Intelligence Capital

CLOSING THE STAMP DUTY LOOPHOLE

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INTRODUCTION

The purpose of this paper is to estimate how much revenue would be feasibly generated by closing loopholes in the UK's stamp duty on share transactions. We focus predominantly on preventing abuse of intermediary relief (sometimes known as the market-makers' exemption), and in this regard, we estimate that preventing such behaviour would raise approximately £1.2bn to £1.9bn in additional tax revenues, leading to an increase in total revenues from £3.1bn to £4.3bn to £5.0bn. Further revenue could also be raised by closing the other loopholes we describe.

Section 1 provides background to the stamp duty; section 2 outlines how many equity transactions are currently subject to the tax and describes the intermediary loophole; section 3 describes how the intermediary loophole might be closed; section 4 briefly describes other loopholes; section 5 provides our revenue estimates regarding the intermediary loophole; and section 6 concludes.

1. UK STAMP DUTY: THE BASICS BY NUMBERS

In 2013–14, HMRC raised £3.1bn through stamp duties on stocks, shares and other liable securities. This comprised £2.8bn from

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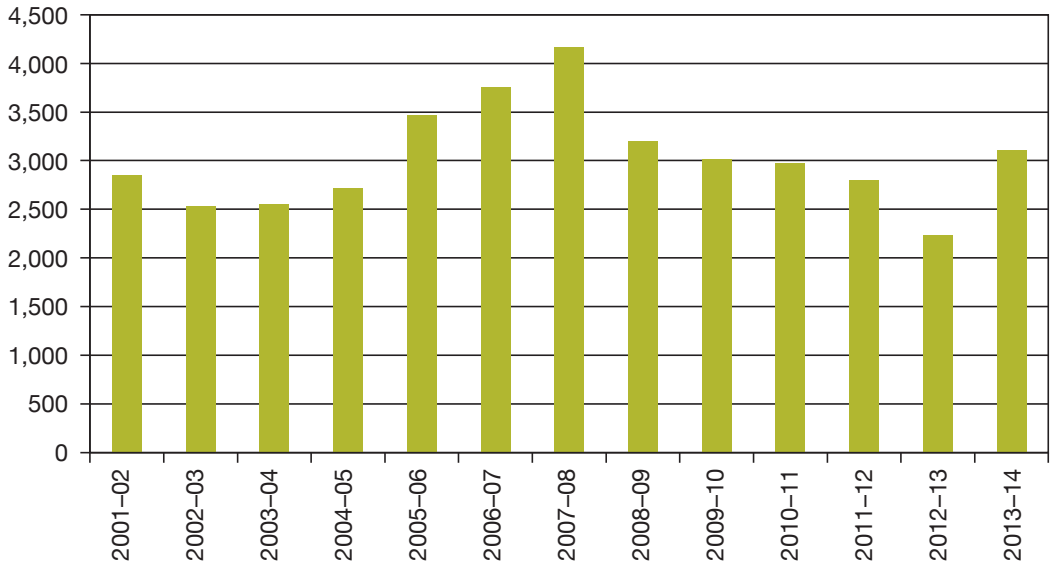
1 This report has benefited greatly from the review and criticism of a number of people, most notably, Tony Dolphin of IPPR, Richard Gower of Foresight Economics, and David Hillman of Stamp Out Poverty.

Chart: Stamp duties on stocks, shares and other liable securities (£m)



Stamp Duty Reserve Tax (SDRT) and £300m from 'other stamp taxes on shares'. Stamp duty revenues fell with the decline in share trading volumes around the world in 2008–13, and rose in line with turnover in 2013–14, when the tax take represented a 39% increase on the previous year.[2]

Stamp taxes on share transactions in the UK were established in 1694. They are one of the oldest taxes, in part because they are one of the hardest to evade and cheapest to collect.[3] 90% of the tax revenue (the Stamp Duty Reserve Tax due on electronic 'paperless' transactions) is automatically collected via the CREST clearing system. According to a study by the Institute for Fiscal Studies, stamp taxes cost just 0.09 pence for every pound collected versus 1.56 pence for collecting income tax and 1.33 pence for collecting capital gains tax.[4] Stamp taxes are almost impossible to avoid if you want to own a share because a change in share ownership cannot take place unless the share purchase has been stamped and the tax paid. This is why an estimated 40% of the tax is collected from holders of UK shares who are not UK tax residents. The payment of stamp duty on shares has one of the highest incidents of foreign payers of any major UK tax.

2 See, HMRC, *UK Stamp Tax Statistics*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/358908/AnnualStampTaxes-Release-Sep14.pdf

3 Stamp duty was first introduced in the Netherlands and then in England on 28 June 1694, during the reign of William and Mary, under *"An Act for granting to her Majesties several duties upon vellum, parchment and paper, for four years, towards carrying on the war against France"*. These additional revenues proved critical in prolonging the war until the French Treasury was exhausted and Louis XIV was forced to accept the protestant William III as the rightful King of England over the claim of the Roman Catholic, James II. This was one important point along the path to the Acts of Union of England and Scotland in 1707.

4 See, *Stamp duty on share transactions: is there a case for change*, M. Hawkins and J. McCrae, IFS, (2002) http://www.ifs.org.uk/comms/comm89.pdf

According to TABB Group, specialists in financial infrastructure, turnover in UK equities was approximately £3.3 trillion in 2010.[5] Data on turnover on the London Stock Exchange (which represents approximately 75% of all trading in UK listed securities but also trading in non-UK securities) indicates that after a 20% drop in 2008/2009 as the Global Financial Crisis unfurled, trading volumes continued to slip until 2013, before returning to the post-crash average in 2014. This is consistent with the profile of stamp duty revenues shown in the chart on page 3. The TABB estimate of turnover in UK equities in 2010 is therefore a reasonable measure of current turnover, though as the financial crisis recedes further, underlying turnover will likely return to pre-2008 levels – boosting the tax take by some 20–25%.

The wider economic costs and benefits of having a stamp duty in place have been well-rehearsed elsewhere (see McCulloch and Pacillo, 2011; and Griffth-Jones and Persaud, 2012) and are not the main focus of this report. In terms of market functioning, which is relevant to our estimates of the revenue raising potential of closing certain loopholes, there are theoretical reasons to expect both positive and negative effects on liquidity and volatility, but the arguments suggesting negative impacts have received much higher profile in some circles. In light of this, it is instructive to note that empirical studies of the recently introduced Italian and French taxes on share transactions find no statistically significant impacts for measures of either genuine liquidity (such as price impact) or volatility (see Capelle-Blancard and Havrylychk, 2014).

Later in this report we look at standard estimates of how closing loopholes will impact turnover and hence tax revenues.

2. CURRENT INCIDENCE OF THE STAMP DUTY AND THE INTERMEDIARY LOOPHOLE

In the UK, the stamp duty of 0.5% is only levied on the purchase of a UK security, not the sale. Comparing tax revenues and turnover suggests that a little more than a third of total turnover in UK equities, 37% is subject to the tax.[6] 63% of turnover is between tax-exempt parties.[7]

The principal exemption or relief from stamp duties on share transactions is a share purchase by an intermediary. The intention of this relief is that entities that provide liquidity to financial markets, by standing ready to buy or sell securities from others and accepting an obligation to trade when requested during the trading day, should be tax exempt. The intention of market makers is not to hold on to the security or make money from doing so but rather to facilitate trade; hence the payment of stamp duty is deemed inappropriate. Turnover between genuine market makers is significant, but it is a far cry from 63% of turnover. Prior to the advent of High Frequency Trading (HFT), approximately 20% of turnover used to be driven by market makers.[8] It is clear that in the UK, the intermediary exemption from stamp duty is being abused. It has become stretched

5 See, *Breaking down the UK Equity Market*, TABB Group, August 2011, for a summary, see http://www.tabbgroup.com/PublicationDetail.aspx?PublicationID=815. Turnover figures are quoted in Euros and converted to pounds using the average exchange rate of 0.85812, see http://www.fxcentre.com/AverageRates-2010.pdf

6 (3,108m/0.5%)/(3,344bn/2) = 37%

7 This seems in line with other recent estimates by Oxera (2007) and estimates by TABB (2011) and NAPF (multiple) on the relative role of long-term (one third) versus short-term (two thirds) traders or of real versus "fake" liquidity in the market.

8 See, *Stock Market Development and Financial Intermediaries: Stylized facts*, Demirguc-Kunt and Ross Levine, World Bank Economic Review, Vol 10. No. 2291-321. 1996.

to include activity that was not strictly intended by the law.

The balance of the turnover of exempt parties, which is not genuine market making, is largely made up of High Frequency Trading (HFT) and the non-market making activities of intermediaries. Most significant is the turnover generated by intermediaries hedging in the share markets their end-customers' activity in Contracts for Differences (CfDs), Financial Spread Bets (FSBs) or other derivative instruments. This is certainly not market making. These derivatives instruments are not intentionally or explicitly tax exempt, but they are not taxed because they do not require a change of ownership in the underlying share.[9] According to TABB Group, the hedging of these instruments in the equities market represents approximately £1,112bn, or 33% of total turnover in UK equities. It is likely that a large proportion of this activity is a form of tax avoidance by hedge fund managers who want exposure to the direction of a share price and do not mind giving up the rights and responsibilities of owning the underlying share in order to avoid the tax. We discuss the impact of closing this tax loophole on the amount of this turnover below.

Another important (although smaller) area of exempt activity is HFT. Though they represent themselves as investors to their clients, HFTs, often receive exempt status. However, their business model is not to stand ready to make two-way markets whenever requested, but to take advantage of faster quote information or market movements that they sometimes help to trigger through large volumes of quotes or orders. The impact of HFTs on orders and quotes is many times their impact on reported turnover of the market, as a large part of their business model is to influence market direction through orders that are later cancelled or multiple quotes on very small size transactions.

3. CLOSING THE INTERMEDIARY LOOPHOLE

We recommend that to end the abuse of the intermediary exemption from stamp duty, the definition of market makers should be tightened, and *relief should be solely applied to the market-making activities of this narrower group of intermediaries*.

In the world of mandatory pre- and post-trade reporting of all trades; new and separate capital requirements for, and moves towards the ring fencing of, trading and market making, these distinctions can be made and enforced. There are a number of ways in which it might be accomplished and while this is not the focus of this paper, one of the simpler ways would be to require a market maker claiming a stamp duty exemption, to show that there is an end-investor along the related chain of transactions that has already paid the duty. Chains can be long, but the behaviour of a market maker, seeking to unload inventory as quickly as possible is different from someone systematically seeking to make profit from a market movement.[10] To keep intermediaries in check, the authorities would only need to

9 A contract for difference, spread bet or equity derivative is a contract whose value is linked to the movement in a share price or the difference between two share prices. This contract benefits from movements in the share price but is not a share and therefore there is no change in the share registry and no stamp duty. Equally, the contract does not confer the rights and privileges of owning a share, such as voting rights, rights to receive dividends or participate in rights or share splits and consequently these instruments are used purely for speculation and hedging.

10 It should be noted that in periods of low volatility, HFT can look like market making activity which underlines the case for making the exemption double-ended: activity carried out by an entity defined as a long-term market maker, that also meets the requirements for genuine market making activities.

test a small portion of trades for which the market making exemption is claimed and levy burdensome fines or trading bans on those intermediaries found to be abusing the relief.

4. OTHER LOOPHOLES

The intermediary loophole has supported the use of instruments such as FSBs that are not subject to central clearing and capital requirements. Initially, it made large unregulated exchanges for retail investors out of CfD brokers who initially did not feel obliged to report their transactions.[11] These brokers – more so the smaller ones – have been subject to a number of complaints and concerns over the fair treatment and charges to retail investors. This has been a matter of concern of the Financial Conduct Authority, which now regulates these firms, and is pushing for greater regulation of their activities such as the central clearing of financial spread bets and CfDs.

A version of the stamp duty could be applied directly to the CfDs, FSBs and equity derivatives markets. This would prevent their use as an avoidance mechanism for stamp duty, and would temper their over-use by retail investors who often leverage their trades and can make considerable losses. The hedging of taxed CfDs or FSBs could then be subject to tax relief, to encourage both the initial payment of tax and subsequent hedging. The revenue that would be generated from the taxation of derivatives is likely to be significant – see Appendix 1 for brief thoughts on this matter, but for the purposes of conservatism we do not include this in our estimates of what can be raised by closing loopholes.

From 2014, the present government has also exempted elements of the stamp duty applying to collective investment schemes (section 19 fees) and shares on growth markets such as AIM. These two measures cost an estimated £145m and £170m in lost revenues, respectively.[12] The shares of approximately 950 companies presently benefit from the growth market exemption,[13] a reasonably large number of which are companies in industries that we might not typically associate with start-ups (including oil and gas and other extractives industries). Providing this relief did little to boost activity in these two market segments and made some investors nervous about an influx of high frequency trading. Closing these new loopholes would cause little market disruption and so £315m of revenues could be added to our estimates.

5. HOW MUCH REVENUE WOULD CLOSING THE INTERMEDIARY'S LOOPHOLE RAISE?

We estimate that closing the intermediary loophole will raise between £1.2bn and £1.9bn. It should be noted that while tax-exempt turnover is currently 170% more than taxed turnover (63% versus 37% of the total), we are predicting a rise in the tax take of just 33%. This is because of three factors. First, a significant part of the untaxed volumes represent intermediaries carrying

11 In 2011, the Financial Conduct Authority fined City Index £490,000 for repeatedly failing to provide accurate transaction reports to the FSA despite requests to do so.

12 UK Government budget 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221885/budget2013_complete.pdf

13 See the list provided by Euroclear https://my.euroclear.com/growthmarketexemptions.html

out genuine market-making activities.[14] This turnover will remain untaxed as it supports meaningful liquidity. Second, another portion of the untaxed volumes represents low margin high frequency trading, which if taxed would largely disappear. This would therefore not raise significant revenue, but it is likely to be good for financial stability and market integrity. In times of market stress, this type of trading tries to get ahead of trends, draining liquidity, giving rise to Flash Crashes and undermining financial stability when it is at its most fragile.[15] It is possible that the HFT industry shifts its business model in response to losing its tax exemption and some tax revenues are collected. However, we assume for the purposes of moderation that there are zero additional tax revenues to be had from taxing high frequency trading. Thirdly and finally, we make conservative assumptions regarding the revenue generating potential of the remaining untaxed market segments.

Even taking account of the caveats above, a significant amount of existing transactions will be brought into the tax system. Principal amongst these will be a proportion of the estimated $1,112bn turnover by intermediaries to hedge derivative or other transactions like contracts for differences and financial spread bets. Estimating how much of this $1,112bn of turnover will disappear or remain after it becomes subject to a 0.5% stamp tax depends on two factors: the "elasticity" of these transactions – their sensitivity to a change in cost – and the proportion of total transaction costs the tax represents.

We do not assert that there is certainty on either of these variables, but ranges taken from independent studies, coupled with conservative assumptions, indicate that £1.2bn is a minimum estimate of the tax take, though it would be likely higher and could be as high as £1.9bn.

5.1 Elasticity of turnover to changes in transaction costs

One of the most relevant and up to date studies of the impact of shifts in transaction costs on turnover[16] was carried out by Joakim Westerholm on the Swedish and Finnish stock markets. He examined turnover in the run up to and the aftermath of the removal in 1991 of a turnover tax.[17] He recorded an elasticity of -1.0. This is in the same ballpark as other estimates of elasticities elsewhere (see McCulloch and Pacillo, 2011, for a comprehensive review of the literature). It is likely that this represents an overestimate in comparison with the UK because the Swedish tax was not a stamp duty. Stamp taxes on share transactions, like the UK tax, are paid whenever there is a registered change in the ownership of a share, irrespective of where a trade is carried out, or by whom. If the share certificate, electronic or otherwise, is not taxed and stamped, the new owner of the share cannot legally enforce their ownership. Property stamp taxes work in the same way. The Swedish and Finnish taxes were instead based on the tax residency of the broker in an

14 Pre-HFT estimates of the intermediary proportion of turnover are around 20% – (see Demirguc-Kunt and Ross Levine, 1996) so 20/(100-37) = 32%.

15 See, *The Economic Consequences of the EU Proposal for a Financial Transaction tax*, Intelligence Capital Limited, March 2012, pp11-13, http://www.stampoutpoverty.org/wp-content/uploads/2012/10/The-Economic-Consequences-of-the-EU-Proposal-for-a-Financial-Transaction-Tax-3.pdf

16 This is more correctly referred to as the elasticity of turnover with respect to transaction costs.

17 See, The Impact of Transaction Costs on Turnover, Asset Prices and Volatility: The cases of Sweden's and Finland's Security Transaction Tax Reductions, *Finnish Journal of Business Economics*, vol 2:3, pp 213-241, (2003). The Ericsson and Lindgren study carried out during 1992 of 23 stock markets found elasticities between -1.2 and -1.5. The Aitken and Swan study, using data from 1993 and 1995 in Australia reports elasticities of -0.97 to -1.2.

age long before banks were required to know the beneficial ownership of their corporate clients and before 80 countries, including the domiciles of all the major stock exchanges, had signed tax information exchange agreements with each other. Consequently, the Swedish and Finish turnover taxes led to a migration in turnover to foreign (UK) brokers who merrily accepted the additional business. This does not occur with the UK tax. Indeed, as we mentioned earlier, 40% of the tax is paid by foreign residents to ensure their ownership of UK stocks is legally enforceable.

The removal of the Swedish and Finnish turnover taxes led to a rise in turnover, reflected in Dr. Westerholm's -1.0 elasticity estimates, that was therefore inflated by a migration of existing but deflected turnover. We should thus expect UK market volume to be less sensitive to changes in costs than Dr Westerholm's estimates for Sweden and Finland, and that the elasticity is in the -0.75 to -1.0 region.

A further important question is whether the segment of the market we are considering (hedge transactions) would have a higher or lower elasticity with respect to transaction costs than ordinary transactions. In other words, are they more or less discretionary than other trades? The more the cost of being unhedged relative to the tax is high, the less discretionary these trades will be (and the lower the elasticity will be and the smaller the impact of increased taxes on the decision to trade). A measure of the cost of being unhedged is the expected annual volatility of stocks. Average annual, implied volatility in the UK stock market is 22.6%[18] or some 44 times the cost of tax paid on the purchase and sale of a hedge. Again this would point to using an elasticity estimate below -1.0.

These arguments notwithstanding, we use a range of likely elasticities from -0.75 to -1.25.

5.2 Transaction Costs

The lower non-tax transaction costs are, the greater will be the proportional impact on total transaction costs of a 0.5% tax on purchases, and the greater will be the estimated decline in volumes, and the lower will be the tax take. Consequently, representatives of the trading industry like to suggest that transaction costs are simply the difference between the edge and mid-point of dealer spreads. (The spread is the difference between the price to buy a stock from a market maker and the price to sell the same stock to the market maker). They point to estimates of dealer spreads on the most heavily traded stocks of a few basis points (hundredths of a percentage point).

This is disingenuous for a number of reasons. The economic cost of a transaction includes not just the dealer spread and any brokerage commissions, but also operational costs, exchange fees, clearing and settlement costs, custody costs and market impact costs. Market impact is one of the most significant and most invisible of transaction costs. It is the degree to which the price of a stock rises as you try to buy it or falls as you try to sell it.

For a long time total costs were hidden, allowing the industry to promote the idea that transaction costs were virtually zero and that taxes would therefore crush volumes to zero. The only voice of objection used to be pension funds, the larger and more sophisticated of which were finding that their annual dealing costs exceeded 1.0% of the value of assets under management, even though their average annual turnover was less than 50% of assets.[19] Today, however, greater light has

18 See, http://www.ftse.com/Analytics/FactSheets/temp/69778999-a572-40c1-abda-ff0cb72bbc33.pdf

19 See, 'How fund managers spend your money', N. Cohen, *Financial Times*, June 6, 2014.

been shed on total transaction costs by the European Union's, 2004/2005, Markets in Financial Instruments Directive. MiFID, as it is known, has required increased reporting and transparency in pre and post trading costs.

Recent scandals surrounding the manipulation of LIBOR and foreign exchange benchmarks have also highlighted other important transaction costs such as execution implementation arrangements. The benchmark scandals would suggest that attempts to reduce the level and uncertainty of market impact costs by making arrangements with brokers to trade at benchmark prices may have inadvertently increased transaction costs in other areas, notably implementation costs. (There are never any free lunches.)

In assessing relevant transaction costs we need to consider volume weighted average costs and not just those on the most liquid stocks. According to a 2007 study by EDHEC,[20] when stock markets were roughly 20% more liquid than today as measured by turnover, volume weighted average bid-ask spreads in the UK were 0.31%. (It should be noted that this is the round trip cost.) Volume-weighted spreads are likely to be higher today as a result of lower volumes than in 2007 and increased capital costs for banks that, as has been widely reported, have reduced their willingness to take market-making risk.

Market impact costs depend on liquidity in the market in general and for particular stocks. They also vary between normal and stressed times and can range from 5 basis points to 25 basis points or more, for purchase or sale of a stock. The EDHEC study, using data prior to the explosion of HFT, found market impact in the UK of 15 basis points per purchase or sale and 30 basis points for the round trip.

Exchange, clearing and settlement costs tend to be levied at a fixed rate per execution rather than as a percentage of a trade's value. These costs averaged £4.50 per transaction prior to regulatory initiatives that will increase clearing fees in particular.[21] By aggregating these costs and the value of turnover, this equates to approximately 3–4 basis points per one side of the transaction or 8 basis points for the round trip, but these costs will likely be higher in the post-crisis clearing and settlement regime.

These costs are all brought together in table 1.

Table 1: Estimates of volume weighted transaction costs of a round trip[22] (in basis points)

Bid-ask, broker commissions	31+
Market impact (of buys plus sells)	30+
Exchange, Clearing, Settlement, Custody	8+
Other (operational, legal, research and execution)	not available
Total	**69 +**

Traders, focused on dealing spreads and not the cost of running, managing, hedging and implementing investments, will complain that these estimates are high. But there are a number of reasons why they are in fact low. In the table above we exclude costs that are hard to split between those related to a specific trade (marginal costs) or to trading capacity (fixed costs). These operational, research and execution costs are not insignificant. Pension funds consider them to be about one third of their total dealing costs.[23]

20 See, *Transaction Cost Analysis A-Z*, EDHEC, November 2008.

21 Ibid note 17

22 Purchase and later sale

23 Ibid note 15

The market impact estimates used above were estimated in 2007 when volumes were high and both dark trading pools and HFT trading were far smaller than they are today. Both of these activities have been associated with an increase in market impact of ordinary trades, though this is more pronounced in periods of market-stress. A Bank of England study reported that markets that exhibit a higher amount of aggressive HFT (such as the London Stock Market) are associated with higher market impact costs (sometimes defined as lower quality liquidity).[24] The roots of Michael Lewis' *Flash Boys*[25] are in the observations of a broker in a large commercial bank that the price impact of his execution of client trades was getting larger post-2007, which after investigation he put down to HFTs having preferential access to order and quote information. These factors suggest that the true total transaction costs today could be closer to 80 basis points, than our 69 + estimate.

How should we consider the impact on transaction costs of the UK's stamp duty? Is it 50 basis points on purchases alone and 0% on sales – which would imply a reduction in purchases but not sales which clearly is not possible – or an average of 25 basis points on all transactions given that for every purchase there is a sale, and purchasers intend to sell at some point. There is a strong logical argument for adopting this latter approach. However, this may be seen as not conservative. Consequently, we use 50 basis points, but ensure that all the other costs reflect round trip costs. Potential purchasers of a stock consider the total costs of purchase and sale before making a decision to go ahead.

Finally, it is worth noting that at times, the trading industry appears to suggest that it is only taxes that have a detrimental impact on turnover and the desire to trade, but in reality all costs have exactly the same impact. In other words the effect on turnover of the Government extracting £500m of taxes on the CfD and FSB markets, for instance, would be the same as the £500m of profit[26] that UK CfD and FSB brokers extract from it. If the former would crush turnover, then the latter must already be doing so.[27]

5.3 Revenue Estimates

Table 2, on page 11, shows the likely tax take assuming different levels of round trip costs and the likely range of elasticity of turnover to a change in transaction costs. If we most conservatively assume transaction costs of 50 basis points and an elasticity of -1.25, then the extra tax take would be £1,236m. Alternatively, if we assume transaction costs of 69 basis points and an elasticity of -1.0, then the extra tax take would be £1,612m. Finally, if we assume non-tax transactions costs of 80 basis points are combined with an elasticity of -0.75, additional revenues would comprise £1,893m. There are good grounds for assuming that the tax take would be closer to this higher

24 High frequency trading behaviour and its impact on market quality: evidence from the UK market. Evangelos Benos and Satchit Sagade, Bank of England, Working Paper 469, December 2012.

25 *Flash Boys*, Michael Lewis, 2014.

26 See IG Global, Annual Report, 2013.

27 Banks generate more revenues from equity trading in London than CfD and FSB brokers, and this figure is on average greater than our estimated £1.2bn to £1.9bn tax take, but they generally breakdown their securities trading revenues by product, not by product and country. However, it is still useful to note that trading revenues of the top 10 banks in 2013 were over £75bn and that as trading revenues are a zero sum game (traders gains are their customers' losses) the impact on global market turnover of banks earning £75bn from the market place would, for instance, be the same as Governments taxing £75bn instead. This suggests that hysterical cries by the financial sector of the obliteration of turnover and revenues if Governments around the world taxed trading by an additional £1bn or even £10bn are just that.

Table 2: Estimated tax revenues from closing stamp duty loopholes (£m)[28]

NON-TAX TRANSACTION COSTS (BP)	ELASTICITY			
	-0.75	**-0.9**	**-1.0**	**-1.25**
50	£1,589	£1,463	£1,390	£1,236
69	£1,801	£1,683	£1,612	£1,459
75	£1,853	£1,738	£1,668	£1,516
80	£1,893	£1,779	£1,711	£1,561

figure. Recently we have observed a mild response of turnover to significant increases in clearing fees, to the rise in market impact, to the incidence of the new taxes in France and Italy, to the reduction of stamp taxes in the UK AIM market and to the additional trade implementation costs implicit in the fiddling of benchmarks by banks. It is also likely that in the post-crisis world of increased costs, that total transaction costs, including dealing spreads, market impact, implementation costs, exchange fees, clearing and settlement fees and other marginal operational, research and capital costs, sum to 80 basis points.

It is perhaps most prudent to think in terms of a potential range for additional revenue (rather than a single point estimate), and we would contest that this should be from £1.2bn to £1.9bn.

6. CONCLUSION

The purpose of this paper was to estimate how much revenue might feasibly be generated by closing loopholes in the UK's stamp duty on share transactions, focusing predominantly on preventing abuse of intermediary relief (sometimes known as the market-makers' exemption). In this regard, we estimate that approximately £1.2bn to £1.9bn in additional tax revenues would be generated, leading to an increase in total revenues from around £3.1bn to £4.3bn to £5.0bn.

We have also briefly described other loopholes that currently exist, in particular the exemption for AIM-listed shares, collective investment schemes and the existence of CfDs, FSBs and equity derivatives, which allow investors to speculate or hedge against the price of a share. Ending the exemption for growth markets, including AIM-listed shares, would raise approximately £170m per year. Applying the stamp duty to collective investment schemes would raise £145m. It is harder to estimate the revenues that would be raised from extending a version of the tax to cover CfDs, FSBs and equity derivatives, although these revenues are likely to be significant given the profitability of this sector for brokers. Appendix 1 offers some brief thoughts on this matter.

28 The general formula for the after tax turnover = old turnover/(1+((elasticity x ((new cost – old cost)/old cost))) x-1). The general formula for stamp duty = after tax turnover x 0.5 x 0.005.

APPENDIX 1

Including Financial Spread Bets, Contracts for Difference and other Derivatives in Stamp Duty

As mentioned briefly above, these instruments are not currently liable for the UK's stamp duty. Stamp duty is levied on transactions that change the ownership of UK-listed shares. These derivatives instruments do not affect ownership, but provide a way of speculating on, or hedging against, movements in share prices.

In the current regime of increasing transparency in derivatives markets, it would certainly be possible to include instruments such as these within the tax base, on the basis of the tax residence of the trader, in a way that was not possible until fairly recently (for further consideration of this see Persaud (2014)).

In this regard, it is worth pointing out that eleven European countries are currently negotiating legislation of a tax that will include derivatives instruments. From the perspective of the UK Government, a recommendation would be to observe this process and follow suit when and if these countries demonstrate the viability of such a tax.

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