PRACTITIONER POLICY PAPER

Report prepared for the International Regulatory Strategy Group
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A Financial Transaction Tax – Review of Impact Assessments

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Scope

Anita D. Millar, a Director of ADM Risk, Regulation & Strategy Group (ADM), was asked by the International Regulatory Strategy Group (IRSG) to review a representative sample of reports, selected by the City of London Corporation (CoLC), that examine the question of the impact of transaction taxes, with a focus on the proposed EU financial transaction tax (FTT). This public report presents conclusions and background material drawn from a larger report prepared for the IRSG, which is an advisory body to CoLC and TheCityUK.

Introduction

In September 2011 the EU Commission tabled a proposal to tax a broad base of tradable financial instruments. Transaction taxes are not new but, like the EU's proposal for a financial transaction tax (FTT), can be controversial. The Commission's proposal and accompanying impact assessment prompted a number of studies and analyses in addition to the work already undertaken by policy makers and organisations such as the IMF.

This report presents the background and conclusions material of a larger report, prepared for the IRSG, that leverages the work of selected impact assessments and analyses (IAAs) – relating to this tax question and the EU's proposal in particular – to provide a reference document that identifies common themes and issues as well as highlighting any contradictory findings. The central message of this research is that while the proposed EU FTT will not effectively address many of the key objectives of policymakers, and is unlikely to raise significant incremental tax revenues, it will give rise to behavioural changes and market distortions that will cause permanent damage to EU economies, so legislators would be unwise to support it.

Organisation

The main body of this report contains relevant background material, summary findings and conclusions that arise from the analysis of the IAAs. The IAAs reviewed and analysed are identified in Annex 1, and while these focus on the EU's FTT proposal and impact study, the report is also informed by studies that pre-date and / or look beyond the Commission's proposal.

The IAAs could have been examined in a number of ways. However, for the purposes of providing a framework for this report and with particular reference to the proposed EU FTT, they were analysed in terms of the remedies a transaction tax is typically intended to confer in comparison with the effective tax rate that may emerge, the market distortions likely to be produced, and where the economic burden of the tax will actually fall within the broader economy. This framework has been applied broadly to help ensure that any findings / themes of interest are reported.

Summary of findings / key themes

The review and analysis of the IAAs point to and / or identify significant distortions that the FTT will be likely to bring about. Before delving into this detail, key findings and themes that emerge from the review are highlighted.

First and foremost, the IAAs refute that the proposed EU FTT will effectively address key policy objectives regarding systemic risk, high frequency trading (HFT) and the perceived

under taxation of the financial services sector via the VAT exemption for the financial services sector. The IAAs suggest that:

- Transaction taxes do not address systemic risk and advise that systemic risk is better addressed by regulation already in train or under discussion.
- The proposed EU FTT is an imprecise and ineffective tool for addressing HFT as it does not consistently differentiate HFT from other forms of trading and is based on a number of unsubstantiated economic and social assertions concerning the value of HFT.
- Contrary to suggestions made by the Commission, the VAT exemption for the financial sector is not a tax advantage for the financial services industry – the removal of VAT exemptions aimed at ensuring consumers pay no tax on, for example mortgage borrowing, would in fact favour financial services firms (as they could claim VAT credits against VAT paid on inputs).

The IAAs also demonstrate that the proposed FTT will give rise to many potential distortions and unknown consequences. The headline tax rate – 0.01% on derivative agreements and 0.1% on non derivative transactions – will be very different from the effective tax rate paid. Under the EU proposal, aside from central counterparties, all financial intermediaries (e.g. brokers) to a transaction (and other transactions triggered by it) will be subject to the tax. This cascade effect is but one way that the effective tax rate will be driven upward by multiple layers of taxation levied on related transactions. Increases in the effective tax rate will incentivise those market players that can respond, to take steps to reduce the effective rate paid by, for example, reducing the number of intermediaries in a transaction chain, substituting transactions with economically similar products, and relocating transactions and some institutions shifting their domicile outside of the EU.

The IAAs underline that the Commission's impact assessment cannot be relied upon. Not only is this assessment based on a closed economy model, but it does not properly reflect the effective tax rate arising from multiple layers of taxation or account for some of the second or third order effects that the IAAs help to highlight, including the adverse impact it is envisaged to have on:

- Liquidity, particularly as the economic viability of the repo market may be threatened.
- Risk management practices, as higher transaction costs will incentivise strategies (e.g. trim back hedging) to reduce the effective tax burden.
- Corporate governance, as the relationship between investors and corporates potentially becomes more distant.
- Savings, particularly as higher transaction costs will translate into lower returns for pension (and other) funds.

Conclusions

For the purposes of providing a framework for the analysis, the IAAs were analysed for the remedies that a transaction tax, in particular the proposed EU FTT, aims to confer as compared with the factors that will determine the effective tax rate(s), the market distortions likely to be produced, and where the economic burden of the tax will actually fall.

The first set of presented conclusions consider whether the proposed EU FTT successfully addresses key policy concerns relating to systemic risk, HFT and the perceived under-taxation of the financial sector vis-à-vis the VAT exemption.

Systemic instability

- Increasing transaction cost (via an FTT) does not address the core sources of systemic instability.
    - IMF and CPB state that there is no evidence that an FTT reduces the leverage associated with systemic risk, and in support of this conclusion both point to the real estate sector where bubbles and crashes are common but where transaction costs are high. Both acknowledge that while there is empirical evidence that an FTT might reduce the amplitude of an asset bubble, this would apply in both directions – i.e. a transaction tax might slow the upswing of the asset cycle; however, it could slow a correction in prices. Nevertheless, it should also be noted that Griffith-Jones and Persaud take the view that there is merit in reducing the amplitude of the cycle (and suggest that in terms of reducing the probability of a crisis, the net effect of the proposed EU FTT on GDP is positive (in the region of +0.25% of GDP)) and the WFO is of the view that the empirical evidence supports an FTT.
- It is unclear and relatively unexplored as to how the proposed EU FTT aligns to the regulatory effort to promote clearing through CCPs.
    - AIMA suggests that the EU proposal favours the over-the-counter market for derivatives rather than promoting the buying and selling of stocks and bonds on exchanges.
    - Both AIMA and CPB present examples that highlight the impact of not extending the FTT exemption applying CCPs to other intermediaries in the chain of transactions necessary to complete investors' purchases or sales of exchange listed financial products.[1]
- It is unclear how the proposed EU FTT aligns to the Basel III NSFR – a structural funding ratio – which is aimed at ensuring that banks' long term assets are funded with a minimum amount of stable long term funding.
    - The CPB implicitly suggests that the NSFR is a targeted tax on maturity mismatches.

[1] Clifford Chance has also examined the cascade effects of the FTT and in one of its publications – http://www.cliffordchance.com/publicationviews/publications/2011/10/financial_transactiontaxupdate.html – and clearly demonstrates that the effective FTT rate on a purchase of a security on the London Stock Exchange by a pension fund would be 1.0% if the vendor is a financial institution and the typical chain is considered (i.e. vendor to broker to clearing member to (exempt) CCP to clearing member to broker and to purchaser).

High frequency trading (HFT)

- As a policy tool for addressing high frequency trading (HFT), FTT is imprecise, ineffective and based on a number of unsubstantiated economic and social postulations.
  - Across the IAAs, HFT is not well defined or consistently differentiated from other forms of short-term trading.
  - There is general agreement (across the IAAs) that FTT will target and negatively impact a number of financial transactions that are arguably beneficial but may trade in a way that is similar to HFT. Consider, for example, algorithm trading in the aid of 'best execution' (as is undertaken for institutional investors) or the role of the repo market in locating securities and providing liquidity. In the context of funds, damage would also be done to a range of funds following higher velocity strategies.
  - Moreover, it is questionable whether speculation that is, rightly or wrongly, associated with HFT will be effectively addressed by the FTT. In fact, ISDA argues that the drop in liquidity (associated with the increase in transaction costs that a transaction tax will bring) will, in fact, create room for speculation.
  - An FTT motivated by HFT prevention presumes that HFT has no economic or social value when, in fact, there is no real consensus on the interaction between the FTT, drops in liquidity and consequential changes in volatility and price discovery, or the economic and social returns these interactions yield.
  - Finally, according to the CPB, it is unclear that HFT contributes to systemic risk or leverage.[2]
- Both ISDA and WFO look at the response of speculators and/or HFT to the FTT. While WFO observes that this activity might be sticky owing to the need of HFT to be physically close to exchanges, ISDA is concerned that the entities engaged in this trading are based outside the EU and will take pools of liquidity with them as they relocate.

Taxing the financial services sector and the VAT exemption

- Contrary to suggestions made by the Commission, the VAT exemption is not a tax advantage for the financial services industry.
  - Evidence to the House of Lords challenges the misconception that in some way the financial services sector is under-taxed and suggests that the FTT needs to be considered in the context of current member state tax regimes.
  - Across the IAAs, a value added tax is identified as a business-to-consumer tax and not a business-to-business tax, with exemptions, like those available in the EU, typically aimed at ensuring consumers pay no tax on, for example, mortgage borrowing or insurance premiums. Consequently, the removal of such exemptions would, in fact, favour financial services firms as they could then claim VAT credits against VAT paid on inputs.

[2] CPB's assertion is supported by other studies on HFT – such as Finansinspektionen's (FI) February 2012 report and the BIS publication of the Market Group Study Committee (Mktc05) – but these are out of scope for the purposes of this review

- Removal of current EU VAT exemptions may not lead to increased revenues.
    - As summarised by Blackrock, the effect of the removal of the exemptions will be a function of the proportion of business-to-business versus business-to-customer transactions carried on by affected financial services firms.
    - As highlighted by AIMA, in the funds and asset management sector in the UK and Netherlands, the definition of funds falling within the scope of the exemption is narrow; so many asset management services are already subject to VAT.

In summary, the proposed EU FTT does not effectively or efficiently address key policy objectives. However, its full evaluation must also consider the effective tax rate it implies – rather than the headline rate – to identify many of the implications of the tax and the distortions it may produce.

Effective FTT rate: multiple layers of taxation

Layers of multiple taxation that arise with transaction taxes work to drive up the effective tax rate and rates of return required on affected products and businesses.[3] In turn, this effect could impact the viability of some EU markets (e.g. repo, money market), the cost of risk management and the returns on actively managed funds. The Commission's proposal, even with its exemption for CCPs, does not address this problem, so the IAAs highlight a number of second and third-order micro-economic/market impacts.

- The Riksgalden (2011) examined the multiplicative effects of FTT in the context of the Swedish fixed income market.
    - Primary dealers when sitting between two investors will pay 0.2% on the total transaction – 0.1% on the purchase and 0.1% on the sale – and the Riksgalden estimates that for a one month SEK Treasury bill this corresponds to 115 basis points eating up much of the dealers' return on the transaction.
    - In repo markets where the maturity is shorter, a tax of 0.1 % on a repo with a one week maturity corresponds to 500 basis points in interest terms (i.e. 5 percentage points), making the economics of repo markets untenable (where the margins on the trades are much lower – say 0.25 %), (and this calculation does not yet factor in the tax being applied to both the sale and repurchase of the securities lent out).[4]
- Together Riksgalden and Oxera point to the consequences of an uneconomic repo market.
    - Banks would be forced to hold more cash and fewer government securities and other liquid assets to meet their liquidity needs. This would be costly for the banks with knock-on effects, as they could no longer use government securities to boost their return to the same extent.
    - Demand for government securities would drop, driving down prices and increasing the rate of return required. In Sweden, a thin repo market would

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[3] A number of submissions to House of Lord Committee looking at the FTT included detailed explanations of the multiple or cascade effects of the FTT - http://www.parliament.uk/documents/lords-committees/eu-sub-com-a/FinancialTransactionTax/WOSevidenceFTT.pdf. For a visual image of this effect see page 8 of the submission (AIMA). In very simple terms, while the tax may be low, a transaction to buy a security off an exchange may require a number of intermediate transactions which increases the cumulative tax rate paid on the purchase or sale of a security.

[4] These figures are based on the author's and CoLC's reading of the text, but clear and accessible case studies of the impact of the proposed EU FTT are needed

make government securities more difficult to locate and obtain than is currently the case.

    - Runs counter to regulatory efforts aimed at having banks hold a buffer of liquidity assets that they could repo out (i.e. sell and buy back at a later date) at a time of stress.[5]

- Efama draws attention to the multiplicative effects of the proposed EU FTT on actively managed fund portfolios.
    - For short-term portfolios, such as money market funds, the cumulative impact of FTT on fund entry / exit and portfolio transactions could wipe out returns and introduce competitive distortions whereby money market funds are disadvantaged as compared to bank deposits and insurance contracts.
    - For longer-term portfolios there would be a reduction in returns which would have competitive impacts and be detrimental for investors.
    - Both ISDA and Oxera identify that the risk management associated with hedging – which necessarily introduces a chain of transactions and therefore multiple taxation – will become more expensive for financial institutions and corporates, which, in turn, will invite changes to hedging practices and less prudent management of positions.

Effective FTT rate: avoidance

Multiple taxation will prompt strategies to reduce the effective FTT rate or circumvent the tax altogether. Moreover, each tax avoidance strategy will introduce second- and third-order impacts. Consideration of these impacts is particularly important given that the Commission's own impact assessment is based on a closed economy model and its policy relies on the presumption that the residence principle – which seeks to capture any transaction where at least one party is in the EU – will not be easily circumvented.

- Sweden's experience with its now abolished tax on equity securities and stock options using local Swedish brokers, was cited by a number of the IAAs (and in particular the CPB) as example of how capital flight can undermine such a tax – in 1990, six years after its enactment, more than 50% of all Swedish trading had moved to London.
- Examples of tax avoidance strategies (and their implications) that the EU proposal will likely give rise to are highlighted by a number of the IAAs and include the following:
    - The reduction of the number of intermediaries in a transaction chain will undermine trade transparency and regulatory oversight.
    - The reduction in the number of times a fund is re-balanced or hedged will work to undermine and discourage sound investment practices, which will expose pensioners and savers to increased investment risk.
    - The reduction in the appetite for currency transactions will lead to falls in fund diversification across geographic regions.
    - The substitution of economically similar products to avoid, for example, a situation where a hedge to a fixed rate loan by a bank to a borrower attracts the FTT while the loan does not, introduces competitive distortions.

[5] The liquidity buffer is the numerator in the Basel III liquidity coverage ratio (LCR)

    - Relocation of financial transactions to more tax-friendly jurisdictions will negatively affect GDP and reduce expected tax revenues.

- The IAAs also highlight that the residence principle gives rise to a number of distortions and identifies what some of these might be.
    - AIMA focuses on how EU financial services firms would be competitively disadvantaged on at least two fronts: non-EU firms trading with non-EU counterparties would pay no tax on the trading on EU securities or derivatives, whereas EU firms (even if trading with a non-EU counterparty) would pay tax on EU and international securities and derivatives; and /or market participants not located in the EU would seek out non-EU financial counterparties over EU financial counterparties.
    - ACT focuses on the effect of corporate treasuries diverting group funding (and perhaps equity) or group hedging to non-EU locations on European financial markets and the potential inefficiencies this might introduce.
    - Blackrock considers the new markets that may arise outside the EU that would allow non-EU persons to access European markets without incurring the FTT.
    - Oliver Wyman, with a focus on the response of the FX markets, identifies that:
        - FTT could reduce notional turnover in FX cash (forwards and swaps) and derivatives in Europe by 70–75% across all counterparties owing to relocation.
        - Pension funds, asset managers, insurance companies and corporates will be least able to relocate and avoid the FTT.
        - The impact on speculative currency trading will be limited, owing to the exemption for FX spot transactions.

Other sources of distortion

The residence principle is just one element of the Commission's proposal that may invite a series of unanticipated distortions in the market place.

- The potential distortions that may arise from the manner in which products are differentiated are unclear – both in terms of products in scope versus comparative products that are out of scope, and the apparent bias in favour of derivatives.
    - Efama is concerned that, for example, the FTT applies to open-ended real estate funds but not to direct investment in real estate and real estate partnerships. Equally, it is concerned that the FTT will apply to purchase of funds, but not deposits in savings account.
    - AIMA warns that the bias in favour of derivatives (away from equities and bonds) will incentivise investment in more complex alternative instruments and will prompt a number of knock-off effects (including a fall in investment in the real economy and discouragement of good corporate governance). On the other hand, Oxera notes that the overall tax for corporate treasuries could be significant given the variety of contracts used and the frequency of renewal.
- The impact of not extending the primary market exemption to related secondary market activities will give rise to distortions that the primary market exemption was aimed at guarding against.
    - ACT notes that the primary market exemption only gives corporates marginal relief as their cost of capital is affected by rates demanded on their securities

through secondary trading. Furthermore companies issue bonds where and in the form they can, using derivatives (to which the FTT applies) to switch to the currency and type of interest rate required for their business needs.

  - Similarly, Oxera and Riksgalden both underline the importance of the secondary market for government debt (and indeed all issues) and the manner in which the FTT will drive up the borrowing costs of member states.

Incidence and macro-economic impacts

All the IAAs consider, to varying degrees, the question of who bears the economic burden of an FTT and the implications for the wider economy. With most comments made in direct reference to the EU proposal, a number of the IAAs take a detailed look at the sectors most likely to be affected while others consider longer term impacts on the wider economy. One IAA also took a second look at the Commission's GDP and revenue estimates. The conclusions that can be drawn are as follows:

- Across the IAAs, it is agreed that when the FTT is first applied, the immediate burden would fall on the holders of financial securities as securities values fall, with the IMF providing reference to a number of empirical studies (including one that shows that the 1983 imposition of a tax on equity trades in Sweden resulted in a market decline of 5.3% on the Stockholm Stock Exchange in the 30 days leading up to the tax).

- The longer-term macro-economic discussion is more complex and invites more discussion in terms of the chain of events and responsiveness of capital to price changes (i.e. is it perfectly elastic or sticky?) and the consequences for investment, wages, costs and GDP – all of which point to the difficulties of coming up with robust GDP and revenue estimates.

  - Nevertheless, IMF, IEA, OW CBP, and Griffith-Jones and Persaud all agree that a <u>closed economy model, like that undertaken by the Commission, overlooks the role world markets would play in determining the net return on capital</u>, and the manner in which the tax depresses net returns and prompts a capital outflow – <u>with the implication that the Commission under-estimates the GDP impact and over-estimates Revenue collected</u>.

  - Griffith-Jones and Persaud look at policy options to reduce this outflow so that, effectively, the EU is a closed economy where wages drop in the financial sector (releasing skills to the rest of the economy) and/or investments substitute away from traded sources of investment for banks loans and private equity. The social implications of this policy suggestion, in terms of the distribution of the ownership of capital, are not discussed.

  - The other IAAs, looking at the EU proposal specifically, adopt the 'cost of capital' model and focus on the degree to which capital is mobile (i.e. elastic) and can relocate putting a downward pressure on wages and investment with capital sharing the burden where it is sticky (i.e. cannot relocate) but passing on the costs in the form of lower wages, higher prices to consumers and lower returns to pension funds/savers (in the funds context.

- Higher transaction costs do translate into lower trading volumes.
  - The IMF provides a country breakdown of estimated elasticities of trading volumes with respect to transaction costs, as published by various studies for various markets, which prove that an increase in transaction costs will decrease trading volumes.

- The IMF and Oliver Wyman also reference the Swedish experience where the imposition of a tax on equity trades resulted in a 60% decline in trading volumes of the 11 most actively traded stocks on the Stockholm Exchange with this share class moving to London.

- The IAAs looking at the extent to which transaction costs are passed on to consumers/pensioners (or end-users), agree it will be a significant proportion.
    - Oliver Wyman makes reference to prior studies that show that as much as 90% of the additional burden on financial institutions is generally passed on to end users.
    - IEA notes that while the issue is still being argued – with estimates of 30% to 70% of corporation tax really being paid by workers (with the remainder paid by shareholders) – it also references a study noting the theoretical possibility that the incidence on workers can be over 100%.
    - AIMA makes reference to the Commission's own impact assessment which states that "banks are able to shift 90% of their corporate income tax burden [onto their customers], depending also on the competition they face."[6]

- Examinations of the costs to pensioners indicate that their economic burden will be significant.
    - Blackrock analysed the impact of the proposed EU FTT on actual transactions made during 2010 on a selection of mainstream funds. Despite not taking into account cascade effects, FX transactions or redemptions and subscriptions, the study showed that in the short run, for a fixed income active portfolio the return would halve. Over a 20 year horizon, the FTT costs on a £10,000 investment varied by portfolio and was reported as follows:
        - Fixed income active portfolio – £1,000 of original investment.
        - A global equity fund – £2,300 in expected returns.
        - An active European fund – £15,000 (a loss of 50% more than the original investment).
    - Oxera looked at the impact of the tax on a typical pension fund and illustrative retail investment with a capital guarantee – the former's return falling by between 2.7% to 5.5% (depending on whether cascade effects are included or excluded) and the latter's expected return of 5% falling by 0.8% to 4.2%.

- While it is suggested that the proposed EU FTT is progressive (affecting the wealthy who hold a greater share of securities) it may not be as a progressive a tax as is suggested given the scope of the tax.
    - As highlighted by Blackrock, the FTT will apply to a spectrum of investment vehicles (UK ISAs, Nest funds and UCITs, to separate accounts) thereby adversely affecting a wide spectrum of savers (from office workers to nurses to firemen to high worth investors and executives) – so not just the high income individuals holding shares that, in accordance with economic theory (and well outlined by the IMF and other IAAs) will drop in value when the FTT is implemented.

[6] Commission Staff working paper, Impact Assessment, Sec (2011) 1102 Final, Vol 10 page 37

- The relative burden borne by SMEs and, in particular growing firms in need of funding, has not been examined although it is clear that they will be affected despite the EU Commission's effort to ring-fence the 'real economy'.
    - While the IAAs do not directly discuss this issue, ACT's written comments to the UK House of Lords and reports by Oliver Wyman and Oxera point to it.
        - ACT highlighted that the primary exemption offered corporates little insulation from the FTT.
        - Oliver Wyman estimated that only 30% to 35% of EU corporate transactions could avoid the FTT by moving to non-EU jurisdictions.
        - Oxera questioned the Commission's estimate that 15% of financial transactions in the EU do not involve financial institutions.
- The Commission's headlined revenue estimate does not align with the headlined GDP estimates associated with a 0.1% tax on securities transactions
    - Oxera highlights the Commission's own calculation of the effect of assuming a 0.2% tax rate (presumably to capture the effect of two financial counterparties being party to the transaction) versus 0.1% rate under a series of pessimistic and optimistic assumptions. Under a series of less optimistic assumptions, the initial GDP impact of 1.76% nearly doubles to 3.43% when a tax rate of 0.2% per trade is used rather than 0.1%. When more optimistic assumptions apply, and an FTT of 0.1% is used, the Commission's GDP estimate falls by 1.76% of GDP to only 0.53% of GDP. However, if as Oxera suggests is correct, an effective rate of 0.2% is used and optimistic assumptions apply, the reduction in GDP only falls from 3.43% of GDP to 2.42% of GDP. Oxera also suggests that the Commission's revenue estimate of €57 billion (increased from €37 billion) aligns with an effective FTT rate of 0.2% rather than 0.1%.

Background

Historical context

A financial transactions tax (FTT) is not a new idea. In 1936 John Maynard Keynes first proposed a securities transaction tax (STT) on equity trades, to discourage speculation, and then in 1972 James Tobin proposed a currency transactions tax (CTT), to reduce exchange-rate volatility. And in fact, transaction taxes exist in various forms in a variety of jurisdictions including the UK, where there is a stamp duty on equities. However, with the financial crisis of the late 2000s and its continued reverberations policy makers have shown a renewed interest in examining the FTT not least as a means of ensuring that the financial services sector contributes to covering governments' costs of repairing the banking sector. While the FTT has been rejected as a policy option, in a number of countries, it has gained ground in Europe with the Commission's September 2011 proposal.

EU Commission proposal and key points in the accompanying impact analysis

The Commission's proposal for an FTT is grounded in the wider FTT debate and is principally aimed at ensuring that the financial sector contributes to covering the costs of the crisis *and* is taxed in a fair way vis-à-vis other sectors. Also key to the proposal is the view that a harmonised framework will strengthen the EU single market and help to:

- Prevent distortions associated with EU member states taking unilateral action
- Dis-incentivise excessively risky activities by financial institutions
- Complement regulatory measures aimed at avoiding future crises
- Generate additional revenue for general budgets or specific policy purposes

These motivations drive the design of the proposal and therefore the proposed FTT will apply to a broad range of financial institutions, financial instruments (including structured products) and transactions (on organised markets and traded over-the-counter). While there are some notable exemptions applying to entities and transactions,[7] the proposed FTT rates that are to be applied to each taxable party to a transaction, are:

i. 0.01% on the notional amount for derivative agreements
ii. 0.1% on taxable amounts determined for other (i.e. non derivative) transactions

Furthermore, to address the issue of tax avoidance, particularly in a world where financial transactions are highly mobile, the FTT is to be applied on the 'residence principle' whereby one of the parties to the transaction needs to be established in a member state.

Estimating the expected revenue and GDP impacts of such a tax is a complex process and necessarily involves a number of assumptions concerning the extent to which capital will take steps to avoid the tax, trading volumes and transaction costs, and the responsiveness of transaction volumes to changes in tax rates – which is referred to as an elasticity.[8] The Commission's impact assessment, which accompanied its proposal, considered a number of scenarios based on various combinations of tax rates, elasticities and falls in derivatives trading to produce a series of corresponding revenue and GDP impact estimates.[9] An

[7] The exemptions apply to households and SMEs (Recital 5, 2011/0261 CNS); spot currency transactions (explanatory memorandum S 3.3.1 COM (2011) 594); most primary markets transactions for raising capital through issuing shares and bonds; and transactions with member state central banks and the European Central Bank (and other named European organisations); and entities such as the European Financial Stability Facility, central counterparties and central securities depositories (Article 1 2011/0261 CNS).

[8] The analytic formula used to assess revenue is *Revenue = Tax * Volume *Evasion (1 + Tax/Transaction Cost)*^{Elasticity}

[9] Commission Staff working paper, Impact Assessment, Sec (2011) 1102 Final, Vol. 12 summary tables pages 25–29

examination of results highlighted by the Commission – where respective elasticity and declines in derivative trading volumes are set at (a) -2 and 90% and (b) 0 and 70% – illustrates the sensitivity of the model to its parameters. In sum:

- FTT rate of 0.01% applied across all product classes would generate revenues between (a) EUR 16.4 and (b) EUR 43.4 and fall in GDP between (a) 0.13% and (b) 0.35%
- FTT rate of 0.1% applied across all product classes would generate revenues between (a) EUR 73.3 and (b) EUR 433.9 and fall in GDP between (a) 0.60% and (b) 3.54%

While this approach produced a set of indicative impacts, the Commission also looked to a more complex Dynamic Stochastic General Equilibrium model (DSGE) to capture potential macroeconomic effects of the tax. In turn, the results of the DSGE model varied if a series of mitigants, deemed to dampen the negative GDP impacts, were switched on or off. The Commission used a closed-economy model, so the relocation of affected financial services transactions to alternative jurisdictions was not allowed for, so this mitigant was effectively always switched on. The mitigants that could be varied included the exclusion of primary markets, transactions involving exempted institutions, the effects of the decline of high frequency trading, and company funding in the form of bank loans and retained earnings. In sum:

Without the application of mitigating effects

- FTT rate of 0.01% on securities estimates a reduction in GDP by 0.17%
- FTT rate of 0.1% on securities estimates a reduction in GDP by 1.76% [10]

With all the mitigants in play and a FTT of 0.1% on securities, the GDP impact is reduced from 1.76% to 0.53%.[11]

While these estimates exclude derivative transactions, the impact assessment includes a revenue estimate including derivatives of €37 billion.[12]

The Commission's impact analysis is extensive but serves to underline the sensitivity of the revenue and GDP estimates to the model used, parameter estimates and whether potential mitigants are switched on or off. Also, as suggested in the IAAs reviewed for the purposes of this report, the Commission's impact analysis under-reports a number of second order effects. A number of these effects are highlighted in the conclusions section of this report .

Alternatives

Transaction taxes can take several forms. The proposed EU FTT is a combination of a securities transaction tax (STT) – a tax on trades of specified securities (equity, debt, and their derivatives) – and a currency transaction tax (CTT) – a tax on foreign exchange transactions and possibly their derivatives (although the EU proposal excludes spot transactions). The Commission, in its impact assessment, looked at other options, including a securities transaction tax on equities only. However, financial services taxes can also take

[10] Commission Staff working paper, Impact Assessment, Sec (2011) 1102 Final , Vol. 16, Appendix, page 43–44
[11] Commission Staff working paper, Impact Assessment, Sec (2011) 1102 Final , Vol. 1, Box on pages 51–52.
[12] Commission Staff working paper, Impact Assessment, Sec (2011) 1102 Final , Vol. 1, Box on pages 44- 45. In the FAQ document accompanying the proposal the Commission suggests that revenue will be up to 57 billion euros – it is widely understand that this factors in taxing the buyer and seller when they are both financial institutions.

the form of a capital levy (a tax on increases in all forms or select types of business capital or form of business), a registration tax (a tax on individuals on banks loans/registrations) and a bank transaction tax (on deposits and/or withdrawals from bank accounts).

The surcharge on systemically significant banks (SIBs), as envisaged by the Financial Stability Board (FSB) and Basel Committee, is a capital levy, so would act as yet another potential tax on the EU's financial services sector. While the EU Commission did not examine the SIB surcharge in its proposal for the FTT, one alternative it did actively consider was a financial activities tax (FAT) – a tax on the rents (i.e. profits and remuneration) arising from financial services activities over and above income and capital gains tax or social security contributions. It would appear that the FAT was ruled out on the basis that it had less revenue potential.

Another alternative to the FTT are bank resolution fund levies, which are expected to feature in the Commission's upcoming proposal for a crisis management regime or Financial Stability Contributions (FSC) suggested by the IMF. [13] Like the FTT, the motive would be to ensure that the financial services sectors pays when a crisis occurs, rather than the taxpayer and that the amount paid by each institution reflects their contribution to systemic risk. Such funds are used to finance the costs of resolving failed banks.

This is not an exhaustive list of alternatives and any policy would need to be designed to respond to the desired objectives, recognising the jurisdiction of each member state to adopt an appropriate fiscal response.

[13] IMF's Final report to the G20 in June 2010 "*A Fair and Substantial Contribution by the Financial Sector*"- http://www.imf.org/external/np/g20/pdf/062710b.pdf

Annex 1: IAAs in Scope

The IAAs listed below are in scope of the review and were suggested by City of London Corporation.

IAA	**Table 1: IAAs reviewed**
1	European Commission FTT proposal and Impact Assessment (Sept 2011) [i]
2	Efama comments on EU Commission's FTT proposal (Nov 2011)[ii]
3	IMF Working Paper – FTT Issues and Evidence (Mar 2011) [iii]
4	House of Lords, EU Economic and Financial Affairs and International Trade sub-committee, oral and written evidence on FTT (Nov 2011)[iv], with a focus on evidence provided by: • BlackRock • AIMA • ACT • IEA • ISDA • Wellcome Trust And supplemental AIMA note on FTT (January 2012)[v]
5	Oliver Wyman evaluation of the EU FTT proposal on European FX Markets (Jan 2012)[vi]
6	Oxera review of the EU Commission's economic impact assessment (Dec 2011)[vii]
7	Netherlands Bureau for Economic Policy Analysis – CPB discussion Paper 202 (Jan 2012)[viii]
8	Riksgalden / Swedish National Debt Office response to the EU Commission FTT proposal (Dec 2011)[ix]
9	Stephany Griffith-Jones and Avinash Persaud assessment of the EU Commission FTT proposal, practical criticisms and design suggestions (as tabled at Feb 2011 EU Parliament public hearing)[x]
10	WFO – Austrian Institute of Economic Research study on the implementation of a general FTT (June 2011)[xi]

[i] http://ec.europa.eu/taxation_customs/taxation/other_taxes/financial_sector/index_en.htm
[ii] http://www.efama.org/index.php?option=com_docman&task=doc_download&Itemid=&gid=1607
[iii] http://www.imf.org/external/pubs/ft/wp/2011/wp1154.pdf
[iv] http://www.parliament.uk/documents/lords-committees/eu-sub-com-a/FinancialTransactionTax/WOSevidenceFTT.pdf
[v] http://www.aima.org/download.cfm/docid/0C29CD99-353F-403B-B9D4DB267A42838F
[vi] http://www.oliverwyman.com/media/Oliver_Wyman_Impact_of_the_Financial_Transaction_Tax_on_FX_markets_FINAL.PDF
[vii] http://www.oxera.com/cmsDocuments/The%20economic%20impact%20of%20the%20proposed%20FTT.pdf
[viii] http://www.cpb.nl/en/publication/financial-transaction-tax-review-and-assessment
[ix] https://www.riksgalden.se/PageFiles/11583/European%20Commission%20proposal%20for%20a%20directive%20on%20a%20common%20system%20of%20taxation%20on%20financial%20transactions.pdf
[x] http://policydialogue.org/files/publications/FINANCIAL_TRANSACTION_TAXES_Griffith_Jones_and_Persaud_February_2012_REVISED.pdf
[xi] http://www.wifo.ac.at/wwa/jsp/index.jsp?fid=23923&id=41992&typeid=8&display_mode=2

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