HR 4191: Probably Dangerous and Destructive, But Perhaps Merely Useless

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Last updated:12/16/2009

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Oregon Representative Peter DeFazio and others have introduced HR 4191, *Let Wall Street Pay for the Restoration of Main Street Act of 2009*. This bill seeks to fund spending programs by taxing securities and derivatives transactions. As a claimed side benefit to raising revenue, the tax would massively raise the costs of trading, thus curbing "speculation." But alas, passage of this Act would likely hit the superfecta of unintended consequences as little tax is actually collected, stock prices fall, systemic risks increase, liquidity dries up, and, ironically, credit costs to businesses and individuals rise as banks' balance sheet capacity gets consumed with favorably taxed-transactions.

The Act, a 0.25% transactions tax, states that it "has a negligible impact on the average investor" and its sponsors claim that it "will ensure Wall Street pay for needed investment." Both assertions are false. The sponsors believe that their tax would raise as much as $150 billion per year. Instead, it would raise only a small fraction of that as trading volume diminishes or alters form to reduce the burden. While that drizzle of revenue might ultimately prove to be embarrassing to the sponsors who promised a downpour of cash, the economic costs will be a tsunami to investors saving for the future, businesses raising capital to expand and create jobs, and banks working to prevent a further contraction in lending.

Once imposed, the tax either "works" and becomes more aptly titled the *Let Main Street Pay For the Restoration of Main Street Act of 2009* or, more likely, doesn't work and becomes the *Let No One Pay for the Restoration of Main Street Act of 2009*. Which way it goes will be determined by the precise language of the final Bill, but either direction is a wrong turn for taxpayers and investors.

The UK has had a similar tax for some time (see the Addendum for more on this and the experiences of other nations and our nation in the past). In contrast to the DeFazio proposal, the 0.50% UK Stamp Duty Reserve Tax exempts dealers. This exemption leads to a simple device that miraculously eliminates most of the potential for tax collection and its adverse consequences. Investors, both large and small, purchase economic exposure to stock through derivatives trades with dealers. The dealers retain the actual legal ownership of the shares and investors buy the returns from them. As an aside, to anyone interested in the democratization of corporate governance, forget about it in this case as the investors owning the returns no longer own the shares.

An unfortunate side-effect is it moves a huge volume of assets onto dealer balance sheets, something we won't be too happy about when the next financial crisis arrives. As bad as 2008 was, imagine if one of the few well-functioning markets at the time, the stock market, all of a sudden also came to crisis because so many customer positions were actually carried on the books of a handful of troubled firms.

All of that seems pretty unwelcome and not at all what the Bill's sponsors intend, so maybe they will not add a UK-style dealer exemption. In that case, investors either pay it or substantially stop trading. If, for some reason, investors are willing to keep on trading a lot and pay a lot of tax, then one thing has to happen – stock prices will fall sharply. Why? Because the transaction tax imposes a tax on the value of the assets. One simple result is that stock prices adjust downward to reflect much of the expected present value of the future stream of taxes. If such a tax really generates $150 billion per year, that value destruction might be in excess of $1 trillion in the $13 trillion US equity market. It is doubtful that the Bill's supporters intend to drive down stock prices and capital gains tax collections, particularly nowadays, though that's why the consequences are called "unintended." In fact, their discussion implies they think Wall Street will bear all the costs and this is simply false.

The transaction tax is a tax on investors, not bankers. Even if some investors (e.g. tax-advantaged savings accounts) are exempted from paying the tax, all investors will pay in the form of lower share prices. Notice that nowhere in this process are bank profits taxed, and banker compensation is only hurt by hurting their business, presumably not the objective of any of HR 4191's sponsors. Instead, Main Street will see lower pension fund values, both in their own retirement savings and in the public employee pension plans they will now have to top off with new taxes on their homes and incomes.

It's almost certain that far far less than $150 billion per year in tax actually will be paid, as trading volumes must decline sharply. Here's a simple way to demonstrate this eventuality. High frequency traders (and more on them, later) are thought to generate about half of today's market volume. They work on razor thin margins, maybe making 0.2 cents or less per share they trade. If typical equity market volumes are about 8 billion shares per trading day, that's total annual revenue of $2 billion. Not bad, but it doesn't seem reasonable that this activity could support paying $75 billion (their share of the $150 billion) in taxes[1]. Obviously, high frequency traders won't be able to trade. Other trading intensive activity will be taxed out of existence, too. If you estimate that 90% of market volume would go away then so would 90% of the projected tax revenue. And that may be a reasonable estimate since that would get us much more in line with what the

[1] Note that we have long had a transaction tax, the small "SEC fee" that is a tax of 0.00257% on all sales. This tax gets changed up and down a couple of times per year, but for a high frequency trader it may represent 20-30% of his margins, a high, but apparently sustainable rate. The transaction tax proposed in HR 4191 is 100 times as large.

few billion dollars per year the UK market tolerates in stamp tax payments, recall the shifting of most of their trading to nontaxable form, scaled up for our larger market size.

So the Bill becomes ineffective at raising revenue, but the good news is that share prices will decline less than they would if the tax really did raise $150 billion. Trades still will happen, some tax will be paid, and share prices still will fall some. However, the bad news is that a host of side effects will be significant and all dangerous. Trading costs will soar as market making activity is taxed to near extinction. Bid/ask spreads will widen substantially. When an investor wants to sell, there will be fewer market makers to intermediate between him and a future buyer of the same stock. Instead, sellers often will have to coax buyers into trading immediately by offering a healthy discount. We will turn our very liquid stock market into a far less liquid one, to our collective regret. Anyone remember 2008 and the destructive power of illiquid markets?

The problems above are symptoms of a market getting less efficient. Here is another one, volatility will rise, too. How could it not? Without liquidity providers (all of whom trade a lot), buyers and sellers have to act more aggressively to find trading partners, so we will see prices jump around more than we do today. And the speculators? Well, they aren't the ones who trade a lot, rather, it's the liquidity providers who do that. Will the 0.25% tax prevent a speculator from buying the $50 stock that the Internet chat room says will soon trade at $100? No, but serious investors with realistic expectations will be deterred and market prices will become less efficient. We will be paying for that either in the next bubble or in the crash that follows it as Mom and Pop buy grossly overpriced shares then sell them at the bottom in an implosion that should never have happened.

The sponsors and some commentators like the tax as a means to eliminate "high-volume short-term speculative trading." And, yes, the tax would likely put high frequency traders out of business. The problem is that these are today's market makers. They are our liquidity providers now that the older, traditional and more expensive ones on Wall Street are largely gone.[2] In general high frequency traders run low risk businesses that serve a needed role in our markets, they aren't speculators.

Others like the tax because they hope it will reduce trading done by what academics call "noise traders" and who you, if less cynical, might call traditional money managers. A transactions tax would presumably reduce the trading of those who aren't very good, and are thus trading on "noise", but it also would reduce the trading of those who are and whose trades are necessary to make prices reflect economic reality. In fact, if noise traders exist it's highly likely they are overconfident and one could easily imagine their trading falling considerably less than their better informed cousins.

[2] Markets always have had market makers who provide liquidity, the necessary grease to keep markets functioning and prices fair. As our equity markets became more technologically advanced, as the rules became more democratic, and trading venues more fairly accessible by all, Wall Street's human market makers were largely replaced by a more widely distributed collection of electronic traders. For the most part, high frequency traders are these new market makers. They work on much smaller margins than their burly, pizza and doughnut eating predecessors, benefiting investors from the largest to the smallest, in the form of lower trading costs. Note that the authors are not high frequency traders..

Should Congress and the President find enough appeal in HR 4191 to enact it, there are three possible outcomes. The first is that there are enough loopholes that the tax raises little money but has unfortunate side effects like driving jobs and tax revenues overseas or inflating the balance sheets of banks. The second is that there are no meaningful loopholes but, surprisingly, people still trade a lot and enormous taxes are paid, in which case we expect stock prices to fall dramatically. The third, and most likely, is that there aren't enough exemptions and investors react by sharply reducing trading activity, so there is little revenue but great harm to the market and the economy. Whichever of these occurs, the sponsors of the Bill will face a hard time explaining how, when aiming to shoot the banks, they shot their constituents, who will then pay for the next Wall Street bailout.

Addendum - A Brief History of Security Transaction Taxes

A common argument from transaction tax proponents is that taxes have been imposed in the past and did not kill financial markets. A review of the experiences, however, suggests a different lesson. Taxes either raised little revenue and caused inconvenient distortions, were disastrous and quickly repealed, or were small enough to be meaningless. In fact, given the extensive experience with such taxes, it is proponents who should point to an experience they intend to emulate.

The UK, for example, has a stamp duty levied on securities transactions but dealers are exempted. That makes it easy for investors to avoid by trading in derivatives. Japan introduced a tax in 1987 that pushed transactions overseas, causing volumes to drop 80% in five years. The tax was repealed in 1993. Sweden introduced a tax in 1984 that caused money market transactions to drop 20%, bond trading 85%, futures 98% and options trading to disappear entirely. As a result the tax raised less than 5% of projected amounts, as transactions moved to London, but was blamed for a 10% stock market decline. The tax was repealed in 1991 and volumes recovered over the next few years. Taiwan tried a much smaller tax, 0.05%, on commodity futures in 1993. Trading moved to Singapore to such an extent that when Taiwan cut the tax to 0.01% it actually raised more revenue than at the higher figure.

Several other Asian countries had similar experiences. Numerous studies agree that the taxes depress security prices and trading volumes, increase volatility, increase bid/ask spreads, make institutional portfolios less diversified and efficient and increase autocorrelation of returns (a measure of how much security markets trend in the short-term and an indicator of market inefficiency). Not all studies find all problems in all instances, but no studies found that any market got either more efficient or less volatile.

The United States, and individual states as well, has imposed security transaction taxes on several occasions dating back to the formation of the Republic. The longest-lived example was a 1914 tax of 0.02% on stock sales, doubled to 0.04% in 1934 and repealed in 1966.[3] This tax was much smaller than current proposals, and it was insignificant compared to the high fixed commissions and bid/ask spreads of the time. Moreover, both the capitalization and annual turnover of the stock market were much smaller compared to gross domestic product, so the economic effects would be much less than today. Although the tax did not kill the stock market, volatility and autocorrelation was higher and average returns were lower than they have been since the tax was repealed. The tax only raised significant revenue during the bubble market of the late 1920s (which it obviously did not prevent).

A different type of transaction tax was popular in Latin America and some Asian countries in the 1990s. Several countries levied taxes on bank deposits and withdrawals. This is closer to a retail sales tax than a securities transaction tax, but in most cases the taxes were ineffective at raising revenue and caused painful economic distortions. The one arguable exception was Brazil where a tax imposed in 1996 raised significant revenue without major harm to the financial system. However this tax averaged only about one week's interest on bank deposits and was in force during a period of dynamic growth. Even so, it was repealed in 2007.

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[3] Higher figures are often quoted. One possible reason is prior to 1959 the tax was levied on the par value of the stock rather than the market price. For some stocks that had fallen below par value, the tax was a higher percentage (of course, for other stocks it was a lower percentage). Also there were state transaction taxes, which were more complicated and changed frequently during the period. It's possible that the actual average transaction tax paid on US share transactions from 1914 to 1966 was considerably larger than the figures quoted above, but we are aware of no study measuring the effective, as opposed to statutory, rates. It's also possible the actual tax paid was lower, due to exceptions and rebates. We are aware of no reliable estimates. For the purposes of this paper, the point is that it is certain the tax was a small fraction of contemporary transaction costs.