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TAXING TRANSACTIONS IN FINANCIAL DERIVATIVES: PROBLEMS AND SOLUTIONS

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ABSTRACT

Eleven European countries are moving towards agreement on a Financial Transactions Tax (FTT) that includes derivatives. World-wide anti-money laundering initiatives and agreements for mutual assistance on tax matters now have real teeth and make an FTT on derivative instruments far more feasible than it would have been even ten years ago. This paper briefly outlines the main challenges that the eleven will face in applying the tax on derivatives, and makes recommendations for the way forward. Principal among these recommendations are (i) the suggestion that tax rates be informed by the already well developed system of charges applied to derivatives contracts by clearing houses, (ii) that the residence capturing principle is applied for derivatives, so that the tax is due wherever one of the counter-parties, or the beneficial owner of one of the counter-parties, is located in an FTT jurisdiction as this is no longer easy to hide, (iii) that derivative instruments on which the tax is due and unpaid be clearly marked null and void in FTT jurisdictions, via an amendment to standard ISDA contracts. This creates a powerful incentive for compliance, even for non-residents. Keeping the tax at a modest level compared to other transaction costs will also support compliance. In the past when transaction costs were deliberately opaque, the industry has presented these other transaction costs as tiny bid-ask spreads, but numerous studies of all transaction costs faced by end-users, such as clearing and settlement fees, brokerage charges, the price impact of trading etc, suggest they are between 1.0% and 1.5% per annum of assets under management for long-term investors, many times the proposed levels of the FTT.

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Avinash Persaud's career spans finance, academia and public policy. He was a senior executive at J. P. Morgan, Union Bank of Switzerland and GAM London Limited and routinely ranked in the top three, worldwide, of debt and currency analysts. He currently holds a number of senior board appointments including non-executive chairman of Elara Capital, an emerging market specialist, and Intelligence Capital Limited, a financial advisory firm to institutional investors. He is Emeritus Professor of Gresham College, a former Governor of the London School of Economics, past President of the British Association for the Advancement of Science (Economics) past Member of Council of the Royal Economics Society, past director of the Global Association of Risk Professionals, Executive Fellow of the London Business School and winner of a number of research awards including the Jacques de Larosiere Award in Global Finance. He was a Member of the UN Commission on Financial Reform and chair of its regulatory sub committee. He was chairman of the Warwick Commission and a Member of the Pew Task Force to the US Senate Banking Committee. He was an Expert Member of the UK Treasury's Audit and Risk Committee and was voted one of the top three public intellectuals in the world on the financial crisis by an expert panel for Prospect Magazine.

1. INTRODUCTION

Stamp duties on legal transactions are the oldest, least avoided and hardest to evade of all taxes. In Europe they can be traced back to at least the middle of the sixth century.¹ In the UK, following an earlier Dutch example, stamp duties were established on 28 June 1694 to help finance the war against France. At the time of the “big bang” reforms to the City of London, the 1986 Finance Act, amongst other things, lowered the rate on share transactions to 0.5% and spread it to paperless transactions.

In 2013, to sharpen its opposition to the proposal of a European Financial Transactions Tax (FTT), which had been blunted by the UK itself having one of the oldest and most successful examples of an FTT, the UK Government granted additional exemptions to the UK stamp tax on share transactions.² Prior to that, the tax collected over €6bn (or \$8bn) per annum or approximately 0.8% of UK tax revenues. It should be noted that corporation tax paid by the UK financial sector amounts to just 1.9% of total tax revenues,³ even though the sector represents 9.4% of GDP,⁴ making the FTT an important way of ensuring the sector makes a fairer contribution. Today, more than 30 countries collect over \$30bn per year through stamp duties on financial transactions.⁵ Other types of FTT yield further revenue. The feasibility of Financial Transactions Taxes in general should not be in doubt.

Stamp taxes on share and non-bearer bond transactions are almost impossible to avoid because legal title of these securities has to be registered and transfer of title is not legally enforceable unless it has been stamped to indicate that taxes have been paid. Foreign purchases of UK equities, for instance, even when the orders are made outside of the UK and/or through a non-UK broker, pay the tax in order to secure legal title. It is estimated that as much as 60% of those who pay the UK tax on share transactions are non-UK residents, giving it one of the most international footprints of any UK tax.⁶ In the UK the tax is substantially collected by CREST, the paperless, electronic settlement and share registration system administered by Euroclear in Brussels.⁷

All taxes create an incentive for avoidance and evasion, proportional to the size of the tax. But differences in corporation and income taxes many times the impact of the proposed 0.1% European transaction tax have not been sufficient to lead to a material shift of people and companies out of many countries. Despite the UK having a Financial Transactions Tax more than twice the rate of the proposed European FTT, the London Stock Exchange has emerged as one of the largest most liquid stock markets in the world. Other countries where an FTT has long co-existed with a vibrant and rapidly growing stock market are Hong Kong, India, Switzerland, Taiwan and South Africa (see Appendix 1). Three-quarters of both the G-8 and G-20 levy some form of FTT.

¹ The existence of a form of stamp duty in Europe may be traced back to Roman times when it was decreed by Emperor Justinian that there must be certain inscriptions on legal forms in order for them to be enforceable.

² The government announced that it would abolish Stamp Duty and Stamp Duty Reserve Tax on transfers of interests in Exchange Traded Funds or ‘ETFs’ and on transactions in securities admitted to trading on a recognised growth market (like the AIM market) provided they are not also listed on a recognised stock exchange.

³ Source: IMF, <http://www.imf.org/external/np/seminars/eng/2010/paris/pdf/090110.pdf>

⁴ Source: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/34607/12-1140-industrial-strategy-uk-sector-analysis.pdf

⁵ This maybe a conservative estimate. Brazil raises \$15bn each year, the UK \$6bn and Taiwan \$3–4bn alone.

⁶ See Sony Kapoor Evidence to the House of Lords, 30 March 2012, p.43. <http://www.publications.parliament.uk/pa/ld201012/ldselect/ldcom/287/287.pdf>

⁷ Euroclear also provides central clearing and settlement services for Belgium, Finland, France, Ireland, Netherlands and Sweden across around 900,000 different securities.

It should be remembered that the FTT is an indirect tax on companies and more directly a tax on the churning of investors.⁸ Across international experience of FTTs, primary issuance is almost always exempt. The amount of the tax paid by investors in the secondary market is related to the degree to which they churn or turnover their investments. A pension fund that buys a stock and holds it for ten years will effectively have an annual average tax rate of 0.02% (0.1% x 2 for purchase and sale, divided by 10) per year of holding. This is a small fraction of total transaction costs.

Some in the industry would like to pretend that transaction costs other than taxes are merely bid-ask spreads, in which case the FTT appears large and plugging that into economic models would indicate that the FTT would have a large impact on valuation and turnover, larger than it appears to have done in those countries with an FTT. However, transaction costs include all marginal costs relating to the decision to trade and completing the trade such as clearing and settlement costs, bid-ask spreads, the price-impact of trading, brokerage commissions, internal middle-office and trading costs etc. Clearing and settlement costs on their own can exceed the bid-ask spreads of some heavily traded stocks. These “dealing” costs are deliberately left opaque by traders and fund managers as they are often passed on to underlying investors either directly, or indirectly through lower returns.⁹ In the US which has one of the most

competitive investment industries, transaction costs were estimated to range from 1.15% to 1.44% of assets under management per annum.¹⁰ It should be noted that the impact on turnover and value of a transaction tax can be no different than the impact of any other transaction cost and so whatever damage a transaction tax of 0.02% per annum is alleged to do, it must be a fraction of the damage being done by the other 1% or more of transaction costs currently being paid. An investor who buys and sells the same share five times a year would pay a combined 1.0% in transaction taxes, still less than total transaction costs, but substantially higher than what a pension fund or other long-term investor would pay, implying that the tax lowers the cost of long-term capital versus short-term capital, helping to correct the short-termism that can blight investment in the real economy.¹¹

The bottom line is that if someone wishes to have legal title to a share of a company registered in a jurisdiction that taxes share transactions, there is no avoiding paying the tax, wherever they reside or whichever location they trade from or hold their assets. In regard to the different ways in which an FTT tax liability can arise, this is referred to as the “issuance principle”. The amount of tax they pay will be in direct proportion to the amount they churn their portfolio.

8 Churning is the frequent turning over of an investment portfolio, often associated with tax avoidance, speculation on short-term events, awarding trading commissions and more. The average pension fund, turns over their portfolio completely once every two years. Some High Frequency Traders turn over their portfolios many times a week or even a day.

9 Hidden costs are estimated to be in the region of 50–60 basis points. See, ‘On the disclosure of the costs of investment management’, David Blake, Discussion Paper PI-1407. The Pensions Institute, Cass Business School, City University, London, May 2014. <http://www.pensions-institute.org>

10 In a study of approximately 1,800 US equity mutual funds from 1995–2006, aggregate trading costs were 1.44% of assets under management, with hidden costs being around 0.55%, see Edelen, Evans and Kadlec, 2013 ‘Shedding light on “invisible” costs: trading costs and mutual fund performance’, *Financial Analysts Journal*, 69, 33–44. Similar results can be found in ‘The Arithmetic of “all-in” Investment Expenses’, John Bogle, *Financial Analysts Journal*, February 2014.

11 Financial Transactions Taxes can be considered “Pigouvian Taxes” that serve to internalise into the private price, the external social costs of an activity, see *The Economics of Welfare*, A. C. Pigou, Macmillan, 1920. See also, Paul Krugman ‘Things to Tax’, *New York Times*, 28th November 2011, available here <http://www.nytimes.com/2011/11/28/opinion/krugman-things-to-tax.html> and the literature regarding noise traders, a brief summary of which appears in Blancard and Havrylychik, 2013, ‘The impact of the French securities transactions tax on market liquidity and volatility’.

2. DERIVATIVES

Shares and non-bearer bonds have single, registries of ownership with fixed residency where the issuer is headquartered. But not all securities do. Anyone can write a contract whose value is *derived* from the price of anything else, including a share or bond, without ever having title to that share or bond. You and I can agree that if the price of BP shares rise above £5.50¹² before June 2015¹³ I will pay you £1m¹⁴ and for this agreement which imposes a contingent liability on me, you will pay me a consideration determined by our assessment of the likelihood of the pay-out, say £250,000.¹⁵ Simple options like these, known colloquially as “vanilla” options are essentially insurance contracts. The person with the contingent liability is the insurer, otherwise known as the writer or seller of the option, and the person paying the premium to the insurer is the holder of insurance or buyer of the option. Complex options are simply a series of vanilla options layered on top of each other, so for instance, I may pay you if the price of BP shares rises above £5.50 as before, but now, if we overlap another option, you will have to pay me the same amount if it rises above £6.00, so that my exposure is limited to a range of £5.50–£6.00.¹⁶

You could be an exporter of oil, based in Venezuela, and BP could be your main competitor so that you have arranged financial insurance based on the success of BP’s share price. You do not need to be resident in the UK or anywhere where BP shares are traded, or ever own any BP shares to use its share price, as publicly reported by the stock exchanges,

as the metric that determines the pay out of an insurance contract, issued anywhere. Derivative contracts can be registered in and issued from any jurisdiction. The issuance principle, then, would not be able to capture tax on derivative transactions.

One may wonder why, then, over the course of the last hundred years or more, all transactions subject to a tax on a transfer of title in the UK or any other jurisdiction with stamp duties have not shifted to the derivatives market. There are at least two reasons. First, the stock market is the market for corporate control. One reason why many own shares, especially large institutional investors, investor-activists, socially responsible investors and corporate raiders – who account for more than two thirds of investors in shares by assets – is to influence corporate decisions. They cannot do so – are not entitled to attend the AGM or demand a seat on the Board, take up their corporate social responsibility, or earn a special or ordinary dividend, benefit from a scrip or bonus issue,¹⁷ or protect themselves from dilution of interest in a rights issue¹⁸ – unless they have title to the shares. In the light of the many corporate actions that can take place, like rights issues, mergers, spin-offs, acquisitions etc, owning title to shares provides important protection against dilution of interests and returns. The majority of holders of shares need to own them and not just benefit from short-term movements in the share price.

Secondly, derivative contracts are mainly the right or obligation to purchase or sell shares at some point in the future and so unless the derivative contract expires worthless, one party

¹² This is known as the “strike price” of the option.

¹³ This is known as the option expiry date.

¹⁴ This is the notional value of this option.

¹⁵ This is known as the option premium.

¹⁶ Known as a collar, buyers of these options tend to be those with a view that prices will move in a small range and is more a bet on volatility being low than on a specific price being reached.

¹⁷ A scrip or bonus issue is where a company’s cash reserves or part are converted into shares and distributed proportionally to existing shareholders.

¹⁸ A rights issue is where a company issues new shares and gives existing shareholders a first right of refusal in taking up those shares and therefore not suffering a dilution in the proportion of the outstanding shares that they own.

to the derivative will likely end up purchasing or selling shares on which derivative contracts are written. Moreover, even when a derivative is settled with a cash payment, the current practice of market participants is to hedge shifts in this potential cash payment or receipt through transactions in the stock market. It is the most direct hedge. If the likelihood increases that a holder of a derivative will have to buy a share at a higher future price and deliver it at a fixed, lower price, (having sold a vanilla call option) they will hedge that potential loss by buying some shares today. Holding derivative contracts often spurs at least one and sometimes multiple transactions in the underlying cash market. A tax on transactions in the underlying market may reduce the frequency of hedging derivative transactions in the underlying market, but hedging will still take place as the potential costs of not doing so will more than offset the benefit of saving a 0.1% or 0.05% tax.

But the issuance principle is not the only or even the main principle of taxation in use today. Most countries levy income and capital gains tax on proceeds from shares whether or not they are registered locally or overseas, purchased using a local or overseas broker or held in a local overseas custodian. They do so on the basis of tax residency. An FTT based on both the issuance and residency principle, as proposed by the European Commission¹⁹ and implemented by the Italian government in their existing tax on equities and equity derivatives, captures transactions by residents in all derivative or collective instruments, or even “off-market”.

Where the tax is due but is not automatically deducted by the clearing agent, residents would be liable for reporting the transaction and paying the tax, which could be accomplished through annual tax returns, as is currently the case for the assessment of capital gains tax,²⁰ or paid with greater

frequency than annually if the resident is a financial business. In the UK, if the tax has not been automatically deducted at the point of clearing and settlement by the relevant agent such as CREST, as is normal practice, residents are required to report transactions within one month of them taking place and are subject to interest and penalties for any delay. This practice could be easily followed.

Given that transactions are not legally enforceable in tax jurisdiction countries if the tax has not been paid, clearing and settlement houses would be incentivised, for the sake of preserving legal certainty, to collect the transaction taxes due at the point of clearing. New requirements that require all vanilla derivatives to be centrally cleared would make this avenue the most likely route for collection, even under the residency principle. Given that it would be in their own interests, I believe it would be best to let clearing houses come themselves to the decision to collect the tax – as they have done with the UK Stamp Duty – than to require those in FTT jurisdictions to be the collection agents. Otherwise it would be argued that this would act against the current regulatory objective of incentivising clearing of all transactions or would push clearing outside FTT jurisdictions.

Will the FTT on derivatives lead to the re-location of derivatives industries from FTT-implementing countries such as France, Germany, Italy and Spain to non-taxed jurisdictions?

Financial sector lobbyists have repeatedly claimed that it is not worth governments introducing a tax on derivatives, since they would engage in complex re-routing of trades to avoid it and moreover, could re-locate their derivative business and the attendant jobs and revenues. Is this a credible threat? Similar statements have been made regarding other

¹⁹ See http://ec.europa.eu/taxation_customs/taxation/other_taxes/financial_sector/index_en.htm#prop

²⁰ It should be noted that in the assessment of capital gains tax on shares, in those jurisdictions that have capital gains taxes, information is required and already routinely disclosed on the purchase and sales prices and times.

policy measures in the past, but have not been carried out (for example, in 2008, Terry Smith, head of Tullet Prebon, famously said that he would allow any of the company's 950 London-based staff to move overseas before the new 50p tax rate came into force; the Guardian reported on 14 April 2010 that so far "none... have taken him up on the offer"). In fact, avoidance along these lines would be much harder than the financial sector makes out.

Consider the first claim – that complex re-routing of trades can avoid the tax. On paper, this approach directly contravenes the capturing principle for the tax. Eligibility for payment is determined not by where the trade takes place, but by the "tax residence of the financial institution or trader" (often abbreviated to the 'residence principle'). A number of provisions exist to stop a beneficial owner of shares avoiding income and capital gains taxes by creating non-resident subsidiaries in low or un-taxed jurisdictions including those where double taxation treaties exist. FTT jurisdictions can reduce any uncertainty in this area by issuing a Special Anti-Abuse Rule, that a resident will be liable for the FTT incurred by entities in which it controls, wherever they are resident, carrying out transactions that would incur the FTT were they to have been carried out directly by the resident, unless the entity's transactions are subject to a local FTT equal to or greater than the FTT in the country of residence.

Financial institutions could attempt to obfuscate the identity of the trading entity through the use of shell companies and the

like, but as the next section of this paper makes clear, this is becoming increasingly difficult. And the penalties being applied when financial institutions are judged to be operating outside of the law are now several orders of magnitude higher than a decade ago (see next section), making this sort of evasion a very high-risk activity.

Now consider the second claim – in particular that derivatives trading operations would be relocated to bank subsidiaries overseas that are not subject to the FTT. Again, this runs into problems – if the trade is being conducted *on behalf* of an EU11 resident, then the tax would still be payable according to the residence principle above.

What if the trade is being conducted on the bank's own account? Even here there is a problem with shifting trades outside of FTT jurisdictions: where banks are transacting on their own account, they are required to put aside capital to absorb losses against the riskiness of their exposures. Before the crisis this capital could be easily shifted between locations, but following Lehman's collapse it is now ring-fenced so that it cannot be as easily moved. Capital is expensive to hold, and banks therefore have a strong incentive to reduce the amount they have to put aside in any one jurisdiction by offsetting complimentary derivative and underlying exposures into a hedged-position. But shifting the derivatives exposure to a non-EU11 jurisdiction would reduce the potential for this offsetting. This would raise total capital requirements by many times more than the taxes saved.

	SUBJECT TO TAX?	ABILITY TO CHANGE TAX LIABILITY BY RE-ROUTING THE TRADE?
Resident in a non-tax jurisdiction carrying out derivatives trading in a tax jurisdiction	No *	Not applicable
Resident in a tax jurisdiction	Yes	No **

* Although the trading venue is in a taxed jurisdiction, the issuer of a derivative contract will likely today be in an internationally tax neutral jurisdiction, such as Luxembourg, Dublin, Jersey or Cayman. (It is far easier to change the location of the issuer of a derivative than it is to change the location of the issuer of the underlying shares which is where the company is registered – where its mind and management takes place.)

** This is because the tax liability arises as a result of the residency of the beneficial owner, not because of where the trade takes place.

Some examples:

- **Would an institution resident in France be liable for the tax were they to purchase in New York a derivative issued by a US bank?** Yes. In the same way that all French residents are liable for income and capital gains taxes on foreign shares, subject to double taxation treaties. Consequently, they would have no FTT-driven reason to trade in New York or London if they would ordinarily trade in Paris or Frankfurt.
- **Would a UK company owned by a French resident be liable for the tax were they to purchase in London a derivative issued by a London-based bank?** The French beneficial owner of the UK company would incur the tax liability. In the same way as they would be liable for income and capital gains tax on the shares, subject to double-taxation treaties. The UK subsidiary would have to report the transactions to the French tax authorities. They would have independent access to transaction reports through EMIR, MiFID and Tax Information Exchange Agreements. Consequently, there would be no FTT-driven reason to establish non-resident companies to trade in London or New York if they would ordinarily trade in Paris or Frankfurt.
- **Would a US resident be liable for the tax were they to ask a Paris-based broker to purchase a derivative issued in Cayman Islands and traded in Paris?** No. Because the owner of the instrument is a non-resident. Consequently, they would have no reason to move the location of their broker or trade from Paris.

WE RECOMMEND...

1. **The FTT will be due on derivative instruments, irrespective of the place where the transactions are executed where one of the counter-parties, or the beneficial owner of one of the counter-parties, is resident in an FTT jurisdiction.**

3. AVOIDING EVASION

Up to the last five years, the opportunities for evading transaction taxes levied on the residency principle were far greater than those levied on the issuance principle. Tax residents could set up a shell company in a non-tax jurisdiction where there is no legal or no enforced requirement to disclose the beneficial owners and purchase derivatives on shares registered in an FTT jurisdiction and transact in the underlying markets in all other shares. Consequently, local financial firms were justifiably worried that if there was a transaction tax based on the residency principle, all derivatives trading and trading in foreign shares would go abroad and a proportion of trading in local shares would be diverted to the derivatives market or foreign listings.

In the past finance was presented as something ethereal, materialising momentarily before disappearing again, impossible to pin down, report and tax. Whether that was ever strictly true or not, a couple of events have changed that for sure. Firstly, there was the “9/11” tragedy which spawned new and tougher anti-money laundering and anti-terrorist financing measures and rules. Secondly, there was the Global Financial Crisis which reinvigorated the role of the tax, licensing and regulatory authorities. There will be much scepticism on the efficacy of international tax assistance, especially after what took place before the financial crisis and what has been revealed about the low level of taxes paid by major corporations such as Apple, Amazon, Google, Starbucks and others. While we are far from a perfect world, there are five separate developments that have taken place over recent years in response to those two events that, collectively, indicate that we can rely on the residency principle for the taxation of derivative instruments in a way that we could not, just five years ago, and in a way that it will be hard to better.

The first is based on the new anti-money laundering regime, sponsored by the 36-member Financial Action Task Force and

its eight associate regional Task Forces. For our purposes a measure of the effects of this is the field work carried out by Mike Findlay, Daniel Nielson and Jason Sharman on the ease with which shell companies can be set up across almost all of the jurisdictions in the world.²¹ This work, carried out in 2010 and updated in 2012, shows that in many of international financial centres in small states, where it is often thought that compliance is problematic, it is no longer possible to establish shell companies. This is the case in Jersey, Cayman, British Virgin Islands, Monaco, Gibraltar, Luxembourg, United Arab Emirates, Seychelles, Bahamas, Isle of Man and Bermuda. In all of these jurisdictions, bearer bonds are also no longer admissible as vehicles for corporate ownership or for any financial purpose such as collateral for loans. The worst performers in this field experiment, were actually some of the very large countries most vocal about international tax evasion. There is further work to be done on eliminating shell companies, but the work of Sharman *et al* suggests that much has changed in the furthest reaches of international finance and the remaining work to be done is at home, in countries that boast that they wish to lead the fight against international tax avoidance.

Secondly, given the failure of some of the larger economies to “walk their talk” on eliminating shell companies, the call of the G20 at its April 2009 London Summit to amend and extend the OECD Convention on Multilateral Assistance in Tax Matters is important. In 2010 the Convention was significantly amended to provide for all possible forms of administrative co-operation

between states in the assessment and collection of taxes, including automatic exchanges of information and the recovery of foreign tax claims. Some 70 countries have now signed up to the Convention including all major financial centres.²²

Thirdly, in March 2010, the US Congress passed the Foreign Account Tax Compliance Act (FATCA) which requires United States persons, including individuals who live outside the US, to report their financial accounts held outside the US, and requires foreign financial institutions, under the threat of substantial sanction if they do not comply, to report to the Internal Revenue Service (IRS).²³ Some 35 countries including all European and G7 countries have already established local rules that require their local institutions to comply with FATCA. The reason why this is especially significant, is that having this principle and model established by the US, and expensively complied with abroad,²⁴ the UK and the EU have openly discussed replicating it and using the growing network of compliance agreements. If this were in place in 1963, there would have been no Eurobond market. A European FATCA is on its way with the Commission waiting to see the details of the automatic tax information exchange model that comes out of the OECD Multilateral Convention²⁵ or, if it is not satisfied with that, extending the Administrative Co-operation Directive to cover all tax administration by 2015.

Fourthly, the Global Financial Crisis has pushed us to a point where through a variety of regulatory measures including Europe’s regulation on derivatives, central counter-

²¹ See ‘Global Shell Games: testing money launderers’ and terrorist financiers’ access to shell companies’, Findlay, Nielson and Sharman, October 2012. http://www.griffith.edu.au/_data/assets/pdf_file/0008/454625/Oct2012-Global-Shell-Games-Media-Summary.10Oct12.pdf

²² <http://www.oecd.org/tax/exchange-of-tax-information/conventiononmutualadministrativeassistanceintaxmatters.htm>

²³ <http://www.irs.gov/Businesses/Corporations/Foreign-Account-Tax-Compliance-Act-FATCA>

²⁴ This is an extraordinary piece of extra-territoriality of US tax administration.

²⁵ See for example PWC (2014), ‘Soon to be released Common Reporting Standard promises new FATCA-type obligations around the world, available here: http://www.pwc.com/en_US/us/financial-services/publications/fatca-publications/assets/pwc-tax-insights-common-reporting-standard.pdf

parties and trade repositories (EMIR²⁶), financial reporting of on and off-balance sheet exposures of licensed financial institutions is mandatory and central clearing and settlement is required of all vanilla financial products, which are the most heavily traded.²⁷ It is estimated that by 2015, the notional value of Over The Counter (OTC) derivatives that are centrally cleared will be in excess of \$470trn.²⁸ Institutions that do not comply with the new regime suffer severe penalties, are eliminated from critical access to funding and payments systems and licensed activities, which today means a financial death penalty.

Relatedly, and fifthly, the authorities have become more aggressive – not before time – in fining institutions and forcing them to admit criminal wrongdoing when they do not comply with this new regime of greater reporting and closer supervision, so much so that many institutions are backing out of whole sectors where they cannot be certain of compliance and being free of penalty. Credit Suisse agreed to pay a \$2.6bn fine in 2014 and plead guilty to helping US citizens evade taxes that were due on the residency principle. The guilty plea could make the total cost far higher. A number of its counter-parties are not allowed under their internal rules to work with convicted felons. At the time of writing the US is reportedly seeking to fine BNP Paribas as much as \$10bn and disbar it from dollar clearing facilities for a period in order to settle charges that it violated trade sanctions by

disguising transactions with Iran, Sudan and Cuba. Approximately \$10bn has been wiped off the value of BNP shares on fears of the impact of the temporary removal of dollar clearing on its business. HSBC was earlier fined \$1.9bn for routinely handling money transfers from countries under sanctions and for Mexican drug traffickers.

In 1984, Sweden introduced a 0.5% Financial Transactions Tax, raised to 1.0% in 1986, entirely levied on the residency principle and collected by local brokers. Many Swedes evaded it by establishing non-resident accounts in London and trading in Swedish stocks from there. Tax revenues were lower than expected. The tax would have been more successful if it were also based on the issuance principle and not reliant solely on the residency principle. Then all purchasers of Swedish shares from any location would have to pay the tax in order to have legal title to the shares. However, this poor design also suffered from being in an age when residents could evade taxes by going off-shore and establishing non-resident entities with the active encouragement of their brokers and bankers and sometimes that of the foreign jurisdiction. London's current position as one of the world's largest offshore financial centres was a result of creating an off-shore bond market²⁹ and its favourable tax treatment of income and capital gains of those participating in the hedge fund and private equity sectors.

26 This is the Regulation of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties (CCPs) and trade repositories (TRs) (EMIR) entered into force on 16 August 2012. The implementing standards were published in the official journal dated 21 December 2012. The main obligations of EMIR are Central Clearing for certain classes (vanilla) of OTC derivatives; application of risk mitigation techniques for non-centrally cleared OTC derivatives; reporting all transactions to trade repositories; application of organisational, conduct of business and prudential requirements for Central Clearing Houses; and Application of requirements for Trade repositories, including the duty to make certain data available to the public and relevant authorities.

27 The purpose of this requirement is to limit the systemic risk caused by the failure of a single counter-party. During good times, the counter-party may appear to have a small risk, but this may be because it is engaged in a large number of back-to-back transactions. If the counter-party fails and all of these underlying transactions fail, the system could fail. However, if there is an agreement through a Clearing House on how this will be managed in the event of failure and how back to back contracts that net out are handled and the net risk insured against, the risk of systemic failure could be avoided and the confidence this brings will spur activity.

28 Source: BIS 2009; ISDA 2010 Market Surveys and Booz & Company analysis

29 The first Eurobond was issued in 1963 by Italian motorway network Autostrade. The issue was arranged by S. G. Warburg in London. By issuing US paper outside of the US, the instrument attracted US investors but was free of US withholding tax.

In today's world, this tax could not be easily evaded. The Swedish beneficial ownership of the London entities would have to be declared in order for the entities to be established, or for them to have a bank account from which to trade or for them to have an account with a counter-party with a licence to broker shares. Once the beneficial owners are established, and there is automatic exchange of tax information, a tax demand would follow with penalties for late payment. If none of this is done, the directors of the corporate service companies, banks, or brokers that have failed to comply with the law are personally liable and if convicted face up to five years imprisonment, fines in excess of \$500,000 or both. No tax is watertight. It is estimated that some 20–30% of income tax is evaded or avoided, but this does not lead us to scrap it. For the tax authorities, the objective is to make tax evasion or money laundering or any other illegal activity a high risk, low return game and as a result keep evasion and avoidance to an acceptable minimum. This has had an impact on banking practice, for example, when weighing up the new balance of risks, J. P. Morgan's Board recently decided to simply not offer any banking services to anyone who is on a list of politically exposed persons.³⁰

A strong disincentive for tax evasion and avoidance remains making all untaxed, taxable instruments, null and void, even where this is limited to within FTT jurisdictions. While a transaction can initially take place outside an FTT jurisdiction, a significant part of the value of an instrument, far in excess of the cost of the tax, is its wide marketability and transferability. If untaxed instruments could not be transferred or marketed to anyone in an FTT jurisdiction, this would severely reduce the value of the instrument, so much so that the tax would be paid. Moreover, derivative contracts are essentially zero-sum games. If I win, it is because you lose. The winner would be strongly incentivised to ensure that the loser could not cancel their loss and the winner's gain, many

times the size of the tax, by moving their tax residency, or the tax residency of the beneficial owner to an FTT jurisdiction. Because at the beginning of the life of a derivative contract both sides think they will be the winner, both are incentivised to pay the tax upfront.

To make this incentive work further we would recommend that one side of the contract can ensure that it can never become null and void by paying the tax. It is quite possible that a number of residents outside of FTT jurisdictions trading instruments not issued in an FTT jurisdiction would want to voluntarily pay the tax to simply and inexpensively, insure against this risk.

The industry will object strenuously to the legal uncertainty that the null and void rule could lead to. Uncertainty for untaxed instruments is what we are trying to achieve in order to ensure compliance. But this issue could easily be addressed by encouraging the development of a standardised amendment to the documentation of these contracts (ISDA/FIA³¹) that provide for the automatic payment of the tax if one or both parties is a resident, or the beneficial owner is a resident of an FTT jurisdiction. Amendments to ISDA contracts have already been introduced that deal with other non-universal matters, such as bond instruments with Collective Action Clauses or those following Sharia Law.

To recap, it is only residents who will be paying taxes on financial derivatives. They will pay the tax on all share transactions and all transactions in financial derivatives irrespective of where they were issued. The definition of taxable derivatives, therefore, does not need to reference securities issued in an FTT jurisdiction, merely what is a derivative. This definition can simply be any instrument whose value is prevalently derived from or is directly related to, or is based on the delivery of, instruments that would ordinarily be subject to the FTT.

³⁰ See 'JP Morgan shuts foreign diplomats' accounts', *Financial Times*, May 6, 2014.

³¹ <http://www2.isda.org>

In addition, it is important to recognise that the residency principle allows the tax authorities to capture residents' trading in derivatives even outside of an FTT jurisdiction. The residency principle will thus add to the tax take. Equally importantly, the derivative business of residents will not then be incentivised to move to a non-FTT jurisdiction and resident owners of shares will not switch to derivatives as a means of avoiding the tax.

Non-residents are not captured by the residency principle. And as derivatives are not captured by the issuance principle, non-residents trading derivatives are not captured.³² Because those who own shares value holding legal title for the reasons set out above, non-residents have not switched *en masse* to derivative instruments to avoid existing FTTs. Moreover, although non-residents trading derivatives are not captured directly, as we have explained above, ensuring that instruments where the tax is due are null and void if the tax is unpaid, means that those non-residents sensitive to the risk of a counterparty switching residency (or the liquidity risk if only trading with those who promise not to), will have an incentive to choose to pay the tax to mitigate these risks, raising its take further.

WE RECOMMEND...

2. **Explicit mention be made by FTT jurisdictions that they will use currently agreed and future mutual assistance in the administration and collection of taxes in the application of the FTT.**
3. **Derivative instruments on which the tax is due and unpaid must clearly be null and void in FTT jurisdictions.**
4. **Law firms in FTT jurisdictions should be encouraged or contracted to develop an amendment to ISDA contracts that provides for the tax being paid by any counter-party who is a resident or has a beneficial owner who is a resident of an FTT jurisdiction.**

4. TAX RATES

At what rate should taxes be levied on derivative contracts and what is the taxable base? The principal we should be mindful of is that the incentive to avoid or evade a tax is proportional to its size and so if the tax is pitched too high it could be at a point of diminishing returns. The proportionality that matters when it comes to incentives for avoidance of a transaction tax, is the tax in relation to all other transaction costs. As mentioned in the introduction, total transaction costs include considerably more than the simple bid-ask spreads that the industry likes to quote. "Revealed preference" suggests that the 0.5% and similar rates in the UK and other countries has not been a material impediment to the growth of major stock exchanges, and so the proposed rate of 0.1% for cash transactions is likely well below the rate of diminishing returns. It is not easy, however, to relate this to derivatives.

The cash consideration paid for a derivative contract is the premium. However, through the overlaying of different options it is possible to have a derivative that has a potentially large pay-out, but no upfront premium. Corporate treasurers are easily seduced by these low premium or even "zero-cost" options. There is of course no such thing as a free lunch and reducing the premium can only be achieved by adding liabilities or risks so a zero premium option is not immaterial, but potentially an indication of an instrument with a high likelihood of an expensive pay-out for one party or the other.

There are at least three ways to determine the tax rate for derivatives, which deal with this problem:

1. The tax could be levied on the fixed or maximum size of the potential pay-out – the notional value of the option. This is simple, transparent and hard to obfuscate and why it is the preferred approach of the European Commission.

³² As they are not captured there is also no reason for this business to leave an FTT jurisdiction.

2. The problem with taxing the notional value is that in order to ensure the incidence of the tax does not create distortionary and false behaviour, we want it to be aligned to the economic value of the activity. Yet the economic value of an option relates to the likelihood of it being “struck” rather than just its notional value. Imagine two financial options, one that pays out \$100m if there is a tsunami tomorrow, and the other which pays out \$100m if a tsunami hits at any time over the next ten years. Both have the same notional value of “\$100m”, but their economic value is quite different and should not incur the same tax. Doing so would disadvantage low probability options that could be socially useful like catastrophe insurance, where the potential payout is large but the probability of a pay-out is small. Consequently, the tax may be better set as a levy on both the premium paid and the end cash settlement. Further advantages of this are that it could then be levied at the same rate as for all other securities – inconsistency of tax rates being a common enemy of compliance – and it is always easier to achieve tax compliance when taxes are being paid out of an existing cash flow.
3. Pushing the idea of “revealed preference” again, suggests a third potential route. The problem of how to align notional values of derivatives to economic value has previously been encountered and addressed by clearing houses that clear derivative contracts and need to find a way of charging for clearing. Relative to the push back from the industry over the FTT there has been little resistance to mandatory clearing and the imposition of clearing house fees. It is estimated that clearing house revenues from fees charged on clearing OTC derivatives will be in the region of \$10bn.³³ Given that the impact on values and turnover of derivatives to every euro of a transaction tax

must be the same as the impact to every euro of clearing house fees, the current level of clearing house fees appear well below the level of diminishing returns. At a minimum, the authorities could start by charging a transaction tax at the exact same rate of incidence as clearing house fees (see Appendix 2.). This rate works out on average to around 0.002% of the notional amount, or 0.05% of the gross market value,³⁴ but differs on different products to ensure it is proportional to the economic value of the products. For instance, the fee rises if a product is an OTC versus a listed derivative, is a bespoke or vanilla product, is complex, has low trading volumes and is settled by physical delivery rather than cash. These are useful factors to consider and it would be helpful to the wider project of financial stability to use the tax to incentivise products that are easier to clear and as a result, pose less systemic risk. While this schedule may appear complex, under the European Market Infrastructure Regulation (EMIR) all clearing houses must publicly disclose the prices and fees associated with clearing services.

WE RECOMMEND...

5. **The tax on derivative instruments is either set as:**
 - a. **0.1% of the premium and cash settlement of a derivative contract, or**
 - b. **100% of Clearing House fees, and further,**
6. **That the rate structure be used to penalise systemically dangerous activity. For instance, the rate on instruments that are not centrally cleared should be 200% of the standard rate. Instruments that are centrally cleared but traded off-exchange should however incur the standard rate.**

³³ Estimate from Deutsche Borse Group, see http://deutsche-boerse.com/dbg/dispatch/en/kir/dbg_nav/home. See also PWC (2011), ‘Getting fit for clearing’, available here http://www.pwc.co.uk/en_UK/uk/assets/pdf/pursuing-the-otc-central-clearing-market.pdf

³⁴ Estimates from PWC and Deutsche Borse Group.

5. WHAT INSTRUMENTS AND WHICH PLAYERS

At a minimum, and as described above, the tax should extend to those instruments derived from those that are taxed. The authorities appear ready to press ahead with a tax on share transactions and therefore it makes sense to extend this to equity derivatives. The equity derivatives market is, however, small relative to interest rate, currency and credit derivative markets. We appreciate the concern that taxing transactions in cash like instruments, might potentially complicate the euro payments system where cash should be frictionless between member states, though we believe this concern is likely overstated as the European Central Bank already effortlessly operates markedly different haircuts (more different than a 0.1% tax) for different government bonds used as collateral for euro liquidity.³⁵ However, it may make sense to start with equity and credit derivatives, which are furthest from such concerns and consider short-term interest rate derivatives – those derived from Treasury bills and bonds of less than three month maturities – later.

We do not support the decision to exempt Government bonds from the standard 0.1% tax on cash transactions because there is no obvious economic argument and this will be seen as disadvantaging private relative to Government borrowers. Since corporate bonds should be taxed, government bonds should be as well. But we believe there is a case of including all credit derivatives, whether they are derived from tax-exempt Government or Corporate bonds. The credit derivative market and the unhindered churning of credit derivative paper and the explosion of gross credit exposures was a source of systemic risk

in the last financial crisis. The wider benefits of such churning are at best unproven and at worse systemically dangerous.

There has been much push back from the repo industry with regards to the FTT. The repo market is effectively a market in standardised, collateralised, loans or bonds that are lent between banks at different levels of hair cut depending on their perceived credit quality. There is a case that they are a critical part of bank funding³⁶ and therefore cash like and should be exempt. There is another case that repos are merely a version of the loans market, as evidenced by varying haircuts, and should be exempt. But there have been concerns over the systemic risks posed by repo markets. Banks, like Lehman Brothers, grew dependent upon them before the last crash. Unlike cash they are inherently pro-cyclical. During a boom as collateral values rise, hair cuts fall. But when confidence seeps out of a financial system, collateral values fall, haircuts rise and borrowers struggle to put up additional cash at the same time as liquidity everywhere else is drying up. Moderation of the dependency of the banks on pro-cyclical funding would yield important systemic benefits.

American Depository Receipts (ADRs), Global Depository Receipts (GDRs) and nominee accounts are an avenue for non-residents to avoid paying the FTT on shares originally issued in an FTT jurisdiction. Rather like a nominee account, in the case of an American Depository Receipt (ADR) a tranche of shares of say a French company, is put into a depository bank in the US and ADRs are then issued by the depository bank and listed on, say, the New York Stock Exchange in US dollars, paying US dollar dividends, representing some fraction of the shares in the depository account. If it were traded on the London Stock Exchange in sterling it would

³⁵ In this context, a hair cut means that while I may lend someone a package of assets in return for them lending me cash, the amount of cash they lend is 100% of the value of the package *less some hair cut*, to take into account the possibility that the price of the assets fall in value before I am able to repay the borrowed cash.

³⁶ In Europe, and during the crisis, they have been partly “crowded out” by the ease with which banks have been able to access long-term liquidity from the European Central Bank, but this is not a normal state of affairs.

be referred to as a Global Depositary Receipt. It would be odd for a French resident to trade in French shares using an ADR, but were he or she to do so, this would still be a financial transaction and would be taxable as all share transactions. As in the case of derivatives, if there is no prior collection agreement with the relevant clearing house, the tax would be due and collected in annual tax returns of the resident, or at a higher frequency if the resident is a financial business.

Americans trading in a French share using the New York ADRs of the French company would not end up paying the tax. This could represent a route of avoidance of the tax levied on the issuance principle for non-residents, especially for high-frequency traders, whose transactions would be captured if they were buying and selling the underlying shares in France. To limit this, shares in depository banks held for the purpose of backing ADRs, GDRs or nominee account programs could (i) face a higher transaction tax when they enter into the program, as in the case of the UK stamp duty, (ii) pay an annual fee of say 200% of the transaction tax rate, levied on the average price of the share over the year, which the manager of the ADR program would likely collect from its customers by charging them, in turn, a transaction fee. This tax could be rebated to 100% of the standard rate if the manager of the program can prove that there were no transactions over the tax year. It is not clear to me that an FTT jurisdiction could go the extra step and require a non-resident holder of a share in a depository to pay a tax commensurate with the number of transactions made by non-residents in securities backed by the share held in the depository. Were this to be possible, the share held in the depository could be used instead to back another nominee instrument.

WE RECOMMEND...

7. **Taxing transactions of:**
 - a. **equity and credit derivatives;**
 - b. **corporate bonds as well as Government bonds and interest rate derivatives with maturities of more than three months.**
8. **Considering whether to make government, credit, interest rate (across all currencies) and repo instruments with a shorter than three month maturity subject to the tax at a later date.**
9. **Owners of shares or taxable securities issued in an FTT jurisdiction that are in a depository program to back American Depositary Receipts, Global Depositary Receipts or other nominee trading would be liable for an annual tax at a rate of 200% of the standard tax rate, levied on the average price of the securities over the tax year, rebated to 100% if the owner can prove that there have been no transactions in a given tax year.**

One of the primary objectives of the FTT is to tax needless churning of portfolios. The incidence of a transaction tax will fall heaviest on high-frequency traders and lightest on long-term investors like life-insurance and pension funds. However, some institutions who purport to be long-term are also involved in excessive churning, made more possible by the opaqueness of total transaction costs and the opaqueness of the services that brokers offer to managers in return for trades. Taxing and reporting tax payments will help to disincentivise needless churning behaviour, which works to the detriment of customers and end-investors. Amongst long-term investors, only those who fear that they cannot justify the degree of turnover in their portfolio would object to a tax that would raise the returns of those who churn least relative to those who churn more. The tax will also probably serve to bring all transaction costs into the open

and this will be of benefit to pensioners and savers generally. We would not recommend exempting long-term investors like pension funds.

Market makers should be exempt, they are essentially finding the price that brings buyers and sellers together and these buyers and sellers will be paying the tax. They are part of the price discovery process not the investment process. But a rigorous definition is required to ensure that this exemption is not abused by High Frequency Traders (HFTs), many of whom act as part time brokers, or proprietary traders. There are distinct differences between HFTs and market makers. HFTs act for their own account and seek to profit from positions. However, the dividing line can sometimes be blurry. We believe it is important to explicitly identify HFTs as non-exempt and define them clearly.

WE RECOMMEND...

- 10. Not exempting pension funds or other long-term investors.**
- 11. Market makers, tightly defined, should be exempt, High Frequency Traders should be explicitly non-exempt.**
- 12. Defining market makers and HFTs rigorously to prevent abuse, perhaps along the following lines:**
 - a. a market maker acts on behalf of clients, not itself, matching client purchases and sales; market maker revenues come not from the shifting value of securities but trading commissions and the clients pay the tax due on the sale and purchase;**
 - b. HFTs are businesses characterised by a large number of trades per day, a large proportion of which are cancelled, where the prevailing activity is not freely acting on behalf of customers, but profiting from short-term changes in asset prices.**

6. FULL LIST OF RECOMMENDATIONS

We would recommend that:

1. The Financial Transactions Tax (FTT) will be due on derivative instruments, irrespective of the place where the transactions are executed where one of the counter-parties, or the beneficial owner of one of the counter-parties, is resident in an FTT jurisdiction.
2. Explicit mention be made by FTT jurisdictions that they will use currently agreed and future mutual assistance in the administration and collection of taxes in the application of the FTT.
3. Derivative instruments on which the tax is due and unpaid must clearly be null and void in FTT jurisdictions.
4. Law firms in FTT jurisdictions should be encouraged or contracted to develop an amendment to ISDA contracts that provides for the tax being paid by any counter-party who is a resident or has a beneficial owner who is a resident of an FTT jurisdiction.
5. The tax on derivative instruments is either set as:
 - a. 0.1% of the premium and cash settlement of a derivative contract, or
 - b. 100% of paid Clearing House fees.
6. The rate structure be used to penalise systemically dangerous activity. For instance, the rate on instruments that are not centrally cleared should be 200% of the standard rate. Instruments that are centrally cleared but traded off-exchange should however incur the standard rate.
7. The tax should initially cover transactions of:
 - a. equity and credit derivatives;
 - b. corporate bonds as well as Government bonds and interest rate derivatives with maturities of more than three months.
8. Consideration should be made of whether to make government, credit, interest rate (across all currencies) and repo instruments with a shorter than three month maturity subject to the tax at a later date.
9. Owners of shares or taxable securities issued in an FTT jurisdiction that are in a depository program to back American Depositary Receipts, Global Depositary Receipts or other nominee trading would be liable for an annual tax at a rate of 200% of the standard tax rate, levied on the average price of the securities over the tax year, rebated to 100% if the owner can prove that there have been no transactions in a given tax year.
10. Pension funds and other long-term investors should not be exempt.
11. Market makers, tightly defined, should be exempt, High Frequency Traders (HFTs) should be explicitly non-exempt.
12. Market makers and HFTs must be defined rigorously to prevent abuse, perhaps along the following lines:
 - a. a market maker acts on behalf of clients, not itself, matching client purchases and sales; market maker revenues come not from the shifting value of securities but trading commissions and the clients pay the tax due on the sale and purchase.
 - b. HFTs are businesses characterised by a large number of trades per day, a large proportion of which are cancelled, where the prevailing activity is not freely acting on behalf of customers, but profiting from short-term changes in asset prices.

APPENDIX 1: LIST OF EXISTING FINANCIAL TRANSACTIONS TAXES (FTTs)

The British think tank IPPR recently³⁷ published a list of FTTs levied across the globe, building on an earlier list compiled by the IMF.³⁸ Since its publication Italy has announced (and implemented) the rates for its derivatives tax, and the updated figure is included here:

COUNTRY	ASSETS TAXED AND RATES
Argentina	Equities, corporate and government bonds and futures (all 0.6%)
Australia	Equities (0.3%) and corporate bonds (0.6%)
Austria	Equities and corporate bonds (both 0.15%)
Belgium	Equities (0.17%) and corporate and government bonds (both 0.07%)
Brazil	Equity issued abroad (1.5%), bonds (1.5%), foreign exchange (0.38%) and capital inflows to equity and bond markets (2%)
Chile	Equities and corporate bonds (18% VAT applied)
China	Bonds (0.5% or 0.8%)
Finland	Equities (1.6%), real estate (4%) and shares in housing (1.6%)
France	Equities (0.2%)
Greece	Equities and corporate bonds (both 0.6%)
Hong Kong	Equities (0.3%)
Indonesia	Equities (0.1%)
India	Equities and corporate bonds (0.5%)
Ireland	Equities (1%)
Italy	Equities (0.1% on exchange, 0.2% OTC) and derivatives (0.0002% plus 0.02% for High Frequency Trading)
Malaysia	Equities (0.5%), corporate bonds (0.5%), government bonds (0.015%) and futures (0.0005%)
Morocco	Equities (0.14% plus 7% VAT), corporate bonds and government bonds (7% VAT on both)
Pakistan	Equities and corporate bonds (both 0.15%)
Peru	Equities, corporate bonds and government bonds (all 0.008% plus 18% VAT on trade costs)
Portugal	Equities (0.3%)
Russia	New equity and bond issues (both 0.2%)
Singapore	Equities (0.2%)
South Africa	Equities (0.25%)
South Korea	Equities and corporate bonds (both 0.3%); derivatives (proposed)
Switzerland	Equities, corporate and government bonds (all 0.15%)
Taiwan	Equities (0.3%), corporate bonds (0.1%) and futures (0.05%)
Turkey	Equities (0.2%) and bond issuance (0.6-0.75%)
UK	Equities (0.5%)
US	Equities (0.0013%) and securities futures (flat fee of \$0.004)

In addition, the European Commission's Impact Assessment (2013)³⁹ lists the following non-EU FTTs currently being levied:

³⁷ T. Dolphin, *New Priorities for British Economic Policy*, March, 2013, http://www.ippr.org/assets/media/images/media/files/publication/2013/03/new-priorities-economic-policy_Mar2013_10475.pdf

³⁸ T. Matheson, 'Taxing Financial Transactions: issues and evidence', IMF Working Paper, March, 2011, <http://www.imf.org/external/pubs/ft/wp/2011/wp1154.pdf>

³⁹ http://ec.europa.eu/taxation_customs/taxation/other_taxes/financial_sector/index_en.htm

COUNTRY	TYPE OF TAX
Algeria	Registration fee
Bolivia	Market costs (fees)
Chile	Stamp duty on money credit transactions
China	Business tax. Stamp duty on securities transactions
Congo	Foreign exchange control fee
Dominican Republic	Tax on banking transactions
Ecuador	Tax on foreign exchange transactions
Guinea Bissau	Commission on funds transfers out of WEAMU
Honduras	Special contributions of financial transactions
Hong Kong	Tax on "Hong Kong stock"
Iceland	Stamp duty on financial transactions
India	Securities transaction tax
Malaysia	Stamp duty on certain transactions of stock market of Bursa Malaysia
Morocco	<i>Taxe sur les profits de cession de valeurs mobilières et autres titres de capital et de créance</i>
Namibia	Stamp duty on the issue or transfer of shares. Draft transfer duty on sale of shares and members' interests
Philippines	Capital gains tax on the sale, exchange and other dispositions of capital assets. Documentary stamp tax. Percentage tax
South Korea	Securities transaction tax. Levy on index futures and index options
Switzerland	Financial transfer stamp duty (<i>droit de timbre de négociation</i>)
Taiwan	Securities transaction tax
Thailand	Specific business tax. Tax on invested equities / Stamp duty
Trinidad and Tobago	Financial service tax. Insurance premium tax
Turkey	Banking and insurance transactions tax. Stamp duty. Resource utilisation support fund

Allowing for duplication between the lists, this gives a sum total of 42 FTTs being levied across the globe.

APPENDIX 2: COST OF CLEARING LISTED DERIVATIVES

Below is an example of the clearing house fee schedule for Over-The-Counter interest rate derivatives from one of the largest clearing houses (CME Clearing Europe) as of July 2014. It shows the size of current fees and their relation to transaction maturity and notional size.

Transaction fee schedule

TRANSACTION MATURITY	BASE FEE RATES* (per million notional)						
	USD	EUR	GBP	CAD	AUD	CHF	JPY
0 - 1 Year	\$1.00	€ 1.00	£1.00	C\$1.00	A\$1.00	CHF 1.00	¥1.00
1 + - 3 Years	\$2.50	€ 2.50	£2.50	C\$2.50	A\$2.50	CHF 2.50	¥2.50
3 + - 6 Years	\$4.50	€ 4.50	£4.50	C\$4.50	A\$4.50	CHF 4.50	¥4.50
6 + - 9 Years	\$6.00	€ 6.00	£6.00	C\$6.00	A\$6.00	CHF 6.00	¥6.00
9 + - 12 Years	\$8.00	€ 8.00	£8.00	C\$8.00	A\$8.00	CHF 8.00	¥8.00
12 + - 16 Years	\$10.00	€ 10.00	£10.00	C\$10.00	A\$10.00	CHF 10.00	¥10.00
16 + - 21 Years	\$12.50	€ 12.50	£12.50	C\$12.50	A\$12.50	CHF 12.50	¥12.50
21 + - 26 Years	\$15.00	€ 15.00	£15.00	C\$15.00	A\$15.00	CHF 15.00	¥15.00
26 + - 31 Years	\$17.50	€ 17.50	£17.50	C\$17.50	A\$17.50	CHF 17.50	¥17.50
31 + - 51 Years	\$24.00	€ 24.00	£24.00	N/A	N/A	N/A	N/A

* All fees are charged in the same currency as the swap notional.

