How can we implement today a Multilateral and Multi-jurisdictional Tax on Financial Transactions?



Les financements innovants pour le développement Groupe Pilote

Technical notes

Draft version

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BRIEFING PAPER ON FINANCIAL TRANSACTION TAXES

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Key issues in designing a financial transaction tax (FTT)

It is sometimes argued that since it is difficult to design a financial transaction tax that would be entirely immune from the ill-placed ingenuity of bankers there is no point in doing so. This is a much higher benchmark than we apply to almost any other tax. One of the principal sources of tax revenues in the United States is income tax, but the last study by the IRS suggested that non-compliance with the tax code amounted to \$345bn and 18-19% of income was not properly reported to the IRS. Other studies suggest this number has grown to \$500bn². Yet this non-compliance is not seen as a sufficient reason for abandoning income tax collection altogether. Eighty two percent compliance is not as good as it should be but the \$2,000bn that is actually raised and spent is not to be dismissed. An important aim in the design of FTTS must be to minimize avoidance and evasion, but there should be an acceptance that minimizing it to zero is not practical for any tax.

Legal Enforceability and Stamp Duties

The way to minimize tax avoidance and tax evasion in a financial transaction tax is the same as with all taxes and other white-collar crimes. It was well described over dinner by

Botswana President, Festus Mogae, as turning the undesired activity from a high return, low risk venture, into a low return, high risk one. In the case of FTT, this means a low tax rate coupled with high consequences of non-compliance.

Across the world where 'stamp taxes' are collected³, a non-taxed, and therefore non-stamped financial transaction, cannot be legally enforced so there can be no registered change of ownership until taxes are paid to, and stamped by, the authorities. These stamp taxes are collected at settlement where change in registered ownership takes place. They are a levy on the transfer of legal ownership not the transactions per se. Non-enforceability of contract is a very high consequence of non-compliance with the stamp duty. It is particularly so where registered owners of assets are due to receive certain benefits and rights like voting at shareholder meetings, dividends, interest coupons, rights issues or buy-outs.

New Regulatory Requirements and Central Clearing

Instruments that are non-taxed, and are therefore not legally enforced, cannot be considered eligible for central clearing by a clearing house. This is of crucial importance today. It represents one of the ways that FTTs are more feasible than ever before. One of the responses by the G20 and the Financial Stability Board to the financial crisis is a regulatory requirement that all exchange-traded instruments (including

¹⁻ Senior Fellow, London Business School, Emeritus Professor of Gresham College and Chairman, Intelligence Capital Limited. Many people contributed to the background research to this paper, especially, Richard Gower.

²⁻ See Richard Cebula and Edgar Feige "America's Underground Economy: Measuring the size, Growth and Determinants of Tax Evasion in the US. (http://www.ssc.wisc.edu/econ/archive/wp2011-1.pdf)

³⁻ Stamp taxes have a long tradition in many countries including Malaysia, Netherlands, Ireland, Israel, UK and the US.

equities, bonds, derivatives and all vanilla overthe-counter transactions such as CDS) must be centrally cleared. Instruments held by financial instruments that are not centrally cleared will incur a capital adequacy requirement⁴.

The consequences therefore of holding nontaxed instruments in terms of loss of legal certainty, higher counter-party risk, loss of gains from netting in a clearing house, and the cost of higher capital adequacy requirements for holding them, are quite substantial. It is estimated that over 70% of OTC credit derivatives will be centrally cleared and those that are not, are highly bespoke complex contracts that the clearers refuse to accept and as a result are more expensive for investors to hold. These non-centrally cleared instruments would still, of course, be subject to the tax and the underlying contracts would be unenforceable if the transfer of ownership was not stamped by the tax authorities. Even if an investor were prepared to take all of the risks - for the sake of saving a small fraction of one percent - they would then have to find another, equally prepared to do so, so as to exit from their investment with a return. Noncompliance will be a high-risk venture. Too high a risk, to be sure, for the banks, insurance companies, pension funds and mutual funds that dominate the financial markets.

To be resistant to evasion and avoidance, it would be best for a FTT to be a small, stamp tax on all financial transactions, with the sanction of unenforceability of contract for unstamped transactions.

Optimal Size, Elasticities and Distortions

A small tax will reduce the potential of economic distortions. One way of measuring this is estimating the elasticity of demand to changes in transaction costs – the amount that demand for an instrument will fall following a rise in transaction costs – caused by anything,

including higher clearing house fees or an FTT. Our intention, so as to minimize distortions, would be not to change substantially the underlying demand for instruments. A number of studies have tried to estimate the price elasticities of one country imposing a transaction tax⁵. These studies indicate that the elasticities of demand for equities, for example, are in the region of 0.25 to 1.65, averaging around 1.0 so that a 1% rise in costs will lead to a 1% fall in volume.

This is a small elasticity of demand. It is likely to be an under-estimation of the effect of larger than 1.0% rises in stamp taxes, but also likely to be an over-estimation of the effect of much smaller rises. Below a certain size of transaction costs, the level of general uncertainties, including the likelihood of the asset price changing during the transaction period, means that there comes a point where thegains from a further reduction in transaction costs cannot be reliably obtained and yield marginal impact. (Similarly, because of these uncertainties, the investment literature generally shows that where nothing else changes, small changes in the short-term cost of capital, like the ones we are discussing here, have little impact on investment demand⁶.)

The effect on demand of an instrument will also depend on a number of other factors that the studies on elasticities tend to neglect. Elasticity of demand would be smaller the more related countries, participate, thereby reducing the substitution effect captured in the studies. Further, the elasticity would be depend on who the investor is. The elasticity of demand for a volatile instrument, by a long-term investor who is hedging this volatility across time, from a small rise in transaction costs, would be far smaller than the elasticity of demand for instruments with generally lower, volatility, of high-frequency traders.

Commentators have argued that it is customers who ultimately pay the tax. This is correct. However not all consumers of financial products will pay equally. Long-term equity investors who roll over their portfolio once or twice a year will pay least and will be least affected, while short-term speculators

⁴⁻ The Communique, issued after the G20 meeting in Pittsburgh in September 2009, states: "all standardized OTC derivatives contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest," "OTC derivatives contracts should be reported to trade repositories," and "non-centrally cleared contracts should be subject to higher capital requirements."

⁵⁻ For a recent review of the results of these studies, see McCulloch and Pacillo (2010).

⁶⁻ For an interesting study on the elasticities of investment in general to transaction taxes where the potential for substitution is high, see "Taxes, the Cost of Capital, and Investment: A Comparison of Canada and the United States." Kenneth J. McKenzie and Aileen J. Thompson, April 1997.

who roll over their portfolios several times a year, and are speculating on Government interest rates or currencies where transaction costs are currently low and elasticities are higher, will pay the most.

This is considered an attractive feature by many and was one of the arguments used originally by John Maynard Keynes and James Tobin in arguing for transaction taxes7. Their intention was to cause a distortion to demand for instruments not to shy away from it. The counter-argument is that this would undermine financial liquidity and so soon after the crisis this is a seductive argument. But it is somewhat specious. While high turnover is one symptom of liquidity, financial market liquidity is ultimately about diversity. Liquidity exists where when you want to sell, someone else wants to buy, because they have a different valuation or investment goal or strategy. Algorithmic high-frequency trading is primarily trend following so that they are buyers when markets are rising and sellers when markets are falling, which reduces diversity and saps liquidity.8

Taxing Different Instruments

To reduce substitution, not penalize one financial instrument over another, and to maximize tax collection while minimizing tax rates, the tax should be collected across all financial instruments. The non-enforceability rule or inability to clear unstamped instruments would bite just as hard for a contract for difference as it would for an equity purchase. But it would be wrong to tax all instruments to the same extent. Across different instruments the tax should be sized to reflect, in general terms, their underlying elasticity or shortterm volatility so as to reduce potential economic distortions. The tax should be highest where the elasticity is low and demand will be relatively unaffected, and lowest where the elasticity is highest and demand would be more affected9.

Analysis of different elasticities¹⁰ suggests that a reasonable range, erring on the side of caution,

of the ratio of the tax in equities, bonds and short-dated bonds should be five to one for equities to long-dated bonds, and two to one from long-dated bonds to short-dated bonds. Hence, if there were a 0.50% tax on equities, the tax on long dated bonds would be 0.1% and the tax on short-dated bills, swaps and futures would be 0.05%. This analysis on the optimal size of the tax resonates with those transaction taxes that currently exist and appear most successful. It should be noted that a majority of foreign exchange transactions involve an underlying equity, bond or other instrument that would be stamped, with bonds and bills playing a particularly important role for those seeking the currency market "carry trade". Consequently, extending the tax to bonds would effectively extend it to the currency markets.

Existing FTTs

Today, around \$23bn is raised annually, by just seven countries, through FTTs. Almost half of this revenue is raised by the UK and South Korea alone where both have a 0.5% stamp duty on equities only – see table 1.

The 'revealed preference' from those countries that are raising significant sums is that tax rates are consistent with the analysis above:

- (1) tax rates of 0.5% or below are not so high as to cause severe distortions or substantial avoidance and evasion, though as indicated earlier, some avoidance is expected;
- (2) existing tax rates are not at the wrong end of the Laffer curve. At these rates, the higher the rate, the greater the revenue;
- (3) tax rates levied on equity transactions are higher than on bonds by a multiple of 3 or 5 to 1. It is interesting to note that the ratio of equity to fixed-income or foreign exchange fees in clearing houses also ranges from 5:1 to 2:1.

⁷⁻ One of the observations of Adair Turner, Chairman of the FSA, shared by others, is that the collapse of transaction costs towards zero, facilitated the creation of huge derivative markets balancing on relatively small underlying markets, which made financial systems more vulnerable in a crisis. The optimal level of transaction taxes may be low, but it is not zero. Mr. Turner is a supporter of transaction taxes.

⁸⁻ This destabilizing behaviour is well described in "Positive feedback investment strategies and destabilizing rational speculation", J. Bradford de Long, A. Shleifer, L. H.Summers and R. Waldman, Journal of Finance, June 1990.

⁹⁻ This principle which maximizes the tax take, or producers surplus is also known as "Ramsey Pricing" after Ramsey (1927) and Edgeworth (1910).

¹⁰⁻ See, Pollin, Baker and Schaberg, (2003).

Past taxing of bonds has been a little fraught, principally because bonds were traded over-the-counter, more bonds were bearer instruments, and short-dated bonds were cash-like. However, as cited above the universal trend towards trade-reporting, greater registered ownership under

anti-terrorism finance, anti-money laundering rules and now central clearing and settlement, makes the task of taxing bonds similar to that of equities, while we must recognize, that lower volatilities, lower elasticities and lower trading spreads point to a lower tax rate than for equities.

SELECTION OF EXISTING STTs

| Country | STT Revenue (\$bn) | STT rates for different assets | | | | |
|--------------|-----------------------|--|---|--|--|---|
| | | Equity | Bonds/ Loans | Options | Futures | Capital Levy |
| Hong Kong | 2.79 | 10 basis points | | | | |
| India | 1.22 | 0.25% on stock rice; 0.025% on intraday transactions; local stamp taxes may also apply | Local stamp duties may apply | 0.017% on premium; 0.125% on strike | 0.017% of delivery price | |
| South Korea | 6.08 | 0.5% on value of shares in corporations or partnerships | | | | 0.1-0.4% tax on capital formation |
| South Africa | 1.41 | 0.25% of value; new share issues excluded | | | | |
| Switzerland | 2 | 15 bps on domestic shares; 30 bps on foreign shares | 6-12 bps on bond issuance | | | 1% on share issuance in excess of CHF 1 mn. |
| Taiwan | 3.3 | 30 basis points | 10 basis points on corporate bond principal | 10-60 basis points on premiums | Up to 0.025 basis points on interest rate futures; up to 6 basis points on stock index and other futures | |
| UK | 5.86 | Stamp duty 0.5% on secondary sales of shares and trusts holding share | | 50 bps on strike price, if executed | 50 bps on delivery price, if delivered | |
| Total | 22.66 | | | | | |

Sources: IMF Working Paper 'Taxing Financial Transactions: Issues and Evidence' March 2011 and World Bank GDP Data, for all except Taiwan (source: Darvas and von Weisacker (2010), 'Financial Transaction Tax: Small is Beautiful', who quote figures from the Ministry of Finance). Data is for 2009 for Hong Kong and Taiwan, for 2008 for India, South Africa and the UK, and for 2007 for all other countries (South Korea and Switzerland).

Section 31 Fees – US Securities Transaction Taxes

The table above ignores transaction taxes that are used to pay for specific, market related, regulatory functions. Arguably, except for how the funds are used, these 'fees' have exactly the same economic and financial effects as transaction taxes. Therefore the true collection of securities transaction taxes and fees around the world annually is likely to be far higher than \$23bn.

The US SEC, the securities regulator, is selffunded by a transaction tax on the volume traded on exchanges. Many who rile against transaction taxes and argue that slight taxes will exact huge disrepair to markets are often unfamiliar with the fact that, without the sky falling upon us, the US SEC charges a 0.00257% tax on transactions that today raises \$1bn annually to fund the SEC. This tax, so-called 'Section 31 fees', is named after Section 31 of the Securities Exchange Act of 193411 which empowers the SEC to exact such a levy. These fees were raised in 2010 from 0.0017% and are likely to rise again given the additional expenditure of the SEC. Clearing houses also charge fees of similar order on transactions (buying and selling)¹².

The table above does not reflect how taxes have fallen and risen over time. Stamp taxes are old, common taxes¹³. Before the financial crisis when the sector convinced us that nothing should stand in the way of more trading, some of these taxes were taken off or moderated as their yield grew large, as was the case of the US securities tax and the broad financial transaction taxes in Brazil. More recently some have been returned. History has shown therefore that this is a policy that can be tried, and, if it proves too costly, reversed relatively easily and quickly. The US Section 31 fees have been lowered nine times and raised seven times since 1934 without stir.

Proposal

Our analysis and the revealed preference of the manner and size of the current \$23bn of stamp duties argues for a small stamp duty across financial instruments, collected at settlement, enforced by the threat of uneforcibility of contract, with the tax sized in accordance to the volatility hierarchy of markets.

A stamp duty of 0.5% on equity transactions, 0.1% on long-dated bond transactions and 0.05% on short-dated bond, swap or futures transactions, if adopted by France, Germany and Spain, would likely yield \$15bn per year (see tables 2 and 3) from equity and government bond markets alone, while causing minimal distortions and limited avoidance.

These funds can be raised independently of other countries following suit. However, such a lead could be accompanied by a commitment of others to follow suit. These taxes can be presented as the way the countries raising them will meet their international obligations and others are welcome to follow or to present alternative plans, but doing nothing is not an option.

Within the G20, four countries already have FTTs – South Africa, South Korea, India and UK. There would appear to be interest in other G20 countries such as Mexico, Argentina, Indonesia, Turkey and Australia to introduce transaction taxes. Brazil's Congress leaders and President have signaled that it will re-impose a 0.38% tax on all financial transactions – to fund domestic health initiatives. India and South Africa could be persuaded to raise their transaction taxes to a new international target. Wider participation could raise the collection to over \$20bn but those that would make most difference remain France and Germany.

¹¹⁻ Under Section 31 of the Securities Exchange Act of 1934, self-regulatory organizations (SROs) – such as the Financial Industry Regulatory Authority (FINRA) and all of the national securities exchanges (including the New York Stock Exchange and the American Stock Exchange) – must pay transaction fees to the SEC based on the volume of securities that are sold on their markets. These fees recover the costs incurred by the government, including the SEC, for supervising and regulating the securities markets and securities professionals.

¹²⁻ http://www.cmegroup.com/company/files/CME_Fee_Schedule.pdf

¹³⁻ The first stamp tax was first devised in the Netherlands in 1624 after a public competition to find a new form of tax.

GOVERNMENT DEBT

| | Revenue (\$m) | Market Turnover (\$m) |
|--------------------|---------------|-----------------------|
| Germany | 1,588 | 6,580,000 |
| Euronext Paris | 1,348 | 5,586,000 |
| Euronext Amsterdam | 845 | 3,500,000 |
| Euronext Brussels | 1,569 | 6,500,000 |
| Euronext Lisbon | 362 | 1,500,000 |
| Spain | 845 | 3,500,000 |
| Totals | 6,558 | 27,166,000 |

| Securities Transaction Tax rate | 0.10% |
|--|-------|
| Elasticity of size to transactions costs | -3 |
| Pre-tax transactions costs | 0.17% |

EQUITY MARKETS

| | Revenue (\$m) | Market Turnover (\$m) |
|--------------------|---------------|-----------------------|
| Germany | 3,821 | 1,528,491 |
| Euronext Paris | 3,939 | 1,575,773 |
| Euronext Amsterdam | 1,578 | 631,378 |
| Euronext Brussels | 297 | 118,616 |
| Euronext Lisbon | 148 | 59,027 |
| Spain | 3,760 | 1,504,052 |
| Totals | 13,543 | 5,417,336 |

| Securities Transaction Tax rate | 0.50% |
|--|-------|
| Elasticity of size to transactions costs | -1 |
| Pre-tax transactions costs | 0.50% |

^{*} Data on turnover comes from Euronext for equities and National Treasuries for exchange and OTC Government bond turnover, except for the Dutch and Portuguese bond turnover figures that are estimated from MTS monthly turnover. Given that the bond markets are primarily OTC, these estimates are crude compared to the equity figures, but because we are not including corporate bonds, swaps, and derivatives, they are likely to be at the lower end of the range. Elasticity estimates and revenue formula come from McCulloch &Pacillo (2010). All data are converted to dollars using a rate of \$1.45.

Conclusion

There are to my knowledge no other innovative forms of financing development that would yield this scale of funding for development (\$15bn per year - \$75bn in five years) and afford the one time opportunity to wrestle and beat some of the biggest public health ailments that so debilitate social and economic development in the world's poorest countries.

Global financial markets are the biggest beneficiaries of globalization, as a consequence, the sector has far outstripped the growth of the world economy and grown from around \$3trn in 1985 to over \$100trn today – despite the global credit crunch. Industry forecasts suggest the sector growing rapidly in emerging markets today - will touch \$200trn within the decade. In turn, globalization has provided a route for the economic advancement of many nations. But some countries, and some communities within other countries, are being left behind. The growing divide is both reflected and aggravated by public health challenges. These not only cause much human misery, they debilitate a country's productivity, rotting away the steps of the ladder out of poverty. It seems fitting that a contribution is made from the sector that benefits most from globalization to those that are being left behind by it. This is a contribution that is small relative to the activity of the sector but large relative to what the resources could be used for, and a contribution that if it were to prove debilitating to markets, could be reversed.

Others are better placed to identify what \$75bn could buy if these funds were directed to specific purpose - such as the elimination of malaria, AIDS or tuberculosis. While hypothecation of tax revenues would probably face greater obstacles than raising them, the legitimacy of the tax will be strongly related to what it used for or at least ear-marked for from general funds. In this regard it is interesting that few blink at the idea of the SEC raising its transaction fees to pay for, hopefully, better regulation, or the Clearing Houses, raising their transaction fees in response to new regulatory requirements designed to reduce systemic risk. There are no long debates on avoidance, liquidity, or the implications of raising the cost of capital.

This briefing has examined the economic issues around FTTs. We conclude that a small stamp tax, where contracts are unenforceable if they

are not taxed and stamped, and where it is imposed across financial instruments can raise \$15bn with minimal distortion and avoidance if France and Germany and Spain adopt it and significantly more if others follow. In short, the economics does not get in the way of the development argument or the moral case. Others are better suited to espouse the moral case, but it would seem to me that while the cost of trying would be small; the costs of prevaricating, or forever promising but never delivering, of waiting till a tomorrow that never comes, are enormous.

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DERIVATIVES

It is often argued that if there is a tax on transacting financial instruments, market participants would switch to the derivatives market where the tax could not be levied. There are a number of reasons why this argument is suspect.

To begin with it is important to remember that there are many ways to evade and avoidthe taxes that contribute most to national treasuries: income, corporate, capital gains and sales taxes. The degree of avoidance of any tax depends in part on the size of the tax and the consequences of being "caught". In this case we are arguing about a small tax with large consequences if they are not paid. These consequences include the simple and traditional legal one, where contracts to buy or sell an instrument will be ruled unenforceable if the tax has not be paid. This is a tough consequence. The major end-owners of financial instruments, such as pension funds, insurance companies and the largest international banks could not, for a host of regulatory, risk-management and fiduciary reasons, hold instruments where their legal enforceability was in doubt. Indeed, an untaxed instrument would be ineligible for central clearing, a new requirement of all vanilla, OTC, derivative instruments, as well as equity and fixed-income instruments, which would cost the evader several times more than the tax. There could be further regulatory rules where instruments that were untaxed could not count as collateral or capital in the countries in which the tax was imposed.

It is easy to be mesmerized by the notional size of derivative markets. The credit derivative swaps market for instance is estimated to be \$30trn, or almost double the size of the US equity. But thesemeasures of size can be an illusionary, often represent double-counting of gross notional positions while the value of net positions are

often considerably smaller. Moreover, in most cases, derivative activity is not so disconnected from the underlying market and so transaction taxes would be paid. In large part, though by no means exclusively, derivative transactions are compliments to the positions in the underlying markets, not substitutes. This can be seen in the case of equity stamp duties that continue to raise large sums, even when they are surrounded by highly liquid and large equity derivative markets as in the case of the UK, Hong Kong, Taiwan, India, South Africa and South Korea.

In many cases a derivative position is a hedge against movements in an underlying holding for which the tax would have been paid. In cases where the derivative is the main focus, investors trade in and out of the underlying market - and hence would pay the tax – in order to hedge their derivative exposures. Imagine, a bank has sold a call option on GE shares to an investor so that were GE shares to rise above a certain level, the bank would be obligated to deliver \$100m of GE shares to its customer at that level. Imagine that after current price action, the probability that the bank would have to do so and would be "short" \$100m of rising GE shares, had risen from 5% to 50%. In order to limit the bank's potential loss from this derivative contract, the bank would buy some GE shares now, and in doing so, would pay the tax. The tax would have to be very substantial, certainly above 1.0%, for the bank to decide it would rather expose itself to a multimillion dollar loss, and collateral call and increased capital adequacy requirement than pay the tax.

However, not all derivative transactions will have some underlying transaction or series of underlying hedging transactions and consequently, a tax on the underlying transaction could lead to some substitution to the derivatives markets and a loss in tax revenues. Again the incentive to substitute will relate to the size of the tax savings and the cost of not holding the underlying instrument in terms of lost dividends or not having the right to vote in shareholder meetings. In this case, the tax authorities could take a leaf out of the historical approach to the transaction of bearer bonds, and tax the premium on derivative transactions at a rate of three times the rate of tax on underlying transactions, while giving a tax credit where taxes are then further paid in the course of hedging the instrument. This could also be set up as a withholding tax on the derivative premia, released in part or in whole if there are related, tax-paying transactions in the underlying instruments. In the GE case for instance. the bank would pay a tax on the premium earned for selling the call option on GE stock, and if greater taxes were paid in the selling and buying of GE stock to hedge this transaction, this tax would be returned (or credited against tax due).

In conclusion, derivatives are less of an obstacle to a financial transaction tax than many people think. First, derivates are often compliments to the underlying markets rather than substitutes and taxes on the underlying instruments can co-exist with healthy derivative markets as we already observe. Where derivatives are a hedge for an underlying instrument, or are themselves hedged by transactions in the underlying transactions a transactions tax would be collected. But this is not always the case today and may be less so in the future. To avoid substitution from the underlying markets to the derivative markets to avoid paying the tax, a withholding tax can be placed on the premium paid for derivative transactions at a "penal" rate of three times the normal rate for a transaction (derivative premia are far smaller than the notional value of the transaction) and this can be refunded in part or in whole if there are related, tax-paying transactions in the underlying markets. The penalty for avoiding or evading the tax would be the same as elsewhere, the contract underlying the untaxed instrument would be unenforceable in jurisdictions that have signed up to the tax which would be a cost and risk far outweighing the cost of paying the tax.

Avinash Persaud

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Opinion: a successful and doable multilateral financial transaction tax (M-FTT)

Bruno Jetin¹⁴

The present note highlights some critical points for the success of a multilateral financial transaction tax (M-FTT). The crux of the matter is that the tax will be naturally incorporated in the present organisation and working of financial markets. There is no technical or economical obstacle to the tax.

1. General features of the M-FTT

The success of the M-FTT depends on its scope and simplicity. The M-FTT must be as comprehensive as possible to avoid fiscal fraud, discrimination between markets and economic agents, and delocalisation of financial activities and jobs. The tax rates must be high enough to generate substantive revenues and no too high to avoid a dramatic reduction of the volume of transaction which would run contrary to the objective of raising revenues and improving the stability of financial markets.

A comprehensive tax

To avoid fraud and discrimination between markets, the tax should be applied on all financial markets, to all market players and to all financial instruments: bonds, equities, money, currency and commodities. Each exception will not only infringe the principle of non-discrimination, it will also create loopholes and possibilities to circumvent the tax on the markets where it is levied. By the same token, the tax must apply to whole financial instruments. The possibility to revise the Treaty regularly will open the possibility to include any new financial instruments.

The only exception to the rule is the distinction between primary and secondary markets for bonds and equities but not for other markets such as the currency market where such a distinction is not relevant. On the primary markets, bonds and equities are issued for the first time

by firms or states to satisfy financing needs. The objective of the tax is not to disturb in any way the economic process by which firms for instance issue shares or bonds to finance investment and create jobs. It is not the case of secondary markets where the same shares and bonds are sold again and again to different owners. Quite to the contrary, taxing secondary markets makes possible to tax the practice of share buy-backs which is detrimental to job creation because it diverts profit from productive investment. It may also encourage investors to keep their bonds and shares for a longer period and contributes to financial stability. And finally, secondary markets are by far the biggest markets where the tax can produce important revenues.

A neutral tax

Taxing all markets and financial instru-**→** ments does not mean that the same rate will be applied. The tax will be considered as a transaction cost by market players. A significant increase in the transaction cost reduces the number of transactions. So the tax rate has to be weighed against the pre-tax transaction cost which is different according to asset/product and market players. To respect the principle of neutrality between markets and financial instruments, the introduction of the tax should increase the transaction cost in the same proportion, (from 30% to 50%) in all markets and for all financial instruments. The tax rate will be different for each broad class of instruments (bonds. shares, currencies, ...) but the effect on the volume of transactions will be the same. The tax rates given in the blueprint are inspired by this philosophy and therefore respect the equal treatment principle.

It follows from what precedes that ideally all States should adopt the same tax rates for each financial instrument, if they have the same pretax transaction costs. If not, investors would be induced to migrate in the taxing states where tax rates are lower.

A tax that avoids multiple taxation

The fact that the M-FTT is a comprehensive tax creates the risk of taxing the same transaction several times. The blueprint proposes the creation of a liberalising electronic tag "attached to any financial transaction on which

the M-FTT has been paid relieving the other intermediaries in the transaction chain, and thereby ensuring legal certainty and avoiding double and unintentional non-taxation" (p 10). This is a major innovation whose importance deserves due attention because one of the traditional critic to the M-FTT is that it is not doable for technical reasons. Not only is the electronic tag efficient against fraud but it is also cost-efficient. Message routing companies such as SWIFT can be mobilised to "tag" electronically each financial transaction. Their messages already include a lot of detailed information such as the identity of the seller and buyer, the name of the intermediaries, the nature of the financial instrument, the countries and currencies involved, and who pays the transaction costs. They are present at every stage of a transaction (from trading to final settlement), which guaranties that all the necessary data for tax collection and to prove that the tax has been paid or not paid, and where it has been paid, will be available with no significant extra costs.

A tax that builds on existing legislation to limit trade offshoring

As explained in the blueprint, the use of the EU-VAT legal system is a source for inspiration. The Treaty provides for a broad range of territorial connecting factors triggering the application of the tax. The taxable event is triggered by the payment of the transaction. It follows that the core of the tax collection is through the centralized clearing and settlement agencies and electronic trading platforms. Centralized clearing and settlement agencies do not migrate easily because they require big infrastructures. Nevertheless, there is still the fear that the introduction of a tax will induce trading rooms, electronic platforms or even part of the stock exchanges and other intermediaries to migrate outside the reach of collecting and taxing states as described in the blueprint. In fact, taxing states are not powerless to enforce their legislation and to minimize the danger of migration of trading activities. For instance, we think possible to rely on existing legislation in the European Union and if necessary to use it as a starting point to establish a multilateral legal system. For instance, the "Directive on Financial Instruments Markets", (also known as the "Investment Services Directive"), which rules the electronic trading platforms and the "Electronic Commerce Directive" which rules all transactions on goods and services realized through Internet.

- The "Directive on Financial Instruments Markets" is in line with the "Securities and Futures Authority" in the UK which has ruled since 1996 that "advising, arranging, dealing or managing foreign exchange or other transactions" constitutes an "investment business".It means that EBS, Reuter, and other trading platforms are legally considered as "investment firms" and have to be registered in the UK or in any of the EU countries to have the right to sell services to British or other European customers. Practically, it means that if any electronic trading platform wants to do business in the EU, it has to be registered at least in one EU member country. If the registration implies accepting and respecting the tax laws, it means that this electronic trading platform has to declare any financial transactions subject to taxation. I underline that this is true whatever the geographical location of these platforms' headquarters or trading web sites. Practically, it means that either each financial transaction can be taxed at the deal site or the electronic platform has to inform the fiscal authorities of any taxable events which can be taxed at the settlement site. Otherwise, the electronic platform loses the right to do business in the EU.
- The "Electronic Commerce Directive" adds some new principles. The directive defines the place of establishment as the place where an operator actually pursues an economic activity through a fixed establishment irrespective of where web-sites or servers are situated or where the operator may have a mail-box. Such definition will remove any legal uncertainty and ensure that operators cannot evade supervision, as they will be subject to supervision in the member state where they are established. Services Providers are obliged "to make available to customers and competent authorities in an easily and accessible and permanent form basic information concerning their activities (name, address, e-mail address, trade register number, professional authorisation and membership of professional bodies where applicable, Value Added Tax number)". I think that this gives a legal basis to oblige any financial intermediaries involved in the financial transaction chain to cooperate with the fiscal authorities. The fact that there is a reference to the VAT confirms its interest to use it as a base for establishing the legal base of the M-FTT. The M-FTT will not be the mere copy of the

European legal system, but at least it gives some insight on what already exists and what is conceivable.

2. Special topics

A treaty which can be revised and improved

The treaty should not be adopted on a temporary basis, but should be subject to revision with the objective of improving it. This is one option of the blueprint which states that "The Treaty could be subject to revision after a trial period". If we include in the text that it is possible to cancel the treaty after a trial period, it means that we are not sure that it is a good idea. It is therefore difficult to convince other governments to do it and it puts the permanence of the treaty at risk. It will not convince markets and investors either to respect the treaty and start paying the tax because they can bet on the fact that the treaty may be cancelled after a short trial period. On the contrary, the revision process means that the Treaty is here to stay but that possible problems can find a solution.

The definition of the taxable event

The event that triggers taxation is fundamentally the payment of a transaction. Hence the fact that the collection of the tax will mainly realized at the clearing and settlement stage. But the blueprint rightly states that "entering into a taxable transaction" is the start of a taxable event. This is especially important because many financial transactions are not effectively paid because of netting. The essence of netting is the cancelation of payments between two counterparties which have made equivalent transactions in opposite ways to avoid the cost of settlement and final payment. Netting can reduce up to 50 or 90 percent of the bulk of transactions in clearing and settlement institutions. The stakes are high. Technically, it is perfectly possible to identify one by one each transaction before they are netted. But the final draft of the treaty must be clear in the definition of the taxable event so that legally, each transaction can be taxed before it is netted.

Opinion: features of a practical and effective M-FTT

Rodney Schmidt, Phd

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In my opinion, it is possible, and not very difficult, to design a Financial Transaction Tax that is practical and feasible, meaning that evasion will be minimal, and that is effective, meaning that it will raise a substantial amount of revenue without unduly disrupting financial markets.

A practical and effective FTT will have a number of core features. It will:

- have broad coverage, especially within an asset class;
- be largely centrally collected, by clearing and settlement agencies and by electronic trading platforms;
- have a low tax rate relative to underlying transaction costs; and
- be assessed on market rather than notional values of derivatives.

A practical and effective FTT does not need to cover all asset classes, and does not need to be implemented by all countries or even all major financial centres. For example, London currently successfully unilaterally collects a Stamp Duty on only equities traded on exchanges.

The ultimate burden (incidence) of the FTT will be borne mostly by large dealer banks and hedge funds.

Coverage

It is possible to levy an FTT on a single asset class, as shown by the London Stamp Duty on equity trading. Nevertheless, to minimize economic distortions through asset substitution, it is prudent to tax a broad range of assets, including equities, commodities, derivatives, bonds, money market instruments, and foreign exchange. This also makes it easier to collect the tax, since it is no longer necessary to distinguish between these instruments. For example,

it is more difficult, though still possible, to tax only foreign exchange transactions, than to tax both foreign exchange and domestic currency (money market) transactions, when both are settled in domestic Large-Value Payments Systems.

Within an asset class, such as equities, it is important to tax all transactions by all types of traders. It is easy for traders to exploit exemptions by adjusting trading strategies and disguising trading intentions. Concerns to minimize the tax burden on retail traders and for trades directly related to real economy transactions are more effectively addressed through tax collection mechanisms and the tax rate.

Closely related asset classes should all be taxed. For example, both equities and derivatives instruments should be taxed, because they are close substitutes. A given financial position can be taken by trading either equities or derivatives, or both. See below for more on taxing derivatives.

Collection

The most effective and comprehensive way to collect an FTT is through, and by, the centralized clearing and settlement agencies and electronic trading platforms. These agencies and platforms appear in all financial markets, both on-exchange and off-exchange (over-the-counter (OTC)), and are the foundation for modern trading in financial instruments.

In most cases, such as on exchanges, a single agency, the central counterparty, clears and settles all trades occurring in that market. Sometimes a single agency settles all trades occurring on multiple exchanges. In major OTC markets, such as foreign exchange and most derivatives, it is also the case that a single agency settles most trades. In foreign exchange this agency is CLS Bank; in derivatives it is MarkitSERV.

However, in some markets, trades may be settled by more than one agency. For example, in foreign exchange, trading may be settled either in CLS Bank or in domestic Large-Value Payments Systems. Thus, the FTT has to be collected in both systems. Coordinating this is not a problem, since a single transaction will only pass through one of these systems.

Sometimes trading occurs on unofficial 'exchanges', electronic trading platforms, provided

by large dealer-broker banks. These platforms also serve as unofficial settlement agencies, because the host dealer-broker banks net out the vast majority (up to 95 percent) of the trades against each other before sending the remaining payment obligations on to a settlement agency. In this case, the host dealer-broker bank would collect the FTT on trading on the platform. Only a few banks are large enough to host such platforms, so it is feasible to enforce tax collection through verification of records.

Trades of financial instruments are nearly always settled in one agency. That is, they are largely mutually exclusive, so that a single transaction will not normally pass through more than one of them. The potential to tax a transaction more than once is therefore not a problem in practice.

In principle, it is possible to evade a tax on equities collected at an exchange by shifting trading to an exchange outside of the tax jurisdiction. (This is not possible in the case of foreign exchange and some derivatives, since settlement is globally centralized.) However, such trade-shifting can be avoided by designing the tax appropriately, as shown by the London Stamp Duty. Specifically, the tax should be associated with legal payment finality. That is, unless the tax is paid on the transaction, payment to settle a trade does not have official, legal, recognition or protection.

Centralized clearing and settlement agencies and electronic trading platforms constitute the fundamental infrastructure of interbank (perhaps now a more accurate term would be 'wholesale') financial markets. Most retail trading in financial assets uses a different infrastructure, namely, local retail banks. Thus, using clearing and settlement agencies and electronic trading platforms as FTT collection points implies that the tax would not, in fact, be collected on most retail financial transactions, those most directly related to real economic activity.

Tax rate

The FTT is, in effect, a transaction cost, similar to other transaction costs, such as broker fees and commissions and other trading and settlement costs. As in any market, there is a relationship between transaction costs and trading volumes – the higher the costs, the lower the volumes. The FTT raises transaction costs

in financial markets, and will therefore reduce trading.

The FTT should be set at a rate that raises significant revenues without reducing trading too much.

Given a proposed tax rate, we can estimate the ensuing reduction in trading volume based on the normal response of trading to underlying (pre-tax) transaction costs. The key factor in such an estimation is the magnitude of the tax rate relative to underlying transaction costs. That is, the key is the percentage increase in transaction costs due to the tax.

Underlying transaction costs are different across financial asset markets. For example, they are significantly smaller in foreign exchange markets than in bond markets. This is because of differences in the size and organization of financial markets. As another example, transaction costs in equity trading organized as an auction market (such as the New York Stock Exchange) are generally smaller than in equity trading organized as a dealer market (such as the NASDAQ).

To avoid distortions and differential impacts across financial markets, the FTT should be set at a rate that is constant relative to (differing) underlying transaction costs. For example, it could be set at a rate of a third or half of underlying transaction costs in all markets. Then the absolute tax rate would be different across asset markets. Thus, for example, the most commonly proposed tax rates are 0,005% for foreign exchange markets and 0,05% for equity markets.

The absolute burden of the tax on a trader in a given period depends, of course, on how much, and how often, the trader trades. Transaction costs in large markets are very low because trading volumes are so high. Trading volumes in interbank (wholesale) markets, dominated as they are by high-frequency traders, are orders of magnitude higher than in retail markets. So, again, the burden of the tax will fall most on traders in interbank markets.

Market values of derivatives

Some financial assets are more complex than others. On one hand, buying foreign exchange spot entails a one-time payment of cash. On the other hand, buying a derivative

entails making or receiving a payment later, depending on intervening movements in price or value of an underlying asset. Taxing spot foreign exchange is straightforward. However, in the case of a derivative, does one only tax the purchase price of the instrument (if there is one) and the subsequent payment or receipt specified in the contract, or does one also tax the 'notional' value of the contract, the value of the underlying asset on which the stream of payments is based?

This is not a question of feasibility, but of potential distortions caused by the tax. If the intention is to minimize substitution in trading between derivatives and their underlying assets because of the tax, then one should tax notional values of derivatives, since this is the equivalent basis for taxing trades in the underlying assets.

However, transaction costs in derivative markets, relative to the notional value of derivatives, are already a fraction of costs in the underlying asset markets, and yet both markets co-exist. This is so in part because derivatives depend for their valuation on well-functioning markets for the underlying assets. Therefore, if the intention is to maintain current market structures, one should not tax notional values of derivative contracts.

Incidence of the FTT

Large dealer banks and hedge funds account for the vast majority of financial transactions, using computerized, high-frequency trading strategies. Because most financial markets, especially those dominated by high-frequency trading, are highly competitive and speculative, there is limited opportunity for dealers and hedge funds to pass on the cost of the tax to other, smaller, traders. That is, dealers and hedge funds compete heavily to trade with smaller counterparties, both to gain market share and to obtain market information on which to speculate subsequently. Therefore, ultimately dealers and hedge funds will likely bear most of the burden of the tax.

Opinion note

The introduction of a FTT – some considerations from a legal perspective

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The introduction of a FTT at a multilateral level is an ambitious, yet not utopian exercise. Opponents to the tax do not only refer to policy arguments on the desirability of taxing the financial industry, but often also invoke various (legal) obstacles to the introduction of a tax or raise doubts as to the feasibility of levying or enforcing a FTT at an international scale. To a large extent, these objections can be overcome. From a legal perspective, creating a multilateral FTT constitute a big challenge, as the FTT should be designed as a comprehensive, effective and cost-efficient system, while minimizing the opportunities for tax avoidance, regulatory arbitrage or free-riding. The effectiveness of an FTT in a globalized economic environment that offers large opportunities for moving taxable transactions internationally or off-shore at a low cost, requires to explore the limits of territoriality in imposing and enforcing a FTT. Furthermore, the feasibility of a FTT will largely depend from the possibility to collect and enforce the tax at a low cost, in view of the peculiar nature of the FTT as a low-rate tax on a large volume of individually taxed transactions. This operational requirement should be appropriately translated into the legal system.

The FTT and free movement of capital

The introduction of an FTT could face legal objections as it restricts the free flow of capital (either domestically or on a cross-border) by making the acquisition or disposal of financial instruments more costly. Notably in the European Union (EU), where free movement of capital constitutes a fundamental and legally binding economic freedom, both within the EU or in relation to non EU-countries, the FTT could be regarded as a prohibited restriction to free movement of capital. There are, however, convincing

arguments to maintain a FTT under the EU rules: although a FTT comes at a cost, the rates currently proposed are only marginal relative to the transaction value. Moreover, provided the tax is applied in a non-discriminatory manner, for both domestic and cross-border transactions, it does not, in our view, violate EU law as currently interpreted by the Court of Justice of the EU.

Scope of application of the FTT

There is no reason why a FTT could not be introduced on a broad basis, encompassing to the largest extent all financial instruments, including derivatives, and currencies. If a FTT is to generate a pre-determined financial revenue, often with the purpose of funding development aid, broadening the scope of financial assets to which it applies allows to keep tax rates relatively lower. Eventually, policy makers will have to draw the line regarding the scope of application of the FTT. The effectiveness of the tax however commands that comparable or substitutable financial instruments be subject to taxation; if not, the FTT could generate tax driven incentives to move into non-taxed substitute investments. Furthermore, if the FTT is commonly designed as a tax on 'financial' transactions, it should be borne in mind that financial transactions are not per se speculative or aimed at financial gains. In practice, however, it will often prove extremely complex to distinguish between both, on the basis of objective criteria. For instance, entering into a derivative contract may serve hedging purposes, and thus be devised to mitigate risks. Taken in isolation, it is not possible, however, to distinguish such a transaction from a purely speculative one. Although levying the FTT will increase the cost of the hedge, we can assume that, due to the low rate, it will not have a major impact on investors' behaviour.

The FTT is essentially targeted at secondary market transactions. Primary market operations (share and bond issues etc.) should be exempted, as imposing a FTT would directly impair on the cost of funding for enterprises put market operations at a competitive disadvantage compared to other sources of funding.

Some further refinements regarding the scope of application and possible exemptions could be considered, having regard to other legitimate interests or market imperatives, or to avoid multiple taxation of a single transaction. For instance,

exempting central banks from the FTT when effecting market operations in the performance of monetary policy functions, appears legitimate. Public debt agencies could be exempted from FTT for financial transactions related to government debt management. For centrally cleared transactions that involve the interposition of a central counterparty (CCP), a mitigation of the tax rate has been proposed in order not to put at a disadvantage centrally cleared operations in comparison with other types of transactions (eg internalization of trades). Considering the peculiar position of a CCP in the transaction chain, the FTT system should make sure that the tax burden is always borne by the counterparty of the CCP. With a view to ensuring a uniform application of the FTT in all participating countries, exemptions are best included in the treaty establishing the FTT.

Territorial reach

The treaty takes a broad view on its territorial application, thereby forming a strong barrier against delocalization and international tax avoidance. The treaty is not novel in this regard. Other international tax rules take a broad view in territorial reach of the tax (enforcement) system as well (eg the EU savings directive, the US regime of Qualified intermediaries or, more recently, the upcoming FATCA regime). Laying down a cascade of connecting factors for the application of the FTT diminishes the effectiveness of opting-out of the FTT system for the major international financial centers. The mere circumstance that trade is settled in a non-participating will not suffice to immunize transactions from the FTT. As soon as one of the parties to a transaction or a financial intermediary involved in the transaction chain is located in a participating state, the FTT will be levied. Moreover, in the situations where the tax collection cannot be realized through the clearing and settlement institutions, financial intermediaries will bear higher administrative burdens a the level of tax collection. This, in turn, could provide incentives for directing trade to markets in participating states, where tax collection can be centralized through the clearing and settlement institutions. The territorial reach of the FTT obviously has limits. When there is no relevant territorial connecting factor in the transaction chain with a participating state, no FTT can be imposed. The mere circumstance that only the issuer of the financial instruments (or of the underlying for derivatives) is established in a participating state may not lead to a situation where the issuer ultimately bears the cost of the FTT.

Taxable event and tax collection

In view of the increasing centralization of post-trade in financial instruments and derivatives, induced by various regulatory initiatives in major financial centers (eg EMIR in the EU), the principle to collect the FTT at the level of the clearing and settlement institutions is likely to produce substantial efficiency gains, as compared to a collection at the level of the financial intermediaries or end-investors. Furthermore, the FTT will necessarily require the adaptation of IT-systems, in particular if an electronic tagging system is introduced, that can best be implemented at the level of the centralized clearing process. It should be stressed that the taxable base for the FTT will be the gross transactions before they enter into the clearing system, where mutual payments and deliveries usually are settled on a net basis. In essence, the proposed FTT system presents characteristics of an accrual system, although it situates the taxable event at the moment of settlement.

The identification of a taxable event could raise interpretation issues as to know when a transaction is concluded or entered into. Deliberately, the FTT treaty does not attempt to mould the conclusion of a transaction into a legal definition. A more functional approach could be adopted in this regard, taking the 'irrevocability' of a financial transaction as the relevant criterion for identifying a taxable event. The irrevocable character could follow from statutory rules (eg the Settlement Finality Directive in the EU), from market regulations or contractual provisions for OTC transactions.

Specific attention should be paid to the sanctions regime. As the FTT is a low-rate tax, the sanction should have a sufficient deterrent effect, while keeping enforcement costs for tax authorities low. The centralization of tax collection in the hands of the clearing and settlement organizations, combined with existing record-keeping obligations in the markets will generally provide sufficient data for tax authorities to supervise the cast majority of plain vanilla transactions. Linking the payment (or FTT-tagging) of a transaction to the eligibility for clearing and settlement should sufficiently incentivise market participants

to comply with the FTT requirements. In other words, the unenforceability of the transaction as a sanction for non-compliance with the FTT is still applied within a limited time frame, thus avoiding a disruptive effect on normal market operations. Unenforceability of the transaction would be more disruptive, however, if the collecting agent would subsequently fail to transmit the collected FTT to the tax authorities. Pecuniary penalties could In this regard also serve as a sufficient deterrent to non-compliance with the FTT obligations.

