

# Effectiveness of fiscal incentives for R&D: a quasi-experiment

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Giorgia Maffini Oxford University Centre for Business Taxation

John Vella Oxford University Centre for Business Taxation

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#### Evidence-based policy making? The Commission's Proposal for an FTT

#### Giorgia Maffini and John Vella\*

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#### 1. Introduction

The ongoing debate on the Financial Transaction Tax (FTT) has frequently been characterized by arguments borne of political convenience, self-interest or uninformed beliefs. The evidence presented by the EU Commission in support of its proposals for an FTT provides a more concrete and fruitful route through the debate. The Commission is committed to evidence-based policy making,<sup>1</sup> and it expended considerable energy in producing a vast amount of evidence to back its proposals for an FTT. The Impact Assessment published in 2011 alone was made up of 19 volumes.<sup>2</sup> This chapter thus joins the debate by simply asking whether this evidence is persuasive and makes the case for an FTT. It does so within the framework of a three-step policy evaluation of the proposal. First, what are the proposal's objectives? Second, are these objectives justified? Third, is the proposed tax the instrument which is best suited to achieve these objectives?

By way of background, it should be remembered that in October 2010 the Commission considered the introduction of an FTT and a Financial Activities Tax (FAT) in a preliminary examination and concluded that "there is greater potential for a Financial Activities Tax at EU-level".<sup>3</sup> It then launched a comprehensive Impact Assessment (2011 IA)<sup>4</sup> into both taxes, the results of which were published together with the Proposal of September 28, 2011 (2011 Proposal).<sup>5</sup> The 2011 Proposal explains that, after analysing the FTT and the FAT and various design features, the 2011 IA "concluded that an FTT was the preferred option."<sup>6</sup> This statement will surprise attentive readers of the 2011 IA since the analysis contained therein does not obviously lead to this conclusion. In fact, the results of the 2011 IA do not always support and indeed partly undermine claims made in the 2011 Proposal as well as in

<sup>\*</sup> Oxford University Centre for Business Taxation. This chapter is partly based on J. Vella, C. Fuest and T. Schmidt-Eisenlohr, "The EU Commission's proposal for a Financial Transaction Tax" [2011] *British Tax Review* 607 and J. Englisch, J. Vella and A. Yevgenyeva, "The Financial Transaction Tax Proposal Under the Enhanced Cooperation Procedure: Legal and Practical Considerations" (2013) 2 *British Tax Review* 223.

<sup>&</sup>lt;sup>1</sup> See, for example, Commission Communication "Smart Regulation in the European Union", COM(2010) 543 final.

<sup>&</sup>lt;sup>2</sup> Impact Assessment accompanying the document "Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC", SEC(2011) 1103 final, (September 28, 2011). The documents produced by the Commission in relation to the FTT can be found at: < http://ec.europa.eu/taxation\_customs/taxation/other\_taxes/financial\_sector/index\_en.htm> <sup>3</sup> Commission Communication, "Taxation of the Financial Sector", COM(2010) 549 final, (October 7, 2010), 8.

 $<sup>\</sup>frac{1}{4}$  2011 IA, above fn. 2.

<sup>&</sup>lt;sup>5</sup> "Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC", COM(2011) 594 final, (September 28, 2011).

<sup>&</sup>lt;sup>6</sup> 2011 Proposal, above fn. 5, p.4.

the Proposal of February 14, 2013 (2013 Proposal).<sup>7</sup> Overall, there is a discrepancy between the 2011 IA and the Proposals, the former recognising the limitations of its analysis and the many drawbacks of the FTT and the latter adopting a more enthusiastic approach which often overlooks the issues highlighted in the IA.

Further evidence was provided by the Commission in a series of "Technical Fiches" published in spring 2012 and in the Impact Assessment (2013 IA) issued concurrently with the 2013 Proposal.<sup>8</sup> However, the Commission's main case for an FTT was made in the 2011 IA and the two later documents merely build on it. The Technical Fiches briefly address some of the concerns raised in relation to the 2011 Proposal, and the 2013 IA returns to some of these concerns but also seeks to address the issues arising from the shift to an enhanced cooperation procedure. One notes a qualitative difference in the analysis provided in the 2011 and 2013 IAs. The analysis in the former appears to be more balanced and scientific.

The central conclusion of this chapter is that the Commission's evidence is not persuasive and does not make the case for an FTT. Whilst some of the objectives pursued by the proposals are reasonable, others are questionable. More importantly, the Commission's evidence does not support the choice of the FTT as the instrument which is best suited to achieve these objectives. More targeted and more efficient instruments should and could be used to achieve these objectives.

#### 2 The Proposals' objectives

The 2011 Proposal<sup>9</sup> set out the following objectives for the FTT:

1. to raise revenue from the financial sector, which, in turn was intende:

1.1. to ensure that financial institutions make a fair and substantial contribution to covering the costs of the recent crisis,

- 1.2. to ensure a level playing field with other sectors from a taxation point of view (to compensate for under-taxation due to the VAT exemption),
- 1.3. to create a new revenue stream for the EU;
- 2. to create disincentives for transactions that do not enhance the efficiency of financial markets;
- 3. to avoid a fragmentation of the internal market that might be caused by uncoordinated tax measures of the member states;

<sup>&</sup>lt;sup>7</sup> "Proposal for a Council Directive implementing enhanced cooperation in the area of financial transaction tax", COM(2013) 71 final, (February 14, 2013).

<sup>&</sup>lt;sup>8</sup> Impact Assessment accompanying the document "Proposal for a Council Directive implementing enhanced cooperation in the area of financial transaction tax: analysis of policy options and impacts", SWD(2013) 28 final, (February 14, 2013). Although this document is entitled "Impact Assessment", the Commission acknowledged that it "does not constitute in itself an Impact Assessment".

<sup>&</sup>lt;sup>9</sup> 2011 Proposal, above fn. 5.

4. to demonstrate how an effective FTT can be designed and implemented, generating significant revenue and paving the way towards a coordinated approach beyond the EU.

The member states which are participating in the enhanced cooperation procedure ("participating member states" – "participating MS") requested that the proposal for an FTT under enhanced cooperation should be based on the objectives of the 2011 Proposal. The objectives of the 2011 Proposal and those of the 2013 Proposal are thus meant to be identical. It is thus interesting to note the following statement in the 2013 Proposal in relation to objective 2:

"[t]hese disincentives through taxing certain activities and transactions are intended to reinforce the effectiveness of regulatory initiatives presently under preparation or having recently been implemented (see footnote 12). For the FTT initiative exercising such disincentives has more the character of welcome side effects."<sup>10</sup>

This statement is surprising given that this objective was previously touted as an important objective of the tax and not merely "a welcome side effect".<sup>11</sup> Indeed, when explaining to the EU Sub-Committee of the UK House of Lords why the Commission favoured an FTT over an FAT despite finding both to be "feasible" Commissioner Semeta only mentioned two factors: the revenue raising abilities of the FTT and its ability to address the issue of high-frequency trading.<sup>12</sup>

3. Are the objectives justified and is the FTT the best-suited instrument to achieve them?

#### 3.1. Raising revenue from the financial sector

#### (a) Specific rationales for raising revenue from the financial sector

(i) Ensuring that financial institutions make a fair contribution to covering the costs of the recent crisis

Here the idea is to claw back some of the money that was spent on rescuing banks during the financial crisis and also some of the broader costs associated with it.<sup>13</sup>

<sup>&</sup>lt;sup>10</sup> 2013 IA, above fn. 8, p. 11.

<sup>&</sup>lt;sup>11</sup> See for example, Algirdas Semeta "Financial Transactions Tax: The Way Ahead" Meeting of Members of the Finance and Fiscal Committees in the Danish Parliament Copenhagen, 19 March 2012, speech 12/196. This is available at: <a href="http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/12/196">http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/12/196</a>>.

<sup>&</sup>lt;sup>12</sup> House of Lords, EU Economic and Financial Affairs and International Trade Sub-Committee, "Financial Transaction Tax, Oral and Written Evidence", p. 248. This is available at: <a href="http://www.parliament.uk/documents/lords-committees/eu-sub-com-">http://www.parliament.uk/documents/lords-committees/eu-sub-com-</a>

a/FinancialTransactionTax/FTTFINALWeb.pdf>.

<sup>&</sup>lt;sup>13</sup> EU Member States provided aid and guarantees worth EUR 4.6 trillion to the financial sector by the autumn of 2011. J. Barroso, "European renewal – State of the Union Address 2011", Strasbourg, (September 28, 2011), available at: <<u>http://ec.europa.eu/commission 2010-2014/president/pdf/speech\_original.pdf</u>>.

Whilst a number of issues need to be kept in mind whilst setting out this objective, such as the contributory role played by regulators and economic policy makers, overall this justification appears reasonable because financial institutions undoubtedly played a significant role in causing the crisis. One can thus turn to the second step in the analysis which is that of asking whether the FTT is the instrument which is best suited to achieve this objective. For the objective to be met, care must be taken to ensure that the incidence of the tax is actually borne by the particular entities from which the tax is meant to be clawed back. As will be noted below, FTTs are especially problematic in this regard. Given this, it is doubtful whether the FTT will have the desired distributional effects. There is the danger that the FTT will be sold to the public as a tax which punishes those who are responsible for the crisis while the true incidence falls on the consumers of financial services. Other tax instruments such as, for instance, the FAT (or at least one version of it) are more likely to be borne by those earning rents in the financial sector. Furthermore, in seeking to recover the cost of the crisis from the financial sector, one ought to choose the instrument which will do so whilst causing the least harm to the economy. As discussed below, there are better options than the FTT in this respect.

All in all, the conclusion reached here is that this is a good justification for raising further revenue from the financial sector. However, an FTT does not appear to be the best available instrument to raise such revenue.

(ii) Ensuring a level playing field with other sectors from a taxation point of view

The central contention here is that the financial sector is under-taxed, relative to other sectors of the economy, because certain types of financial services are exempt from VAT. If true, this provides another justification for raising further revenue from the sector through a new tax. What evidence does the Commission present to back this objective?

In some official documents, particularly those meant for consumption by the general public and non-experts, the Commission presents supportive evidence without hesitation: "[t]he financial sector enjoys a tax advantage of approximately €18 billion per year because of VAT exemption on financial services."<sup>14</sup> However, it is well known that the overall effect of the VAT exemption is ambiguous. The exemption reduces the tax burden on services to consumers but it also increases the tax burden on transactions with businesses. Some studies do suggest under-taxation,<sup>15</sup> however they are not without difficulty and so uncertainty does remain around this issue. In contrast to the bold claim in the quote above, the 2011 IA states:

"[t]he extent to which applying VAT to the financial sector (and its clients) would raise additional tax revenues and – consequently – the extent to which the exemption constitutes a tax advantage for the financial sector is *an unsettled empirical question*."<sup>16</sup>

<sup>&</sup>lt;sup>14</sup> European Commission Press Release, "Financial Transaction Tax: Making the financial sector pay its fair share", IP/11/1085, (September 28, 2011).

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/1085

<sup>&</sup>lt;sup>15</sup> H. Huizinga, "Financial Services—VAT in Europe?", *Economic Policy*, October 2002, pp. 499-534. <sup>16</sup> 2011 IA Vol.1, above fn. 2, p. 14.

The 2011 IA reviews some estimates of the potential tax advantage and presents a new estimate which suggests an advantage in the range of 0.11 per cent and 0.017 per cent of GDP. The 2011 IA is careful in stressing that "all these estimates are very rough approximations and should be interpreted with caution."<sup>17</sup> It then concludes cautiously: "...the VAT exemption for a large share of financial services is an important issue. It *possibly* results in a preferential treatment of the financial sector compared with other sectors of the economy as well as in distortions of prices."<sup>18</sup>

Since the publication of the 2011 IA, a new study commissioned by PricewaterhouseCoopers and carried out by another leading tax economist found neither under-taxation nor over-taxation.<sup>19</sup> It is not argued here that this study is superior to the previous ones or that the financial sector is under-taxed or over-taxed as a result of the VAT exemption. Our understanding of this issue is improving, but at this point in time, as the Commission itself noted, this question is still unsettled.

More importantly, even if the Commission's evidence unambiguously indicated that the sector is under-taxed because of this exemption an FTT would not be the best way to correct this.

In fact, the 2011 IA itself states:

"[t]he transaction taxes as discussed in this paper are not really effective to compensate for the VAT exemption for mainly two reasons. The major part of the exemption is due to the margin based business of the banks when receiving deposits and granting credit. The transaction proposals discussed here explicitly exempt depositing and loans from the tax base. For this reason the FTT would not capture the value-added sufficiently. There is no connection to the EU-VAT system, which aims at a neutral and non-cascading taxation and to the value added of the services involved in the trading or creation of products.

The FAT and namely *the addition-method FAT could be more effective in addressing the VAT exemption* in the sense that the tax base has similarities to the VAT base. However, the integration of VAT and FAT is complicated and poses a number of unresolved problems.

The ideal solution to address the VAT problem remains to fix the issue within the current VAT system.<sup>20</sup>

The Commission's evidence for this objective is thus inconclusive, but even if it were certain, the Commission's own view is that the FTT would be the wrong instrument to achieve it.<sup>21</sup>

(iii) To create a new revenue stream for the EU

<sup>&</sup>lt;sup>17</sup> 2011 IA Vol.1, above fn.2, p.14 (emphasis added).

<sup>&</sup>lt;sup>18</sup> 2011 IA Vol.1, above fn.7, p.15 (emphasis added).

<sup>&</sup>lt;sup>19</sup> B. Lockwood, "Estimates from National Accounts Data of the Revenue Effect of Imposing VAT on Currently Exempt Sales of Financial Services Companies in the EU" (2011). This study is attached to the report PwC, "How the EU VAT exemptions impact the Banking Sector" (2011), available at <u>www.pwc.com</u>.

<sup>&</sup>lt;sup>20</sup> 2011 IA Vol.1, above fn. 2, pp. 34-35 (emphasis added).

<sup>&</sup>lt;sup>21</sup> 2011 IA Vol.1, above fn. 7, p. 29.

At present it is not clear what use will be made of the funds raised by the FTT, although the revenue might be split between the member states and the EU.<sup>22</sup> The Commission certainly views the FTT as a potential new revenue stream for the EU, and has suggested an FTT for this purpose in a proposal on own resources for the EU issued on June 29, 2011 and amended on November 9, 2011.<sup>23</sup>

Whilst, there are good reasons to reduce the EU's reliance on contributions by member states and replace those contributions with new own sources of funding, it is not at all obvious why the EU should be funded by the financial sector to a larger extent than by any other sector. One can thus question the choice of any tax on the financial sector as a means of achieving this objective. That said, if a tax on the financial sector is to be chosen for this purpose, the FTT is not an obvious choice. Given the volatility and uncertainty surrounding its tax base, an FTT certainly does not constitute an obviously stable source of funding upon which a budget can rely. If the objective of the FTT is simply to raise revenue from the financial sector then the considerations raised below must be taken into account.

(b) General considerations on the FTT as a revenue raiser

Each of the three justifications given by the Commission for raising further revenue from the financial sector give rise to specific considerations as to instrument choice. We can leave them to one side and consider the FTT as a general revenue raiser. Four issues are considered here. These issues are well known, and the arguments surrounding them are well rehearsed. The question is whether the Commission's evidence is successful in addressing them. In each of these cases it is striking that the 2011 and 2013 IA do not seem to offer much support for an FTT.

(i) Threat of avoidance though relocation unless FTT is global

The 2011 IA defines relocation risk broadly as including both "moving the relevant activities to jurisdictions where they are taxed less" and also "shifting to products/suppliers outside the scope of taxation within the same jurisdiction."<sup>24</sup> In its October 2010 Communication the EU Commission concluded: "[i]n the light of the analysis undertaken to date, FTT appears less suitable for unilateral introduction at EU-level since *the risks of relocation are high and would undermine the ability to generate revenue*."<sup>25</sup>

This issue was then considered in some detail in the 2011 IA. After reviewing the issue it concluded:

<sup>&</sup>lt;sup>22</sup> 2013 Proposal, above fn. 7, p. 15.

<sup>&</sup>lt;sup>23</sup> "Proposal for a Council Decision on the system of own resources of the European Union", COM(2011) 510 final, (June 29, 2011). The documents relating to this issue can all be found at: <<u>http://ec.europa.eu/budget/biblio/documents/fin fwk1420/fin fwk1420 en.cfm</u>>.

<sup>&</sup>lt;sup>24</sup> 2011 IA Vol.1, above fn. 2, p. 47.

<sup>&</sup>lt;sup>25</sup> Above fn. 3.

"[a]gainst this background, *it is difficult to make unequivocal conclusions* on the exact size of the elasticities and relocation risks (*although there are strong risks of relocation*). Our revenue simulations consider a relocation of securities markets by 10%, a relocation of spot currencies by 40% and a relocation of derivatives instruments of 70% or 90% ...<sup>26</sup>

Overall, the predictions are thus rather gloomy, with the forecast on the over the counter (OTC) derivative markets being particularly so.<sup>27</sup> The 2011 IA notes that "the application of the tax in this highly mobile market will be difficult and reduce the taxable base significantly... the tax base could largely disappear leaving no substantial revenue."<sup>28</sup>

The statement cited above betrays recognition of the severity of the relocation problem. However, at other points in its documentation the Commission adopts a much more optimistic stance. In the 2013 IA the Commission insists that "the risk of geographical relocation remains rather limited ... so do the benefits".<sup>29</sup> Again, given that in its 2011 IA the Commission noted: "if the geographical scope of the tax is reduced relocation risk is increased",<sup>30</sup> one might have expected a recognition of the increased relocation risk following the shift to enhanced cooperation in the 2013 IA, however, this is not forthcoming.

Despite the Commission' s reassurances, the participating MS clearly retained concerns in this respect. In fact, the only instruction given to the Commission in preparing the 2013 Proposal, apart from following the 2011 Proposal, was to ensure that "evasive actions, distortions and transfers to other jurisdictions are to be avoided."<sup>31</sup> The Commission responded by introducing a number of changes aimed at improving the robustness of the tax. These included rules closing specific avoidance opportunities, a General Anti-Abuse Rule (GAAR) and the "issuance principle".<sup>32</sup>

Are the Commission's optimistic statements, particularly those found in the 2013 IA and Proposal, credible? Despite the additional measures adopted, it is unavoidable

<sup>&</sup>lt;sup>26</sup> 2011 IA Vol.1, above fn. 2, p. 47 (emphasis added). The IA goes on to state "[s]uch disappearance could be seen as positive *if* the activities targeted are considered as harmful. *To the extent that High-Frequency Trading is considered as harmful*, one has to bear in mind it is estimated to be about 40% of total transactions." This point is considered below.

<sup>&</sup>lt;sup>27</sup> The 2011 IA employs two scenarios to calculate expected FTT revenues with a predicted decrease in derivative trading of 70 or 90 per cent, respectively. No explanation is given as to why these two numbers are picked. The 2011 IA cites the example of Sweden, where, following the introduction of an FTT, the trading in futures on bonds fell by 98 per cent within the first week of the application of the tax. In the light of this experience and the fear that the tax base could largely disappear the particular figures chosen might be seen as not being large enough. If the Swedish experience is indeed to be taken seriously and 98 per cent instead of 70 per cent or 90 per cent of the tax base is lost, this should reduce predicted tax revenue 15 or 5-fold respectively.

<sup>&</sup>lt;sup>28</sup> 2011 IA Vol. 12, above fn. 2, p. 22.

<sup>&</sup>lt;sup>29</sup> 2013 IA, above fn. 8, p. 49.

<sup>&</sup>lt;sup>30</sup> 2011 IA Vol. 1, above fn. 2, p. 48.

<sup>&</sup>lt;sup>31</sup> 2013 IA, above fn. 8, p. 9.

<sup>&</sup>lt;sup>32</sup> See J. Englisch, J. Vella and A. Yevgenyeva, "The Financial Transaction Tax Proposal Under the Enhanced Cooperation Procedure: Legal and Practical Considerations" (2013) 2 *British Tax Review* 223, pp. 226-229.

that the FTT will lead to a diversion of institutions, activities and capital from participating MS to non-participating MS and non-EU states, which we can here call "non-FTT states".

As the 2013 IA recognises, financial institutions from participating MS may benefit from setting up subsidiaries in non-FTT states, or converting branches in non-FTT states to subsidiaries.<sup>33</sup> Such subsidiaries will be subject to the FTT on transactions with entities or individuals established in participating MS as well as transactions involving instruments issued in a participating MS. However, such subsidiaries will not be subject to the FTT on transactions with entities not established in participating MS as long as they do not involve financial instruments issued in participating MS.

Of course, financial institutions from non-FTT states will continue to trade with entities from participating MS and in instruments issued in participating MS, however, the considerable benefit of setting up subsidiaries or entities in non-FTT States and diverting activities to them is clear. Consider a French bank with a subsidiary in London. If the French bank regularly trades with financial institutions from London, New York, Hong Kong and all other major financial centres, or indeed any entity or individual from non-FTT states, it would benefit considerably by carrying out these activities through its London subsidiary. Furthermore, if financial institutions from participating MS set up subsidiaries or convert branches into subsidiaries in non-FTT states they could similarly trade amongst themselves through these subsidiaries rather than through their parent entities in participating MS. Finally, there are also benefits for a participating MS financial institution to transact through a non-FTT states subsidiary even when transacting with an entity or individual from a participating MS, or when trading instruments issued in a participating MS. Related transactions, such as hedging in the context of a purchase of shares, can be carried out with entities from non-FTT states thus avoiding the tax on those transactions.

The 2013 IA also recognises that financial institutions from participating MS will have incentives to move their headquarters.<sup>34</sup> By doing so the financial institution would avoid the FTT on transactions in which the counterparty is not established in a participating MS and the transaction does not involve an instrument issued in a participating MS. The branches of the financial institution located in non-FTT states will then also avoid the tax to the same extent.

Financial centres outside participating MS thus stand to gain in terms of the relocation of entities or activities. One would expect these gains not to be insignificant. For example, most large European financial institutions already have a large presence in London and therefore the costs of relocation of some activities may not be that large. Whilst the 2013 IA recognises these possibilities, it does not seek to estimate their potential cost to participating MS.

One can also expect capital, as well as entities and activities, to relocate. Take the example of a US investor who is choosing between investing in corporate bonds issued by a French company or a UK company. Assuming the bonds to be identical in all respects save for their susceptibility to the FTT, the FTT could give the US investor an incentive to favour the bonds issued by the UK company. On the other

<sup>&</sup>lt;sup>33</sup> 2013 IA, above fn. 8, pp. 42-43.

<sup>&</sup>lt;sup>34</sup> 2013 IA, above fn. 8, pp. 42-43.

hand, if the FTT is priced into the bonds, the FTT would not affect the US investor's preference but it would increase the cost of capital for the French company relative to the UK company. Therefore, non-FTT states might benefit from the FTT because of the relocation of capital to non-FTT states entities or through the competitive advantage of its entities in terms of a lower cost of capital.

As noted, the 2013 Proposal also introduces a GAAR to address the concerns of participating MS with avoidance. The extent to which the GAAR is thought capable of addressing "the risk of abuse which could undermine the proper operation" of the FTT is unclear.<sup>35</sup> The design of the GAAR is questionable on a number of grounds. Here we focus on a few points relating to its effectiveness. First, employing the concept of commercial substance and recharacterising transactions in accordance with their economic substance might be especially challenging in the world of financial transactions. Second, the intended reach of the GAAR is unclear. Take the example of a UK bank wishing to sell shares in a German company to a US bank. This transaction is subject to the FTT. However, the same economic effect can be reproduced through the purchase and sale of OTC derivatives, which would not be subject to the FTT. Is the GAAR intended to catch such transactions? Preventing FTT avoidance through the use of OTC derivatives amongst financial intuitions outside participating MS appears ambitious. It certainly would give rise to enforcement difficulties. Third, the GAAR will not prevent perhaps the most obvious action to avoid the payment of the FTT: relocation of headquarters outside participating MS or the conversion of branches found in non-FTT states into subsidiaries.

Overall, the Commission's statements which recognize the "strong risk of relocation" appear to be more credible than the ones which claim that the risk of geographical relocation is "rather limited".

Of course any tax is subject to the risk of avoidance but some taxes may be less susceptible to real relocation and avoidance than others. As we explain below, the Commission recognizes that one of these taxes is the FAT. The tax base of the FAT is composed of profits and of labour costs. The former component is clearly susceptible to profit shifting activities but the latter is certainly less mobile than financial transactions.

(ii) Predictable and stable source of revenue

Both the 2011 IA and the 2013 IA<sup>36</sup> acknowledge that estimating revenues for such taxes "is not feasible without a high degree of uncertainty."<sup>37</sup> Nonetheless, at another point in its 2013 IA, the Commission makes bold claims on the FTT revenue potential. The 2013 IA states: "this analysis found […] *very positive effects on public finances* (additional annual revenue in the order of 0.5% of GDP)."<sup>38</sup>

The FTT applied to only 11 countries as proposed in the 2013 Proposal is expected to raise EUR 34 billion per year. The starting point for this forecast is the calculation

<sup>&</sup>lt;sup>35</sup> 2011 Proposal, above fn. 5, p. 13.

<sup>&</sup>lt;sup>36</sup> 2013 IA, p. 21.

<sup>&</sup>lt;sup>37</sup> 2011 IA Vol. 1, above fn. 2, p. 46.

<sup>&</sup>lt;sup>38</sup> IA 2013, above fn. 8, p. 16.

made for the FTT in the 2011 Proposal. The 2013 IA takes the 2011 estimate and scales it by the banking sector's net operating income of the 11 participating MS. This is a very crude approach and the use of such proxies could further affect the credibility of the estimate, especially of a specific point estimate.

The uncertainty surrounding the forecasts of FTT revenues has been painfully confirmed in the recent introduction of FTTs by Italy and France. In both cases, the authorities significantly overestimated potential revenues from their newly-introduced taxes. For 2012, the French Treasury collected EUR 245 million on the FTT, instead of the anticipated EUR 540 million, that is, only 44 per cent of the initial estimate.<sup>39</sup> The French government in its Finance Bill for 2014 (*Project de loi de finances pour le 2014*) explains that lower receipts are due to smaller trading volumes (trading volumes on Euronext were down 20 per cent in 2012 compared 2011), to an overestimation of OTC volumes and finally to an underestimation of exempt trade volumes.<sup>40</sup> It seems that FTT revenues will disappoint in 2013 too. In 2012, the government estimated 2013 revenues to be about EUR 1.5 billion but the latest estimates suggest a figure close to EUR 690 million. Figures for 2014 are forecast to be EUR 701 million, far from the initial predictions of EUR 1.5 billion per year. Overall, annual revenues will probably be only around 46 per cent of initially forecasted proceeds.

When introduced, the Italian FTT was forecast to raise EUR 1 billion a year but between March and October 2013, the tax only raised EUR 159 million.<sup>41</sup> Even considering that the tax had only been in force for 8 months and that the FTT on derivatives was effective only from 1 July 2013, the actual proceeds are still substantially lower than the forecast.

To be sure, the FTTs adopted in France and Italy are different to the FTT proposed by the Commission, however, the French and Italian authorities were aware of these differences when producing their estimates. The point here is that tax authorities have systematically, greatly overestimated potential revenues from an FTT, not least because of the very nature of the tax base. This is a further reason to question the choice of an FTT as a revenue raiser.

Other taxes such as the FAT could be better candidates for providing a relatively predictable and steady stream of proceeds. For example, the Italian *Imposta Regionale sulle Attivita' Produttive* (IRAP) which is very similar to an FAT type 1 collects considerable proceeds. Figure 1 plots total tax revenues from IRAP over GDP since the introduction of the tax in 1997 (the first revenues were collected in 1998). Two facts are clear. First, IRAP has raised a large amount of revenues. For the entire

<sup>&</sup>lt;sup>39</sup> "Project de loi de finances pour le 2014, Rapport économique, social et financier", (2013). This is available at: <a href="http://www.economie.gouv.fr/files/plf-2014-annexe1.pdf">http://www.economie.gouv.fr/files/plf-2014-annexe1.pdf</a>>.

<sup>&</sup>lt;sup>40</sup> "Project de loi de finances pour le 2014, Évaluation des voies et moyens, Tome I, Recettes", (2013). This is available at:

<sup>&</sup>lt;a href="http://www.performance-publique.budget.gouv.fr/farandole/2014/pap/pdf/VMT1-2014.pdf">http://www.performance-publique.budget.gouv.fr/farandole/2014/pap/pdf/VMT1-2014.pdf</a>>.

<sup>&</sup>lt;sup>41</sup> Ministero dell'Economia e delle Finanze, Dipartimento delle Finanze, "Bollettino delle Entrate Tributarie, Gennaio-Ottobre 2013", (December 2013). This is available at: <u>http://www.ilsole24ore.com/pdf2010/Editrice/ILSOLE24ORE/ILSOLE24ORE/Online/ Oggetti Corre</u> lati/Documenti/Notizie/2013/12/Bollettino-entrate-Ottobre-2013.pdf.

Italian economy, it has raised between EUR 27.7 billion in 1998 and EUR 39.4 billion in 2007.<sup>42</sup> EUR 36.1 billion in 2008 and around EUR 32 billion a year thereafter with basic, national rates<sup>43</sup> varying between 3.9 (after 2008) and 4.25 (before 2008) for the non-financial sector and between 3.9 (in 2008 and 2009) and 5.40 (between 1998 and 2001) for the financial sector.<sup>44</sup> Second, IRAP receipts have proven to be very stable with a ratio of between 2.2 and 2.5 per cent of GDP, at least until 2007, the year when the financial crisis first materialized.<sup>45</sup> Initial forecasts for IRAP revenues in 1998 were also higher than the actual revenues collected but the forecasting error of about 22 per cent<sup>46</sup> was much smaller than that of the French and the Italian FTTs. Such underestimation was mainly due to the use of national accounts including an estimate for evasion, which is quite substantial for Italy. The forecasting error was not due to an unpredicted decline in activities.



Source: OECD Tax Revenues Statistics, accessed January 2013.

In pure revenue-raising terms, there are more efficient instruments than an (iii) FTT<sup>47</sup>

<sup>&</sup>lt;sup>42</sup> Data are sourced from the European Commission, Taxation and Customs Union Electronic Database: http://ec.europa.eu/taxation\_customs/resources/documents/taxation/gen\_info/economic\_analysis/tax\_st ructures/2013/ntl release 2013.xls

Since 2002, Italian regions can increase or decrease the IRAP rate by one percentage point.

<sup>&</sup>lt;sup>44</sup> Unfortunately, we do not have disaggregated data for the financial sector but there is no reason to believe that IRAP has raised lower revenues (over GDP) for the financial sector which is levied a slightly higher IRAP rate than the rest of the economy.

<sup>&</sup>lt;sup>45</sup> Data are sourced from the OECD Revenues Statistics 2012, where IRAP revenues are recorded under heading 6000 for Italy. See OECD, "Revenue Statistics, OECD Publishing, (2013). <sup>46</sup> G. Arachi and A. Zanardi, "La Riforma del Finanziamento delle Regioni Italiane: Problemi e

Proposte", Econpubblica working paper no. 65, Universita' Bocconi, Milano, 1999.

<sup>&</sup>lt;sup>47</sup> On this point see, also, IMF, "A fair and substantial contribution by the financial sector – Final Report for the G-20", (June 2010), pp. 19-21.

Macroeconomic impact of an FTT

The 2011 IA initially forecasted that the FTT would reduce annual real GDP by 1.76 per cent in the long run. After considering some mitigating effects,<sup>48</sup> the same IA cuts such estimates to 0.54 per cent *in the best case scenario*.<sup>49</sup> The estimations are then almost halved in the 2013 IA to a 0.28 reduction in annual real GDP in the long-term.

The first point to keep in mind when reading these estimates is that, as the Commission notes "[a]s this new model makes a series of stylized assumptions, for instance about the functioning of financial markets, the financing of business etc., its numerical results have to be interpreted with some caution; they present tendencies rather than precise values."<sup>50</sup> Therefore, we should not accord these estimates with more weight than they deserve.

This is self-evident when considering that the negative impact of the FTT on real GDP has been cut from 1.76 to 0.28 per cent, which is a 1.5 per cent revision in GDP terms. This is a significant change attained through same debatable assumptions. For example, the first reduction in the estimates from 1.76 to 0.54 per cent has been achieved assuming that bank lending and retained earnings are ring-fenced and therefore not affected by the FTT. As explained later on, this is not a plausible assumption.

The final reduction of the estimates from 0.54 to 0.28 per cent is achieved through two assumptions. First, it is assumed that only 30 per cent of investment in the economy is financed by equity and therefore that only 30 per cent of total investment is affected by the FTT. The 2011 IA assumed that 50 per cent of investment was affected by the FTT. Second, the FTT rate used is lower (0.14 per cent) than the FTT rate applied in the previous version of the model (0.2 per cent).<sup>51</sup>

More generally, no single point estimate is reliable in a forecasting exercise of this kind. Point estimates are a powerful tool for politicians, especially if they are small or big enough to suit their arguments; however they are treated with extreme caution by informed observers. For this reason, institutions such as the Bank of England produce confidence intervals for their estimates of GDP growth so that the reader is fully

<sup>&</sup>lt;sup>48</sup> Mitigating effects include, for example, the exclusion of primary markets, the assumption that transactions done by financial institutions represent 85 per cent of all transactions, and that bank lending and retained earnings are ring-fenced (see box on mitigating effects in 2011 IA Vol. 1, above fn. 2, p. 51).

<sup>&</sup>lt;sup>49</sup> The best-case scenario materialises when all mitigating factors occur simultaneously.

<sup>&</sup>lt;sup>50</sup> 2011 IA Vol. 1, above fn. 2, p. 51. At p. 51 the IA also states: "[t]hese features of the tax are not necessarily well taken into account in the modelling of the macroeconomic effects and the impact of this specific design on the macroeconomic effects is therefore of interest. There is no available model to assess these effects and the channels through which they impact macroeconomic variables. The only available approach is therefore to proxy the effects, *at the cost of scientific rigour and with the large caveats and uncertainties that such an exercise may carry*."

<sup>&</sup>lt;sup>51</sup> As Oxera note, the FTT rate used in the 2011 IA varies in different parts of the assessment. The rate used to derive macroeconomic predictions is 0.2 per cent (2011 IA Vol. 16, above fn. 2, p. 37). Oxera,

<sup>&</sup>quot;What would be the economic impact of the proposed financial transaction tax on the EU? Review of the European Commission's economic impact assessment", (December 22, 2011), p. 5.

aware that the forecast can vary according to the different parameters assumed in the forecasting model. The IAs do not systematically investigate and discuss such confidence intervals for their estimates; furthermore, it is telling that the variation in the forecast reported by the IAs is always in the same direction: the negative effect of the FTT on GDP just gets smaller and smaller.

As the Commission itself admits, their model makes some simplifying assumptions. Had the economy been modelled in a slightly more sophisticated way, the predictions of the effects of the FTT on GDP could have been bleaker. Crucially, the Commission's analysis does not investigate avoidance or relocation as the model is one of a closed economy, it does not model the banking system, nor does it include the derivatives market.<sup>52</sup> As discussed above, relocation and avoidance are matters of very great concern for an FTT which is not implemented globally, and, therefore, their absence in the model is significant.<sup>53</sup> The choice of not modelling the banking sector<sup>54</sup> (or any other financial intermediary) is a peculiar one as about three fourths of firms' financial needs within the Euro area are satisfied by the banking sector.<sup>55</sup> Any tax that affects the banking system will also affect the real economy. Also, the model used in the IAs excludes derivatives, although the authors of the model admit that "derivatives account for a large share of transactions in real-world financial markets today"<sup>56</sup> and the Commission itself plans to raise about EUR 21 billion from taxing derivatives (this amounts to over 60 per cent of the total forecasted EUR 34 billion in FTT revenues).

The model also fails to consider the potential changes to financial markets resulting from the tax, despite the fact that these could be of great significance, and, indeed, are taken into account by the Commission in the calculations of the revenues the FTT is expected to raise. When discussing the impact of the FTT beyond the model used, the 2013 IA acknowledges that some financial activities will become uneconomic and therefore, they will disappear or will be curtailed substantially. The list is so long that the FTT seems to have the potential to create one of the largest structural breaks in financial history. The list includes repos transactions, high frequency trading, delta hedging, and the current form of brokerage activities where brokers trade in their own name and in their own account. The Commission assumes that the substantial reduction of these market segments will not harm growth as such activities are considered to have little economic value. Such view is not in line with empirical evidence which, at best is still mixed.<sup>57</sup> If entire markets disappear, it is highly unlikely that there will not be any detrimental effects on growth. For example, repos

<sup>&</sup>lt;sup>52</sup> "First, there is no derivative market in the model and it is assumed that a STT [securities transaction tax] is effectively implementable and enforceable. Therefore, the model cannot be used to answer questions about the taxation of derivatives; it cannot be used either to study changes in the market structure...[s]econd, we use a closed-economy model. This does not allow us to assess cross-border capital mobility and the relocation effects of the STT neither." 2011 IA Vol. 16, above fn. 2, p. 41.  $^{53}$ See section 2.1 (b)(ii) above.

<sup>&</sup>lt;sup>54</sup> R. Raciborski, J. Lendvai and L. Vogel, "Securities Transaction Taxes: Macroeconomic Implications in a General-Equilibrium Model", European Economy, Economic Papers 450. (March 2012), p. 7.

<sup>&</sup>lt;sup>55</sup> M. Draghi, "The euro, monetary policy and reforms", LUISS Guido Carli University, Rome, (May 6, 2013). This is available at: <a href="http://www.ecb.int/press/key/date/2013/html/sp130506.en.html">http://www.ecb.int/press/key/date/2013/html/sp130506.en.html</a>. <sup>56</sup> Raciborski, Lendvai and Vogel, above fn. 54, p. 8 (emphasis added).

<sup>&</sup>lt;sup>57</sup> Oxera, "Analysis of European Commission staff working document on the proposed Financial Transaction Tax", (May 20, 2013).

are a significant source of funding for the European banking system, especially after the onset of the financial crisis when banks have often used government bonds for refinancing their activities through a repo transaction. The disappearance of the repo market would almost certainly increase the cost of funding for banks and consequently increase the cost of capital for the entire economy with a negative effect on GDP. Indeed, in a leaked document the participating MS raised very serious concerns about the impact of the FTT on the repo market and hence on the economy:

"[r]egarding the low maturity of the repo operations on sovereign bonds market (more than two thirds of repo operations on sovereign bonds have a maturity lower than three days), the tax will induce an additional cost that is not sustainable for the market participants, i.e. companies and member states which need to manage properly their cash in a secure environment. The extinction of the market will negatively affect the sovereign bonds market and by consequence will rise the government funding costs. Repo operations are very useful for managing the treasury liquidity and the disappearance of this market combined by the lack of viable alternatives will induce serious problems about risk management. The problem also holds for banks in managing their marginal liquidity and might cause both higher financial costs on the real economy and financial stability issues."<sup>58</sup>

A prudent approach to tax policy would require the Commission to gather more evidence before implementing tax measures which, by the word of the Commission itself, will wipe out entire segments of the current financial markets. If that is the case, at least the Commission should have attempted to model such a large change in the structure of financial markets.

Overall, some of the fundamental channels through which the FTT can affect the economy are not taken into account by the Commission's calculations. The study thus abstracts from fundamentally important problems, raising questions as to the utility of its predictions for policy analysis.

After presenting the estimate in the 2013 IA, the Commission discusses a few broader issues which, it argues, once taken into account would paint an even less negative picture. For example, the IA argues that by using the proceeds of the FTT to cut other distortive taxes or by using FTT proceeds for productive spending, the negative effect of the FTT on GDP will be reduced. However, one notes here that any positive impact would be related to the reduction of other distortive taxes and to the spending of the FTT.

The 2013 IA also argues that FTT proceeds could be used to consolidate public finances, especially in countries with high debt-to-GDP ratios, and this would reduce the harmful effect of the FTT on the economy. This argument, and the Commission' s concern with public debt, does not sit easily with its proposal to levy the FTT on

<sup>&</sup>lt;sup>58</sup> "Implementing enhanced cooperation in the area of Financial Transaction Tax Questions to the Commission from the working level", p. 3. This leaked document can be found at: <<u>http://www.openeurope.org.uk/Content/Documents/Pdfs/2013FTTnonpaper.pdf</u>>.

government bonds as this will certainly increase the cost of servicing public debt, even if primary markets are exempt. This is accepted by the Commission and it even provides an estimate of this cost, although it does so in a very questionable way. In its 2013 IA it first provides an estimate that the FTT would increase the cost of capital for member states by about 0.07 per cent, equating to EUR 3.85 billion for the eleven participating countries. It then notes that these estimates do not take into account certain mitigating circumstances<sup>59</sup> which it argues, if one estimated them to half the modelled predicted increase in the cost of capital, would bring it down to less than EUR 2 billion.<sup>60</sup> The Commission does not justify the assumption that these mitigating factors could have an effect of this magnitude. The unsatisfactory nature of these estimates was also commented on by the participating MS who in the leaked document mentioned above noted "[t]he [2013 IA] is not fully clear on how the taxation on government bonds would interact with the cost of national debt and whether at the overall level of the 11 MS the negative effect of the increase of the cost of national debts could be counterbalanced by the revenues of the FTT. In particular, it is not clear... how the figures indicated in the impact assessment are calculated; in particular, it is not clear how the Commission estimated the 2bn euro related to the mitigating effects, as well as more clarifications would be requested on the calculation of the 0.07 per cent increase of the public budgets and on the revenues from bonds." They thus asked the Commission if it could give evidence of such estimates.<sup>61</sup>

Finally, the IA 2013 suggests that the FTT could help redistribute resources for a fairer income distribution and that this could lead to higher growth, for example through fewer strike actions. The argument is clearly unconvincing not solely because of the naïve statement about strikes but more importantly, because there is no evidence that the FTT will in fact be able to significantly affect redistribution nor does the Commission report any literature discussing the evidence on the relationship between growth and redistribution. The link between the FTT and the positive impact on GDP through a reduction in strikes is tenuous at best, and one is surprised to find it being made in an official Commission publication.

Efficiency: FTT vs FAT

Of course, with the exception of lump-sum taxes, all taxes distort economic behaviour and therefore affect GDP and create *deadweight losses* or *excess burdens*. In other words, raising revenues through taxes imposes a cost on taxpayers and society because taxes distort economic decisions.<sup>62</sup> For example, taxes on the return to investment increase the cost of capital and therefore reduce investment which in turn reduces GDP. Because of lower investment, society suffers a loss of welfare. Part of this loss will be recovered through the revenues collected by the extra tax; another

<sup>&</sup>lt;sup>59</sup> 2013 IA, above fn. 8, p. 27.

<sup>&</sup>lt;sup>60</sup> 2013 IA, above fn. 8, pp. 27-28.

<sup>&</sup>lt;sup>61</sup> "Implementing enhanced cooperation in the area of Financial Transaction Tax Questions to the Commission from the working level", above fn. 58, p. 3.

<sup>&</sup>lt;sup>62</sup> A. J. Auerbach and J. Hines, "Taxation and economic efficiency" in A. J. Auerbach and M. Feldstein (eds.), *Handbook of Public Economics*, (2002, Elsevier) edition 1, volume 3, chapter 21, pp. 1347-1421.

part will simply be lost. This is the deadweight loss. The challenge of designing an optimal tax system is to keep the deadweight loss to a minimum. Hence, revenues for the provision of public goods should be raised through the least distortive taxes, that is, taxes that do not trigger large changes in agents' economic behaviour.

It is sobering to note that using the figures provided by the IAs, Oxera<sup>63</sup> estimates that the Commission's calculations imply that "in order to raise EUR 1 of FTT revenue, the European economy could be expected to sacrifice EUR 2 in economic activity" and that with the assumption of an average ratio of total tax revenues over GDP of 40 per cent across European economies, "80% of the EUR 34 billion estimated revenues would be lost owing to the negative impact [of the FTT] on other tax sources." These calculations, although approximations show that the FTT is not a particularly efficient way of raising revenues.

Indeed, it is unlikely that an FTT-type tax belongs to the set of taxes which are least distortive. The FTT is likely to trigger both large real responses (substitution of taxed assets with non-taxed equivalents) and, as discussed above large avoidance behaviour (variation in the timing of transactions, relocation of entities and activities). This will reduce trade in the FTT zone. Despite the efforts of the Commission to design the FTT so as to minimize real responses and avoidance, the FTT tax base will remain very mobile, especially if London, one of the strongest global financial centres is outside the scope of the tax.

Taxes such as the FTT which are levied on transactions between economic agents are particularly distortive as they distort economic decisions and therefore reduce output. It would then be more efficient to tax output directly.<sup>64</sup> On the other hand, taxes on pure rents<sup>65</sup> do not distort economic decisions as they are levied on the excess return that a resource generates relative to its next-best use.<sup>66</sup> The IMF has proposed an FAT which in its type 2 and type 3 versions should be levied on rents so not to be distortive.<sup>67</sup> In reality, it is difficult to identify and tax rents precisely so an FAT will still be distortive but certainly to a lesser extent than a tax directly levied on transactions. For these reasons, overall, the FAT is likely to extract the same level of tax revenue from the financial sector at a lower cost to the economy as a whole.

In line with these considerations, the Commission recognises that there are alternatives to the FTT. In particular, the Commission acknowledges the superiority of an FAT-type tax in terms of efficiency. The IA 2011 states that:

"[i]n fact, empirically the reaction to tax increases seems to be stronger for transactions than for FDI and profits in the financial sector, pointing to

<sup>&</sup>lt;sup>63</sup> Oxera, above fn. 57, p. 2.

<sup>&</sup>lt;sup>64</sup> IMF, above fn. 47, p. 19.

<sup>&</sup>lt;sup>65</sup> Rents can be defined as the extra return to productive factors such as labour and capital above the minimum return required in a competitive economy.

<sup>&</sup>lt;sup>66</sup> J. Mirrlees, S. Adam, T. Besley, R. Blundell, S. Bond, R. Chote, M. Gammie, P. Johnson, G. Myles and J. Poterba, "Tax by Design: the Mirrlees Review", (the Mirrlees Review), (September 2011, OUP), p. 31.

<sup>&</sup>lt;sup>67</sup> IMF, above fn. 47.

potential higher risks of erosion of the tax base of the FTT compared to the FAT."

The Commission's argument on the smaller elasticity of profits and investment should be supplemented by the very simple observation that the tax base of an FAT includes the cost of the labour force. This component is certainly much less mobile than financial transactions.

The 2011 IA investigates the characteristics of an FAT and of an FTT and concludes:

"[t]he analysis of macroeconomic impacts (and the relocation issues mentioned above) suggests that the *economic distortions related to raising revenue could be lower with a FAT compared to an FTT*. Model simulations indicate that the short-term effect of a 5% FAT on GDP could be limited to around 0.10% while the long-term effect is simulated to reach about half a per cent (deviation of GDP from its long-run baseline), against annual tax revenues of around 0.2% of GDP. On the other hand, a stylised transaction tax on securities (STT), where it is assumed that all investment in the economy are financed with the help of securities (shares and bonds) at 0.1% is simulated to cause output losses (i.e. deviation of GDP from its long- run baseline level) of up to 1.76% in the long run, while yielding annual revenues of less than 0.1% of GDP."

According to the analysis, therefore, from a GDP perspective the FAT dominates the FTT.<sup>69</sup> Obviously, these results have to be seen in the light of the macroeconomic models used to derive them. The limits in the model used for the FTT have been discussed above. Also, as discussed above, some parameters of this model have been changed since this conclusion was reached. Setting that to one side, one notes a more fundamental problem with this comparison: the rates of the two tax instruments discussed would not generate the same tax revenues. Given different predicted tax revenues and differential negative effects on GDP, it is very hard to compare the instruments in a meaningful way. Interpreting these results is made even more difficult by the fact that the assessments of the FAT and the FTT are based on two completely different macroeconomic models.

An evidence-based tax policy would require the Commission to carry out a thorough study of the effects of an FTT versus the FAT, *assuming the same amount of revenues for both taxes*. This would allow for a meaningful comparison of the distortive effects of the two levies on the economy.

(iv) Incidence

<sup>&</sup>lt;sup>68</sup> 2011 IA Vol.1, above fn. 2, 33.

<sup>&</sup>lt;sup>69</sup> These calculations and the comparisons between the FTT and the FAT are carried out using the forecast that the FTT will reduce GDP by 1.76 per cent in the long run. As mentioned above, such forecast has been reduced first to 0.54 per cent and then to 0.28 per cent. Even a 0.28 per cent reduction in GDP is larger than the forecasted reduction in GDP due to an FAT. Once again, it should be noted that point estimates per se are questionable and that a confidence interval for such points should be provided.

The IMF and the Mirrlees review noted that the FTT's real burden may fall largely on final consumers rather than the earnings in the financial sector.<sup>70</sup> Along the same lines, the 2011 IA concludes:

"[a]s far as the FTT is concerned, *a large part of the burden would fall on direct and indirect owners of traded financial instruments*. Moreover, levying the tax on secondary markets generates cascading effects, which might have non-transparent consequences, and thus make incidence more complex. In fact, if business transactions are non-exempt, the tax will be cascading through the production process and affect the price of non-financial products and services."<sup>71</sup>

If this is the case, it would raise serious doubts about the 2011 Proposal's claim that private households and SMEs [small and medium size enterprises] not actively investing in financial markets "would hardly be affected."<sup>72</sup>

Clearly, the incidence of a tax is of great importance, and taxes which are more likely to fall on their intended target are to be preferred. The economic burden of the FAT, in particular the FAT types 2 and 3, is much more likely to fall where it is intended to fall. This is because the FAT taxes excessive wages and profits generated in the financial sector. The possibilities and the incentives to pass on the tax are more restricted in this case.

3.2. Creating appropriate disincentives for transactions that do not enhance the efficiency of financial markets thereby complementing regulatory measures aimed at avoiding future crises.

Whilst this objective might give the impression that the FTT will deal with known causes of financial crises, it certainly does not target any of the accepted causes of the recent crisis, such as excessive leverage and insufficient liquidity coverage. These known causes of the past crisis could be targeted through other corrective taxes such as bank levies along the lines suggested by the IMF or taxes on very short-term liabilities.

As this objective makes clear, the FTT is meant to target short-term trading, in particular high frequency trading (HFT) which is certainly an issue currently worrying regulators.<sup>73</sup> Therefore, the basic thrust of the argument is that HFT has a negative effect on financial markets, and, therefore, by adopting the FTT HFT will be reduced and, consequently, so will the probability of a future crisis. This is a compelling argument at a time when the painful consequences of a financial crisis are still being felt and, in fact, proponents of the FTT have employed the argument repeatedly.

<sup>&</sup>lt;sup>70</sup> IMF, above fn. 47 at p. 20 and The Mirrlees Review, above fn. 66, p. 153.

<sup>&</sup>lt;sup>71</sup> 2011 IA Vol.1, above fn. 2, p. 53.

<sup>&</sup>lt;sup>72</sup> 2011 Proposal, above fn. 5, p. 5.

<sup>&</sup>lt;sup>73</sup> See, for example, A. Haldane, "The race to zero", speech given on July 8, 2011 (emphasis added). This is available at: <a href="http://www.bankofengland.co.uk/publications/news/2011/068.htm">http://www.bankofengland.co.uk/publications/news/2011/068.htm</a>>.

What evidence does the Commission present on the negative effect of this form of trading on financial markets? Surprisingly, the Commission's evidence actually acknowledges the questionable foundations of this objective. The 2011 IA noted that "the empirical economic literature is still *rather inconclusive* on effects from this trading form in terms of increased volatility or price deviations".<sup>74</sup> In a consultation document on the review of the Markets in Financial Instruments Directive (MiFID), the Commission noted "[e]xisting evidence is *inconclusive* about the impact of HFT on market efficiency".<sup>75</sup> Indeed, some studies have found that HFT improved market efficiency through tighter spreads and increased liquidity.<sup>76</sup>

The point here is not that HFT does not raise legitimate concerns. The flash crash of 6 May 2010 was a warning call that must be heeded and it is imperative that systems and processes are in place to address these concerns. In fact, this is being done at an EU level through regulation. The point here is that the evidence on the effects of HFT which is necessary to support the Commission's objective is inconclusive, as the Commission' s itself recognises.

A significant project on the The Future of Computer Trading in Financial Markets, which was recently carried out under the agies of the UK Department of Trade Innovation and Skill, and which involved leading academics from around the world concluded:

"CBT (computer based trading) is now the reality in asset markets. Technology has allowed new participants to enter, new trading methods to arise and even new market structures to evolve. Much of what has transpired in markets is for the good: liquidity has been enhanced, transactions costs have been lowered and market efficiency appears to be better, or certainly no worse. The scale of improvements may be fairly small and, in the short term, they may have been obscured by the background of a very poor performance by Organisation for Economic Co-operation and Development (OECD) economies and stock market indexes in particular. However, there are issues with respect to periodic illiquidity, new forms of manipulation and potential threats to market stability due to errant algorithms or excessive message traffic that must be addressed. Regulatory changes in practices and policies will be needed to catch up to the new realities of trading in asset markets. Caution must be exercised to avoid undoing the many advantages that the high

<sup>&</sup>lt;sup>74</sup> 2011 IA Vol. 1, above fn. 2, p. 16.

<sup>&</sup>lt;sup>75</sup> European Commission, 'Public Consultation: review of the markets in financial instruments directive (MiFID)', (December 14, 2010), (emphasis added). This is available at <<www.ec.europa.eu/internal\_market/consultations/docs/2010/mifid/consultation\_paper\_en.pdf>.

<sup>&</sup>lt;sup>76</sup> See the literature reviewed in Foresight, "The Future of Computer Trading in Financial Markets – Final Project Report" (The Government Office for Science, London, 2012), available at <a href="http://www.bis.gov.uk/assets/foresight/docs/computer-trading/12-1086-future-of-computer-trading-t

in-financial-markets-report.pdf>. The Commission's consultation paper on MiFID, cited above at fn. 75, continues "[S]ome studies suggest that HFT using market making and arbitrage strategies has added liquidity to the market, reduced spreads and helped align prices across markets. However, the average transaction size has decreased considerably and some participants question the value of the additional liquidity provided. They argue there may be improved liquidity for investors who trade retail-size orders but it is now more difficult for institutional investors to execute large orders. Also, there are different views about whether HFT increases or reduces market volatility."

frequency world has brought. Technology will continue to affect asset markets in the future, particularly as it relates to the ultra-fast processing of news into asset prices." <sup>77</sup>

The point here is that on the basis of the current evidence the reduction of HFT simply cannot be portrayed as an unambiguously desirable goal as the Commission has done.

Not only does the Commission's evidence raise questions about this objective, it also raises questions on the use of a transaction tax to obtain it:

"[t]he short-term trading the STT is meant to eliminate is not proven to be detrimental to price recovery. Neither is there a clear link between short-term trading and long-run cycles of asset mispricing (bubbles). On the contrary, the instruments which led to the 2008 financial crisis do not belong to the set of frequently traded instruments. Moreover, asset bubbles have historically also occurred in markets with high transaction costs (real estate), suggesting that a low-rate STT will not prevent them in the future".<sup>78</sup>

Again, therefore, even if evidence were conclusive that high frequency trading is harmful, the Commission's evidence does not make the case for an FTT being the best instrument to reduce it. Indeed, more generally, the FTT does not discriminate between "good" and "bad" transactions, and so whilst it might act as a disincentive for transactions that do not enhance market efficiency it will also act as a disincentive for transactions that do. The concerns generated by HFT are better addressed through targeted regulation.

# 3.3. Avoiding a fragmentation of the internal market that might be caused by uncoordinated tax measures of the member states

Uncoordinated tax measures adopted by member states lead to a fragmentation of the internal market, thus making this a reasonable objective. However, it must be pointed out that uncoordinated tax measures are the rule and not the exception within the EU. Indeed, around the time the FTT debate commenced at an EU level, uncoordinated bank levies were being introduced in thirteen member states,<sup>79</sup> leading to a fragmentation of the internal market and double taxation, however the Commission did not attempt to address this issue through a harmonizing directive. It is not clear why the Commission finds a need to address uncoordinated taxes in the financial sector of one type (FTT) but not another (bank levy). This unexplained selectivity, in and of itself, does not undermine the objective, however, it does give rise to questions about where this objective ranked in terms of importance in the Commission's mind. It appears undoubtedly true that this objective was not the driving objective behind these proposals.

<sup>&</sup>lt;sup>77</sup> Foresight, above fn. 76, p. 59.

<sup>&</sup>lt;sup>78</sup>2011 IA Vol. 16, above fn. 2, p. 34.

<sup>&</sup>lt;sup>79</sup> Austria, Belgium, Cyprus, France, Germany, Hungary, Netherlands, Portugal, Romania, Slovakia, Slovenia, Sweden and the UK.

Furthermore, this objective must now be viewed from the perspective of enhanced cooperation. The introduction of the FTT will remove distortions of competition amongst participating MS (other than those created by different rates). However, it is not evident that the level of distortion within the Internal Market as a whole will be reduced since the national FTTs currently in place are much narrower than the proposed FTT and the FTTs in the seven non-participating MS will remain in place. It is not at all evident that the overall level of distortion within the Internal Market as a whole will be less than it currently is once these five (possibly rising to six) narrow national FTTs are replaced with a much broader FTT in the eleven participating MS.

The 2013 IA recognises that double taxation will arise as a result of the proposed FTT, whenever the transaction is also subject to a national FTT of a non-participating MS. For example, if a German bank sells shares in a UK company to a French bank, the FTT will be due in Germany and France and stamp duty will be due in the UK. The 2013 IA states that "these potential occurrences of double taxation should constitute only a tiny fraction of transactions for which the common system of FTT is designed",<sup>80</sup> and provides some back-of-the-envelope calculations on the potential double taxation as a result of the proposed FTT's interaction with UK stamp duty. This might be so, and one acknowledges data issues, however a more comprehensive estimate for the size of this problem would have been preferable.

#### 3.4. Paving the way towards a global introduction of the tax

Regarding this point the Commission argues:

"[t]he present proposal also substantially contributes to the ongoing international debate on financial sector taxation and in particular to the development of an FTT at a global level. ... The present proposal demonstrates how an effective FTT can be designed and implemented, generating significant revenue. This should pave the way towards a coordinated approach with the most relevant international partners."<sup>81</sup>

The EU Commission is keen on setting an example for how a tax on financial transactions could be implemented. The experience of the eleven participating MS would serve as an incentive for other jurisdictions to follow and also introduce an FTT. The authors believe that the Commission may instead be setting the exact opposite incentives for non-FTT states.

The UK, the US and other countries have been adamant in saying that they are not interested in adopting an FTT. The introduction of an FTT in a subset of EU Member States would seem to provide other states with incentives *not* to adopt the tax because non-participating MS would benefit from the relocation of entities and activity away from states which introduce the tax. Therefore, the soundness of this objective is at least questionable.

<sup>&</sup>lt;sup>80</sup> 2013 IA, above fn. 8, p. 17.

<sup>&</sup>lt;sup>81</sup> 2011 Proposal, above fn. 5, p. 3.

#### 4. Conclusion

Overall, the FTT proposed the Commission raises a number of concerns. Whilst some of its objectives are reasonable, others are questionable. More importantly, the evidence provided by the Commission itself does not support the FTT as the instrument which is best suited to achieve them.

In the light of the Commission's own IAs the writers can only conclude that more targeted and more efficient instruments should and could be used to achieve these objectives. These include a levy on banks' balance sheets which would make financial institutions pay taxes somewhat related to the implicit bailout guarantee which they enjoy, an FAT to tax excessive rents in the financial sector, and various forms of regulation. The Commission expended considerable time and energy on producing the best possible evidence in support of an FTT. That this is the evidence it produced is perhaps the most damning indictment for the FTT.

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