

## The Benefits of a Financial Transactions Tax

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#### **About the Author**

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#### Introduction

The recent economic turmoil has generated renewed interest in a financial transactions tax (FTT). While such a tax will be vigorously opposed by the financial industry, it offers a very attractive mechanism for raising revenue that is arguably efficiency-enhancing. Calculations based on 2000 trading volumes showed that a set of scaled transactions taxes, imposed on transfers of stock and other financial assets, could raise more than \$100 billion a year, even assuming large reductions in trading volume.

This article briefly outlines the case for a financial transactions tax. The following section discusses basic design issues, and the section after that discusses the revenue potential for such a tax. The final section summarizes the potential benefits from financial transactions taxes.

#### The Design of a Financial Transactions Tax

There has been a long historical experience with FTTs in both the United States and around the world. Substantial transactions taxes were imposed in most financial markets until the last two decades, when political pressure from the financial sector, coupled with the threat from increased global competition, led most countries to substantially reduce or eliminate their taxes. Nonetheless, many taxes still remain in place, most notably the 0.5 percent stamp tax imposed on each trade on the London stock exchange. This tax raises more 4 billion pounds annually, the equivalent of almost \$40 billion in the U.S. economy.<sup>1</sup>

There are two reasons that it is noteworthy that the UK continues to impose its stamp tax, and manages to raise a substantial amount of revenue. First, it indicates that the tax is indeed collectable.<sup>2</sup> The UK tax applies to stock trades for firms that are incorporated in the UK, regardless of where the trades take place. While enforcement of the tax on trades that take place outside of the UK is undoubtedly poor, this law limits the extent to which firms would have incentive to list elsewhere to escape the tax.

The other important point that is demonstrated by the stamp tax in the UK is that a modest FTT is not inconsistent with maintaining a vibrant stock exchange. The London market remains one of the largest stock exchanges in the world, in spite of the stamp tax. The other benefits of the London exchange obviously outweigh the burden of the tax so that it is still an attractive venue for raising capital and trading shares.

As a successful model, the stamp tax has two important features that are worth emulating. First, the dealer is responsible for collecting the tax. Obviously the dealer is the party best able to ensure that the tax is paid. In the United States, the dealer already has the obligation to collect the very small

<sup>&</sup>lt;sup>1</sup> Data on revenue raised from the tax in the United Kingdom can be found at http://www.hmrc.gov.uk/stats/stamp\_duty/table15-1.pdf.

<sup>2</sup> The administrative cost of collecting the stamp tax are extremely low. The UK's Inland Revenue Service estimated that the cost is equal to less than 0.05 percent of the revenue collected. By comparison, it estimated that the administrative costs for the income tax is equal to 0.7 percent of the revenue collected (cited in Bond et al., p 4).

transactions taxes that are charged to finance the Securities and Exchange Commission and the Commodities and Futures Trading Commission.

A second important feature of the UK law is that a security cannot be legally transferred unless the tax is paid. The stamp is effectively proof of the transfer of the security (this can also be done electronically). In effect, tax evasion would imply ambiguity around the ownership of the asset. Most investors are willing to pay a 0.25 percent fee to ensure their proper claim to the asset.

An obvious complaint against the stamp tax is that it only applies to a narrow class of assets (stock shares) and therefore it can be readily avoided by traders wishing to speculate on other assets, or even those wishing to speculate on stock through the purchase of futures or options. The obvious remedy to this problem is to have a more broadly based tax that applies to transfers of all standardized financial assets. The fee structure would be scaled to the expected life of the asset so that the disincentive to trading will be roughly equal across markets.

Pollin, Baker, and Schaberg (2002) propose a fee structure that is intended to maintain a rough balance across markets. To match a 0.5 percent fee on stock trades, the paper proposes the following fee structure:

Bonds: 0.01 percent for each year remaining until maturity
Futures: 0.02 percent of the notional value of the underlying asset

Options: 0.5 percent of the premium paid for the option

Interest Rate Swaps: 0.02 percent of asset value for each year until the expiration of the

agreement

At the time Pollin et al. was written, credit default swaps (CDS) were still relatively new instruments, but the fee structure applied to interest rate swaps would probably be appropriate to transfers of CDS also.

The tax schedule was intended to roughly correspond to current transactions costs for these assets. Since much of the trading for some of these assets is not on exchanges (e.g. interest rate swaps), it is difficult to obtain reliable information on current costs. In order for a tax to be neutral across asset classes (if that is desired), it would be necessary to obtain better information on current costs and adjust these tax rates accordingly.

# The Potential Revenue from a Financial Transactions Tax

The few estimates of the elasticity of trading in stocks and other assets with respect to trading costs are quite dated and not very reliable. In the absence of good data on which to project trading responses, the paper simply constructed a range of revenue projections based on what were considered extreme responses (no change and a 50 percent fall in trading volume) and the midpoint of a 25 percent decline in trading.

The revenue calculations (based on 1997 trading volumes) in these three scenarios were \$132.1 billion, \$66.1 billion, and \$99.2 billion, respectively. Approximately 40 percent of the projected revenue was derived from taxing stock trades, with trades of government bonds accounting for approximately 35 percent of the projected revenue.

The projected revenue would be approximately 25 percent higher in 2008 dollars, although the increase in trading volume over the last decade would have an even larger impact. Trading in all of these assets was far larger in 2007 than in 1997. In the case of CDS, the nominal value of the stock of these assets exceeded \$60 trillion by 2007, while the asset did not even exist in 1997.

Clearly a fee structure comparably to the one described above would produce considerably more revenue based on the trading volume just prior to the recent financial collapse than the calculations in Pollin et al. show. While trading will almost certainly not recover to pre-collapse levels any time soon, \$60 to \$100 billion a year in revenue would not be an unreasonable target for a broad-based tax, given the experience in the United Kingdom and other countries that have imposed financial transactions taxes.<sup>3</sup>

#### The Efficiency-Enhancing Effects of Financial Transactions Taxes

Taxation generally leads to economic distortions, with the possible exception of cases where the activity being taxed is itself harmful, such as smoking or drinking alcohol. While there are undoubtedly distortions associated with financial transactions taxes (it will have some impact on the cost of capital), much of the economic activity that will be lost as a result of the tax has the character of gambling. It will have very little effect on the effectiveness of capital markets.

In this sense, a financial transactions tax can actually increase the efficiency of financial markets. If the sector can just as effectively fill its function as an intermediary while employing fewer workers and requiring less capital, then the tax will have increased the efficiency of the financial sector. In this respect, it is worth noting the explosive growth of the financial sector over the last three decades. In the years from 1977 to 2007, the share of private sector wages in the narrowly defined securities and investment sector grew from less than 0.6 percent to more than 2.3 percent.<sup>4</sup>

There is a real economic benefit to this growth insofar as it improved the allocation of capital, allowing firms to better gain access to capital markets or for individuals to better adjust their saving and spending patterns over their lifetimes. However, if this growth in resource use was only associated with additional trading and did not actually lead to better allocations of capital, then the resources were wasted. If a financial transactions tax reduces the volume of trading, and therefore the resources used by this sector, without harming the sector's ability to allocate capital, then it will be making the sector more efficient and freeing up resources for more productive uses.

<sup>&</sup>lt;sup>3</sup> Prior to the collapse of its stock bubble in 1989, the financial transactions taxes in place in Japan raised more than 4 percent of all government revenue. This would be the equivalent to \$120 billion a year in the United States (Japanese Securities Research 1992, p 244).

<sup>&</sup>lt;sup>4</sup> This is taken from the Bureau of Economic Analysis, National Income and Product Accounts, Table 6.3B ([line 55 + line 59]/ line1) and Table 6.3C (line 59/line 1).

This could potentially be a very large benefit from an FTT. If it reduced trading volume by 25 percent (the middle scenario in Pollin et al.), leading to a corresponding reduction in resource use, it would free up more than \$60 billion a year in labor and capital for productive uses.<sup>5</sup>

Whether or not reduced trading leads to serious harm to financial markets would depend on its impact on liquidity and market volatility. Obviously the tax will reduce liquidity by reducing the volume of trading, but it is not clear that the impact will have much consequence. For example, if trading of the most liquid assets, like government bonds, were cut by 50 percent, or even 75 percent, these assets would still have enormous markets. Such reductions in trading may reduce the volume to levels of 20-25 years ago, but these markets were already highly liquid in the 80s.

The tax will also affect trading in less liquid assets, but one of the advantages of the structure of the tax is that the proportionate increase in trading costs will almost always be smaller on less liquid assets, since these assets almost invariably have higher bid/ask spreads. In the case of equities, the tax may double the transaction costs for the most frequently traded stocks, the proportionate increase in trading costs will be far smaller on less frequently traded stocks, and therefore the proportionate reduction in trading volume would be lower.

The impact on volatility is also ambiguous. Theoretically, the impact can be in either direction. If all market actors arrived at their assessments of assets independently, then an FTT would by definition increase volatility, since it would reduce trading volume and therefore the number of independent assessments among traders. However, if there are substantial numbers of noise traders (traders who act based on market movements rather than an assessment of fundamentals) in the market, the reduction in trading volume could actually reduce volatility since it can prevent price swings driven by momentum rather than fundamentals.<sup>6</sup> The research on the relationship between trading volume and volatility is ambiguous. In short, it is reasonable to believe that the reduction in trading volume that would follow from the imposition of an FTT will not qualitatively change the degree of volatility in financial market.

#### **Conclusion**

Financial transactions taxes have been a widely used source of revenue in the United States and elsewhere in the world. A set of taxes applied to trading in a broad range of financial assets and scaled to the level of the UK stamp tax on stock trades could raise close to \$100 billion a year in revenue in the United States. Such a tax is arguably efficiency-enhancing since it would substantially reduce the resources used by the financial sector without reducing its effectiveness in allocating capital.

<sup>&</sup>lt;sup>5</sup> This calculation assumes that the securities and investment sector's share of private sector output is equal to its share of private sector wages and that its size shrinks by 25 percent as a result of the imposition of a FTT.

<sup>&</sup>lt;sup>6</sup> For a theoretical discussion of noise trading see Delong et al. 1987.

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