



December 12, 2011

Honorable Orrin G. Hatch
Ranking Member
Committee on Finance
United States Senate
Washington, DC 20510

Dear Senator:

This letter responds to three questions you posed about a tax on financial transactions that would be imposed if the Wall Street Trading and Speculators Tax Act (H.R. 3313 or S. 1787) was enacted:

- What impact would the proposed tax have on gross domestic product (GDP) and on U.S. jobs?
- What impact would the tax have on municipal financing, including the cost to municipalities of funding their activities?
- What effect would the tax have on the depth and liquidity of the global market for U.S. Treasury securities?

The staff of the Joint Committee on Taxation is providing responses to your other questions.

The Proposed Tax on Financial Transactions

Beginning on January 1, 2013, H.R. 3313 and S. 1787 would impose a tax on most purchases of securities and transactions involving derivatives.¹ For a transaction involving a stock, bond, or other debt obligation, the tax would be 0.03 percent of the value of the security. For a transaction involving a derivative, the tax would be 0.03 percent of any payment made under the terms of the derivative contract, including the price paid for the contract when it was written, any periodic payments, and any amount paid when the contract expired. The tax would not apply to the initial issuance of stock or debt securities, to trading in debt instruments that have fixed maturities of no more than 100 days, or to currency transactions (although transactions involving currency derivatives would be subject to the tax). The tax would be imposed on trading within the United States and on transactions outside the country if any party to the transaction is a U.S. corporation, partnership, or individual.

¹ A derivative is a security that derives its value from another security or commodity. Types of derivatives include options, forwards, futures, and swaps.

The tax would raise the cost of financial transactions. Securities that are traded frequently, such as Treasury securities, would be more affected than securities that are traded less frequently. The tax would also decrease the volume of transactions and would make some types of trading activity—such as derivatives transactions to manage risk and computer-assisted high-frequency trading—unprofitable. In cases where the tax was high relative to current transaction costs for a security or derivative, the volume of trading would drop more than in cases where the tax was low relative to current transaction costs. (Transaction costs tend to be much lower for institutional investors—including pension funds, endowments, mutual funds, and banks—than for individual investors, whose trades are smaller and less frequent.)

Traders would have incentives to avoid the tax either by trading offshore or by creating new financial instruments that were not subject to the tax. Because of economies of scale in trading markets, as foreign holders of U.S. securities moved their transactions abroad, more of the market could go with them, which could diminish the importance of the United States as a major global financial market. That effect would be mitigated if other financial centers introduced their own transaction taxes.

The Impact of the Tax on Gross Domestic Product and U.S. Jobs

The tax's effect on economic output in the United States would depend on several factors: how the tax would influence the amount and productivity of investment; how resources would be reallocated from the U.S. financial sector to other sectors of the economy and to overseas financial markets; and how the tax would alter the value of existing financial assets. In the short term, imposing the transaction tax would probably reduce output and employment. Beyond the first few years, however, the tax's net impact on the economy is unclear.

Investment. The transaction tax would have both negative and positive effects on the cost of financing new investments. On one hand, it would raise the costs of financing investments to the extent that it made transactions more expensive, financial markets less liquid, and management of financial risk more costly.² On the other hand, the tax would increase federal revenues and decrease federal budget deficits, which would tend to boost national saving and reduce interest rates, thus lowering the cost of financing investments. In the short term, the net result of those contradictory effects would most likely be an increase in financing costs, because the economy is weak, interest rates are already extraordinarily low, and the introduction of the tax might not appreciably change investors' expectations about future deficits.³ Any such rise in financing costs would dampen investment in the next few years, although investment spending may be less responsive to financing costs than usual while the economy is relatively anemic. Beyond the next few years, whether the negative or positive effects would prove to be larger is unclear.

A net change in the amount of investment would in turn affect GDP and employment. In the short term, a decrease in investment would lower demand for goods and services and thus reduce output and employment. In later years, output would be determined by the supply and

² In a liquid market, investors can quickly buy or sell large quantities of an asset without affecting its price.

³ For a description of the relationships between interest rates, the credibility of policy, and investors' expectations, see Congressional Budget Office, [*The Macroeconomic and Budgetary Effects of an Illustrative Policy for Reducing the Federal Budget Deficit*](#) (July 2011).

productivity of labor and capital. Over that time horizon, the tax's overall impact on output would depend on whether the tax increased or decreased cumulative investment, either of which is possible. Greater investment would boost the nation's capital stock and output, whereas lower investment would reduce capital and output. Employment would be unaffected in the long term because the policy is not expected to affect labor force participation.

The tax would also affect output if it changed the productivity of investments. Some analysts believe that the increase in transaction costs caused by the tax would reduce volatility in the prices of financial securities, prompting better and more-productive decisions about long-term investment. The tax might discourage short-term speculation, which can destabilize markets and lead to disruptive events (such as the October 1987 stock market crash and the more recent "flash crash," when the stock market temporarily plunged on May 6, 2010).⁴ However, the tax would discourage all short-term trading, not just speculation—including transactions by well-informed traders and transactions that stabilize markets. Empirical evidence provides little indication that a transaction tax would reduce volatility. In fact, a number of research studies have concluded that higher transaction costs are associated with more, not less, volatility.⁵

Reallocation of Resources. The tax would also affect GDP by reducing the number of financial transactions and the total resources used to conduct those transactions. In the short run, lower output, employment, and income in the financial sector would lessen the demand for goods and services and reduce GDP and employment. In later years, the resources no longer used for financial transactions would be reallocated to other sectors of the U.S. economy and to other countries, as some trading moved to foreign financial markets. Whether that reallocation of resources would lead to higher or lower GDP in the United States would depend on whether the new uses for the resources were more or less productive than the uses that would occur under current law, as well as on the degree to which trading moved abroad.

Asset Value. Initially, the transaction tax would reduce the value of existing financial assets, because investors would not be willing to pay as much for assets that had become more costly to trade. That reduction would produce an immediate—though probably small—decline in wealth for people who owned financial assets when the policy was enacted. Their consumer spending would decrease to some extent, contributing to the decline in GDP in the short term.

The Impact of the Tax on the Cost and Availability of Municipal Financing

Like other entities that issue securities in capital markets to raise funds, municipalities would probably face slightly higher costs to finance their activities. However, because the transaction

⁴ During the "flash crash," major stock indexes fell by between 5 percent and 6 percent in minutes, before quickly recovering, and the prices of some individual stocks were even more volatile. That crash has been linked to fully automated trading strategies. See Commodity Futures Trading Commission and the Securities and Exchange Commission, *Findings Regarding the Market Events of May 6, 2010* (report to the Joint Advisory Committee on Emerging Regulatory Issues, September 30, 2010).

⁵ See, for example, Thornton Matheson, *Taxing Financial Transactions: Issues and Evidence*, Working Paper WP/11/54 (International Monetary Fund, March 2011); and Neil McCulloch and Grazia Pacillo, *The Tobin Tax—A Review of the Evidence* (Institute of Development Studies, University of Sussex, March 23, 2011).

tax would be small and would apply uniformly to all types of debt obligations, it would probably not disproportionately affect municipal governments' access to finance.

The tax would not apply to the initial issuance of debt, so municipalities would not pay the tax directly on the securities they issued. But investors would probably require a somewhat higher interest rate on those securities to recover the direct cost of the transaction taxes they would have to pay whenever they bought or sold the securities on the secondary market and to recover the indirect cost that the tax would impose in terms of reduced liquidity. Those higher costs would be reflected in the prices that municipalities would receive when they issued securities. In 2010, only about 0.5 percent of the stock of outstanding municipal debt was traded on an average day. That figure—which is low compared with the volume of trading for other types of securities—suggests that the tax would have a smaller impact on municipal funding than on trading in more liquid and active markets.⁶ (As of June 2011, state and local governments and governmental authorities had a total of about \$2.9 trillion in outstanding municipal debt.)

The transaction tax would also affect the funding of state and local pension plans (which held about \$3 trillion in assets as of June 2011). Besides initially reducing the value of their existing assets slightly, the tax would raise transaction costs for pension plans. Both of those effects would increase required contributions to the plans.

The Impact of the Tax on the Depth and Liquidity of the Global Market for U.S. Treasury Securities

The market for Treasury securities is one of the most active securities markets in the world. The strong credit quality and standardized terms of Treasury debt make it the most widely held global security. Total Treasury debt held by the public exceeded \$10 trillion as of September 2011. Foreign holdings account for about 45 percent of that total; U.S. banks and mutual funds are also major investors.

Imposing a transaction tax would probably have a large impact on the frequency of trading in Treasury securities—especially for recent issues, which are traded the most often and have the lowest transaction costs. In 2011, approximately 5 percent of the outstanding stock of Treasury securities was traded among market participants each day.⁷ With about 250 trading days in a year, a Treasury security is traded more than 10 times a year, on average (with recent issues being traded much more frequently and older issues much less frequently than the average). Trading costs on Treasury securities generally average less than 0.02 percentage points.⁸ In addition, yields on short- and medium-term Treasury securities are now very low—less than 1 percent for maturities of less than five years. Thus, a 0.03 percent transaction tax would be

⁶ Estimate based on data from the Securities Industry and Financial Markets Association available at www.sifma.org/research/statistics.aspx.

⁷ Estimate based on data from the Securities Industry and Financial Markets Association for primary dealer activity.

⁸ Trading costs are about half of the spread between the bidding price (what the buyer is willing to pay) and the asking price (which the seller is willing to accept). Those spreads are less than 0.01 percentage point for some Treasury securities but are larger for others; they vary with the maturity of the security and over time. See Michael J. Fleming, "Measuring Treasury Market Liquidity," *Economic Policy Review*, vol. 9, no. 3 (Federal Reserve Bank of New York, September 2003), pp. 83–108.

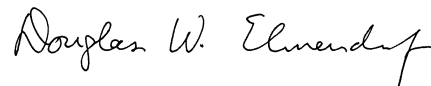
large relative to both the current cost of trading Treasury securities and their yields. As a result, the volume of trading in Treasury securities would be expected to decline significantly, reducing the ability of buyers and sellers to execute transactions at high frequency or in large volumes (a measure of the market's depth).⁹ Even after accounting for any reduction in borrowing costs from reducing budget deficits, the cost to the Treasury of issuing federal debt would probably increase in the short term because investors would pay less for Treasury securities that were less liquid. Over the longer term, whether that cost would be higher or lower than would otherwise be the case is unclear.

Several factors, however, might reduce the tax's impact on the liquidity of the market for Treasury securities and on the Treasury's borrowing costs:

- Despite the large percentage increase in trading costs, Treasury securities would remain among the cheapest securities to trade that were subject to the tax.
- Treasury securities would retain several unique characteristics, such as their value in repurchase agreements and their favored tax and regulatory treatment.¹⁰
- The large share of Treasury securities that are held offshore by foreign entities would be exempt from the tax if they were sold to other foreign entities.
- The roughly 5 percent of Treasury securities that have maturities of less than 100 days would also be exempt from the tax.

I hope that you find this information helpful. If you have any further questions, please contact me or my staff. The primary staff contacts are Bill Randolph and David Torregrosa.

Sincerely,



Douglas W. Elmendorf
Director

cc: Honorable Max Baucus
Chairman
Committee on Finance

⁹ Depth, which is one component of liquidity, is the amount of securities that can be traded at the quoted price.

¹⁰ Repurchase agreements are effectively short-term loans secured by some type of security (such as a Treasury security) as collateral. Such agreements are a means for financial institutions to lend to one another with minimal counterparty risk (the risk of loss if the other party in a securities trade has trouble meeting its obligations under the terms of the transaction), which provides a source of liquidity to financial markets, especially in times of market stress. Repurchase agreements also enable financial institutions to temporarily transfer ownership of the securities that serve as collateral. Those agreements, which are generally treated as secured financing for tax purposes, would most likely be exempt from the transaction tax.

cc: Honorable Tom Harkin

Honorable Dave Camp
Chairman
Committee on Ways and Means

Honorable Sander M. Levin
Ranking Member
Committee on Ways and Means

Honorable Peter A. DeFazio