Taxing Financial Speculation:

Shifting the Tax Burden From Wages to Wagers

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Executive Summary

The vast majority of stock trades and other financial transactions are done by short term traders who hold assets for less than a year and often less than a day. These trades are essentially a form of gambling. This paper proposes a modest tax on these trades, 0.25 percent on the sale or purchase of share of stock, along with comparable fees for other assets such as bonds, futures, options, and foreign currency. Such a tax would leave long-term investors largely unaffected, but impose a significant tax on speculators. This tax could raise more than $120 billion a year in revenue.

The tax could allow for a 40 percent tax cut in the income taxes paid by typical working families. For example, in a tax proposal laid out in this paper, a single worker with an income of $12,000 could get a tax cut of $280. A family with 2 children and an income of $20,000 could see an $800 increase in the size of their earned income tax credit, and a couple with two children and an income of $50,000 could see a tax cut of $1,900.

Alternatively, the revenue could be used to meet some of the nation's unmet social needs. The revenue collected through such a tax is more than one-third the size of the entire domestic discretionary portion of the federal budget: this portion of the budget is currently projected to shrink by almost 30 percent over the next decade, as a share of GDP. Revenue from a tax on financial transactions can allow the government to maintain and increase its spending on education, health care, child care and vital programs.

This tax shift should also produce large dividends in terms of economic growth. Simply by reducing the number of transactions in financial markets, the tax will be making these markets more efficient. The tax could reduce the resources wasted in operating the financial markets by as much as $12 billion a year, thereby allowing these resources to be shifted to productive uses. In addition, if the revenue is used either for tax cuts or public investment, there should be a growth dividend. A conservative estimate of the size of this growth dividend is $150 billion over the next decade. This means that the total growth dividend over the next decade, adding in the savings in the operation of the financial markets, will be close to $300 billion. This is a far larger gain than can be reasonably projected from almost any other economic policy, such as debt reduction, trade agreements, or industry deregulation.

Taxing Financial Speculation: Shifting the Tax Burden From Wages to Wagers

There can be reasonable debates over exactly how large the government should be. People may differ on the extent to which services such as health care, education, and child care should be provided by the public sector. However, there can be no disagreement that, however large we want the government to be, it should raise the necessary tax revenue in the fairest and most efficient manner.

This paper argues that the current system can be vastly improved by a simple shift in the tax burden. By taxing financial speculation, trading in stocks, bonds, futures, options, foreign currencies and other financial instruments, it would be possible to have either a large reduction in tax rates for a typical working family, or to provide for many of the nation's unmet social needs. A small tax on financial speculation, such as a 0.25 percent tax on the sale or purchase of a share of stock, would have very little impact on people who buy these assets as an investment to hold. The bulk of this tax would be paid by people who speculate in financial assets, often buying and selling them in the same day. Such speculation is soaring as new technology allows round the clock trading over the Internet. Such speculation is really just a form of gambling, and deserves to be treated like gambling. It is far more efficient for the government to tax an unproductive activity of this type, than to tax a productive activity like work.

Insofar as possible, taxes should be shifted away from productive activity and onto unproductive activity. In recognition of this basic economic principle, the government (mostly state and local governments) already taxes most forms of gambling quite heavily. For example, gambling on horse races is taxed at between 3.0 and 10.0 percent.[1] Casino gambling in the states where it is allowed is taxed at rates between 6.25 and 20.0 percent.[2] State lotteries are taxed at a rate of close to 40 percent (1998 U.S. Statistical Abstract).[3] Stock market trading is the only form of gambling that largely escapes taxation. This is doubly inefficient. The government has no reason to favor one form of gambling over others, and it is far better economically to tax unproductive activities than productive ones.

It is also unfair. When poor and middle-income people gamble, they are most likely to engage in one of the heavily taxed forms of gambling, such as buying lottery tickets or going to the racetrack. Disproportionately, the people who gamble in the stock market are the wealthier segments of the population. It is unfair that their gambling should escape taxation. Furthermore, since the volume of trades in stock and other financial assets is so large, even a modest tax on these trades would raise an enormous amount of revenue.

A tax of 0.25 percent imposed on each purchase or sale of a share of stock, along with a comparable tax on the transfer of other assets such as bonds, options, futures, and foreign currency, could easily raise $120 billion annually. Such a tax would have a minimal impact on people who buy and hold stock for their retirement or children's education. Only those who speculate by frequent trading would feel any significant impact from such a tax.

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[1] For more information see, Thoroughbred Owners and Breeders Association. <www.toba.org>

[2] For more information, see American Gaming Association <www.americangaming.org>

[3] These tax rates refer to the taxes on the gambling revenues themselves; they do not include the income taxes paid by the winners.

A tax of this magnitude would be sufficient to allow a tax cut for middle income tax payers of more than one-third, while still providing additional revenue to meet neglected needs. Such a tax shift would be an enormous boon for moderate-income families that are struggling to get by. A tax cut of this magnitude or a comparable increase in public investment should also provide a considerable boost to the economy, since it will be giving more incentives for people to work, while providing fewer incentives to gamble.

The Basic Arithmetic of the Gambling Tax

There is a considerable degree of uncertainty about exactly how much money can be raised through a tax on trading stock and other financial assets, but there can be no dispute that the sums involved are enormous. The value of stock trading on U.S. exchanges now exceeds $10 trillion a year. If each trade were taxed at a 0.5 percent rate (0.25 percent paid each by the buyer and the seller), the tax would raise more than $33 billion a year, even if the number of trades fell by a third.

The volume of trading of government bonds and bills is even larger, more than $40 trillion annually. If these trades were taxed at an average rate of 0.1 percent (again, 0.05 percent paid by the buyer and by the seller) it would raise more than $27 billion annually, even with a one-third decline in trading volume.[4] The notional value of the assets in the futures contracts traded each year exceeds $100 trillion. If trades of futures were taxed at just a 0.02 percent rate on this notional value, it would raise another $13.3 billion. The market in currency trading worldwide is over $200 trillion. If one-quarter of this could be made subject to a U.S. tax (ideally other nations would impose comparable taxes), it would raise more than $33 billion annually. In addition to these markets, there are also large volumes of trading in corporate bonds, options, and swaps.

Altogether, a tax that was scaled so as to be approximately neutral between markets, and was set at a level equal to a tax of 0.25 percent on the purchase of a share of a stock, could easily raise in excess of $120 billion annually, as shown in the table below. This figure already assumes a one-third reduction in the volume of transactions in all cases.

(Annual Rates)	**Current Trading Volume**	**Projected After Tax Volume**	**Tax Rate (both sides)**	**Revenue**
Stocks	$11 trillion	$7.3 trillion	0.5%	$36.5 billion
Government Bonds	$41.6 trillion	$27.7 trillion	0.1%	$27.7 billion
Corporate Bonds	$22.1 trillion	$14.7 trillion	0.1%	$14.7 billion
Futures Contracts	$100 trillion	$66.7 trillion	0.02%	$13.3 billion
Currency	$200 trillion (worldwide)	$133.3 trillion	0.1%	$33.3 billion (U.S. share=25%)
Swaps	$22 trillion	$14.7 trillion	0.02%	$2.9 billion
Options	Not available	NA	0.01%	NA

[4] Taxes on debt issues would have to be scaled to the maturity of the debt, so that the tax on the trade of a one year note may be just 0.01 percent, whereas the tax on a the trade of a thirty year bond could be 0.3 percent.

It is important to realize that a tax of this magnitude would have very little effect on someone who buys stock, or any other financial asset, with the intention of holding it. This can be seen with a simple example. Suppose a person buys $10,000 worth of stock and holds it for ten years. Under this proposal, they will pay a tax of $25 when they first buy the stock. After ten years, it would be reasonable to expect that the price of stock rises at least sixty percent. This means that the stock would be worth $16,000. The tax paid when the stock is sold would then be $40, for a total tax burden of $65.00. By comparison, the gain on the stock would have been $6,000 over this period. The total burden of the tax is then just over 1.0 percent of the capital gain.

In the last session of Congress, the tax rate on capital gains that is paid by most people who invest in the stock market was lowered by 8.0 percentage points. For a long-term investor, this tax would effectively take back 1.0 percentage points of this tax cut, leaving their tax rate far below what it was as recently as 1996. In short, while no one is ever going to like paying taxes, the impact of this tax on anyone who buys and holds an asset is going to be very small.

The people who will pay most of the tax are the individuals and institutions that are actively speculating in stock and other assets. While they have every right to engage in such speculation, the public has the right to expect that this activity will be taxed in exactly the same way as any other form of gambling. There is no justification for taxing a worker's lottery bets at a 40 percent rate while the gambling on the stock market goes altogether untaxed.

There is a simple principle that economists hold to strictly: comparable activities should be treated in a comparable way. For example, if the country decided to tax alcohol to discourage drinking and raise revenue (as it does), it would be foolish to tax everything except whiskey. This would simply encourage people to switch to whiskey consumption to evade the tax. People who happen not to like whiskey would be treated unfairly, while the government would be collecting less revenue as people switched to whiskey.

Exactly the same logic should apply to gambling in financial assets. There is no reason to treat it any differently from any other form of gambling. From an economic standpoint, the nation is certainly no better off if people do their gambling on Wall Street rather than in Atlantic City or Las Vegas. In fact, there are reasons to believe that the nation is better off if people gamble in Las Vegas, since gambling on Wall Street can destabilize the functioning of financial markets. Many economists have argued that speculators cause the price of stocks and other assets to diverge from their fundamental values. This creates an additional form of risk in financial markets known as "noise trader risk." It increases the possibility that investors may be forced to sell their stock or other assets at temporarily depressed price. There is a considerable body of economic research demonstrating that this sort of divergence in prices from fundamental values is both theoretically possible and empirically observable. Many of the nation's most respected economists have contributed to this research, including Lawrence Summers, the current Treasury Secretary, and Joseph Stiglitz, the chief economist at the World Bank.[5]

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[5] See Lawrence Summers and Victoria Summers, "When Financial Markets Work Too Well: A Cautious Case For a Securities Transactions Tax," Journal of Financial Services Research, 1989; and Joseph Stiglitz, "Using

There also can be little dispute that what takes place in these markets is to a large extent just gambling. When an investor buys a share of stock in a company that she has researched and holds it for ten years, this is not gambling. But when a day trader buys a stock at 2:00 P.M. and sells it at 3:00 P.M., this is gambling. Similarly, the huge bets made by hedge funds on small changes in interest rates or currency prices is a form of gambling. Or, as Federal Reserve Board Chairman Alan Greenspan observed, purchasing the high flying shares of Internet companies that have never earned a penny is similar to buying a lottery ticket. The recognition that these transactions are a form of gambling does not necessarily mean that they are morally wrong. It is simply a necessary step in establishing a tax structure that is fair and efficient.

Financing Tax Cuts and/or Public Investment

If a tax on financial transactions can raise $120 billion annually in new revenue, it would be able to finance either very large tax cuts for low and middle income workers or a significant boost in neglected areas of public spending, such as child care or education. To get some idea of the order of magnitudes involved, the total amount of federal income tax collected from filers reporting income of less than $50,000 of income in 1997 was $141.8 billion. The tax collected from filers reporting income of less than $100,000 was $332.2 billion. This means that that the financial transactions tax would in principle be large enough to cut taxes for these people by an average of more than 35 percent.

At the level of the individual taxpayer, a tax cut of this magnitude would make it possible to lower the tax rate in the lowest income bracket from 15 percent to 9 percent. Alternatively, it would be possible to lower the bottom tax rate from 15 percent to 11 percent, and the tax rate faced by most middle income workers from 28 percent to 26 percent. This would provide large savings for middle and low income workers. A single worker earning $20,000 a year would save $780 a year with the first tax cut. If the second tax were put in place, a couple with two children and a combined income of $50,000 would save approximately $1,900 a year. Tax cuts of this magnitude provide a significant boost to these people's living standards. Both tax cuts could be coupled with a thirty percent increase in the size of the earned income tax credit, to ensure that even the lowest income workers get something as well.

Tax Policy to Curb Speculative Short-Term Trading," Journal of Financial Services Research, 1989. See also "A Few Good Taxes" by Larry Summers, New Republic, November 30, 1987, p 14.

The table below shows the alternative tax cut proposals and their impact on individuals and families at different income levels.

Tax Cut I – Reduce First Bracket to 9 Percent			
Individuals			
Income	***Size of Tax Cut***	***Percent of Income***	***Percent of Taxes***
$12,000	$280	2.3%	40.0%
$30,00	$1,200	4.0%	40.0%
$100,000	$1,500	1.5%	6.3%
Families (with two children)			
$20,000	$800	4.0%	Not Applicable
$50,000	$1,900	3.8%	40.0%
$200,000	$2,500	1.3%	5.2%

Tax Cut II – Reduce First Bracket 11 Percent, Second Bracket to 26 Percent			
Individuals			
Income	***Size of Tax Cut***	***Percent of Income***	***Percent of Taxes***
$12,000	$190	1.6%	26.7%
$30,000	$900	3.1%	26.7%
$100,000	$1,500	1.5%	6.4%
Families (with two children)			
$20,000	$800	4.0%	Not Applicable
$50,000	$1,280	2.6%	26.7%
$200,000	$2,890	1.4%	6.0%

Alternatively, the size of the annual tax would dwarf government spending on many important programs. For example, Federal spending on Head Start is only $3 billion annually. Spending on the Women, Infants, and Children Nutrition program is even less. President Clinton's recent anti-poverty initiative was projected to cost just $980 million over five years. The entire budget for domestic discretionary spending in 1999 is just over $270 billion. This means that the financial transactions tax would be large enough to allow 40 percent increases in all areas of discretionary spending, or even larger increases in programs like Head Start that really need additional funding.

At present, the baseline course for the federal budget has discretionary spending declining by more than one quarter, measured as a share of GDP, over the next decade. This means that if there are no changes in the budget, federal spending on everything from education to environmental clean-up will be cut by more than 25 percent between 1999 and 2009. Cuts of this magnitude will have a serious impact on the quality of government services and the state of the nation's infrastructure and environment. The revenue generated through a tax on financial assets can eliminate any need for such cuts.

The Macroeconomic Impacts

A tax on the trading of financial assets should have substantial positive effects on the economy. The most immediate and direct effect is that the tax would eliminate a substantial amount of waste in the running of financial markets by reducing the volume of trades that take place. It is important to recognize that the output of the financial sector is not trading assets. Rather, its output is the transfer of savings from investors to the corporations,

individuals, or governments that need to borrow. If this transfer can be done with fewer workers and fewer trades, then the efficiency of the financial sector will be greater.

As it is, the financial sector has become increasingly inefficient through time. In 1977 just 0.4 percent of the work force was needed to run the nation's financial markets. By 1997 the percentage of the work force employed in investment banks or brokerage firms had increased to more than 0.7 percent. This means that it takes a far larger share of the work force to accomplish the task of transferring money from savers to borrowers in 1997 than in 1977. If there was some evidence that the financial sector was performing this task better today -- for example if markets were less volatile or there were reason to believe that savings are being better allocated -- then it would be plausible to claim that the output of this sector had increased. As it is, there is reason to believe that the massive increase in trading volume and the complex new financial instruments that have been developed in the last quarter century have actually made the financial markets more volatile. There is certainly no evidence that volatility has been reduced.

In addition, virtually everyone would acknowledge that the financial markets are currently funneling tens of billions of dollars to Internet companies that don't even have an idea of how they could make a profit. It would be hard to claim that this is an effective allocation of capital. As a bottom line, if the markets are allocating capital better today than they did twenty five years ago, it has not shown up in productivity numbers. The growth of productivity in this business cycle, after adjusting for changes in measurement, has been virtually identical to the growth rate in the seventies and eighties.

In short, if the financial markets are in some way operating more effectively today than they did a quarter of century ago, it's hard to find the evidence. This means that if a financial transactions tax had the effect of reducing the number of transactions of financial markets and therefore the labor and capital that is used to carry through these transactions, it would simply be eliminating economic waste. This would provide exactly the same benefit to the economy as if we could get rid of government bureaucrats who never did anything but pass papers back and forth. In this case, if the tax led to a 10 percent reduction in the resources used by the financial markets, this would amount to a savings of $11 billion annually to the economy.

It is also important to note that the tax cuts or spending on public investment could have significant positive economic efforts. Conservative economists, such as Martin Feldstein, have long argued that taxes provide a significant disincentive to work and save and thereby reduce economic output. It is worth noting that the tax cuts described here would have a far larger effect on any such disincentives for most workers than the tax cuts currently being put forward by Republicans in Congress. Similarly, there is a considerable body of economic research that showing that public spending on education, research and development, worker training and other forms of public investment increases economic growth.[6] A conservative

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[6] For example, see Douglas Holtz-Eakin and Amy Ellen Schwartz, Infrastructure in a Structural Model of Economic Growth, Washington, DC: National Bureau of Economic Research, Working Paper # 4824, 1994; and Alicia H. Munnell, "How Does Public Infrastructure Affect Regional Economic Performance?" in The Third Deficit: The Shortfall in Public Capital Investment. Boston, MA.: Federal Reserve Bank of Boston, Conference Series, No 34, 1994.

estimate based on this research is that a boost to public investment equal to the revenue raised by a tax on financial speculation could add a total of more than $150 billion to economic growth over the next decade. A reasonable estimate of the impact of tax cuts would be similar. In short, this tax revenue should provide a significant spur to further economic growth.

Conclusion

A tax on financial speculation is both fair and efficient. The vast majority of transactions that take place on the stock exchanges and other financial markets are essentially gambling and deserve to be treated just like other forms of gambling. A very modest tax that will have almost no impact on long-term investors can raise more than $120 billion a year in revenue. This revenue will be sufficient to allow large tax cuts for working families, or a large increase in public investment in education, infrastructure, and research and development. This tax shifting would lead to a much fairer distribution of taxes and provide a significant boost to economic growth.