

# **Financial Transactions Taxes: In Brief**

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7-.... www.crs.gov R42078 Since the financial crisis and the ensuing 2008-2009 Great Recession, the idea of imposing a tax on financial transactions has appeared somewhat frequently in policy debates. At its most basic level, a financial transaction tax (FTT) is a tax imposed on the buyer or seller of a security at the time a financial transaction occurs. An FTT 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). Similarly, an FTT can be applied to the transactions of all traders, or selectively to only certain types, such as those made by institutional traders but not individual investors.

While an FTT can come in many different forms, three justifications are commonly offered for imposing such a tax: (1) it would reduce financial market volatility by reducing speculation, (2) it would generate a significant amount of revenue, and (3) it would help pay for recent and future federal assistance to the institutions that are viewed by some as the source of the financial instability (a.k.a., "Wall Street"). This report briefly discusses the concept of an FTT in a historical and international context, summarizes recent FTT proposals, examines the tax's effect on financial market volatility and speculation, and analyzes the revenue potential.

Opponents of the tax also generally offer a number of objections. First, it is argued that the tax will introduce distortions into the marketplace as well as raise the cost of capital for businesses seeking to finance investment. Second, if raising revenue is the objective, it is not clear that an FTT is the best of all available options. Third, if the tax is effective at raising a large amount of revenue, this would seem to imply that its ability to reduce speculation and high-frequency trading is low (and vice versa). And fourth, regulators may be better suited to increase transparency and reduce volatility using the set of tools at their disposal, which may more directly target improving the function of financial markets if the current financial environment is viewed to have problems.

### Historical and International Overview of FTTs

The general idea of an FTT can be traced back to at least the time of the Great Depression. In 1936, British economist John Maynard Keynes suggested that the United States impose an FTT to reduce "speculation" in financial markets by raising the cost of short-term trading.<sup>1</sup> Along similar lines, American economist and Nobel Laureate James Tobin, speaking in 1972, advocated for a worldwide tax on all foreign currency transactions to quell disruptions in the foreign exchange markets.<sup>2</sup> Tobin's proposal, which became known as the "Tobin tax," is technically different from an FTT because it applies only to foreign currency transactions, but is substantively similar in objective to an FTT. Thus, the two terms are often used synonymously. Other terms that are used interchangeably with FTT include securities transactions tax, securities transfer tax, securities transfer excise tax, stamp duty, and stock transfer tax.

There are historical precedents for an FTT in the United States. At the federal level there was a stock transfer excise tax (sometimes called a documentary stamp tax) on the issuance and subsequent transfer 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

<sup>&</sup>lt;sup>1</sup> John Maynard Keynes, *The General Theory of Employment, Interest, and Money* (New York: Harcourt, 1953), pp. 158-160.

<sup>&</sup>lt;sup>2</sup> James Tobin, The Eliot Janeway Lectures at Princeton, 1972 as published in James Tobin, *The New Economics, One Decade older: The Eliot Janeway Lectures on Historical Economics in Honor of Joseph Schumpeter* (Princeton, NJ: Princeton University Press, 1974).

1905 to 1981.<sup>3</sup> There have been proposals in New York to reinstate the transfer tax since its repeal.

There are also international precedents for an FTT; at least 40 countries currently or previously have had FTTs.<sup>4</sup> It is beyond the scope of this report to compare and contrast the existing FTTs around the world; however, it is important to note that there are differences, and in some cases these differences may impact the effect of the tax.

### Proposals

There have been numerous FTT proposals introduced since the financial crisis. The most recent proposals, H.R. 1516 and S. 647 introduced in the 116<sup>th</sup> Congress, propose a 10-basis-point tax (0.1%) on transactions involving stocks, bonds, futures, options swaps, and credit default swaps. These proposals are similar to H.R. 2306 introduced in the 115<sup>th</sup> Congress, which proposed a 3-basis-point tax (0.03%) on transactions involving stocks, bonds, futures, options swaps, and credit default swaps. An offsetting tax credit was included for contributions to qualified tax-favored accounts (retirement accounts, health savings accounts, education accounts, etc.). A similar 3-basis-point tax was included in H.R. 5745 in the 114<sup>th</sup> Congress; H.R. 880, S. 277, and S. 410 in the 113<sup>th</sup> Congress; and H.R. 3313, H.R. 3638, H.R. 5727, S. 1787, and S. 2252 in the 112<sup>th</sup> Congress, although not all of these bills included an offsetting tax credit for tax-favored accounts.

Proposals introduced in the 114<sup>th</sup> Congress included S. 1371, S. 1373, and H.R. 1464, which would have imposed a tax rate that varied depending on the underlying security. Specifically, the bills would have subjected transactions involving stocks and interests in partnerships and trusts to a 50-basis-point-tax (0.5%), transactions involving bonds and other forms of debt (other than tax-exempt state and local bonds, and bonds with a maturity of less than 60 days) to a 10-basis-point-tax (0.10%), and derivative transactions to a half-basis-point-tax (0.005%). The proposals would have also provided an offsetting tax credit for taxpayers with a modified gross adjusted income of \$50,000 or less (\$75,000 if married filing jointly). An identical FTT proposal was included in H.R. 1579 from the 113<sup>th</sup> Congress.

FTT proposals were also introduced in the 110<sup>th</sup> and 111<sup>th</sup> Congresses, although these earlier proposals were generally less detailed than more recent ones, and typically had higher tax rates. For example, the first FTT proposal (H.R. 7125) made during the financial crisis in the 110<sup>th</sup> Congress would have subjected transactions involving securities regulated by the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC) to a 25-basis-point-tax (0.25%) tax. There were a number of proposals in the 111<sup>th</sup> Congress, as well, which differed in terms of what types of transactions were covered. These include H.R. 1068, H.R. 3153, H.R. 4191. In each proposal, however, the maximum tax rate was 25 basis points (0.25%).

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> Daiana Beitler, *Raising Revenue: A Review of Financial Transaction Taxes Throughout The World*, Health Poverty Action and Stamp Out Poverty, September 2010, http://www.robinhoodtax.org/sites/default/files/ Raising%2520Revenue%2520web.pdf.

# **Effect on Financial Market Volatility**

An argument that is periodically invoked in support of an FTT is that the tax would reduce trading volume, which in turn would reduce volatility in financial markets. It seems likely that a tax on financial trading would indeed reduce trading volume, as some transactions would become unprofitable. The reduction in trading, however, could either reduce or increase market volatility. On the one hand, a reduction in volatility could occur if the tax pushes destabilizing traders out of the market. On the other hand, volatility could increase if the tax impedes upon the price discovery function of financial markets. In this case, the tax could lead to greater movement in asset prices (i.e., volatility) as traders wait for larger fluctuations to offset the higher trading costs stemming from the FTT. Additionally, it is not clear how effective an FTT would be at preventing "flash crashes" similar to the ones seen in recent years, especially ones triggered by a human error or computer malfunctions.<sup>5</sup>

A number of empirical studies have examined how FTTs and FTT-like regulations affect financial market volatility. The majority of the literature has found that transaction taxes either have no effect on volatility, or that they increase volatility.<sup>6</sup> There may be limitations to some of the research that studied earlier time periods (e.g., the 1980s) since 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 80% of U.S. trading volume.<sup>7</sup> If the amount of high frequency trading has increased substantially over time, then older FTT studies may not be applicable to the effect on volatility in today's financial market structure. Still, at least one recent empirical study found that increases in FTT-like fees were associated with a reduction in volatility, while another posits that the effect on volatility may depend on how well developed the market is for a particular asset.<sup>8</sup>

<sup>&</sup>lt;sup>5</sup> For a discussion of recent flash crashes, see CRS Report R43608, *High-Frequency Trading: Background, Concerns, and Regulatory Developments*, by Gary Shorter and Rena S. Miller.

<sup>&</sup>lt;sup>6</sup> 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; Karl Habermeier and Andrei A. Kirilenko, *IMF Staff Papers*, vol. 50 (2003), pp. 165-180; Harald Hau, "The Role of Transaction Costs for Financial Volatility: Evidence from the Paris Bourse," *Journal of the European Economime Assoication*, vol. 4, no. 4 (June 2006), pp. 862-890; Shinhua Liu and Shen Shu, "Transaction Costs and Price Volatility: New Evidence from the Tokyo Stock Exchange," *Journal of Financial Services Research*, vol. 36, no. 1 (August 2009), pp. 65-83; Markku Lane and Timo Vesala, "The Effect of a Transaction Tax on Exchange Rate Volatility," *International Journal of Finance & Economics*, vol. 12, no. 2 (April 2010), pp. 123-133; and Anna Pomeranets and Dainiel G. Weaver, *Securities Transaction Taxes and Market Quality*, Bank of Canada, Working Paper 2011-26, February 2013.

<sup>&</sup>lt;sup>7</sup> 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; and Robert Mackenzie Smith, "Chicago Fed Official Slams CFTC, SEC Over HFT Regulation," October 2, 2015.

<sup>&</sup>lt;sup>8</sup> Thornton Matheson, "The Effect of a Low-Rate Transaction Tax on a Highly Liquid Market," *FinanzArchiv: Public Finance Analysis*, vol. 70, no. 4 (December 2014), pp. 487-510, and Yongheng Deng, Xin Liu, and Shang-Jin Wei, "One Fundamental and Two Taxes: When Does a Tobin Tax Reduce Financial Price Volatility," *NBER Working Pape*, *r* No. 19974, March 2014.

# **Effect on Speculation**

An FTT could reduce speculation to the degree that it makes some trading strategies unprofitable. However, there may also be unintended consequences for businesses that use financial markets to hedge risk and smooth costs.<sup>9</sup> For example, consider an airline that would like to purchase jet fuel futures contracts in January to protect against the risk of rising summer fuel prices. The party on the other side of the market may have no real interest in the underlying commodity; rather, they may wish only to profit off a price movement in the opposite direction. If the counterparty is considered a speculator subject to an FTT, 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 particular example, numerous other lines of business commonly use financial markets to hedge various risks.

Still, to the degree that short-term, high frequency trading (HFT) is viewed as speculative, speculation in this sense would be reduced by the tax. 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. Additionally, some HFT firms also function as market-makers whose role it is to maintain liquidity and ensure an orderly market. While several countries provide an exemption for market-makers, most of the proposals in the United States do not. Subjecting market-makers to an FTT may infringe upon their ability to carry out their role. At the same time, exempting market-makers could result in a large number of transactions going untaxed, which could have significant important revenue implications. Regardless, it does not appear that an FTT could be designed to tax only destabilizing, speculative behavior.

# **Financial Crisis**

Calls for imposing an FTT generally stem from the financial crisis that began in 2007. It therefore seems reasonable to question whether an FTT would have helped prevent the financial crisis. On the one hand, as previously discussed, the tax would likely drive some speculators from the market, which could have a stabilizing effect. On the other hand, the tax may have had little impact along a number of dimensions that contributed to the crisis. For example, it appears that an FTT would have done little to address excessive leverage, deteriorating lending standards, and direct overinvestment in residential housing, all of which are widely thought to have contributed to the financial crisis. Additionally, it is possible that the presence of an FTT would have worsened the already dampened interest in buying stocks, which would have impeded the stock market recovery.

# **Revenue Potential**

One of the arguments made by proponents of an FTT is the potential revenue that it could raise. The revenue potential of any FTT would depend on its specific design. A tax with too high a rate, or one applied too narrowly, would likely elicit a behavioral response by traders as they move to avoid the tax by either fleeing the market or using financial engineering to create "synthetic"

<sup>&</sup>lt;sup>9</sup> 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.

securities that generate the same economic return, but that are not subject to the tax.<sup>10</sup> Additionally, if the tax is effective at raising a large amount of revenue, this would seem to imply that its ability to reduce speculation and high frequency trading is low (and vice versa). At this point, it is difficult to predict exactly how traders' behavior will change in response to a tax. Still, the Joint Committee on Taxation (JCT) estimated in 2018 that a proposal similar to the one included in H.R. 1516 and S. 647 from the 116<sup>th</sup> Congress would generate \$776.7 billion in revenue over 10 years.<sup>11</sup> The proposal included in both of those bills would impose a 10-basis-point tax (0.1%) on transactions involving stocks, bonds, futures, options swaps, and credit default swaps.

Estimates by others vary depending on the design of the tax and modeling assumptions. Researchers at the Tax Policy Center (TPC) estimated the revenue-maximizing FTT to be somewhere in the area of 0.1%, which would result in about \$54 billion in annual revenue.<sup>12</sup> At rates higher than that, the behavioral responses of traders would lead to falling revenues, according to their model. In 2009, another team of researchers from the Center for Economic and Policy Research and the Political Economy Research Institute estimated that much more revenue could be generated from an FTT—anywhere between \$176.9 billion and \$353.8 billion annually, depending on the behavioral response of traders.<sup>13</sup> These estimates appear high when compared to the JCT and TPC estimates and the experience of other countries.

# **Regulatory Alternatives**

Depending on the goal of policymakers, an alternative or complementary approach to taxing financial transactions would involve regulatory changes.<sup>14</sup> For example, most of the recent FTT proposals would probably only indirectly address the use of particular trading strategies such as front-running or stock-trading platforms such as "dark pools" that are believed by some to tilt the market in the favor of certain traders, often at the expense of other traders by reducing the profits in the industry. Financial regulators could possibly better address concerns over some of these financial market practices with regulations. The introduction of "circuit breakers" has helped to prevent unusually large and sudden movements in stocks, although various observers speak of the persistence of so-called "mini" flash crashes, which are significant and precipitous drops in the prices of individual securities that do not reach the level of the 2010 flash crash.<sup>15</sup> Additionally, the Dodd-Frank Act introduced more emphasis on clearing houses and margin requirements to reduce counter-party credit risk, which was prominent during the financial crisis. And the SEC is continuing to review particular aspects of the market's structure, such as tick-sizes, exchange

<sup>&</sup>lt;sup>10</sup> A synthetic security is a financial instrument composed of two or more different assets and that is designed to replicate the return of another asset.

<sup>&</sup>lt;sup>11</sup> Congressional Budget Office, *Options for Reducing the Deficit: 2019 to 2028*, December 2018, pp. 298-300, https://www.cbo.gov/system/files?file=2018-12/54667-budgetoptions.pdf.

<sup>&</sup>lt;sup>12</sup> Leonard E. Burman, William G. Gale, and Sarah Gault, et al., *Financial Transaction Taxes in Theory and Practice*, Tax Policy Center, July 31, 2015, http://www.taxpolicycenter.org/UploadedPDF/2000287-financial-transaction-taxes-in-theory-and-practice.pdf.

<sup>&</sup>lt;sup>13</sup> Dean Baker, Robert Pollin, and Travis McArthur, et al., *The Potential Revenue from Financial Transactions Taxes*, Center for Economic and Policy Research and Political Economy Research Institute, December 2009, http://www.cepr.net/documents/publications/ftt-revenue-2009-12.pdf.

<sup>&</sup>lt;sup>14</sup> For more on the regulatory aspect, see CRS Report R43608, *High-Frequency Trading: Background, Concerns, and Regulatory Developments*, by Gary Shorter and Rena S. Miller; and CRS Report R43739, *Dark Pools in Equity Trading: Policy Concerns and Recent Developments*, by Gary Shorter and Rena S. Miller.

<sup>&</sup>lt;sup>15</sup> See, for example, Ivy Schmerken, "Mini-Flash Crashes Continue To Fly Under The Radar," *Wall Street & Technology*, November 19, 2012.

-access fees, maker-taker rebates, and order routing transparency, while also increasing its capacity to better monitor markets in real time.

### Considerations

If the objective of policymakers is to reduce financial market volatility, then it is not clear that an FTT would be the most effective tool. Existing empirical research suggests that an FTT could increase volatility, although all of 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 FTT as a means for reducing volatility, one option would be to begin with a low tax rate and increase it only if additional research or data supports such a move. Another option would be to consider imposing a tax on submitted bids instead of completed transactions. As it stands, most proposals would not affect high-frequency traders who submit large orders that are then frequently canceled in an attempt to move the price of a stock.

If the objective of policymakers is to raise tax revenue, a carefully designed FTT 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 yet to be fully answered is whether an FTT is the best of all available options that can reasonably raise a given amount of new revenue.

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