

Is the Tobin Tax Practicable?

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The proposed Tobin tax is a percentage of the quantity of domestic currency converted into foreign currency. It would be collected on all such conversions of domestic currency, and would be treated by participants in the foreign-exchange market as an added cost to each foreign-exchange transaction. The tax cost would be equivalent to the payment processing costs which, though very small, are currently paid on each foreign-exchange transaction.

In current discussions, the Tobin tax is put forward as a partial solution to the problems of managing international financial crises; moderating capricious exchange rate behavior; or raising revenue for international public projects. These are distinct objectives, and the ability of the Tobin tax to achieve them should be addressed in their separate contexts. However, the dominant issue of the day is whether the Tobin tax is practicable, and this issue encompasses all these objectives. On one hand, if the Tobin tax can be only partially implemented, or is easily evaded, it is unlikely to achieve any of its purposes and may well do more harm than good. Most evaluations of the Tobin tax are based on the argument or presumption that it is not practicable. On the other hand, if the Tobin tax can be shown to be practicable, it remains to show that it can achieve its objectives.

The argument that the Tobin tax is not practicable may be summarized as follows: The market for trading in foreign exchange is decentralized, unregulated, highly mobile, and innovative. If any particular country tries to impose the tax, trading of its currency will simply move offshore. Thus, a globally coordinated tax is required. It would be hard to achieve the necessary political consensus for that, especially as there are strong incentives for individual countries to opt out and offer a tax-free haven. Even if a global tax were successfully implemented, it would be hard to collect the tax on the many financial and foreign-exchange assets that can be used to mediate a foreign-exchange transaction. For any particular version of the tax, new financial instruments may be expected to be created to avoid it.

The market for trading foreign exchange is supported by a global infrastructure for making payments to settle such trades. In contrast to the preceding characterization of the trading market, the interbank or wholesale foreign-exchange payments infrastructure is highly organized, centralized, and regulated. It has become so through technological innovation and the combined efforts of central banks and major foreign-exchange trading institutions, so as to cope with the huge volume of foreign-exchange trading that occurs every day while safeguarding the integrity and stability of the international financial system.

We contend that the Tobin tax is practicable if it is assessed on wholesale foreign-exchange payments as they are processed to settle foreign-exchange trades. Specifically, a country

can unilaterally collect the tax on conversions of its own currency into foreign currency, no matter where in the world the trade takes place, and no matter which financial instruments are used to mediate the trade. In this way, the Tobin tax can satisfy the requirements of efficiency, being applied uniformly and comprehensively in all markets and on all foreign-exchange assets. It would also be transparent and inexpensive to implement, since it exploits existing payments processing technology.

The international wholesale payments system consists of up to three components: a domestic large-value payment system for each currency; domestic or offshore netting systems; and, to the extent that financial assets are used to make payments, clearinghouses for securities exchanges. Note that each financial or foreign-exchange trade results in at least two counterpart payments made to settle the trade. For this reason, each of the three institutions of the wholesale payments system processes financial and foreign-exchange payments as follows: first, payment instructions from traders are treated individually as they arrive at the system ('Real Time Gross Settlement', (RTGS)), and second, the two or more counterpart payment instructions are matched to each other and to the original traders before they are processed, simultaneously ('payment-versus-payment settlement'). All this occurs automatically and electronically. This payment process was implemented relatively recently to eliminate settlement risk, which refers to the possibility that one party to a trade makes an irrevocable payment to discharge its obligation under the trade, and then does not receive the obligatory payment from its counterpart in the trade.

Since counterpart payments are matched before being settled anywhere in the wholesale payments system, it is possible to both identify the originating trade, and to distinguish foreign-exchange from domestic-financial transactions (in the case of the former, the counterpart payments are denominated in different currencies). The payments institutions can then collect the Tobin tax on behalf of the central bank that issues the taxed currency as appropriate.

These payment processes are regulated and enforced by the central bank that issues the currency being paid, whether the processing institution is at home or offshore. The reason is that netting systems and clearinghouses located worldwide that deal in assets denominated in the domestic currency are closely integrated with the large-value payment system for that currency. That large-value payment system is located at home and operated or regulated by the central bank. This must be so, since the wholesale payment system for the domestic currency depends fundamentally on the services of the central bank, including its supervision, legal, credit and 'lender-of-last-resort' facilities, to function as such, and on the domestic currency liquidity available only in the domestic money market. For the same reasons, individual participants in offshore netting systems and clearinghouses are also members of the domestic large-value payment system, and are subject to central bank regulations. These enforcement mechanisms can also be used to unilaterally implement the Tobin tax worldwide.

Coordinating the Tobin tax across domestic large-value payments systems, netting systems, securities clearinghouses, and the individual participants in them so as to avoid leakage is straightforward, for two reasons.

First, in nearly all cases the technology and payments processing services for all three payments institutions is provided, either individually or together, by a single, dominant, third party, the Society for World-wide Interbank Financial Telecommunications (SWIFT). SWIFT also provides the standardized and integrated communications system and services between individual trading banks, and between them and the payments institutions. Thus, SWIFT is already functionally a virtual global centralized foreign-exchange payments system.

Second, in the near future a physical global wholesale foreign-exchange payments system, encompassing both large-value and netting systems, designed to process many currencies in a single system, and using SWIFT technology and services, will begin operations. It will be known as the 'Continuous Linked Settlement Bank'.

A Tobin tax applied to foreign-exchange payments would also be hard to avoid by creative use of foreign-exchange instruments. Nearly all such instruments, including exotic derivatives, require payments for settlement. In most cases, these are simple payments of the principal amounts traded, just as with ordinary foreign-exchange instruments. The exception is the foreign exchange option, which may never be executed. However, options are bought at a price which reflects their value, and the payment made to buy the option would be taxed. Further, the price of the option responds to the tax, in two ways. First, the price depends on the potential for executing the option, and the decision to execute depends on the tax. Second, the price depends on the cost of alternative, 'synthetic', ways to reach the same foreign-exchange position, by buying and selling the underlying assets denominated in domestic and foreign currencies.

The immediate effect of the enforceable Tobin tax on foreign-exchange payments would be to increase bid-ask spreads in the foreign exchange market. The spread results from both transactions costs, such as the Tobin tax, and from exchange rate, credit, and other risks taken on by dealers in foreign exchange. Thus, the size of the increase in the spread depends on the net changes in costs and risks as a consequence of the tax. In ordinary times the increase in transactions costs would dominate. In extraordinary times, when foreign exchange, liquidity, and credit risks arising from a potential crisis become much more significant, the effect of the tax on those risks would also be reflected by the spread.

In fact, there are two foreign-exchange bid-ask spreads, one for the retail market and one for the wholesale market where the dealers are active. Most of the Tobin tax would be likely to appear in the retail spread, to the extent that short term speculation originates in the retail market. The reason is that a large share of dealer foreign-exchange trading in the wholesale market consists of activity to hedge risks taken on in the retail market. Dealers responding to retail speculation would pass on the tax paid on their own resulting hedging activity to the retail market. To the extent that dealers themselves initiate speculative trades, the Tobin tax would also appear in a rise in the wholesale spread.