Comment on "Securities Transaction Taxes and Financial Markets"

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The paper "Securities Transaction Taxes and Financial Markets" by Karl Habermeier and Andrew Kirilenko is an excellent overview of the literature and key issues related to securities transaction taxes (hereafter referred to as STTs). The paper does a particularly good job of linking arguments from very different strands of literature—ranging from work on market microstructure to corporate finance to international macroeconomics. The authors also do a very nice job not only summarizing arguments made in previous work, but critically assessing this work and pointing out some of its shortcomings and weaknesses. Largely as a result of this critical assessment, the paper presents a very strong argument—that STTs have substantial costs and minimal benefits. This dominant opinion provides a coherent framework that connects many of the different topics covered in the paper. This strong viewpoint is also a refreshing improvement on many surveys that make an effort to be so evenly balanced that a reader can be left wondering what to conclude.

Since I agree with the paper's general conclusions, and since the paper does not develop any new models, datasets, or empirical results that usually provide substantial fodder for discussants, I take a slightly unusual approach in my comments. After a brief summary of the paper, instead of focusing on what the paper does do, my discussion focuses on a number of key aspects of STTs that are not covered in the paper. More specifically, I provide more substantiation for some of the arguments in favor of STTs (that are only eluded to briefly in the paper before

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being dismissed). Then I focus on a range of issues related to STTs, such as their potential to correct for negative externalities, their impact on asset prices, their variations across different instruments, their potential to cause hysteresis effects, and the need for further empirical work. Although including a thorough discussion of many of these additional topics is beyond the scope of the current paper, a better understanding of these issues is critical in order to form a more coherent and balanced assessment of STTs. These additional considerations would also make intriguing topics for future work.

I. Paper Summary

This paper begins with an extremely concise summary of the main theoretical arguments both for and against STTs. This discussion suggests that there are potentially valid arguments on both sides of the debate, and that solid empirical evidence is necessary to resolve which effects dominate in the real world. The paper then provides an equally concise summary of the empirical evidence both for and against STTs. The main "conclusion" is that this empirical evidence is extremely weak, limited, and inconclusive. Next, the paper provides a fairly detailed review of the Swedish experience with STTs—one of the examples used for some of the empirical studies. This case study helps solidify many of the theoretical arguments and claims made in the rest of the paper.

The next few sections of the paper carefully dissect several of the key arguments used to support STTs and show why they are invalid. First, previous work argued that STTs are useful policies to reduce unproductive trading. Instead, the authors argue, inter-dealer trading is important to manage risks and provide liquidity. Second, previous work argued that STTs could reduce asset price volatility. Instead, the authors argue, STTs would increase volatility. Third, previous work argued that STTs could reduce noise in asset prices and therefore improve price formation. Instead, the authors argue, even a small STT could cause prices to deviate substantially from their "full information" values. To solidify this point, they work through a simple model showing that STTs can increase the variance of prices. Fourth, previous work argued that STTs could reduce trading volume, which is beneficial if trading in financial markets is believed to be unproductive. The authors agree that STTs could reduce trading volume, but argue that lower trading volumes are actually undesirable and costly because they lower pricing efficiency.

The final sections of the paper touch on several issues related to STTs. More specifically, several paragraphs discuss market segmentation and execution costs in different markets. This section provides concrete examples of trading costs in the United States and Ireland. There are also several paragraphs linking the discussion on STTs with the much more extensive literature on taxes on international capital flows.

The paper ends with a very strong set of conclusions. STTs have negative effects on price discovery (i.e., prices become less informative). STTs have negative effects on volatility (i.e., raise volatility). STTs have negative effects on liquidity (i.e., reduce liquidity). STTs have negative effects on volume (i.e., reduce volume). Therefore, STTs reduce overall market efficiency and cause a misallocation of resources. There is no doubt where the authors stand on STTs.

II. The Other Side of the Argument

Although these strong arguments on the negative effects of STTs are convincing, the conclusions are so one-sided and clear that a reader can't help but wonder: What am I missing? If STTs have so many substantial costs, yet no real benefits, why do so many countries use them? Why are different variants of STTs (such as the Tobin tax) frequently raised in international forums? Why do they garner so much support from a variety of groups? Although the authors briefly allude to several reasons why STTs gain sponsorship, some of these arguments merit further exploration before being dismissed so quickly. In particular, three arguments that deserve more careful discussion are STTs as a revenue source, as a political vehicle, and as a tool to promote equity.

The first argument, that STTs can be an important and lucrative income source, may be the most important reason why STTs exist and garner so much support. The volume and value of daily financial transactions is tremendous; rough estimates suggest that the value of global financial transactions is over 50 times greater than the value of global trade in goods and services. A minute tax on each of these financial transactions could generate a large sum of money. A recent paper by the OECD estimates that an STT of 0.5 percent that only applied to trading in foreign exchange markets could raise up to \$1.5 trillion per year, "a sum out of proportion with that currently spent on overseas development assistance." A recent paper by the United Nations suggests STTs as a "proposal for innovative sources of finance." The paper estimates that a tax of only 0.1 percent on global currency transactions would yield revenue of about \$132 billion to \$264 billion per year (with the lower estimate adjusting for the reduced volume of transactions resulting from the tax). It is difficult to imagine any sort of feasible tax or revenue source that could provide these sorts of funds. Financial resources of this magnitude could be used to substantially improve the health, education, and productivity of developing countries around the world.

A critical component of this argument that STTs could be a valuable revenue source is the opportunity cost in terms of what other revenue options are available. Even though STTs may create distortions and lead to a misallocation of resources, most taxes share these traits. For countries that have become dependent on STTs as an important revenue source, removing this tax would mean a costly adjustment of spending reductions or raising revenues through other channels.³ Are the distortions created by an STT any worse than that from other taxes used to generate a comparable amount of revenue? It is impossible to answer this question by considering STTs in isolation. Instead, an assessment of a specific proposal for an STT should carefully consider what the tax revenue would be used for, and what is the alternative if an STT is not utilized. In other words, when considered in a general equilibrium framework, STTs may be a desirable policy for a country that requires revenue

¹OECD (2002). Calculations are based on an average daily trading volume of \$1.25 trillion over 240 trading days per year.

²United Nations (2001).

³For example, the Taiwanese government projected that revenues from its STT of 0.3 percent would equal about NT\$80 billion (*Taiwan Economic News*, 2001).

for a high-return project, and for which raising revenue through other sources would be even more costly than through an STT.

In addition to providing revenues, another major argument raised in support of STTs is political. For example, in the fall of 2001 several leading politicians in the European Union (including Lionel Jospin, then prime minister of France) supported a Tobin tax. A Tobin tax is a type of STT that only applies to foreign currency transactions. They viewed a Tobin tax as a "response to the challenges of globalization" and encouraged the European Union to form a study group to seriously consider this tax.⁴ Cynics viewed this debate as a "sop for protestors" instead of serious consideration of an STT, but even this cynical view is informative. Some people view STTs as a method of reducing the costs of financial integration and globalization. Politicians could use STTs as a method of appeasing the anti-globalization coalition, possibly in order to gain support for other policies they view as more effective.

Closely related to these political arguments in support of STTs is a belief that STTs could be a tool to promote equity. There is a widespread belief that the cost of STTs would mainly be paid by the wealthy and/or by speculators, while the costs of globalization are largely paid by low-income workers. For example, a United Nations study argues that "individuals and corporations selling foreign-exchange services or participating in foreign-exchange arbitrage and speculation...will tend to bear a larger share of the burden..." of an STT.⁵ Although I have not seen any convincing evidence either supporting or refuting these claims, policymakers may view STTs as a relatively costless way to improve equity.

Although I fully agree with the authors that these arguments in support of STTs are not nearly as convincing as the arguments against STTs, some of these viewpoints (and especially the revenue-generating issue) do have some merit. If nothing else, they help clarify why, despite the substantial costs of STTs, they continue to garner some support. Therefore, the paper would be much stronger if it gave these "pro" arguments a fair representation, rather than simply focusing on the "cons" and leaving readers wondering if they were missing any critical points.

III. Additional Considerations

In addition to a more thorough discussion of the "pros" of STTs, the paper would also benefit from some discussion of a number of issues related to the use, design, and effectiveness of STTs. Many of these topics have not been discussed (to the best of my knowledge) in other work, so exploring these topics could provide important new insights. Many of these issues could also be important factors in determining the relative costs and benefits of STTs. Realistically, discussing all of these topics in depth is beyond the scope of the current paper, but they are important areas for future work.

One of these topics is if STTs could be used to adjust for negative externalities not incorporated in individual asset prices. More specifically, the paper develops a model that clearly shows how STTs could decrease demand for stocks/bonds and

⁴Norman (2001).

⁵United Nations (2001).

increase demand for derivatives. This is a simple application of the result that STTs will tend to shift demand from assets that are taxed to assets that are not taxed. Although this effect is generally viewed as a cost of STTs, could it be structured to be a benefit? For example, could STTs shift demand away from foreign currency bonds into domestic currency bonds (thereby alleviating the "original sin" challenge for many emerging markets)? Could STTs shift demand from short- to long-term capital inflows, or from portfolio flows to Foreign Direct Investment? Obviously, the desirability of any of these policies would first depend on proving that one asset (such as foreign currency bonds, short-term capital flows, or portfolio investment) actually generates significant negative externalities. But if this initial negative externality exists, could STTs be designed to adjust for the externality and more accurately align the private cost of an asset to its social cost?

A second topic that merits further investigation is how STTs affect the level of asset prices. Although the paper does an excellent job discussing how STTs could affect price discovery and volatility, there is only a brief discussion of any impact on price levels. Existing empirical evidence suggests that STTs could have a substantial negative impact on asset prices. For example, the finance literature has shown that assets with high transaction costs trade at low prices relative to their expected cash flows. Jones (2001) shows that the decline in transaction costs in the United States may have contributed to a fall of 1 percent in the equity premium. Forbes (2002) shows that the Chilean tax on capital inflows from 1991–98 (a form of an STT) increased financial constraints for smaller traded firms. Is there other evidence that STTs increase the cost of capital and/or increase financial constraints for certain types of firms? If so, this could be an important cost of STTs, and a cost that not only merits more careful attention, but which would further strengthen the paper's arguments against STTs.

A third topic that would be a useful addition to the paper is a more thorough discussion of the different types of STTs and their advantages and disadvantages. The paper treats all STTs as one policy, but different types of STTs could have very different costs and benefits. For example, do taxes on purchases and sales have symmetric effects? Why do some countries have an STT that is a flat tax per transaction, while others have an ad valorem tax? Could STTs that are limited to certain types of transactions, such as a Tobin tax on foreign exchange transactions, have different effects than a broader STT on all transactions? What are the different costs and benefits of these various forms of STTs?

A fourth topic that merits some discussion is whether STTs have hysteresis effects. Could a country briefly adopt an STT—possibly for a short-term revenue emergency—and then end the tax with no long-term effects? Or does the adoption of an STT generate a permanent change in how a market operates? Although event studies are always subject to criticism since it is difficult to construct a counterfactual, there are several natural experiments that could provide evidence on whether STTs have hysteresis effects. For example, the paper mentions that after the Swedish STT was abolished, "some trading volume came back to Sweden." But did the market recover to where it was before the tax? Was its longer-term development substantially slower than that of comparable markets in the region? Has the Chilean stock market recovered from its period with a tax on capital inflows? (Informal evidence suggests not.)

A final topic that would substantially improve the paper would be additional information on different countries' experiences with STTs. Although the paper does provide a few tidbits of information on STTs in the United States and Ireland, as well as more detailed information on the Swedish experience, it would be useful to include a table with summary information on STTs in a range of countries. In its simplest variant, a table could just include basic information on the size of the tax, the structure of the tax, and the amount of revenue raised in different countries. Even more useful would be some basic information on not only the diversity of STTs across countries, but information on the other market variables analyzed in the paper—such as trading volume, market liquidity, bid-ask spreads, etc. The paper makes a number of strong arguments about how STTs should affect these market variables. Granted, there are numerous other factors that will also affect market development and pricing in different countries, but it would substantially strengthen the paper's arguments if some of the raw correlations predicted in the discussion also apply in some basic cross-country comparisons. Of course, an even more convincing approach would be a thorough empirical analysis of how STTs affect each of the variables discussed in the paper—but that would inevitably merit a full paper in itself.

IV. Conclusions

To conclude, the paper by Habermeier and Kirilenko is an excellent resource for someone wishing to learn about STTs. The paper makes a strong and compelling case that STTs have a number of serious costs, but few significant benefits. In an effort to make this strong case, however, the paper does brush over some potentially valid arguments in favor of STTs (such as a revenue source if other tax options are even more distortionary). A more balanced representation of some of these counterarguments would make the paper more evenhanded and therefore more convincing. Moreover, there are a number of thought-provoking issues related to STTs that the paper does not discuss—and although many are realistically beyond the realm of one paper—these issues could be important when evaluating the desirability of STTs. If nothing else, these additional issues discussed above provide intriguing topics for future research.

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