

## **Confronting the New York Fiscal Crisis: Raising Revenue Through Taxing Stock Market Transactions**

Robert Pollin and James Heintz<sup>1</sup>  
June 2003

Research Brief 2003-4

New York State and New York City face an enormous fiscal crisis that currently threatens delivery of education, health care, and basic services. Furthermore, the proposed cuts to balance the budget will undermine job creation and economic growth. However, New York could reduce the severity of this crisis by reintroducing a low-level Stock Transfer Tax on all shares exchanged on Wall Street. This Research Brief evaluates just such a proposal.<sup>2</sup> The New York State Assembly and the New York City Council are debating a reintroduction of the tax at half the rate that prevailed at the time of its repeal. The revenues from the tax, at around \$3.4 billion under current stock market conditions, would be shared equally by the New York City and State governments.

The principal benefit of the proposal is clear. The public revenue it would generate would allow both the State and City to avoid sharp cuts in their ability to provide health, education, public safety, and other vital services. The increased revenues would also help counter the damage such fiscal austerity would inflict in terms of worsening the State's recession. In terms of New York City alone, the \$1.7 billion in direct revenue for the City amounts to 5 percent of current city-funded expenditures totaling approximately \$32 billion. The Independent Budget Office (2003b) forecasts shortfalls of \$2.2 billion in 2004, \$3.9 billion in 2005, \$4.0 billion in 2006, and \$3.7 billion in 2007. This additional revenue would cover roughly half of the average of these annual shortfalls, saving jobs and public services and generating positive ripple effects throughout the New York economy.

Despite these sizeable benefits, opponents of the proposal argue that reinstating the STT could produce negative unintended consequences that could then contribute to a worsening of

---

<sup>1</sup> Robert Pollin is Professor of Economics at the University of Massachusetts and Co-director of the Political Economy Research Institute (PERI). James Heintz is an Assistant Research Professor at PERI.

<sup>2</sup> A much more thorough discussion of the issues raised here, as well as other important concerns, can be found in Robert Pollin and James Heintz (2003), "Evaluation of a Proposal to Reinstatement the New York Stock Transfer Tax," Research Report 7, Political Economy Research Institute, University of Massachusetts, <http://www.umass.edu/peri/pdfs/RR7.pdf>.

overall economic conditions in the City and State. In this Research Brief, we evaluate two potential negative consequences:

1. A reduction in employment in the securities industry that could then lead to broader cuts in private sector employment in the region.
2. The relocation of the New York Stock Exchange to alternative trading platforms or northern New Jersey as a means of enabling traders on the exchange to circumvent the tax.

Overall, we conclude that reinstating the STT at half the rate that prevailed in the early 1980s can play a substantial positive role in as a means of addressing the current fiscal crisis in both the City and State of New York. We also recognize that negative consequences might emerge from reintroducing the STT. But in our assessment, the increase in overall trading costs that the STT would impose will be relatively modest, raising average transaction costs to a level that would still be below those which prevailed as recently as the late 1990s. As such, we conclude from the evidence that these negative effects associated with the STT are likely to be correspondingly modest—in particular, that there will likely be no large-scale job losses resulting from the STT and that firms now trading on the NYSE are not likely to switch to alternative platforms.

### **How it would work**

The State of New York initially instituted a Stock Transfer Tax (STT) in 1905 and all the tax revenues were shifted to New York City in 1966. It was phased out between 1979 and 1981. However, it is still nominally “paid” to the state on paper and immediately rebated back to the payer. In other words, although traders in New York’s stock markets have not faced any tax obligation since 1981, the apparatus to operate the tax remains in place. Therefore, in terms of start-up costs, the City and State would not face serious difficulties in reinstating the tax.

At the time of its repeal in 1981, the tax operated on a sliding scale basis relative to the selling price of a traded share. For shares whose sale price was under \$5.00, the tax rate was 1.25 cents per share sold. The rate then rose gradually to five cents per share for stocks selling at \$20 or above. The STT also included a maximum tax obligation for a given trade of \$350.

The current proposal for reinstating the tax suggests that the new rates should be one-half those at the time of repeal. In other words, the tax would begin at 0.63 cents per share sold. The rate would then rise to a maximum of 25 cents per share sold for stocks selling at \$20 or above. The maximum tax obligation would then be \$175 per trade. In this Research Brief, we have focused our analysis on the effects of a tax set at this rate, i.e one-half the rate as of 1981.

It is important to make clear that the total tax obligation applies to both parties to the stock trade. The tax rates we have cited are therefore what are known as the “two-sided” rate, since it applies to both parties. But this also means that for each party to the transaction, they would tend to assume only one-half of the total obligation. In other words, what is called the “one-sided” tax rates are one-half of the “two-sided” rates. Thus, with the current STT proposal, the lowest one-sided rate is 0.32 cents per share traded, and the highest one-sided rate is 1.25

cents per share. The maximum tax obligation calculated on a “one-sided” basis would therefore be \$87.50.

To illustrate how the STT would operate in practice, let us consider a transaction for a single share of stock valued at \$25, which happens to be the average price of equity shares in the New York Stock Exchange in January 2003. In this case, the one-sided tax rate would be at the maximum level of 1.25 cents. The tax rate on this average transaction would be 0.05 percent (i.e. 1.25 cents is 0.05 percent of \$25). Now consider a case in which 100,000 shares of this same stock were traded. This \$2.5 million transaction would be taxed at the maximum rate of \$175, or \$87.50 on a “one-sided” basis. This amounts to a one-sided tax rate of 0.004 percent (\$87.50 is 0.004 percent of \$2.5 million). As we see, the tax rate continues to fall as the size of transactions increase, given that the maximum tax paid is \$175.

### **The Costs of the Tax: The Risk of Unintended Consequences**

In assessing the possibility of negative unintended consequences resulting from the tax, we need to compare the impact of the proposed STT with the average cost of trading stocks in today’s markets, since the risk of negative unintended consequences will depend on how much the tax raises the cost of trading. When referring to the cost of trading, we will refer to “basis points”. A basis point is just 1/100<sup>th</sup> of a percent. Therefore, as shown above, the proposed STT amounts to 0.05 percent—or 5 basis points—of the average price of stocks traded.

Relatively little solid data exist on the size of total transaction costs—that is, the costs traders incur when they buy and sell shares. However, based on a number of studies conducted over the past decade, we are able to at least draw some broad conclusions.<sup>3</sup> For example, a 2000 study by Prof. Ian Domowitz of Pennsylvania State University, Jack Glen of the International Finance Corporation, and Ananth Madhavan of ITG Inc. (and formerly of the University of Southern California) estimates transaction costs for both the Canadian and U.S. stock markets combined. The research shows that average costs fell by more than half over two years, from an average of 68.2 basis points in the third quarter of 1996 to 32.4 basis points in the third quarter of 1998. In the same study, the authors report an average figure for transaction costs for the United States alone over the same period. This average figure is 38.1 basis points.

Comparing again the effects of the proposed New York STT relative to these figures, we see that the 5 basis points average tax rate amounts to about 13 percent ( $= 5/38.1$ ) of the average total transaction costs in the U.S. over this period. The 5 basis points tax would also range from being between 7.3 percent ( $= 5/68.2$ ) of total transaction costs in North American markets as of the third quarter of 1996, but rising to 15 percent ( $= 5/32.4$ ) of these costs in the third quarter of 1998.

---

<sup>3</sup> The basic transaction cost one incurs—what researchers call the “explicit” cost—is the commission a trader pays to his/her broker to effectuate the trade. But some researchers have also tried to incorporate “implicit” costs into their calculations, such as the potential impact that large trades might have on market prices. Keim and Madhavan (1998) for example, break down “implicit” costs into three components: 1) bid-ask spreads—that is, the difference between the buyer’s price and the seller’s price; 2) the price impacts of large trades on markets; and 3) the opportunity costs associated with missed trading opportunities.

The central question in evaluating these figures is straightforward: whether the increase in costs generated by the STT would represent a major burden on traders operating in the New York stock markets. Let us focus on the situation for the average-sized trade. For an average \$25 share, the proposed STT tax of 5 basis points would entail an increase in total transaction costs from 32.4 to 37.4 basis points. This would be a 15 percent increase in total transaction costs in North American markets as of the third quarter of 1998. At the same time, this increase in costs from 32.4 to 37.4 basis points would still mean that total transaction costs would remain 45 percent below the average level of 68.2 basis points in the third quarter of 1996.

There is no way one can conclude with certainty what the effects of an average 5 basis point increase in transaction costs would be, given that we also cannot know what the state of stock market itself would be at the point when the tax would be implemented. Still, it is clear from the evidence presented here that a tax imposed at the level being proposed would raise total transaction costs only to a point well within the range that traders have been paying even in the late 1990s. As such, we would not expect that an STT at the level proposed is likely to produce substantial changes in the patterns of trading relative to what would have otherwise occurred.

### **The Effect on New York Employment**

The imposition of the STT on stock trading in New York is likely to reduce trading volume to some extent, given the tax will raise the costs of trading. But, as we have discussed in the previous section, we would expect this decline in trading to be relatively modest. However, assuming there will be some decline in trading volume, this raises another question: would this decline in trading produce significant job losses for people who are involved in trading securities? If there were significant job losses in the securities industry, this effect could reverberate throughout the broader economy. That is, if a large number of well-paid financial traders and others in the industry lose their jobs, this would mean that they would have less money to spend, which would in turn produce further job losses among people in the region whose jobs depend on the spending of the newly unemployed securities industry employees.

The New York City Independent Budget Office (IBO) has estimated that the 1.25 cent one-sided STT could produce up to 10,000 job losses in the securities industry itself (Independent Budget Office 2003a). The IBO then projects that this loss of 10,000 securities industry jobs could lead to as many as 80,000 overall job losses in New York City's private sector. As of January 2003, total employment in New York City was 3.35 million. A loss of 80,000 jobs would therefore mean a 2.4 percent increase in the City's unemployment rate. Especially given that unemployment in New York City stood at 9.1 percent as of January 2003, the loss of 80,000 private sector jobs would obviously represent a severe blow to the economy, raising the unemployment rate under current conditions to 11.5 percent. It is therefore a matter of considerable importance to evaluate this estimate by the IBO.

The logic behind the IBO estimate follows from what we've sketched above. It proceeds in three stages:

1. The rise in transaction costs leads to a decline in trading volume.

2. The decline in trading volume means approximately 10,000 layoffs for New York City securities industry employees.
3. When 10,000 securities industries employees become unemployed, the loss of spending power by these people produces a total of 80,000 job losses for the City's private sector.

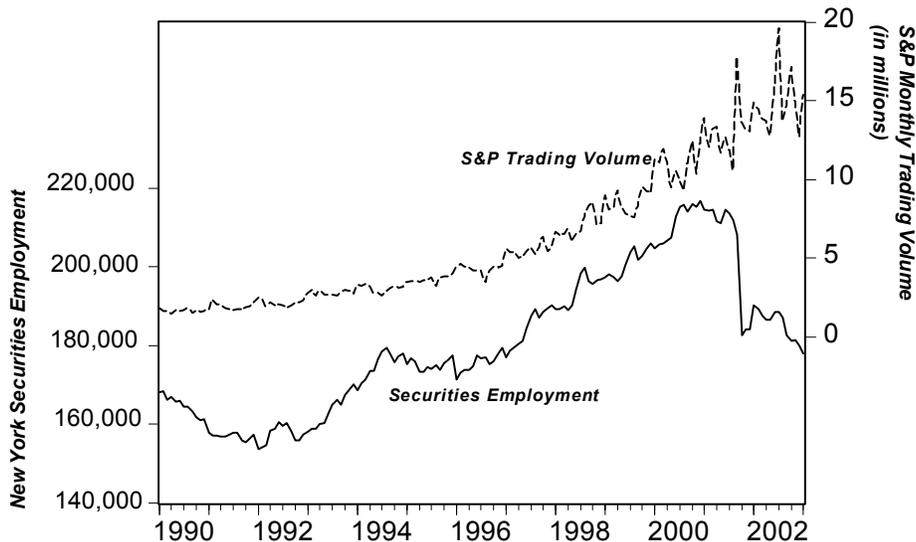
As we have said, we consider it doubtful that imposing a tax at the level being considered would, on its own, lead to a significant decline in trading volume. However, even if it did produce a significant decline in trading volume, it is not clear that this, on its own, would lead to a loss of 10,000 jobs in the securities industry. As of January 2003, 178,000 people were employed in the New York City securities industry. The loss of 10,000 jobs would therefore mean a fall in employment in the industry by a substantial six percent.

Is this estimate of job losses credible? Figure 1 presents statistics on trading volume and employment, from January 1990 – January 2003. Simply observing the data patterns in this figure with respect to the relative movements between trading volume and employment raises important questions about the IBO's estimates. First, looking at the lower line tracking employment between 1990 and 1992, we see that employment falls, from 168,000 to 153,000,

**Figure 1.**  
**Employment and Stock Market Trading Volume**

-- *Monthly Trading Volume of S & P 500 Firms*

-- *New York City Employment in Securities, Commodities, and Financial Investment Services*



while trading volume is rising slowly but fairly steadily through these initial two years. Then, from 1992 through August 1994, employment rises sharply, to 174,400, while, again, trading volume continues to rise slowly. Employment then flattens out for roughly the next two years before rising again, peaking in October 2000 at 215,900, and then beginning a sharp descent that

continues until January 2003. Meanwhile, trading volume continues to rise even after 2000—that is, while employment is falling. Short-term sawtooth-like fluctuations in trading volume do occur beginning in 2000. But these short-term changes are also not reflected with corresponding fluctuations in employment.<sup>4</sup>

The data from Figure 1 also provides some broader perspective for evaluating the employment loss estimates of the IBO. As we have seen, employment in the New York City securities industry peaked in October 2000 at 215,900 before falling to 178,000 as of January 2003. That is an employment loss of 37,900 jobs. These jobs were lost in the wake of what can be fairly termed a series of calamitous shocks to the New York City economy. These shocks included the collapse of the stock market bubble, the subsequent corporate accounting scandals and major corporate bankruptcies, the broader economic recession, and, of course, the September 11 terrorist attacks. However, the IBO estimate effectively contends that a 1.25 cent per share one-sided STT would have more than one-quarter the total impact on security industries jobs in New York City as *the combination of all these other factors*—the market collapse, the scandals and bankruptcies, the recession, and September 11.

From our examination of the evidence, we conclude that the IBO’s claims on prospective employment losses from the proposed STT are not supported by empirical evidence. Still, as we hasten to emphasize, we are not suggesting that the STT would produce no job losses. Our point is simply that the evidence we have reviewed suggests that if there would be losses, they would likely be modest, certainly in comparison with the combined effects of the series of major shocks that the New York City economy has experienced since the latter months of 2000. In addition, the IBO makes no effort to estimate the other side of the employment effects of the STT—that is, the employment *gains* that would result through being able to avoid cutting \$3.5 billion from the City and State’s operating budgets.

### **The Risk of Relocation**

Would the reinstatement of the STT create serious incentives for security firms and their clients to circumvent the tax through either 1) the securities firms relinquishing their listing on the New York Stock Exchange in favor of alternative trading platforms; or 2) the New York Stock Exchange physically relocating from New York City to northern New Jersey? These possibilities have been widely discussed, most prominently in letters of April 15 of this year signed by the CEOs of 14 major securities and addressed to New York Governor George Pataki, Assembly Speaker Sheldon Silver, and Senate Majority Leader Joseph Bruno respectively. The letters assert that proponents of the STT “lack an understanding of the detrimental impact the STT will have on the industry and the State’s and City’s economies.”

Accompanying the letters was a statement issued by the Securities Industry Association, which discussed in somewhat more detail the basis for the CEOs’ claim. This statement explains that

---

<sup>4</sup> For a more rigorous and detailed discussion of the limitations of the IBO’s employment estimates see Robert Pollin and James Heintz (2003), “Evaluation of a Proposal to Reinstate the New York Stock Transfer Tax,” Research Report 7, Political Economy Research Institute, University of Massachusetts, <http://www.umass.edu/peri/pdfs/RR7.pdf>.

Securities firms must adhere to “best execution” rules mandated by regulatory authorities. Faced with the STT, these firms are likely to gravitate towards Electronic Crossing Networks (ECNs), Automatic Trading Systems (ATs) and other alternative trading platforms, which are not within the tax jurisdiction of the State.

Do such threats carry substance? We need to distinguish, and consider separately, the two possibilities—that firms might delist from the New York Stock Exchange or that they might physically remove themselves from New York.

#### Delisting from the New York Stock Exchange.

In our view, reinstatement of the STT at half its 1981 rate is highly unlikely to induce the outcomes that the Securities Industry Association claims. The reason is straightforward: even with the reinstatement of the STT, overall transaction costs for firms trading on the New York exchanges would still be well below those of alternative trading platforms.

Overall transaction costs are lower on the NYSE than on the other exchanges that could serve as a substitute. Why is this the case? The primary reason is that, in most situations, the NYSE is simply more liquid—that is, it is easier to match buyers to facilitate an exchange. The NYSE is a larger and more organized market, which in turn means that more possibilities exist on the NYSE to find the best possible trading partners. This is true even as differences in explicit execution costs—primarily the fees one pays to brokers in the two markets—are relatively narrow.

The advantages in overall trading costs for the NYSE relative to the NASDAQ become even more pronounced in comparison with the “Electronic Crossing Networks (ECNs), Automatic Trading Systems (ATs) and other alternative trading platforms” to which the Securities Industry Association memo refers. ECNs provide benefits by increasing the technical efficiency of executing trades. However, the ECNs also introduce several problems for traders, such as raising significantly the possibility of failing to execute a trade because dealers are not available to facilitate the trade. Moreover, in the absence of dealers, it becomes more difficult to discover what the appropriate price should be at which trades will take place. It is precisely in recognition of these problems that trading on the NYSE has maintained its dominance over the ECN alternatives. This dominance has only strengthened with the bursting of the 1990s market bubble. As a recent report in the *Wall Street Journal* points out, there have been

Countless predictions that the stock exchange, with its reliance on a physical floor to bring traders together, would one day be made obsolete by faster, cheaper electronic markets. Those predictions reached a peak with the 1990s bull market...But ECNs had difficulty reaching the critical mass of trading volume they needed. Unless they had lots of volume, big traders wouldn't be confident of getting the best possible price on them. At the same time, without those big traders, reaching that volume was difficult. Meanwhile, the meltdown in technology stocks and the three-year bear market have severely scaled back the

NASDAQ's volume, prestige and ambitions. Now many ECNs are struggling to survive. The NYSE has also suffered from the bear market, but not nearly as much. And even its critics acknowledge there is no place else they can trade such large volumes of blue-chip stocks as efficiently. (4/18/03).

The advantages of the NYSE relative to other exchanges in the U.S. are similar. None of the exchanges outside of New York operate at levels of trading volume, and thus of liquidity, even close to that offered by the NYSE. For example, the largest markets outside of New York are the Chicago and Cincinnati Stock Exchanges which, despite the latter's name, are both based in Chicago's financial district. Trading volume on the Chicago Stock Exchange was 5.1 percent of the NYSE in 2001. As for the Cincinnati exchange, virtually all the firms trading there are cross-listed on NASDAQ. They would therefore lose the liquidity advantages of operating on NASDAQ if they chose to list themselves solely on the Cincinnati exchange. Other exchanges include the Archipelago Exchange, with 2.1 percent of the dollar volume of the NYSE in 2002, the Boston exchange, at 2.1 percent in 2001, and the Pacific exchange, at 0.4 percent in 2001.

Over time, it is conceivable that the cost advantages of trading in New York could erode as other trade platforms develop. However, because the benefits of trading in New York are so large at present, any firm that chooses to migrate now would face the near-certainty of significantly higher trading costs—even after paying the STT. The Securities Industry Association memo emphasizes that “securities firms must adhere to ‘best execution’ rules mandated by regulatory authorities.” The term “best execution” is typically interpreted to mean trading at the most favorable price available in the market. What emerges from the available evidence is that, to maintain adherence to “best execution” standards, firms that trade on the NYSE at present would need to continue doing so even if the STT were reinstated.

#### Relocating the NYSE to New Jersey

In theory, all of the advantages of trading on the NYSE could be retained, while the STT could also be circumvented, if the entire exchange simply relocated to northern New Jersey. But this also seems like an implausible scenario in light of the modest increase in overall transaction costs that would result from the proposed STT.

The NYSE has made frequent threats to relocate over the past 100 years. Prof. Michael Wallace in *A New Deal for New York* (2002) points out that the Exchange threatened to move to New Jersey in the first decade of the 20<sup>th</sup> century, after New York initially adopted the STT. The most recent threat to relocate took place between 1998 and 2001. This involved a bidding war between New York and New Jersey, with each offering incentive packages to the NYSE (Pacelle and Ip 1998, Bagli 1998). These packages focused on infrastructure development and direct incentives, including the construction of a new building with an expanded trading floor (Independent Budget Office 2001). What seems clear is that the successful re-development of lower Manhattan, including the infrastructure projects being planned around the former World Trade Center site, will exert more influence over any plans to move the NYSE than the modest transaction cost increases resulting from the low-level STT. Moreover, the revenues generated by the STT can themselves contribute toward maintaining the NYSE in New York, since these revenues will be a funding source for the re-development of lower Manhattan.

There is another perspective from which we can evaluate the prospects of the NYSE relocating in order for those trading on it to avoid paying the STT. This is the fact that the costs that securities firms pay at present for maintaining their operations in Manhattan are *already* significantly higher than what they would be in New Jersey. As one important component of total costs, the average rents for offices in northern New Jersey are approximately \$24.00 per square foot per year compared to \$35.00 per square foot per year in lower Manhattan (CB Richard-Ellis 2002, 2003). That is, securities firms are paying at present a 30 percent premium on rent for maintaining their offices in Manhattan. Thus, if lower costs were the driving factor informing the NYSE's choice of location, it would clearly have left for New Jersey years ago.

### Conclusion

Each of the negative consequences from the STT that we have considered exists as a possibility, but they are not likely to impose significant costs on the City and State economies. As such, we conclude that the revenues generated by the STT, and the ability to use these revenues to ameliorate the current fiscal crisis, outweigh the costs of reinstating the tax.

On its own, the \$3.4 billion in revenues that would be generated by the STT under current conditions will not be sufficient to close the budget gap for either the City or the State. But it will go far toward preventing the most severe consequences that could result from the fiscal crisis. Enabling the City and State to avoid imposing such severe budget cuts will also establish a firmer foundation on which the private sector of the region can begin growing out of the current prolonged economic slump. In fact, the private sector will not be able to sustain its upward momentum out of the slump without the stabilizing effects of a viable public sector. Moreover, the benefits of any renewed economic growth will not be broadly shared if public spending on education, health, social welfare, and safety are allowed to continue deteriorating.

### References

- Bagli, Charles (1998) "Wall Street Plays Relocation Card," *New York Times*, November 8, 1998, p. 39, 41.
- CB Richard-Ellis (2002) *Manhattan Office Market Index Brief*, 4<sup>th</sup> Quarter.
- CB Richard-Ellis (2003) *Northern & Central New Jersey Suburban Office Market Index Brief*, 1<sup>st</sup> Quarter.
- Domowitz, Ian, Jack Glen, and Ananth Madhavan (2000) "Liquidity, Volatility and Equity Trading Costs Across Countries and Over Time," *International-Finance*, 4(2): 221-55.
- Keim, Donald B. and Ananth Madhavan (1998), "The Cost of Institutional Equity Trades," *Financial Analysts Journal*, July/August, pp. 50-69.
- Ip, Greg and Suzanne Craig (2003) "NYSE's 'Specialist' Probe Puts Precious Asset at Risk: Trust," *Wall Street Journal* April 18, 2003, p. A1.
- New York City Independent Budget Office (2003a) *Budget Options for New York City*, February.
- (2003b) *Analysis of the Mayor's Preliminary Budget for 2004 and Financial Plan through 2007*, February.
- (2001) "Stock Exchange Project: City Board to Vote on Financing," *Inside the Budget*, November.
- Pacelle, Mitchell and Greg Ip (1998) "New Jersey Purrs in the Ear of Big Board," *Wall Street Journal*, May 8, p. C1, C15.
- Pollin, Robert, Dean Baker, and Marc Schaberg (2003) "Security Transaction Taxes for U.S. Financial Markets," *Eastern Economic Journal*, forthcoming. Posted on-line: <http://www.umass.edu/peri/pdfs/WP20.pdf>.
- Pollin, Robert and James Heintz (2003), "Evaluation of a proposal to reinstate the New York stock transfer tax," *Challenge*, July/August, forthcoming.
- Wallace, Michael (2002) *A New Deal for New York*, New York: Bell and Weiland.