how to minimize taxes under the current opaque system.

THE SIZE OF THE APT TAX BASE AND THE TAX RATE

The potential benefits of a universal transactions tax are largely tied to the fact a broader tax base would need much lower marginal tax rates to generate the revenues now raised by taxing income and consumption. But to get a fix on this “revenue-neutral” rate one must calculate the amount of revenue that needs to be raised and the volume of transactions to be taxed.

Table 1 shows the source of United States tax revenues that the APT tax would to replace. (These numbers, incidentally, do not include contributions for social security programs, for state and local property taxes and user fees, which I would not replace with an APT tax.) In 1996, the two major sources of federal and state revenues were the income taxes (74 percent) and excise taxes (24 percent). The revenue-neutral APT tax designed to replace federal, state and local personal and corporate income, excise, gift and estate taxes would thus have been required to yield tax revenues of \$1,357 billion in 1996.

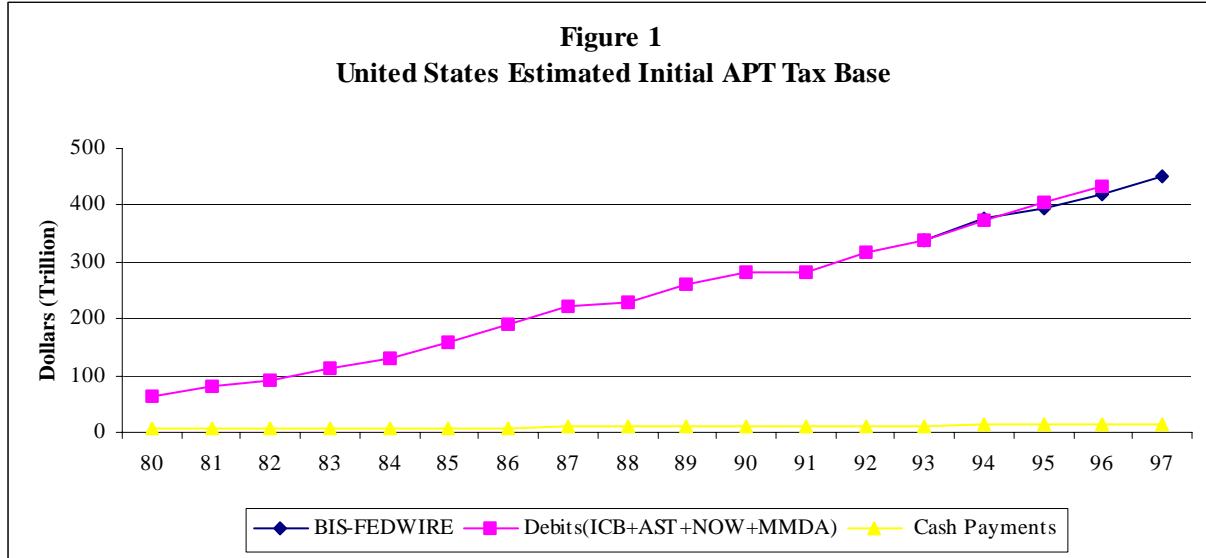
Table 1Revenues to be Replaced by APT Tax for 1996

<u>Revenue Source</u>	<u>Federal</u>	<u>State and Local</u>	<u>Total</u>	
	<u>Dollars (Bil.)</u>	<u>Dollars (Bil.)</u>	<u>Dollars (Bil.)</u>	<u>Percent</u>
Individual Income Tax	\$656	\$149	\$806	59%
Corporate Income Tax	\$172	\$35	\$206	15%
Excise and Customs Tax	\$73	\$250	\$322	24%
<u>Estate and Gift Tax</u>	<u>\$17</u>	<u>\$5</u>	<u>\$22</u>	<u>2%</u>
Total	\$918	\$439	\$1,357	100%

Source: U.S. Bureau of Economic Analysis, National Income and Product Accounts of the United States and Survey of Current Business.

Now for an estimate of the APT tax base, which consists primarily of debits to accounts that permit the settlement of claims by check, wire transfer or direct debit. Debits and credits to bank and brokerage accounts are routinely recorded as part of routine accounting practices. Thus the collection and aggregation of debit statistics would impose minimal added burdens on the financial community.

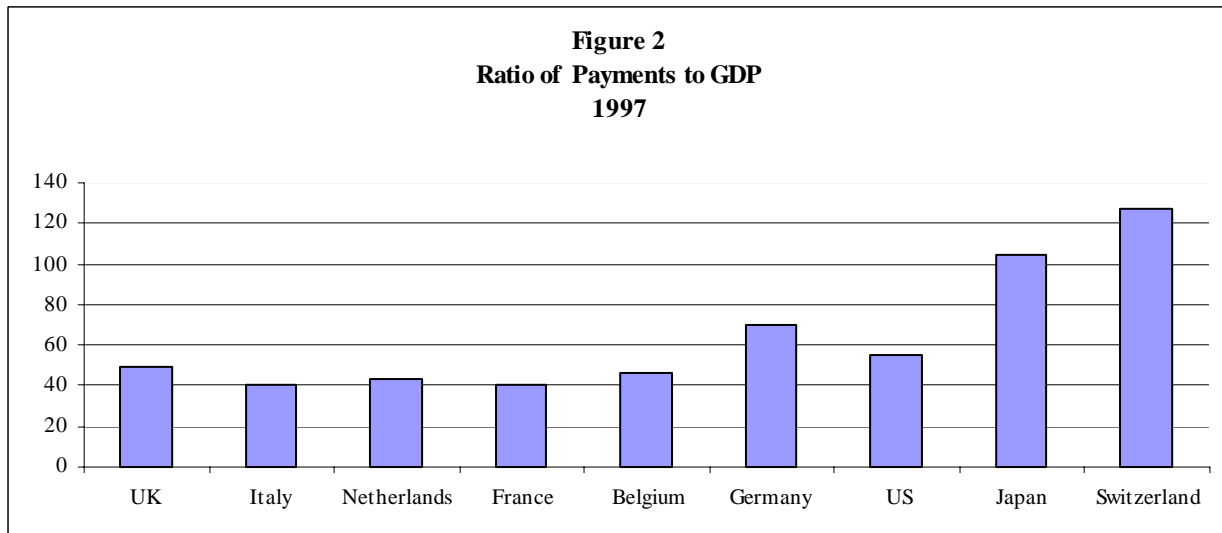
I use two estimates of total payments. The first is the Federal Reserve's measure that includes debits to all insured commercial bank demand deposits and to other accounts that can be debited by check. The second is the Bank for International Settlements' estimate of the value of total payments, adjusted for double counting. To these estimates we add an estimate of the total volume of payments made with US currency. These estimates are displayed in Figure 1, which reveals that cash payments make up only 3 percent of total payments.



Source: Bank for International Settlements (1998) and Federal Reserve Bulletins. Author's estimates of Cash Payments.

In 1996, the APT tax base was *98 times* larger than the income tax base as measured by the Internal Revenue Service's estimate of Adjusted Gross Income. Given an estimated initial APT tax base in 1996 equal to some \$ 445 trillion, and a required level of tax revenues of \$ 1,357 billion, the revenue-neutral tax rate per transaction would equal 0.30 percent. Thus each party to a transaction would be required to pay an APT tax of 0.15 percent.

Although most of my analysis focuses on the United States, it is interesting to look at the potential APT tax base in other highly developed economies.



Source: Bank for International Settlements (1998) and Author's Calculations

Figure 2 displays the ratio of the volume of Bank for International Settlements payments to GDP for the United States, Japan and seven European nations. The ratios for Japan and Switzerland are roughly twice as high as that for the United States, whereas the average of the other European countries is 13 percent below that for the United States. This suggests that the estimated revenue-neutral APT tax rate for European countries would be slightly higher than that for the US, while the revenue-neutral APT tax rate for Japan would be somewhat lower.

One flaw in the basic calculation of the transaction tax base is obvious: even a low tax rate of approximately 0.15 percent for each buyer and seller would create incentives to economize on the volume of transactions. What's needed to adjust the measure to a more realistic equilibrium figure is an estimate of the sensitivity of transactions to changes in costs – in the parlance of economics, the elasticity of total transactions with respect to transaction costs.

To calculate the impact, one must get a sense of the changes in transactions costs that would be induced by the tax. And that's a significant problem because we have no systematic means of measuring and tracking aggregate transaction costs over time. At best, we may be able to measure costs in particular markets and examine estimates of the elasticities in those markets.

I have been able to account for roughly 66 percent of the payment estimates. Missing are all transactions in tangible assets including real estate, raw materials, art and commercial enterprises as well as exchanges of financial assets and liabilities that are not included in readily available macro accounting sources. Of the \$294 trillion in measured transactions annually, 77 percent comprise money-changing transactions, foreign exchange transactions and bond market transactions. Equity, options and mutual funds transactions account for an additional 5 percent, while goods transactions account for roughly 11 percent.

Estimates of the elasticity of stock trading volume to transaction costs range from .26 in the United States to 1.0 for the Stockholm stock exchange. That is, a 10 percent increase in trading costs would reduce the volume of transactions in the United States by 2.6 percent.

Now consider the level of transactions costs paid for equity trades by the largest institutional investors in Europe, Japan and the United States. In 1999 these ranged from a low of .27 percent in Germany to a high of .90 percent in Luxembourg. Since 1996, equity-trading costs have declined in many countries, sometimes by nearly half. Indeed, on average, equity transactions costs ran about .762 percent in 1996.

Combining the transaction cost estimates and the aforementioned equity turnover elasticity estimates, we can estimate the consequences of introducing an initial APT tax with a flat rate of 0.30 percent in 1996. The average percentage decline in trading volumes over all countries could be as low as 9 percent or as high as 33 percent. But several factors suggest that the lower estimate is more likely. First, the breadth of the APT tax would eliminate easy substitution options – you couldn't shift to, say, bond trading to escape the tax. Second, overall transactions costs are falling rapidly, implying that the tax would be offset in part by reductions in other trading costs. Last but hardly least, the concomitant elimination of income and capital gains taxes would reduce impediments to realizing profits.

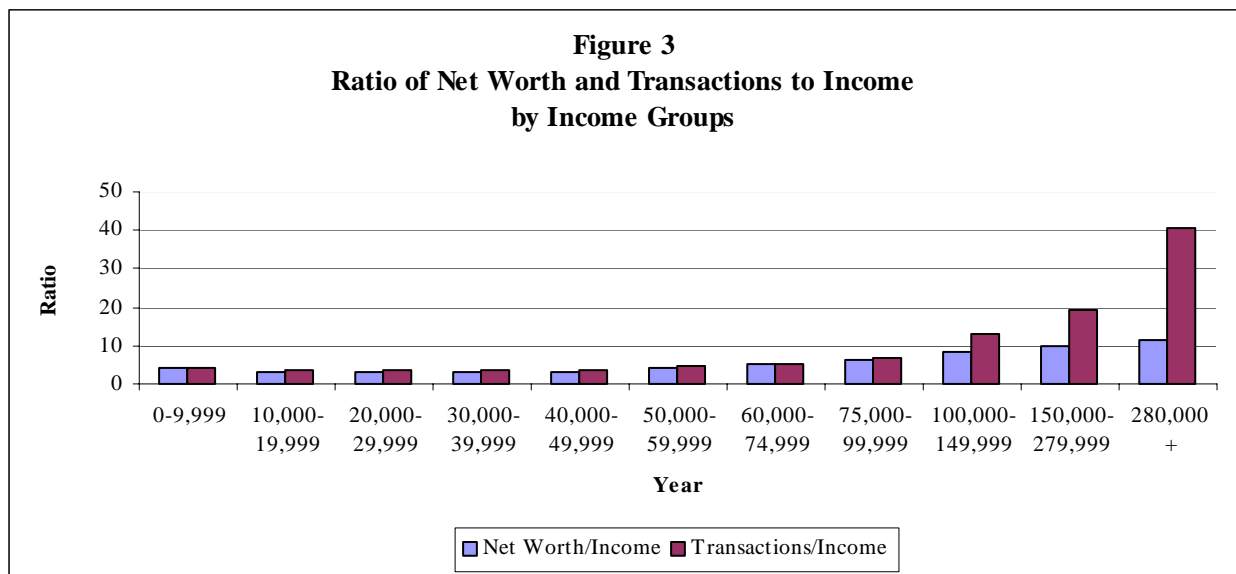
The consequences of transaction taxes on foreign exchange have been most widely discussed in the context of Tobin's 1972 proposal to "throw some sand in the wheels of speculation." Annual foreign exchange volume in the US amounted to \$ 67.3 trillion in 1996 and rose to \$ 84.2 trillion in 1998. The volume of foreign exchange is made up of 42 percent in spot transactions, 11 percent in forward contracts and 47 percent in swaps. Perhaps 40 percent of this volume represents short-term trades of seven days or less. A .15 percent APT tax on a security that turned over each week would thus amount to an annualized tax rate of roughly 15 percent -- certainly enough to induce investors to reduce trading volume substantially and to increase holding periods. Yet, while we are confident that the tax could have a real impact of currency trading, we don't have much clue about the magnitude. In the circumstances, the best one can do is to provide a sensitivity analysis that determines the revenue-neutral APT tax rate under different assumptions.

A 50 percent decline in the volume of transactions would require a revenue-neutral APT rate of 0.30 percent on each party. A 70 percent decline – a decline that would return the United States to the level of transactions that prevailed in the mid-1980s -- would raise the rate to 0.51 percent. For purposes of illustration I'll assume that total transaction volumes would decline by half, requiring a uniform flat rate on all transactions of 0.6 percent divided equally between the buyer and seller of each transaction.

WHO PAYS

To gauge the distributional impact of the APT tax, it is necessary to estimate the distribution of payments made by different income classes. Here, I simulate the transactions

patterns of U.S. households from their wealth composition, as revealed in the Federal Reserve's Survey of Consumer Finances. Applying turnover rates to each of the various asset and liabilities held in household portfolios of particular income categories, it is possible to simulate the volume of transactions (credits and debits) undertaken by households in different income classes.



Source: Author's simulations based on Federal Reserve Survey of Consumer Finances

Figure 3 displays the simulated ratios of transactions to income, by income classes. Higher income groups account for the largest proportion of transactions, implying that they would pay a far greater proportion of the tax than lower income groups. Indeed, the ratios are so skewed that a uniform tax on transactions would be highly progressive for taxpayers with incomes exceeding \$75,000.

ADMINISTRATION AND COMPLIANCE

The everyday operation of the modern financial system already requires the maintenance of exact records of debits and credits to determine customers' current balances. In practice, the proposed APT tax revenue assessment and collection system would demand only a software modification to existing financial institution accounting procedures. The change would create a virtual tax payment account (TPA) linked to every customer's financial account. The linked TPA would be required to maintain a positive balance somewhat in excess of expected tax payments.

Every debit or credit to the primary account would trigger a corresponding debit in the TPA account equal to the debit amount multiplied by the flat tax rate. The assessed tax would be electronically transferred to the account of the government. All taxes would thus be automatically assessed and collected at the time the transaction is consummated.

All tax systems, including the APT, are vulnerable to evasion when paper currency is freely available to the taxpaying public. Since the administrative costs of policing currency transactions are clearly prohibitive, an explicit form of taxation would be needed for currency usage. One practical approach: exact a tax on currency each time it leaves and enters the banking system.

To be effective, the tax rate charged on currency would have to be higher than the rate on check transactions. Indeed, currency should be taxed some multiple of the tax on check payments equal to what the great economist Irving Fisher called "the cash loop."

The cash loop is the average number of instances that a unit of currency is used as a means of payment between the time it enters into circulation and the time it is returned to the banking system. Fisher estimated the U.S. cash loop as approximately two payments between withdrawals and redeposit; more recently, I estimated a cash loop for the Netherlands as approximately four payments.

If the actual after-tax cash loop is eight turnovers and the APT tax rate is 0.5 percent, a 2 percent premium charged on currency at the point of its withdrawal from banks, coupled with a 2 percent discount on currency at the point of its return to the banking system, would be sufficient to equalize the incentives to use currency and checks as a final means of payment. Individuals and firms requiring currency would have to purchase each dollar of currency at a premium of \$1.02, and when currency was returned to the banking system it would be exchanged for deposit money at \$ 0.98 per dollar. To distribute the added costs of currency usage, retail firms would presumably charge a fee for payments made with currency, in much the way as they occasionally add a premium for credit card sales.

Disallowing exemptions and deductions, and assessing and collecting taxes automatically, would eliminate the largest components of administration and compliance costs. There would no longer be a need for individuals to file tax returns, nor for firms to file information returns. The automatic revenue collection feature produces a real-time taxpayer

account that automatically provides every taxpayer with a transparent record of her direct tax payments.

The direct costs of collecting the individual income tax in the United States amounts to between seven and eight percent of revenues raised. For the year 1982, that came to \$30-\$35 billion, with taxpayers spending approximately two billion hours to comply with the law. Extrapolating these estimates to the current United States tax system suggests that total annual collection and compliance costs are well in excess of \$100 billion.

By freeing firms and individuals from the onerous and costly task of determining their specific tax base, tax rate and tax liability, the APT collection system would bring the marginal costs of collection and compliance down to the cost of electronic transfers of information. The low APT tax rate would reduce the payoff from tax avoidance, even as the automated assessment and collection feature raised the costs of these activities.

Tax evasion is another major cost of the present tax system. The IRS projected 1992 unreported legal-source income on individual income tax returns at \$587 billion, while my own research suggests that unpaid taxes totaled \$123 billion in that year.

Every tax can be avoided and evaded. The question is, at what cost? Since the APT tax is collected through the payments mechanism, it can be avoided by engaging in barter transactions. But barter is extremely costly, reducing the cases in which it would pay to evade the small tax to insignificant proportions. Tax evasion through “offshore” exchanges poses a subtler problem that can be addressed by structuring appropriate penalties to provide serious disincentives. One way would be to deny the parties to any untaxed transaction the right to legal protection from the state, much the way courts refuse to enforce payments in gambling debts.

A second device, proposed by Peter Kenen of Princeton University, would be apply the tax at a penalty rate to all transactions made with financial institutions in tax-free jurisdictions. Alternatively, APT tax-compliant nations could refuse to recognize credits or debits from “offshore” havens or non-APT countries that countenance “counterfeit” financial transactions. Every offshore exchange must have points of connection with the payment and clearing systems of the world’s legitimate financial markets. These connection points are the Achilles heel of offshore tax havens, since once severed from the mother ship, the tax haven ceases to function.

Under the APT system, Internet transactions that are paid by credit, debit or stored value cards would pose no collection problem. Credit and debit card payments would be taxed when

the customer settles accounts with the card issuer and stored value cards would be taxed when they were recharged with a debit to a financial account.

Technological innovations such as anonymous forms of digital cash that represent a private substitute for the government's present monopoly of issuing currency could raise collection problems in any tax regime. Such E-cash could accumulate and simply be transferred from party to party without returning to the banking system. Thus if anonymous private digital cash were permitted to substitute freely for government paper currency, it could function as a tax evasion vehicle. Given this concern, it would make sense for the government to issue its own E-cash, and to treat private inside money designed to evade taxes as counterfeiting.

THE ROLE OF GOVERNMENT

The APT tax system would shift the state's role from that of an active partner in the outcomes of the "game of economic exchange" to that of a disinterested ticket-taker. The government would simply establish the costs of admission. Those who chose to make exchanges would bear the full burden of mistakes and reap the full advantages of successes.

By the same token, the APT tax would eliminate all tax exemptions and tax credits. The history of past tax systems amply demonstrates the vulnerability to special interests of any tax system that permits exemptions, exclusions and credits. According to the Congressional Budget Office, tax expenditures amounted to \$ 470 billion in fiscal 1996. Denying the revenue collection mechanism the role of allocating and redistributing resources this way would restore the comprehensibility and simplicity of the tax system. Moreover, the elimination of hidden tax expenditures would force the government to appropriate funds for all services and transfer payments, making the true level of expenditures explicit and subject to direct political evaluation.

The APT tax design must also address the issue of fiscal federalism. State and local property taxes and user fees would continue to provide the same level of revenue as before, since the APT is not intended to replace these revenue sources. State income and excise taxes would, however, be eliminated and replaced through the APT tax system. The states could establish resident-specific taxpayer accounts directly linked to the taxpayer's federal TPA account. Every final payment would trigger both an automatic federal payment and a state resident payment. The states could therefore collect taxes electronically as a form of automated revenue sharing.

ECONOMIC EFFICIENCY

The transactions directly associated with the production of final goods and services amount to roughly twice the GDP. Thus, although these transactions represent less than 5 percent of total transactions, they constitute the principal portion of the current tax base.

The APT tax on payments related to the final production of goods and services is equivalent to a flat-rate personal income tax (on wages, interest, dividends and rents), a flat rate corporate income tax and a differentiated expenditure tax. The reduction of average and marginal tax rates on current taxable income from more than 30 percent to approximately 0.3 percent would drastically reduce the present tax incentive to substitute leisure for work. Since the APT tax system would include neither personal deductions nor exemptions, it would also eliminate current distortions that favor some types of income while discouraging others.

When fringe benefits are not taxed as part of employee income, firms have an incentive to provide such benefits even though their costs exceed what employees would otherwise be willing to pay for them. Under the APT tax employees, whose marginal tax rates on wages and salaries would be reduced from roughly 30 percent to 0.3 percent, would have little incentive to over-consume fringe benefits, choosing instead to take wages and salaries as direct payments.

Note, too, that the APT tax would fundamentally change the incentives facing firms, altering the strategic rules of doing business. The state's present extensive participation in the costs of doing business provides firms with perverse incentives to inflate overall costs, since they now serve to reduce overall tax liabilities. Moreover, depreciation rules, interest deductions, and deductibility of particular forms of compensation create major distortions in firms' choices of depreciation schedules, modes of financing investment and payment of compensation to factors of production. With the APT tax, firms would be free to select internal depreciation methods that reflect the actual replacement costs of their capital stock, the most efficient methods of financing investment and the least costly factor compensation packages dictated by market rather than tax incentives. Finally, the APT tax system would reduce distortions created by the wide range of effective tax rates on different classes of investment.

Subjecting trade in unfinished goods and services to the APT tax base would be analogous to introducing a small, flat-rate turnover tax. Given the knee-jerk antagonism of most economists to the mere mention of a turnover tax, it is important to clarify the likely extent and nature of the distortions. First, the turnover component of the APT would be small since total

intermediate transactions make up less than 5 percent of total payments in the economy. Second, I doubt that the APT tax would result in substantial vertical integration of businesses since in most cases, gains from specialization are likely to be large relative to the size of the broad-based APT tax. More likely, the APT tax would simply slow the trend towards vertical disintegration brought about by growing markets that favor specialization. Technological advances in Internet business-to-business cost savings are likely over time to offset the incentives toward integration produced by the APT levy.

The international transaction component of the APT tax is a variant of what has become known as the Tobin Tax. Tobin's concern arose from what he considered "the excessive international -- or better, inter-currency mobility of private financial capital" which has rendered national governments incapable of adjusting to disturbances in international financial markets "without real hardship and without significant sacrifice of the objectives of national economic policy with respect to employment, output, and inflation."

The advantages and shortcomings of taxing foreign transactions have been extensively analyzed. A modest tax on international flows would be unlikely to hamper international trade, being small compared to transportation costs and not exceeding the cost of using forward and future markets to hedge against currency fluctuations. Since the relative importance of the APT tax would decrease with the length of maturity of financial contracts, the tax would primarily affect "hot money" transactions seeking to profit from the arbitrage possibilities created by minute price differentials. Unlike the Tobin tax, which proponents see as a possible revenue source for multilateral organizations like the World Bank, the APT tax revenues would go to national tax authorities.

All voluntary exchanges of goods and services undertaken at prices that fully reflect the costs of production are "welfare enhancing," since they allocate resources to their highest valued use. The same principle applies to exchanges of assets. However, under the present tax system, the fees charged for financial exchanges only reflect private costs, while the cost of operating the government now falls on the markets for goods, services and factors of production.

Consider, too, that speculative exchanges can lead to situations in which the losses exceed the gains. Indeed, John Maynard Keynes' argument for a tax on asset transactions has not lost its salience today, with admirers ranging from Tobin to Stanford economist Joseph Stiglitz to Treasury Secretary Larry Summers. Of course, the direct effect of any transfer tax would reduce

the liquidity of financial markets, and might increase price volatility. However, if the imposition of the APT tax were synchronized with the elimination of capital gains taxation, the net effect would surely be to increase market liquidity.

The APT transfer tax would provide an incentive to lengthen the holding period of both equity and debt instruments. The biggest effect would be on short-term speculative trades intended to capture small percentage returns to portfolios by getting on or off the "bandwagon" of what is believed to be current market psychology. By increasing the cost of frequent trading, the APT tax provides incentives for financial analysts to direct their talents to the search for long term profits rather than short term trading programs. Larry Summers has also argued that the higher costs of frequent trading would extend corporate management's investment horizons and give shareholders greater incentives to monitor management.

To calculate the net effect of replacing the current tax system with an APT tax, one must also take account of the elimination of existing taxes on wealth transfers. Debt would become more costly as the government would now charge a brokerage fee, much the way as banks currently impose "points" for lending. The loss of deductibility of interest payments would also discourage borrowing. Offsetting these disincentives are the reductions in income taxes and the elimination of inheritance and capital gains taxes.

CONCLUSIONS

To assess the desirability of the APT tax proposal we must weigh its likely benefits against its likely costs. On the benefit side we must include all available empirical estimates of the total allocation, administration, compliance and evasion costs of the present system that the APT tax would replace. Eliminating the waste linked to price distortions created by the current tax system could yield annual benefits in excess of \$250 billion. The elimination of tax and information returns could yield added compliance costs savings between \$100 billion and \$200 billion per year. To these savings, add the reduced administrative and enforcements costs resulting from the unique automated collection mechanism of the APT system. The quantifiable benefits of eliminating the current tax system are therefore likely to range from \$350-\$500 billion per year. The intangible benefits of greater simplicity, transparency, and equity would be pure gravy.

Against these benefits weigh the costs of the new distortions the APT system is likely to introduce, along with the costs of transition. I have tried to make the case that the benefits are likely to exceed the costs by a substantial margin, but many details need further elaboration. We must learn more about the institutional complexities of domestic and international equity, debt and derivative markets and acquire better estimates of the extent to which transaction volumes are likely to fall in response to the imposition of the APT tax.

By the same token, the distributive consequences of the APT tax system appear to be progressive since the tax would fall disproportionately on asset exchanges by wealthier citizens. The tax would, however, induce responses that diminished its initial redistributive consequences. Note, too, that since tax expenditure redistributions are not an option under the APT tax, any further efforts at redistribution would have to be made through explicit government expenditures.

The Apt tax proposal embodies the normative principles that have guided all successful tax reform proposals: simplicity, equity, efficiency and reduced costs of administration and compliance. To achieve these ends it contemplates revenue neutrality, base broadening, the reduction of marginal tax rates, a single flat tax rate, the elimination of tax loopholes, the end of tax returns and information returns and the automatic electronic assessment and collection of taxes. All in all, it looks like a proposal worthy of serious consideration.