

Tax “LaSalle Street” to Meet Human Needs.

(1) What is a “LaSalle Street” Tax?

A “LaSalle Street Tax” or **financial transactions tax (FTT)** is a very small tax on the trading (buying/selling) of financial assets such as stocks, bonds, currencies and derivatives (futures and options) based on these assets. It is essentially a sales tax, such as when we buy/sell shoes or computers. “LaSalle Street” has come to mean the financial/trading district, the “Wall Street’ of the Midwest.



(2) Why Illinois?

Illinois has two of the largest financial markets in the world, the Chicago Mercantile Exchange (CME; CME owns the Chicago Board of Trade) and the Chicago Board Options Exchange (CBOE). Each year the value of products traded on these two exchanges totals well over \$900 trillion.

(3) How would a LaSalle Street tax (LST) work in Illinois?

Proposals for a LaSalle Street Tax that have been submitted to the Illinois State Legislature call a \$1/contract fee on all agricultural futures and options traded on these two exchanges and a \$2/contract fee on all other futures, futures options and options traded on these two exchanges with the exception of options on individual stocks. Average contract size at these exchanges is more than \$225,000, so this tax amounts to less than 2/1000 of a percent of average contract value.

(4) That doesn’t sound like a very big tax - would the LST raise much money?

Yes, the tax rate is very low but, because the number of trades is so large, the proposal would raise between billions of dollars for the state. Based on current average trading volumes we’ve estimated a *maximal* figure of \$12 billion. However, since the implementation of an LST is likely to cause some reduction in “high frequency trading” (HFT) (see (5) below), actual revenue from an LST will probably be lower than this. For example, if the LST results in a 50% reduction of HFT trading volume, it would raise \$6 B.

(5) Wow! But can the exchanges afford to pay this tax? Wouldn’t they move?

The LST is not a tax on the exchanges; they don’t trade. It is a tax on the buyers and sellers of futures and options contracts traded in the exchanges. The exchanges would simply act like the hardware store that collects the sales tax when you buy a hammer. And then sends the tax to the State of Illinois. Contrary to claims by lobbyists that the exchanges could easily move trading infrastructure out of Illinois, such a relocation would be enormously costly and disruptive. The CME facility in Aurora for example is the size of seven football fields and reportedly is going to be expanded by 500,000 square feet to more than fifteen football fields (<http://www.datacenterknowledge.com/archives/2016/05/09/cyrusone-plans-huge-expansion-at-cme-data-center-campus-in-chicago>), and at other facilities throughout the Chicago area “high frequency traders” (see 7 and 10) seeking to place their servers as close as possible to trading matching engines have “co-located” near other exchange. All of these trading and exchange facilities would have to be relocated together and customized high-speed straight-line transmission connections to trading in New York,

Asia, and other locations around the world would have to be rebuilt. Straight-line transmission is used for nanosecond time savings that allow high frequency traders to get an information edge on other traders as described in the Michael Lewis book *Flash Boys* for options and stock trading in Chicago and New York. Chicago is a key time zone player in 24 hour global trading strategies between New York and Asia. Also trading “clearing house” facilities and their links to all of the financial institutions in Chicago would have be relocated and reconnected. Finally, in the unlikely event that the exchanges were able to provide credible data indicating that profit reduction from trading volume losses due to the LST was large enough to justify the costs of relocating out of Illinois, the state could negotiate a lower LST that would likely still raise billions in public revenue. Currently, detailed data on trading is generally not publicly available.

(6) Are there any experiences with Financial Transactions Taxes in other parts of the world?

The United Kingdom, Switzerland, Hong Kong, Australia, France, and Singapore have such taxes. These are all large markets, the tax had been in place for years without hurting these markets, and exchanges have not moved away. In addition, 10 European countries are working toward implementing an FTT in 2018. A particularly good example for Chicago is Taiwan where a financial transactions tax has been collected from options and derivative trading for many years that is in the same percentage range of contract value as the proposed LST. In 2008 Taiwan, which has a much smaller and less established trading market than Chicago, raised about \$3 billion or 5.5% of its national revenue from this tax.

(7) I don't know anyone who trades on the CME and CBOE. Who are they? Can they afford this tax?

Few of us know anyone who trades on these exchanges, because the vast majority of trading is done by large banks, hedge funds -- financial institutions in general -- other large businesses, and wealthy individuals. None of these would be hurt significantly by the proposed LST. There *would* be a reduction in what is called “high frequency trading,” where traders buy and sell the same contract within seconds but reducing such trading will not harm the economy. In fact, these high frequency trades are considered destabilizing gambling, so it would amount to a ‘sin tax.’ Taiwan’s financial transaction tax that applies to derivatives that are similar to the products to which an LST would apply in Chicago is specifically designed to repress high frequency trading.

(8) Would these traders move to another exchange?

The products that are proposed to be taxed are not traded on any other exchange. In addition, some of the products that would be taxed, such as the S&P 500 index futures and options, are exclusively licensed to these two exchanges. While another exchange could seek regulatory approval to trade some of the other products, doing so would take some period of time. Moving trading liquidity from one market to another is extremely difficult. Once an exchange has captured all the volume in a product, it is difficult for a later entry to establish a market that is attractive to traders. Since traders need other traders to trade with unless a critical mass of them move together, they cannot move. In economics this is called a “collective action” problem.

(9) You compared the LST to the state sales tax. That's 6.25%, right? How does the LST compare?

The LST rate is much, much lower than the 6.25% for the Illinois state sales tax. While the LST rate would vary depending on the size of the different contracts, here are some representative figures. For

example, the size of an S&P 500 index futures contract is currently about \$100,000. If a trader bought and then later sold the index futures contract, the total tax on the \$100,000 would be \$4 (\$2 to buy and \$2 to sell), or 0.004% -- less than 1/1000th of the sales tax that you pay. Another example: a soybean futures contract is for 5000 bushels. When soybeans are selling for \$7/bushel, the value of the contract is \$35,000. Since soybeans are an agricultural product, the LST for both buying and later selling a contract would be \$2 (\$1 to buy and \$1 to sell), or 0.006%, again less than 1/1000th of the sales tax we pay.

(10) Would an LST of \$2 a contract be so high relative to exchange fees that it would cause traders to move to a new exchange?

Estimates of fees in Chicago are provided on [p. 11 of this](#). Exchange fees range from \$0.40 to \$50 (including commissions) depending on exchange and type of product. But the assumption underlying this question that fees greater than the LST of \$2 fee for each buy and seller of a contract would eliminate profitable trading is incorrect. First of all, the key comparison is between costs of trading and minimum profit "ticks" that range from \$6.25 to \$31.25 all greater than \$2, see [p. 9 of this](#). So the LST would not eliminate profit on winning trades, though it would reduce these profits. But more importantly, as the average non-ag contract is \$335,719, these fees would be insignificant for economic trades for risk hedging and would be significant only for High Frequency Traders (HFTs) who are speculating on small margin gains and losses for millions of trades. There would be a possibility of a significant repression effect for HFT traders only. Trading volume in Chicago might decline or not grow as fast due to this. As noted in (7), this would be a beneficial policy outcome for "clean" exchanges. In terms of state leverage the key issue is whether volume fee losses from HFT trading repression would be a significant enough incentive for the exchanges to relocate elsewhere given the huge co-location, transmission, and clearing house, and infrastructure investments in the Chicago area by the exchanges and traders described in (5). Traders would not move (as Atlanta ELX example shows, see (12) below) as the LST would only apply to monopoly or near monopoly products in Chicago. Exchange member traders need the participation of non-members – hedgers and speculators - to trade with per the “collective action” problem discussed in (8) above. Finally, as discussed in (5) above, the tax on HFT's could be lowered if necessary by the state to make sure that profit losses from HFT suppression by the exchanges would be minimal compared to the cost of relocation, [see p. 10-11 in this](#).

(11) How does the LST fee proposed compare with other countries that have a FTT?

Taiwan is one of the best comparables as it has successfully applied a financial transactions tax to futures and derivatives, the same products to which LST in Chicago be applied, for many years with the expressed purpose of raising public revenue and repressing HFT trading, [see p. 2 of this](#). The rates for these products in Taiwan are 0.06% to 0.0000125% of notional value. For the average non-ag contract in Chicago value of \$335,719 the 2\$ LST fee is about 0.0006%, i.e. right in the ball park of the Taiwan FTT on these products. Moreover, Chicago is a much larger and more established exchange than Taiwan and the world center for these products.

(12) What is liquidity and what role does that have on the exchanges just picking up and moving to Atlanta?

Liquidity is a generic term for the size of the trading market. HFT's do not actually add to liquidity, or the facility of legitimate economic trading for risk hedging purposes, as they sell as quickly as they buy and generally make daily profits on quick turn-around trading, [See p. 9-11 of this](#). These traders are thus skimming off revenue from the non-HFT traders that they prefer to trade with, rather than taking a

proportional share of losses that would add to potential gains for other traders (as derivative trading is zero sum minus fees). Moreover, as noted in (8) above, real liquidity, or non-HFT trading volume, is very hard to move. This is compounded by the fact that, as noted in (10) above, the only traders who would have a real incentive to relocate their trading due to an LST are HFTs since the LST would be negligible for other traders. But HFTs need non-HFTs to skim off of as they can't make consistent profit by trading with other HFT traders employing similar (scamming) techniques. So trading could only realistically relocate if the exchanges physically moved, and the only incentive for this would be fee losses from trading volume as the exchanges would not be directly taxed by the LST. Once one exchange has captured all of the volume in a product later entry is extremely difficult even when such an effort is backed by major financial institutions. For example, in 2011 the Electronic Liquidity Exchange (ELX) opened for trading offering many of the same products traded on the CME and CBOT – but with one significant difference: ELX charged \$1.25 – \$2.00 less in clearing and settlement fees to trade the same contracts as the CME and CBOT. ELX had another advantage: the exchange had the backing of JP Morgan Chase, Morgan Stanley, and Goldman Sachs. What happened? ELX's best volume was achieved when their monthly trades in some contracts almost equaled the daily trades in the same contracts on the CME. Clearly the \$1 - \$2 difference was not enough to overcome the collective action problem that arises when trying to move liquidity from an existing liquid market to a new, illiquid market.

(13) \$12 B is an awful lot of revenue, wouldn't it be worth it for another state, say Wisconsin or Indiana, to offer large incentives to the Chicago exchanges to relocate so that they can capture this revenue?

\$12 B is an enormous amount of revenue. If this much revenue was raised, the LST would be the state's second largest source of revenue second only to total income tax revenue estimated at about \$ 16 B in 2017, and would represent an over 30% increase in public revenue relative to Illinois' total 2017 General Fund Budget of about \$ 39 B. There is no doubt that other states would love to capture such a lucrative public revenue source. But there are a number of problems with this scenario. First, as id noted in (4), the \$12B is a *maximal* estimate based on recent contract volume averages in the Chicago exchanges for the products that would be taxed. As has been noted in (10), it is likely that the proposed LST would result in a reduction, or slower growth, in HFT trading. If this were to occur, LST revenue would decline. It would still be a very large public revenue source but not quite so out-size as \$12 B. Second, and more importantly, no state would be able to capture this revenue unless it too implemented a local financial transactions tax, which presumably would be the primary motivation for the exchanges to relocate. The possibility that another state could do this in the future, even if it "guaranteed" that it would not do this immediately, would essentially eliminate the incentive to relocate. If another state did not impose such a tax, the only benefits that it would gain from exchange relocation would probably be a small number of on-site technical server maintenance jobs and modest property taxes that would probably be more than off-set by the incentives necessary to induce re-location. There would be no need for exchange management, trading companies, and other related highly paid individuals to relocate out of the Chicago area, and they probably would not want to leave the third largest metro area and second largest financial center in the U.S. if there was no reason to do so. Finally, any such incentives offered to the exchanges by another state for relocating in order to capture the (modest) public benefits of these jobs could be matched by the state of IL to prevent relocation. And as such incentives offered to the *exchanges* would likely be much lower in value than the billions in revenue that would be raised from an LST on *traders* the state would still likely net billions of dollars in public revenue from an LST.

(14) The \$2 or \$1 fee on buyers and sellers of non-Ag and Ag contracts appears arbitrary. Why not a \$3 or \$4 fee as the LST is such a tiny share of the more than quadrillion (a thousand billion) dollars of notional value traded in the Chicago exchanges yearly?

While we would support a higher national or global financial transactions tax, we have tried to design our LST proposal so that it is a “modest” *local* financial tax that is commensurate with the leverage that the state of Illinois possesses over the Chicago exchanges due the “collective action”, “co-location” and “straight-line transmission”, barriers described in (5), (8), (10), and (12). As described in (10), an absolute upper limit to the size of an LST fee that would not repress a large share of HFT trading is the estimated minimal “tick” value, or minimum gain or loss from a price change, of \$6.25 to \$31.25. This and the fact that, as described in (12), the \$1.25 to \$2.00 reduction in exchange fees offered by the ELX did not induce traders to leave the Chicago exchanges, conservatively suggests to us that a \$1 to \$2 financial transactions fee on these products would not provide a sufficient economic incentive for the Chicago exchanges or other potential competitors to establish alternative trading venues outside of Illinois. However, our proposed \$1-\$2 LST proposal does *not* mean that a less cautious and conservative LST with a higher fee level might not be feasible.

(15) In 2011 corporate income taxes on the Chicago Mercantile Exchange (CME) were reduced by roughly 55% from \$158 M in 2011 to \$73 M in 2014, based on CME’s claim that only 27.54% of their customers were based in Illinois. Doesn’t this mean that an LST would apply to only a small share (like 27.54%) of financial trading in Chicago?

The 2011 CME tax break appears to have been a result of intense lobbying by the CME against the 2011 increase in IL individual and corporate income taxes. The CME claimed that the increase in corporate income tax from 4.8% to 7% would cause it to consider relocating out of Illinois. For all of the reasons enumerated in (5), (8), (10), (12), and (13), we believe that this was a bluff, similar to reported arguments now being made by financial lobbyists that financial trading servers “would be loaded on a flatbed” and moved out of state if an LST was passed. The 27.54% share of Illinois based trading is much lower than widely publicized estimates of a 50% or more share of HFT trading that by definition, as HFT traders are “co-locators” who place their servers as close as possible to exchange matching engines, originates in the state of Illinois. In fact *all* of the trading that runs through matching engines in Illinois is in-state. The fact that the traders and trading companies are located all over the globe is irrelevant to fact that exchange matching engines for these products (and associated financial clearing – though this is another issue) are located in Illinois. Thus the 27.54% figure used as a rationale for the CME tax break based on Illinois’ “single sales factor” corporate income tax that stipulates that corporate income tax can only be applied to in-state sales appears to be grossly inaccurate.

(16) Wouldn’t it be relatively inexpensive for the exchanges to re-locate nearby, for example right across the state line to Wisconsin or Indiana?

As noted in (5), (10), (12), and (13), because of “co-location” and “straight-line” transmission, the costs of relocation would be large no matter how geographically close it might be. The exchanges would have to move and reconnect all of their matching engines and co-locators who have contracts stipulating that their servers are placed as close as possible to exchange matching engines. Moreover, due to the “straight-line” transmission barrier, even a relative close geographic relocation would result in multiple transmission line “kinks” that would need to be straightened out to ensure that transmission speeds from, for example, the New York area, and to Asian markets, did not increase by nanoseconds (or other tiny time increments) as they would no longer be perfectly straight (see *Flash Boys* for documentation that this is not an

exaggeration). Thus, given the embedded matching engine and transmission infrastructure, any relocation, no matter how geographically close, would be very costly and disruptive.

(17) OK, how could we use the money raised by the LST?

There are many good uses of this revenue. Illinois could reverse decades of underfunding and understaffing of Human Services and human needs. It could boost funding for public education (today Illinois ranks last in state share of funding for education). It could be used, at least in part, to make up for the decades long failure of the Illinois legislature to keep their promise to fund the pensions of teachers and other public employees. Illinois could fund thousands of jobs preserving the environment, improving energy efficiency, rebuilding public infrastructure, etc.

(18) Sure it's a great idea, but will it fly politically?

LaSalle Street Traders and Wall Street banksters have lots of money to throw into opposing this idea, so many politicians are leery ... but voters like it. When asked in a ballot referendum, Chicago north side voters supported the Financial Transactions Tax by a margin of 3-1. In a 2014 *Sun Times* poll an LST was tied in first place as the best revenue raising option for the City of Chicago even though it had received almost no publicity in mainstream media, [see p. 4 of this](#). **IL state senator Omar Aquino has proposed the tax by introducing SB 1970. Call your IL senator today and ask her or him to sign on as a co-sponsor of the bill.**

It's been called the most popular tax in history.