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Security Transaction Taxes

A Security Transaction Tax (STT), also known as a financial transaction tax (FTT), is imposed on the buyer or seller of a security at the time a transaction takes place.[1] Securities are defined as "a claim on the borrower's future income that is sold by the borrower to the lender."[2] In the past, countries such as the United States have implemented security transaction taxes with the aim of generating additional revenue and reducing volatility and speculation in financial markets. Volatility is "the amount and frequency by which prices fluctuate over a set period of time."[3] Speculation is defined as "the commitment of capital with its appreciation rather than its preservation and income as the primary objective."[4] Despite the fact that most STTs have been repealed in the late 1980s-early 1990s, numerous legislative efforts in the United States have been made to reintroduce them, though none have been implemented thus far.[5] India introduced STTs in 2008, and they are still present today. Many other countries have implemented financial transaction taxes, but India tends to have the most comprehensive tax on securities.[6] Taiwan has also adopted the use of STTs. Members of the European Union have recently adopted a proposal for a Council Directive to use FTTs. This report examines the effects associated with STTs in financial markets and the impacts they have in generating state revenue.

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[1] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," Congressional Research Service, April 10, 2012, accessed on March 18,2013, http://www.hsdl.org/?view&did=715463, p. 1.
[2] Fredric S. Mishkin*, Economics of Money, Banking, and Financial Markets* (Prentice Hall, 2012), 10th ed., p. 2.
[3] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 9.
[4] Howard Bryan Bonham, "Definition- Speculation," in *The Complete Investment and Finance Dictionary* (Massachusetts: Adam Media Corporation, 2001), p. 611.
[5] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," pp. 1-2.
[6] B.K. Bhoi, "Securities Transaction Tax: International Experience and Lessons for India," *Economic and Political Weekly* 40 (2005): 8, accessed April 2, 2013, http://www.epw.in/system/files/pdf/2005_40/08/Securities_Transaction_Tax.pdf.

Financial Markets and Securities

Securities are one of the many instruments that are used in financial markets. They come in many forms including: "corporate stocks and bonds, commercial paper, government debt, and a large number of derivative products such as futures and options."[7] Futures are "contractual agreements to buy or sell specific amount of interest rates, currencies, commodities, or stock indexes, at certain dates in the future for specific rates."[8] Options refer to **"**the purchased privilege to buy or sell 100 shares of a stock at a specific price for a specific time."[9] Financial institutions can create new types of securities "in response to changing economic conditions, or by court rulings that declare a certain financial interest not previously considered a security to be one for legal or tax purposes."[10]

Institutional investors engage in most financial transactions. They include: "insurance companies, pension and mutual funds, hedge funds, investment banks, foundations, and university endowments."[11] Securities are traded in order to "balance portfolios, meet financing needs, manage risk, and maximize expected returns."[12]

Securities are traded in both regulated and unregulated markets.[13] Regulated markets in the US, such as the New York Stock Exchange or the New York Mercantile Exchange, are overseen by the Securities and Exchange Commission (SEC) and Commodity Future Trading Commission (CFTC). Common types of securities exchanged in this market include: standard stock, options, futures, and commodity contracts. Unregulated markets, also known as over-the-counter markets (OTC), typically are composed of market instruments that are "highly individualized products, designed to meet the specific needs of a trader."[14]

Trading in both markets has "increased substantially over the last two decades."[15] SEC regulated exchanges went up from "2.2 trillion in 1990 to 82 trillion in 2008."[16] Since unregulated markets do not have to adhere to any requirements, information about "who is involved in OTC transactions, or what they are trading, is not always available."[17] However, The Bank of International Settlements estimated that between 2001-2011, the face value of "all "OTC derivative contracts went from 95.2 trillion to $647.8 trillion."[18]

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[7] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 2.
[8] Howard Bryan Bonham, *The Complete Investment and Finance Dictionary,* p. 288.
[9] Howard Bryan Bonham, *The Complete Investment and Finance Dictionary***,** p. 472.
[10] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 2.
[11] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 3.
[12] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 3.
[13] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," pp. 2-3.
[14] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 3.
[15] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 3.
[16] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 3.
[17] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 3.
[18] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 3.

Security Transaction Taxes

Those who advocate for a security transaction tax argue that it will serve as an additional way to raise revenue, reduce speculation, and curb overall volatility in financial markets.[19] Those who advocate against STTs argue that STTs will provide an additional opportunity cost imposed on financial transactions. This may lead to the reduction in the overall value of the securities market, decrease liquidity, and lead to an overall decrease in the efficiency of the financial market, which may potentially drive trade to other foreign markets.[20] In addition, there have been concerns over the likelihood of firms fighting against or evading STTs.[21]

Past research on STTs, regulations associated with their implementation, and the impact they have on the price volatility of securities suggests, "Transaction taxes may have no effect on volatility or, in some cases, may actually increase volatility."[22] "The increased cost of trading could therefore lead to large movements in security prices and hence greater volatility. On the other hand, an STT could theoretically reduce excess volatility if it deters certain destabilizing investment behavior that pushes security prices away from fundamentals, eventually leading to sharper price corrections."[23] Fundamentals are referred to as "the qualitative and quantitative information that contributes to the economic well-being and the subsequent financial valuation of a company, security or currency."[24]

It is difficult to properly assess the future market effects that STTs would have since most research done draws from "data [that are] over 20 years old."[25] In addition, there is no present model or indicator that could "estimate how traders would respond to a new tax."[26] Since global financial markets and regulations have evolved, these reports may not be applicable to current market trends.[27]

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[19] C Johan Bjursell, George H.K. Wang, and Jot Yau, "Transaction Tax and Market Quality of U.S Futures Exchanges: An Ex-Ante Analysis," in *Review of Future Markets*, The Institute for Financial Markets, 2012, http://www.theifm.org/rfm-special-Issue2011.pdf pp. 114-115.
[20] C Johan Bjursell, George H.K. wang and Jot Yau, "Transaction Tax and Market Quality of U.S. Futures Market: An Ex-Ante Analysis", Institute for Financial Markets, July 2012, accessed on April 15, 2013, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2139586, p. 7.
[21] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 2.
[22] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 2.
[23] Mark P. Keightley, "A Securities Transaction Tax: Financial Markets and Revenue Effects," p. 9.
[24] "Definitions: Fundamentals", Investopedia, 2013, http://www.investopedia.com/terms/f/fundamentals.asp.
[25] Mark P. Keightley, "A Securities Transaction Tax: Brief Analytic Overview with Revenue Estimates," Congressional Research Service, June 1, 2012, accessed on March 17, 2013, http://www.fas.org/sgp/crs/misc/R42078.pdf, p. 2.
[26] Mark P. Keightley, "A Securities Transaction Tax: Brief Analytic Overview with Revenue Estimates," p. 2.
[27] Mark P. Keightley, "A Securities Transaction Tax: Brief Analytic Overview with Revenue Estimates," p. 2.

Potential Revenues from Security Transaction Taxes

Estimating the amount of revenue that STTs may potentially create is difficult. "The difficulty comes from uncertainty about future economic conditions, unknown potential behavioral responses by taxpayers, and notable differences among legislative proposals."[28]

Table 1: Potential Net Revenue from 0.25% STT, 2007

Reduction in Trading Volume	Projected Annual Revenue, $billion
20%	132.3
50%	82.7
Source: Mark P. Keightley, "A Securities Transaction Tax: Brief Analytic Overview with Revenue Estimates," Congressional Research Service, p. 3.	

Table 1 provides an estimate for how much revenue a 0.25% STT would create if enacted on SEC regulated exchanges under two different market responses. The first scenario examines what would happen to annual revenue if there was a 20% reduction in trade volume due to the STT. The second scenario examines the potential impact on annual revenue if STTs caused a 50% reduction in trade volume. "In 2007, the SEC reported that the total value of transactions involving U.S. stock, options, and security features as $66.1 trillion. This base does not include bond trading, trading occurring off SEC-regulated exchanges, and other markets."[29] While projected annual revenue is significant, factors such as governmental exemptions and administrative and evasion problems need to be taken into consideration.[30]

STTs: India

India has been one of the more recent markets to introduce STTs unlike many of the models that were phased out during the late 1980s-early 1990s.[31] The Finance Act of 2004 led to the establishment of STTs in the National Stock Exchange of India (NSE).[32] Taxation rates from the 2004 Act were later modified in the Finance Act of 2008. The 2008 rates are the same rates used today.[33] Since India's financial markets contain "some of the highest rates of speculation

[28] Mark P. Keightley, "A Securities Transaction Tax: Brief Analytic Overview with Revenue Estimates," p. 11.
[29] Mark P. Keightley, "A Securities Transaction Tax: Brief Analytic Overview with Revenue Estimates," p. 3.
[30] Mark P. Keightley, "A Securities Transaction Tax: Brief Analytic Overview with Revenue Estimates," p. 3.
[31] B.K. Bhoi, "Securities Transaction Tax: International Experience and Lessons for India," *Economic and Political Weekly* 40 (2005): 8, accessed April 2, 2013, http://www.epw.in/system/files/pdf/2005_40/08/Securities_Transaction_Tax.pdf.
[32] Ishani Tewari, "Securities Transaction Tax: Is It Effective?" *Economic and Political Weekly* 39 (2004): 40, accessed March 20, 2013, http://www.epw.in/system/files/pdf/2004_39/40/Securities_Transaction_TaxIs_It_Effective.pdf.
[33] National Stock Exchange of India, "Securities Transaction Tax," National Stock Exchange of India, accessed March 15, 2013, http://www.nseindia.com/products/content/derivatives/equities/sec_tranc_tax.htm.

in the world," STTs became a viable option for India to generate state revenue as well as reduce market speculation and volatility.[34]

India's STTs are broken into three different payable rates. A sale of an option in securities is taxed .017%, payable by the seller. A sale of an option in securities where the option is exercised is taxed at .125%, payable by the purchaser. Exercising refers **"**to acting on a right provided for in a securities contract."[35] A sale of a futures in securities is payable by the seller and is taxed at a rate of .017 %.[36]

Current studies on India's STT suggest that there is a "weak correlation between transaction taxes and desired results."[37] Due to the consistent changes involved with stock markets, there is a lack of up-to-date information on the true effectiveness of India's STT.[38] Additional research is required in order to understand the long-term effects associated with the original implementation of STT or consequent effects if the tax is changed.

STTs: Taiwan

Created in 1998, Taiwan taxes .3% for average money collected from the sale of shares by companies and .1% for average money collected from trading in corporate and financial bonds as well as securities approved by the government.[39] The .1% is will not go into effect until 2016.[40] Thus far, revenue for this tax has been positive. In 2009, 2.4 billion Euros were accumulated from the stocks and bonds.[41]

STTs: The European Union

On February 14, 2013, the European Commission adopted a proposal for a Council Directive in regards to the adoption of financial transaction taxes. Eleven out of 27 euro-member states have agreed to the use of FTTs. They include: Austria, Belgium, Estonia, France, Germany,

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[34] Kavaljit Singh, "Tax Financial Speculation: The Case for Securities Transaction Tax in India," 2001, Asia-Europe Dialogue Project, accessed March 18, 2013, http://www.madhyam.org.in/admin/tender/Tax%20Financial%20Speculation.pdf.

[35] Howard Bryan Bonham, *The Complete Investment and Finance Dictionary***,** p. 231.

[36] National Stock Exchange of India, "Securities Transaction Tax."

[37] Ishani Tewari, "Securities Transaction Tax: Is It Effective?"

[38] New Delhi Television, "Budget 2013: Government to reduce securities transaction tax on certain segments," Press Trust of India, accessed April 5, 2013, http://profit.ndtv.com/news/budget/article-budget-2013-government-to-reduce-securities-transaction-tax-on-certain-segments-318797.

[39] European Commission, "Comission Staff Working Paper Impact Assessment," September 9, 2011, accessed on April 12, 2013, http://www.parlament.gv.at/cgi-bin/eukp.pdf?P_EU=XXIV.pdf/EU/05/98/059894.pdf.

[40] Pricewaterhouse Coopers (PwC) Taiwan, "Introduction to Taiwan tax rules: Taiwan Pocket Tax Book 2011," May 2011, accessed April 12, 2013, https://www.pwc.tw/en_TW/tw/publications/assets/taiwan-pocket-tax-book-2011.pdf.

[41] European Commission, "Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC."

Greece, Italy, Portugal, Slovakia, Slovenia, and Spain.[42] The main aim of the FTT is to make the financial and banking sector "pay their fair share of the cost of recovering from the [2008 Global Financial Crisis]."[43] The FTT would have a "minimum rate of 0.01% for derivatives, and 0.1% for every other transaction, including purchases of shares and bonds. Participating countries are free to apply a higher rate. The tax would not be applied to everyday financial activities by people and businesses – such as getting insured, taking out a mortgage, credit card purchases and business lending."[44] The Euro-zone FTT is estimated to generate €30-35 billion a year. The rest of the tax revenues would go to national budgets, to be used like other tax revenues – to reduce debt or invest in growth and jobs, for example."[45] The tax will be implemented in January 2014.[46]

Conclusion

Due to the changing nature of financial markets, most studies on STTs are not applicable to current market conditions. Most of the data used to determine the potential economic effects associated from STTs draws from data collected many years ago. In order to understand STTs, additional research is recommended. In 2004, India introduced STTs to generate state revenue. Taiwan introduced STTs in 1998. Members of the European Union will be adopting the use of financial transaction taxes in January 2014. Since India recently introduced STTs and there is not a significant amount of research examining the impacts STTs have had in Taiwan, there currently is not enough research to properly assess the overall economic impacts of STTs.

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[42] Council of the European Union, "Financial Transaction Tax: Council Agrees to Enhanced Cooperation," January 22, 2013, accessed on April 13, 2013, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/134949.pdf, p. 1.
[43] European Commission, "EU Financial Transaction Tax," February 13, 2013, accessed on April 14, 2013, http://ec.europa.eu/news/economy/130214_en.htm.
[44]European Commission, "EU Financial Transaction Tax," 2013.
[45] European Commission, "EU Financial Transaction Tax," 2013.
[46] European Commission, "EU Financial Transaction Tax," 2013.