

A Securities Transactions Tax: Brief Analytic Overview with Revenue Estimates

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Congressional Research Service 7-5700 www.crs.gov R42078 Policymakers are currently considering taxing certain financial securities transactions. There are two justifications commonly offered for imposing such a tax: (1) it would reduce financial market volatility, and (2) it would be a significant source of revenue. Existing empirical research, however, suggests that volatility could actually increase in response to a securities transactions tax (STT), although the existing research may not be directly applicable to today's environment. Estimates do indicate that an STT could be a significant revenue source if designed properly.

At its most basic level, an STT is a tax imposed on the buyer or seller of a security at the time a securities transaction occurs. An STT can be applied across the board to all financial transactions, or only those involving specific types of securities (for example, stocks, options, and futures, but not bonds). An STT can be applied to all security traders, or selectively to only certain types, such as intuitional traders but not individual investors.

There are historical precedents for an STT in the United States. At the federal level there was a stock transfer excise tax (sometimes called documentary stamp tax) on the issuance and subsequent transfers of securities from 1914 to 1966. Currently, the Securities and Exchange Commission (SEC) imposes a tax-like fee on certain securities transactions. At the state and local level, the state of New York, in conjunction with New York City, taxed the transfer of stocks from 1905 to 1981.¹ There have been proposals in New York to reinstate the transfer tax since its repeal.

This report briefly discusses recent STT proposals, summarizes the possible effects on financial market volatility and speculation, and provides estimates of the potential revenue effects. This report is a condensed version of CRS Report R41192, *A Securities Transaction Tax: Financial Markets and Revenue Effects*, by Mark P. Keightley. Contained in that report is an in-depth economic analysis of an STT, a detailed discussion of revenue estimates, STT design options, and a summary of historical and international STT examples.

Proposals

A number of STT proposals have been introduced in the 112th Congress. H.R. 1125 proposes a 1.00% transaction "fee" that would encompass all transactions in the economy, not only securities transactions. The objective of imposing the 1.00% fee would be to eliminate the national debt and the individual income tax. H.R. 3313, H.R. 3638, H.R. 5727, S. 1787, and S. 2252 would impose a three-basis-point fee (0.03%) on non-consumer transactions involving stocks, bonds, futures, options swaps, and credit default swaps.

There were a number of proposals in the 111th Congress, as well. These included H.R. 676, H.R. 1068, H.R. 1703, H.R. 3153, H.R. 3379, H.R. 4191, H.R. 4646, and S. 2927. In opposition, 36 House Members sent a letter to then-House Committee on Ways and Means Chairman Charles Rangel and Ranking Member Dave Camp urging them not to adopt an STT. According to a press report, U.S. Treasury Secretary Timothy Geithner has previously questioned whether an STT

¹ For example, details of the tax in New York state are described in Robert Pollin and James Heintz, *Confronting the New York Fiscal Crisis: Raising Revenue Through Taxing Stock Market Transactions*, Research Brief 2003-4 (Political Economy Research Institute, University of Massachusetts, Amherst, June 2003), p. 2, available at http://www.peri.umass.edu/fileadmin/pdf/research_brief/RB2003-4.pdf.

would work since, as the report quotes Secretary Geithner as saying, firms are "going to move in a heartbeat to get around any tax like that."²

Effect on Volatility

A number of empirical studies have examined how STTs and STT-like regulations impact the price volatility of securities.³ The results suggest that transaction taxes may have no effect on volatility, or, in some cases, may actually increase volatility. There may be limitations, however, to applying existing empirical STT research to understanding the effects of an STT on volatility today. Much of the existing research relies on data over 20 years old. Since then, regulatory changes and advances in technology may have fundamentally changed the way financial markets operate. For example, some reports suggest that high-frequency trading now represents between 40% and 70% of all U.S. equity trading volume.⁴ If the amount of high-frequency trading has increased substantially over time, then older STT studies may not be applicable to the effect on volatility in today's financial market structure.

The potential for increasing volatility may be due to the tax increasing the transaction cost and reducing the profitability of some trades. With an STT in place, traders may have to wait for prices to make larger movements before it becomes profitable to enter the market. For example, a trader who may have previously found it profitable to trade when a stock's price jumped from \$50 to \$51 dollars, may now wait until the stock's price rises to \$51.25, to cover the extra cost of the tax. The increased cost of trading could therefore lead to larger movements in the prices of securities and hence greater volatility.

Effect on Speculation

An STT aimed at reducing speculation may have unintended consequences for businesses that hedge risk to smooth costs over time.⁵ For example, an airline may purchase jet fuel futures contracts in January to protect against the risk of rising summer fuel prices from a counterparty who speculates that prices will move in the other direction. If the counterparty is considered a speculator subject to an STT, they may respond by raising their price, and, in turn, increasing the cost to hedge. The airline would then pass the additional cost on to customers or shareholders. Alternatively, the airline could fail to hedge and take the risk on itself. Although this is just one

² Robert Schmidt, "Geithner Dismisses Tax on Financial Transactions as Unworkable," Bloomberg.com, December 5, 2009, http://www.bloomberg.com/apps/news?pid=20601087&sid=a45uxLtxi3N8#.

³ See, for example, Richard Roll, "Price Volatility, International Market Links, and Their Implications for Regulatory Policies," *Journal of Financial Services Research*, vol. 3, no. 2/3 (December 1989), pp. 211-246; Steven R. Umlauf, "Transaction Taxes and the Behavior of the Swedish Stock Market," *Journal of Financial Economics*, vol. 33, no. 2 (April 1993), pp. 227-240; Charles M. Jones and Paul J. Seguin, "Transaction Costs and Price Volatility: Evidence from Commission Deregulation," *The American Economic Review*, vol. 87, no. 4 (September 1997), pp. 728-737; and Karl Habermeier and Andrei A. Kirilenko, "Securities Transaction Taxes and Financial Markets," *IMF Staff Papers*, vol. 50 (2003), pp. 165-180.

⁴ Cristina McEachern Gibbs, "Breaking it Down: An Overview of High-Frequency Trading," Advanced Trading, October 1, 2009, available at http://www.advancedtrading.com/showArticle.jhtml?articleID=220300267.

⁵ There is no uniform definition of "speculation." See Lynn A Stout, "Why The Law Hates Speculators: Regulation and Private Ordering in The Market for OTC Derivatives," *Duke Law Journal*, vol. 48, no. 701 (1999), p. 735, and footnotes within, for a discussion of the difficulty in identifying speculation and defining it.

particular example, numerous other lines of business commonly use financial markets to hedge various risks.

Still, an STT would likely render some current short-term trading strategies useless. Thus, to the degree that short-term, high-frequency trading is viewed as speculative, speculation in this sense would be reduced. The desirability of this reduction hinges critically on the role short-term traders play in destabilizing financial markets. Short-term traders are an important supplier of liquidity to the market, which, at certain times, performs a stabilizing role in financial markets. At other times, the same traders' behavior may destabilize the markets if the liquidity they provide abruptly dries up. An STT would not, however, be able to only tax destabilizing behavior.

Revenue Effects

Depending on the specific design of an STT, such a tax could be reasonably expected to yield significant new revenue. The unavailability of data on certain financial transactions that could be subject to an STT and the breadth of securities that may be included, however, complicate any revenue estimation. Also complicating the estimation is how traders would respond to a new tax. It is likely that an STT would reduce trading volume, although there is no way to know by how much.

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Reduction in Trading Volume	Projected Annual Revenue, \$ billion
20%	132.3
50%	82.7

Table I. Potential Net Revenue from 0.25% STT, 2007

Source: Congressional Research Service

Table 1 presents revenue estimates for a 0.25% STT imposed on transactions occurring on SECregulated exchanges under two different behavioral responses.⁶ One scenario assumes that the tax reduces trading volume 20%, whereas the other assumes a reduction of 50%. In 2007, the SEC reported that the total value of transactions involving U.S. stock, options, and security futures was \$66.1 trillion.⁷ This base does not include bond trading, trading occurring off the SEC-regulated exchanges, and other markets. Although trading volume on these markets is significant, these transactions may not become a part of taxable base for various reasons, ranging from governmental exemptions to administrative and evasion problems.

Considerations

If the objective of policymakers is to reduce financial market volatility, then it is not clear that an STT would be the most effective tool, or effective at all. Existing empirical research suggests that

⁶ A much more detailed discussion about how these estimates were constructed may be found in CRS Report R41192, *A Securities Transaction Tax: Financial Markets and Revenue Effects*, by Mark P. Keightley.

⁷ Even though 2008 and 2009 trading volume figures are available, using 2007 data might represent a better benchmark for the analysis. Trading volume during the financial crisis may not represent volume that could be expected during more normal times.

a securities tax could actually increase volatility, although the existing research may not be directly applicable to today's environment. Thus, improving financial market operations may be achieved more effectively via some other mechanism such as reforming the regulatory environment within which derivatives and high-frequency traders operate, for example. If policymakers do proceed with an STT as a means for reducing volatility, one option would be to begin with a low tax rate, perhaps lower than 0.25%, and increase it only if additional research supports such a move.

If the objective of policymakers is to raise tax revenue, a carefully designed STT appears to be an option. Although opponents of the tax may argue that it introduces distortions into the marketplace, the same can be said about other taxes. Distortions would be minimized if the set of taxable securities were as broad as possible. A lower rate could then be applied to achieve a given amount of revenue. An important question is therefore, is an STT the best of all available options that can reasonably raise a given amount of new revenue?

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