

# TRADE UNION ADVISORY COMMITTEE TO THE ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT

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This paper was drafted by Pierre Habbard (TUAC) with contributions by Kirsty Drew & John Evans (TUAC), Anabella Rosemberg (ITUC & TUAC), Peter Bakvis & Francesca Ricciardone (ITUC/Global Unions - Washington Office), and Andrew Jackson (Canadian Labour Congress).

# THE PARAMETERS OF A FINANCIAL TRANSACTION TAX AND THE OECD GLOBAL PUBLIC GOOD RESOURCE GAP, 2010-2020

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### **Summary**

- This paper examines the value and parameters of a Financial Transaction Tax (FTT) in the context of enormous OECD country public resource gaps created by the financial crisis, on the one hand, and significant government commitments for financing development and climate change mitigation and adaptation measures on the other.
- As a result of the global crisis, including the bailing out of the banking sector, OECD government deficits have reached unprecedented levels. For the OECD, the size of fiscal consolidation projected at \$300-370bn per year over the coming years will place severe budget constraints on governments. Working families risk paying twice for the crisis: first through rising unemployment and falling incomes and then, as a result of cuts in public expenditure, through reduced access to social services and the corresponding rise in inequality. The OECD fiscal consolidation programme would put postwar welfare systems and social cohesion at risk. And yet these same governments have still to deliver on their commitments to finance global public goods, including raising Official Development Assistance to 0.7% of Gross National Income and climate change adaptation and mitigation measures for developing countries. The global public good resource gap that would emerge would be in the range of \$324-336bn per year between 2012 and 2017 (\$156bn for climate change, \$168-180bn for ODA). These figures could change should the global economy move to self-sustaining recovery and growth rates and hence tax receipts rise. Nonetheless, at least part of the new public policy coming out of the crisis should be grounded on a revision of tax policy. The criteria for tax policy must be social justice, economic value and political acceptability. On all these grounds an FTT would make sense.
- The economic justification for an FTT starts with the acknowledgement of the harmful effects of short-term speculation producing strong and persistent deviations of asset prices from their theoretical equilibrium levels.

Such "overshooting" in prices lead to speculative bubbles over the long run. A measured and controlled increase in transaction costs implied by an FTT would slow down trading activities so as to align capital flows with economic fundamentals and the real economy, while freeing up new sources of financing for global public goods. Since the original proposal by James Tobin, the idea of an FTT has been developed in many different ways both by economists and civil society groups, which have a strong focus on financing for development. Today, the issue is back on the agenda with the current global crisis and the G20 process in particular. Unlike in the pre-crisis literature, it has now gained considerable traction, both as a financial stability instrument and as a solution for financing for development.

- This paper analyses three major contributions to the introduction of a financial stability-oriented FTT, which were published in 2009 in Austria, France and the US. The analysis shows that an FTT could be designed with different rates for each "counterparty" (regulated banks, other financial institutions & private capital, and non-financial corporations and public institutions) and for different transactions ('traditional' foreign exchange markets, exchange-traded derivatives, over-the-counter (OTC) derivatives), assuming that some categories of counterparty (e.g. hedge funds) or transaction (e.g. certain derivative products) are more prone to speculative trading than others. Such a multi-tiered tax regime would help to identify the desirable level of reduction in trading activities, which should be large enough to wipe out short-term speculative trading, but not so large as to hamper normal functioning of markets. Given the change in scale in financing global public goods resulting from the OECD countries' resource gap, and new financial stability concerns associated with the shadow financial industry, it is important for an FTT to cover exchange traded and over-the-counter (OTC) derivatives, where the overwhelming majority of trading is taking place. Hence, the standardisation and overall regulation of OTC derivatives – which is on the agenda of the G20 – should become a high priority in order to avoid any feasibility problems with regard to the application of an FTT to OTC transactions.
- The IMF has argued for the creation of a "global banking insurance scheme" as an alternative to an FTT, to which the Fund has been opposed. The two instruments differ in terms of both revenues (which would not be available for public goods under an insurance scheme) and the handling of risk (institution-based under insurance, transaction-based under an FTT). Two and a half years into the crisis, serious flaws remain in the national and international financial supervisory framework. An FTT, unlike the insurance proposal, would provide governments with a powerful regulatory tool which would not depend on the ability of the supervisory authorities to price or assess risk. An FTT is thus the most appropriate 'low-cost' instrument for tackling volatility in asset prices and for downsizing the global banking industry, particularly at a time when the international financial supervisory framework is in tatters and will take a decade to reform. It would also free up new sources of financing for global public goods, including climate change and development, at a time when public services and welfare across could be at threat if OECD fiscal consolidation is acted upon.

## The OECD scenario for the decade to come: making public welfare pay for fiscal consolidation

In November 2009, the OECD predicted an un-precedented post-war level of government budget deficits and debt for the decade to come. Total OECD government budget deficits and public debt are forecast to exceed 7.6% and 103% of GDP respectively in 2011, compared with 1.3% and 73%

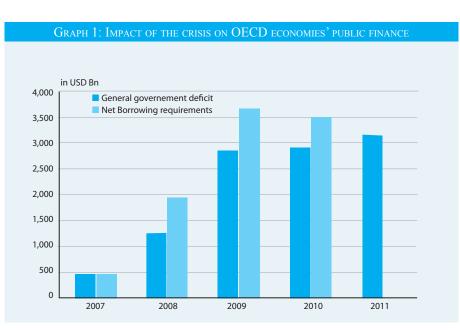
in 2007. This huge public resources gap is unevenly distributed across countries. As shown in Table 1, the US, Japan and the UK will together make up over half of the total OECD country deficit.

TABLE 1: OECD PROJECTIONS OF GENERAL GOVERNMENT DEFICITS IN 2011

	2007	2011		
	% GDP	% GDP	in \$ bn	share of total
OECD – Total	1.3%	7.6%	3172	100%
United States	2.8%	9.4%	1439	45%
Japan	2.5%	9.5%	397	13%
United Kingdom	2.7%	12.5%	279	9%
Euro area	0.6%	6.2%	683	22%

Source: TUAC calculations based on OECD 2009a and stats.oecd.org

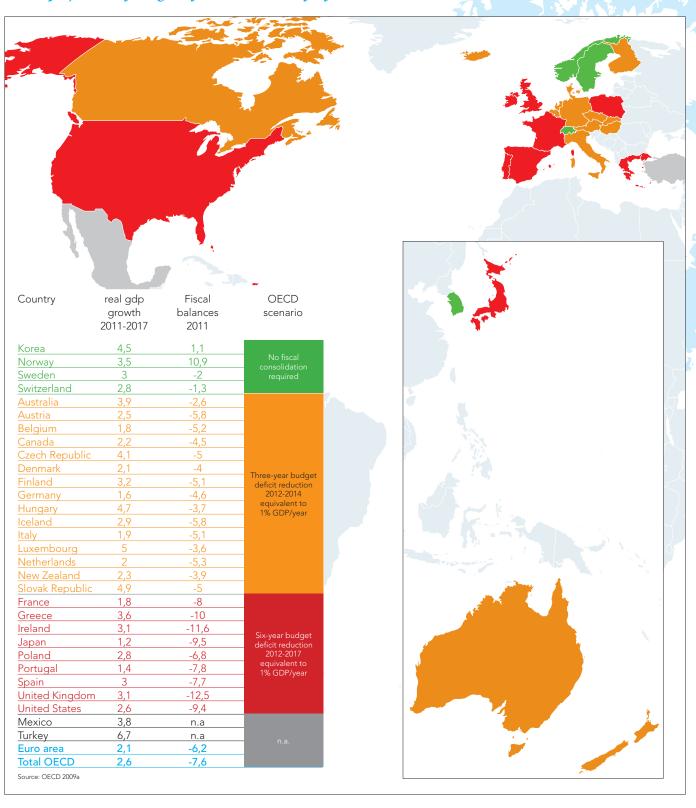
- The forecast OECD public finance gap can also be measured using the expected growth in net borrowing requirements. And here the picture is even worse, as shown in Graph 1. Whereas in 2007 borrowing requirements were equal to the budget deficit, they have since grown much faster with the result that in 2009, OECD countries' treasuries issued over \$3500bn in public securities, which is seven times the 2007 level. So far, investors have been willing to absorb this exceptional level of issuance of low yield government papers. That could change abruptly, however, should investors re-diversify their portfolio as the recovery makes progress, debt levels continue to rise and sovereign credit risk ratings begin to degrade as in the case of Greece which together would exert upward pressure on interest rates. According to OECD forecasts, government net debt interest payments are likely to increase substantially in the US in 2010 (OECD 2010a).
- The OECD (along with the IMF) has accepted that in 2010 the "balance of risk" implies that the priority should be to maintain stimulus for the global economy rather than fiscal consolidation. However, the OECD contends that 2011 is a crucial year. It argues that unless fiscal consolidation measures are taken to bring fiscal imbalances down to normal levels (below 2%) by 2011, long-term fiscal sustainability and hence cost-efficient access to finance will be seriously at risk. In a scenario issued in November 2009, the OECD outlines a fiscal consolidation strategy for OECD economies to fill this public resource gap between 2011 and 2017. Assuming that there is a gradual recovery at a rate of 2.6% real GDP and that there is no second



Source: OECD 2010a

The OECD fiscal reform scenario that is described for the coming decade - the years of the "heavily indebted rich countries" - would involve cuts in public services, social security and public pensions, as well as regressive tax reforms.

### OECD projections of budget deficits and scenario for fiscal consolidation, 2011-2017



'double-dip' – a reduction of the deficit by 2-2.5% would be within reach without requiring structural reforms. This leads the OECD to postulate a 5% deficit reduction to be tackled by fiscal consolidation measures. As shown in Annex 1, the OECD scenario consists of:

- A three-year fiscal consolidation equivalent to 1% GDP per year between 2012 and 2014 for 15 OECD countries for which the budget deficit in 2011 will be in the range of 2-6% (covering the majority of OECD membership);
- An additional three-year fiscal effort (also equivalent to 1% GDP per year) between 2015 and 2017 for the 9 countries for which the deficit exceeds 6% of GDP in 2011: France, Greece, Ireland, Japan, Poland, Portugal, Spain, UK and US.

According to the OECD, this unprecedented budget consolidation should be met by "efficiency gains" and public sector reforms, as well as "long overdue reforms" to public pension schemes (OECD 2009a). Regarding government revenues, the OECD strongly advocates broadening the tax base and implementing regressive tax reforms that will have the greatest impact on households, including increasing indirect taxation (including VAT and property taxes), cutting top personal income taxes and maintaining or lowering corporate income taxes (OECD 2009c). Overall, the OECD fiscal reform scenario that is described for the coming decade – the years of the "heavily indebted rich countries" - would involve cuts in public services, social security and public pensions, as well as regressive tax reforms. Working families would thereby pay twice – if not three times – for the current crisis: first through rising unemployment and falling incomes and then through reduced access to social services and the corresponding rise in inequality incurred in funding the 1% GDP per year fiscal consolidation efforts. Trade unions are concerned that that such fiscal consolidation programme would put post-war welfare systems and social cohesion at risk.

OECD budget constraints come at a time when commitments to global public goods have yet to be met.

# Financing fiscal consolidation, development and climate change measures

Implementing the OECD's fiscal proposals would amount to a resource gap of roughly \$372bn per year for 2012-2014 (with 25 member states implementing 1% GDP fiscal consolidation) and \$295bn for 2015-2017 (with 9 remaining member states)<sup>1</sup>. The resource gap for the US alone would amount to \$155-168bn per year during 2012-2017, followed by Japan (\$43-46bn), the UK (\$22-25bn) and France (\$22-23bn). These are very broad estimates based on OECD projections. Nevertheless, they help gauge the scale of the budget constraints in the coming decade, should the OECD policy recommendations be implemented. These constraints come at a time when commitments to global public goods have yet to be met, namely:

- Millennium Development Goals (MDGs) by 2015;
- Climate change mitigation and adaptation for developing countries.

Until now there has been no comprehensive monitoring of the gap between commitments and delivery for financing the MDGs<sup>2</sup>. Globally, the

 $<sup>1\,</sup>$  Based on GDP 2008 at current prices & exchange rates (OECD Stat portal), real GDP growth estimates and projections for 2009-2017 published in OECD 2009a.

 $<sup>2\</sup>quad \text{At the 2009 L'Aquila G8 Summit, Leaders tasked a working group with devising a methodology for accounting for development and development-related G8 commitments. This work is on-going.}$ 

most common figure cited in the media is a 2003 World Bank cost estimate of \$50-65bn per year, with more recent estimates existing for Africa and the Asia Pacific regions<sup>3</sup>. For the purposes of this paper, the resource gap in reaching the target ODA level of 0.7% of Gross National Income (GNI) – to which all OECD countries members of the Development Assistance Committee (DAC<sup>4</sup>) have formally committed – is used as a proxy indicator. Based on OECD-DAC figures<sup>5</sup> and the current OECD-DAC weighted average ODA level of 0.3% of GNI, the total OECD resource gap for the years 2012-2017 to reach the 0.7% objective would amount to \$168-180bn per year<sup>6</sup> – of which \$81-88bn would be attributed to the US (current ODA being at 0.18% of GNI) and \$27bn to Japan (also at 0.18% GNI).

TABLE 2: OECD RESOURCE GAP IN FINANCING DEVELOPMENT AND CLIMATE CHANGE

Indicative estimates in \$bn	2012-2014	2015-2017
	Period	Period
Climate change	156	156
Adaptation measures	86	86
Mitigation measures	70	70
DAC members' ODA reaching 0.7% of GNI	168	180
Of which the US	81	88
Of which Japan	27	28
Total average annual OECD gap	324	336

Source: TUAC calculations based on UNDP 2007, UNFCCC 2007 & stats.oecd.org

Similarly, the financing of climate change policies has yet to be secured for developing countries – this was a major contributory factor in the failure of the Climate Change Summit in Copenhagen in December 2009. It is anticipated that any agreement in the future would require a commitment by OECD countries to finance short and medium term measures in developing countries with regard to (i) adaptation to climate change and (ii) mitigation policies (halting deforestation, sustainable agriculture, and technology transfers). Yet no comprehensive cost estimates exists at the international level. Regarding adaptation, the UNDP estimates the cost of measures for developing countries to be \$86bn per year (UNDP 2007) for which financing – it is assumed in this paper – would be covered by OECD country public resources only. With regard to mitigation policies, cost estimates by the UNFCCC value Green House Gas (GHG) emissions reduction measures<sup>8</sup> at \$200bn per year, half of which would cover developing countries (UNFCCC 2007). Unlike adaptation, however, it is widely agreed that mitigation financing should rely on a more diversified pool of resources beyond OECD country public budgets. Even a conservative approach would nevertheless expect OECD countries to bear the brunt of the financial burden (circa 70%, amounting to approximately \$70bn). This ratio could be reduced in the medium run if other mechanisms are established, such as a global carbon tax, a percentage on carbon trading revenues, maritime or aviation levies, among others. Overall,

<sup>3~</sup> For example in 2008 the MDG Africa Steering Group calculated the resources gap at \$28bn/year (http://www.mdgafrica.org). For the least developed countries of the Asia-Pacific region the gap is estimate by the UN at \$8bn per year. (A Future Within Reach, UN-ESCA, 2008).

 $<sup>4 \</sup>quad \text{That is all OECD members except the Czech Republic, Hungary, Iceland, Korea, Mexico, Poland, the Slovak Republic & Turkey.} \\$ 

<sup>5</sup> http://www.oecd.org/dataoecd/48/34/42459170.pdf

<sup>6~</sup> Based on Gross National Income at market prices in 2008 OECD Stat portal, and real GDP growth estimates and projections for 2009-2017 published in OECD 2009a.

 $<sup>7 \</sup>quad \text{The World Bank 2009 estimate of the cost of climate change adaptation for developing countries is \$75-100bn per year for 2010-2050, http://siteresources.worldbank.org/INTCC/Resources/Executivesummary.pdf}$ 

<sup>8</sup> Measures needed to reduce 2000-level GHG emissions by 25% by 2030.

climate change adaptation and mitigation measures for the decade to come would require OECD governments to allocate \$156bn (\$86bn for adaptation, \$70bn for mitigation) per year to the developing countries, in addition to their ODA commitments.

Overall, and as shown in Table 2, if one totals the indicative estimates of the resource gaps for climate change and ODA for the 2012-2017 period, the total OECD-wide resource gap would be close to \$324-336bn per year. This resource gap would come at a time when governments will be pressed by international organisations to cut heavily on public expenditures – in the range of \$300-370bn per year according to our calculations (table 3) – to finance fiscal consolidation, which in turn will place further budget constraints on governments.

TABLE 3: OECD FISCAL CONSOLIDATION PLAN THROUGH CUTS IN PUBLIC SERVICES AND WELFARE

Indicative estimates in \$bn	2012-2014	2015-2017
	Period	Period
Fiscal consolidation equivalent to 1% of GDP/year	372	295
16 OECD countries with 2.5-6% budget deficits in 2011	98	-
(3-year consolidation)		
9 OECD countries with over 6% budget deficits in 2011	274	295
(6-year consolidation)		
Of which the US	155	168
Of which Japan	44	46

Source: TUAC calculations based on OECD 2009a & stats.oecd.org

### The parameters of a financial transaction tax

- The economic justification for an FTT starts with the acknowledgement of the harmful effects of short-term speculation producing strong and persistent deviations of asset prices from their theoretical equilibrium levels. Such "overshooting" in prices leads to speculative bubbles over the long run. A measured and controlled increase in transaction costs implied by an FTT would slow down trading activities so as to align capital flows with economic fundamentals and the real economy. The other acclaimed benefit of an FTT namely the creation of a new and vast source of government revenue –was a secondary objective, at least as far as James Tobin was concerned. "The more the tax succeeds in the economic objectives that primarily motivated me", he said, "the less revenue it collects for worldwide good works" (TUAC 1995).
- Since the original proposal by James Tobin, the idea of an FTT has been developd in many different ways by academic experts and civil society groups, each with their specific parameters and each giving different priority to the dual goals of increasing financial stability and generating new public financing resources. In fact, until the onset of the current crisis, the revenue objective overshadowed the financial stability one. Development/aid centred proposals targeted a minimalist tax rate of 0.005% to "avoid producing market distortions" and to ensure that the impact on financial institutions would "be highly diffused" (Hillman et al. 2007 & Schmidt 2007). Financing the MDGs was almost the only goal. A revenue-focussed FTT proposal that would deliver in the range of \$20-30bn per year was considered "enough".
- There are a number of parameters to consider when elaborating a specific FTT proposal:
  - The tax rate: proposals range from 0.5% (the original proposal by James Tobin) to 0.01% (most recent proposals).
  - Assumptions about the reduction in the trading volume, which is necessary to eliminate short-term speculative trading, that will result

The measured and controlled increase in transaction costs that would result from an FTT would slow down trading activities so as to align capital flows with economic fundamentals and the real economy.

### Distribution of foreign exchange, exchange-traded and OTC derivatives markets per jurisdiction and counterparty

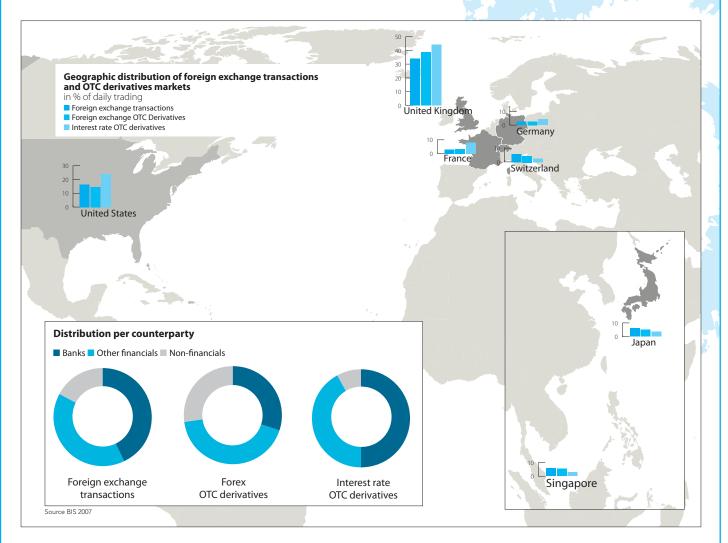


Table 4a: Daily trading in foreign exchange and OTC derivatives per counterparty

(in % or \$ bn, 2007)	Banks	Other financials	Non-financials	Total %	Daily trading	Gross market value
Foreign exchange transactions	43%	40%	17%	100%	3210	
Foreign exchange OTC derivatives	30%	43%	27%	100%	2319	1611
Interest rate OTC derivatives	50%	42%	8%	100%	1686	6724

Source: BIS 2007

TABLE 4B: DAILY TRADING IN FOREIGN EXCHANGE AND OTC DERIVATIVES PER JURISDICTION

(in % & \$ bn, 2007)	UK	US	3rd largest	Other	Total	Daily trading	Gross market value
Foreign exchange transactions	34.1%	16.6%	Switzerland (6.1%)	43.2%	100%	3 210	
Foreign exchange OTC derivatives	38.6%	14.6%	Singapore (5.1%)	41.7%	100%	2 319	1 611
Interest rate OTC derivatives	44%	24.2%	France (8.1%)	23.7%	100%	1 686	6 724

Source: BIS 2007

from the implementation of the tax: these assumptions ranging from -25% to -75% reduction in the volume of trading are key in determining the revenues to be expected by the tax. A crucial step in building an appropriate FTT is to determine the upper ceiling of the reduction in volume, beyond which the FTT would affect normal functioning of markets and create liquidity problems.

- The scope of the transactions covered by the tax is equally important: while Tobin only focussed on foreign exchange 'spot' transactions, more recent proposals extend the coverage to exchange traded derivatives, (non-exchange traded) OTC derivatives, if not bonds, and equity. Table page 10 outlines the main categories of transactions as reported by the Bank for International Settlements (BIS).
- The scope of market participants or "counterparties": Tobin did not exclude applying exemptions to certain categories of market operators such as central banks or, at the other end of the spectrum, individuals and households. There are three broad categories of market participants, or counterparties (BIS definitions):
  - "Reporting dealers": large banks and broker dealers that are registered with central banks or with financial market authorities;
  - "Other financial institutions": smaller banks but also, and importantly, hedge funds, pension funds, and sovereign wealth funds;
  - "Non-financial institutions": private non-financial corporations and government institutions.
  - The geographical coverage: while most contributions will look at the implementation of an FTT worldwide, many proposals include geographical scenarios, including the US (or NAFTA) and the EU (or the EU + Norway and Switzerland). Geographical focus can be legitimate in so far as foreign exchange trading (as well as derivative trading) is extremely concentrated in a handful of countries (mainly the US, the UK, Switzerland and Singapore).
- Unlike in the pre-crisis literature, however, the idea of an FTT has gained considerable traction both as an instrument for financial stability and as a solution for financing development.
- Hence, different tax rates can be set for different counterparties. A low rate would apply for those with high elasticity<sup>9</sup>, such as banks, and a high rate for those with low elasticity, such as non-financial corporations. They can also be set according to the type of transaction a low rate for 'traditional' currency transactions and a high rate for certain derivatives, or for listed equity. The impact on market participants would differ accordingly. For example, an FTT that would apply to the "traditional" foreign exchange markets and to interest rate-related OTC derivatives would directly target banks and "other financial institutions", given their share of trading as shown in Table 4a page 8. On the other hand, an FTT on foreign exchange-related OTC derivatives would affect "other financial institutions" first and foremost (including, one would suspect, many hedge funds) and would affect non-financial corporations at a higher level than an FTT on foreign exchange transactions would do. Accordingly, there is considerable variation in the annual revenues generated by an FTT, from \$10bn (or less) to \$1tr annually.
- The geographical distribution of trading, as show page 9, confirms the excessive level of concentration. The US and the UK jurisdictions capture over 50% of trading on key segments, be it traditional foreign exchange transactions or OTC derivatives.

<sup>9</sup> The magnitude of the reduction in trading volume would be greater than the increase in transaction costs resulting from the tax.



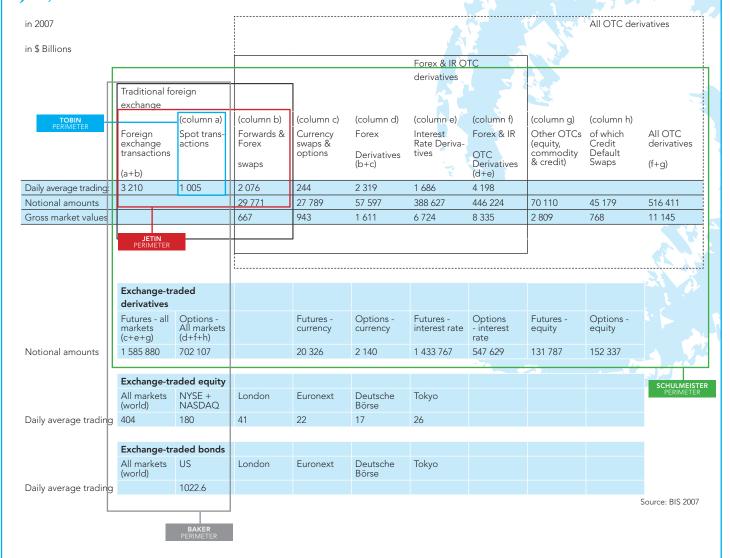


TABLE 5: PARAMETERS OF THE FTT PROPOSALS BY TOBIN, JETIN, BAKER AND SCHULMEISTER RESPECTIVELY

	TOBIN	JETIN	BAKER ET. AL.	SCHULMEISTER
Tax regime	Uniform 0.5%	Multi-tier: 0.02% banks; 0.1% funds and compa- nies	Multi-tier: 0.5% options; 0.01% spot; 0.02% futures 0.5% listed equity; 0.01% bonds	Uniform (3 scenarios) 0.01% 0.05%, 0.1%
Trading volume reduction		-66% for banks & other financials -25% for non-financials	-50%	-75% (at 0.1% tax rate) -75% (0.05%) -25% (0.01%)
Scope of transactions:				
Spot transactions	<b>◆</b>	<b>◆</b>	<b>◆</b>	<b>•</b>
Forwards and forex swaps		<b>•</b>	<b>•</b>	<b>•</b>
Exchange-traded derivatives			<b>◆</b>	<b>•</b>
OTC derivatives				<b>◆</b>
Bonds & Equity			<b>*</b>	
Annual revenues generated (in	\$Bn)			
World	+1000	191.6		917 (0.1%) 650 (0.05%) 286 (0.01%)
US/NAFTA		158	176.9	131 (0.01%)
EU		99		103 (0.01%)

Source: Jetin~2009, Baker~et.~al.~2009, Schulmeister~2009, BIS~2009.~Figures~do~not~add~up~because~of~double~counting.

# A multi-tiered tax system could help if one makes the assumption that certain categories of counterparty or of transaction are more prone to speculative trading than others.

### The expected tax revenues of a financial stability-oriented FTT

- The proposal for an FTT is today back on the agenda, due to the current global crisis and the attention of the G20 in particular. Unlike in the pre-crisis literature, however, the idea has gained considerable traction both as a financial stability instrument and as a solution for financing for development. On the revenue side, the estimates of the OECD countries resource gap for the coming decade as approximate as they may be are indicative of the scale of the post-crisis public budget problem and place the benefits of an FTT in a new context. For this paper, we have selected three contributions published in 2009, which address the dual objectives of financial stability and financing development and which have gained authority among proponents of an FTT in their respective regions, Europe and North America:
  - "The Potential Revenue from Financial Transactions Taxes" by Dean Baker, Robert Pollin, Travis McArthur and Matt Sherman, issued jointly by the Washington-based Center for Economic and Policy Research (CEPR) and the Political Economy Research Institute of the University of Massachusetts December 2009 (Baker 2009). The paper (hereafter "Baker") provides updated figures on a previous paper released by the authors in 2003;
  - "Financing development with global taxes: Fiscal revenues of a currency transaction tax" by Bruno Jetin, Professor at Université Paris-Nord and member of the scientific council of ATTAC-France, March 2009 (Jetin 2009);
  - "A General Financial Transaction Tax: A Short Cut of the Pros, the Cons and a Proposal", by Stephan Schulmeister, Senior researcher at the Österreichisches Institut für Wirtschaftsforschung (WIFO), a Vienna-based joint employer-labour research institute. The paper was published in September 2009 (Schulmeister 2009).
- Bruno Jetin's proposal is the closest to the original Tobin tax project. Based on the BIS Triennial report of 2007 (BIS 2007) and previous work conducted by the Belgian, Finnish and French governments in the early 2000s, Jetin's proposal consists of an FTT with different tax rates per counterparty with a 'small' rate of 0.02% for banks and a bigger rate of 0.1% for other financial institutions and for non-financial corporations. The reason for this lies in the different levels of elasticity of banks – and thereby their post-tax reduction in trading volume – compared with those of other financial institutions and non-financial firms (see Annex 2). A multi-tiered tax system would also be appropriate if one makes the assumption that certain categories of counterparty are more prone to speculative trading than others (e.g. hedge funds). Regarding the scope of transactions, Jetin's FTT would cover the "traditional" foreign exchange markets (that is Tobin's perimeter), to the exclusion of all derivative products, whether traded on organised exchanges or OTC. Factoring in elasticity (and tax evasion) the revenues generated would amount to \$191.6bn worldwide (using 2007 figures), \$158bn for NAFTA alone and \$99bn for the EU<sup>10</sup>.
- Baker's proposal has a wider scope than Tobin's or Jetin's contributions (see page 10, which gives an overview of the coverage of each of the three proposals). In addition to traditional foreign exchange markets, Baker's FTT would apply to nearly all transactions that take place on organised exchanges (futures & options) as well as bonds and listed equity. Based on a uniform -50% reduction in trading volume, different tax rates are applied per category

<sup>10</sup> figures do not add up because of double counting between regions.

of transaction. For spot transactions & swaps (Tobin's perimeter) and bonds, a low 0.01% rate would apply, traded derivatives would be taxed at 0.5% for options and 0.02% for futures, and listed equity at 0.5%. Within the US jurisdictions, the Baker proposal would generate \$176.9bn in annual revenues (based on 2008 figures). Also, the Baker FTT would depart significantly from the original Tobin project in so far as it would draw the vast majority of the revenues not from foreign exchange transactions or traded derivatives, but from assets that are supposedly closer to the real economy, bonds and equity (\$134.5bn).

The Schulmeister FTT proposal has an even wider coverage than Baker's (see page 10). It covers foreign exchange markets (Tobin/Jetin's perimeter), exchange-traded derivatives (Baker's) but also the OTC derivatives: interest rate-, foreign exchange-, equity-, commodity- and credit-related OTCs (including the Credit Default Swaps, CDS). It would ensure level-playing field between exchange-traded and OTC markets. Indeed, a tax applied to exchange traded products only could actually lead to migration of trades away from exchanges toward OTCs. The paper points to the inherently speculative nature of the derivative products that were introduced to protect investors against volatility of the underlying assets: "the spectacular rise of derivatives trading cannot be caused by hedging activities, because the volume of derivatives transactions is just much too big to be accounted for by hedging". In the same vein, it questions the role played by technical trading: the "overall transaction volumes stems from technical trading since this practice uses data of ever higher frequencies (trading becomes progressively "faster"). At the same time, technical trading is unrelated to market fundamentals". Like Baker and Jetin, Schulmeister uses standard rates of reduction in trading volume that do not distinguish between counterparties: -25% for a 0.01% tax rate, -65% for 0.05% and -75% for 0.1%. The fact that expected reductions in trading volumes are drawn from assumptions rather than actual empirical estimates, constitutes a weak point in the argument for an FTT. Given the wider coverage of the Schulmeister-style FTT, the expected revenues are considerably larger than those of Baker and Jetin: worldwide, a tax at 0.1% would generate revenues equivalent to 1.688% of world GDP: that is roughly \$917bn, \$650bn at a 0.05% rate and \$286bn at 0.01%. For North America, it would produce revenues in the range of \$250-300bn at a 0.05% rate and for Europe in the range of \$200-250bn.

# The IMF-preferred insurance scheme and recent tax on large bank balance sheets

At the G20 Summit in Pittsburgh in September 2009, Leaders called on the IMF to undertake research to determine a "fair and substantial contribution" that the financial sector could make to pay "for any burdens associated with government interventions to repair the banking system". Leaders further tasked the IMF "to strengthen its capacity to help its members cope with financial volatility, reducing the economic disruption from sudden swings in capital flows and the perceived need for excessive reserve accumulation." The IMF was quick to publicly dismiss the FTT<sup>11</sup> as an option to be considered in the commissioned report (forthcoming, April 2010). After this initial dismissal, however, an IMF spokesperson later stated that an FTT would be included for consideration under the G20 mandate. The sceptical reaction of the IMF is not surprising. Ever since 1995 – when the Tobin tax became a "global issue" – the IMF has not seriously considered the issue. Warn-

<sup>11</sup> Transcript of a Press Conference by International Monetary Fund Managing Director Dominique Strauss-Kahn with First Deputy Managing Director John Lipsky and External Relations Director Caroline Atkinson, Istanbul, Turkey, Friday, October 2, 2009.

ings by the IMF – and the OECD – against the negative impact of an FTT, were largely based on brief literature reviews of existing academic work. No comprehensive evidence-based research or in-house modelling of the issue has ever been released either by the IMF or the OECD, despite their well-known expertise and availability of resources for this kind of exercise.

The most serious IMF objections to an FTT concern the negative impact that the reduction in trading volume would have on (i) price volatility and (ii) market liquidity and, more generally, market efficiency. Other objections relate to the potential transfer of the added transactions cost to "middle class investors", the opportunities for tax avoidance strategies (tax havens, "disguising" a tax-covered transaction into a non-covered one) or the more economic theory textbook argument, that tax should apply to value added, not to transactions. Dean Baker has published a solid set of responses to those criticisms (Baker 2010) as has Stephan Schulmeister in his FTT proposal. Overall, perhaps the single most important aspect to keep in mind in considering the pros and cons of an FTT is the need for a comprehensive approach – a cost-benefit analysis – and to look at the *specific* problems associated with a particular FTT proposal (in contrast to generic problems that would also be encountered by other regulatory options that are comparable in size and ambition). IMF and OECD concerns about FTT feasibility clearly belong to the latter category. Yes, implementing an FTT would be complicated. However, it is necessary to question whether an FTT would be more complicated to implement than an alternative solution that would deliver comparable financial stability and global public good objectives. Just like any other form of regulation, an FTT will certainly produce collateral costs. For example, as Baker notes, under certain circumstances, the level of reduction in trading volumes or in liquidity might exceed the desired level. This possibility seems far less significant when compared with the cost of inaction, considering the current situation in which un-regulated OTC derivatives account for well over 10 times world GDP in notional terms, and for the total US GDP in gross market value terms.

At this stage of the G20 debate on an FTT, and pending the forthcoming commissioned report, the IMF appears to be strongly in favour of an alternative proposal: a global banking insurance scheme. The insurance option would involve a different set of policy and regulatory issues than those associated with an FTT. The two instruments are different. The difference lies in the way financial risks are handled. Under an insurance scheme, risks are pooled (or collectivised), or they are transferred (from private to public operators), but they are not necessarily reduced although the price of insurance may provide an incentive to reduce a risk<sup>12</sup> (OECD 2008). Being transaction-based, an FTT would automatically reduce risks given the substantial reduction in trading volume (and it would eliminate risks as far as short-term speculative trading is concerned). This difference in risk management has implications with regard to both government revenues and to the capacity of regulators to manage risks.

The insurance scheme would not produce revenue for public goods. By definition, an insurance scheme needs to be pre-funded. That means the insurance fees would be kept aside (for the next speculative asset bubble to implode). They would not be reallocated to those global public goods targeted by the FTT: achieving the MDGs; mitigating and adapting to climate change; and reaching fiscal sustainability.

The insurance scheme would be more onerous for regulators in managing

The insurance option would involve a different set of policy and regulatory issues than those associated with an FTT. The difference lies in the way financial risks are handled.

And the overall systemic consequences of the risks may be reduced if the insurance is capable of preventing the

collapse of individual entities leading to systemic collapse.

<sup>.....</sup> 

risk than the FTT. Like any guarantee, insurance coverage for bank liabilities and (excess losses on) assets gives rise to "moral hazard", something that the OECD considers as "an important and real (not just conceptual) issue that should not be ignored, even in the midst of a crisis" (OECD 2010c). Furthermore being institution-based, a pre-requisite for any insurance scheme is the ability to "price risk" associated with the banks' balance sheets, which in turn presupposes the ability of the insurer (the regulator) to conduct proper risk assessment of the insured (the banks) and to do so at reasonable costs. And yet it appears that such a basic requirement has become a bridge too far for OECD country-based and other G20 regulators. Two reports of the Financial Stability Board (FSB), commissioned by the G20 and released in September 2009, reveal that two and a half years into the crisis serious flaws remain in the national and international supervisory frameworks: "significant lack of information" of financial authorities, as well as "data gaps" on "key vulnerabilities", including an "understanding of where risks actually lie" (FSB & IMF 2009, BIS, FSB & IMF 2009). The FSB reports are worrying in that they reveal the extent to which the national and financial authorities continue to lack the essential tools to monitor and control global finance effectively.

### Bringing the global banking industry back to real economy

In a paper published in January 2010, OECD staff claims that the "unique" feature of this crisis" was a structural change in the business models of the global banking industry in the past decade from a "credit culture" to a (shareholder-value driven) "equity culture". Traditional commercial banking is based on direct loans to businesses and households and is funded by deposits and longer-term borrowing, the difference in interest rates between loans and deposits generating predictable cash flows. This 'credit culture' business model was replaced by an 'equity culture' or 'volatile investment banking' model in which revenues were generated not by loans and deposits, but by securities and derivatives trading activities (OECD 2010b). "Banks less driven by investment banking and structured products fared much better" through the crisis, says the OECD. Those driven by investment banking were "much more problematic in terms of contagion and counterparty risk regardless of their balance sheet size." OECD experts place partial blame on the self-regulatory rule of the Basel II Framework for determining the capital adequacy ratio, which had pro-cyclical effects by fuelling rather than restraining excessive leveraging and risk taking<sup>13</sup> and allowing CDS contracts "misleadingly to conceal risk". They further point to a positive correlation between the Basel II Tier 1 capital adequacy ratios (supposed to shield against excessive risk taking) and the cumulative losses of banks since 2007.

The challenge for the years to come is to bring the global banking industry back to a "credit culture" business model – in other words, to finance the real economy. To that end, the solutions suggested by the OECD consist of splitting the banks<sup>14</sup> – not exactly a light-handed policy proposal – and more stringent group-level leverage ratios (OECD 2009b & OECD 2010b). To some extent, such a hands-on regulatory approach to banks' balance sheets is becoming popular with policymakers. Since the G20 Summit in Pittsburgh, some governments have considered implementing new tax regimes for banks applied to their traders' and executives' bonuses (as in France and the UK) or to the risk-level of their balance sheets (Sweden's "stability levy"). In mid-January 2010, the US Administration announced its intention to introduce

<sup>13</sup> including the scope of "regulatory capital" which allow for debt to be included and the absurd situation of conflict of interest in which the bankers are being given the extra degree of freedom to assess themselves the risk exposure they should report back to supervisors.

<sup>14</sup> under the disguise of "non-operating holding companies".

a levy on banks in much the same way as Sweden and not too far from the OECD proposal. Obama's "Financial Crisis Responsibility Fee" aims to recover an estimated \$90bn (in order to off-set the projected \$117bn loss on the \$700bn TARP bailout programme of 2008). It would be collected over a 10-year period (maximum) from the 50 or so largest banks, insurance companies and trading houses with assets of more than \$50bn. Firms subject to the fee would pay a 0.15% tax on borrowed money on their balance sheet to the exclusion of deposits already insured by the Federal Deposit Insurance Corporation, the US banking insurance scheme.

The US administration project is welcome in so far as it is tax-based, not insurance based, and hence the revenues generated would be allocated to the general government budget. Exemptions would apply, however. The tax revenues collected would be capped at \$90bn, and non-registered financial institutions, including hedge funds, would be excluded. Despite these caveats, the Obama tax nevertheless would help curb excessive risk-taking and leveraging by banks in so far as taxation would be risk-based and linked to quality of the banks' balance sheet. In fact, it may be functionally equivalent to the group-level leverage ratio proposed by the OECD. Like the IMF-inspired insurance scheme, however, the efficiency of such risk-based tax would depend on the ability of the supervisory authorities to understand the balance sheets of 'large complex financial groups' and for the latter to have limited opportunities for regulatory and tax arbitrage. It seems that these conditions have yet to be met.

Unlike insurance schemes, an FTT has the merit of providing governments with a powerful regulatory tool that would not depend on the ability of the supervisory authorities to price or assess risk.

### **Concluding remarks**

- In conclusion, one can make the following remarks with regard to the introduction of an FTT, within the broader regulatory framework, the parameters and scope of the tax and the size of the revenues and tax collection.
- The broader regulatory framework:
  - Counterbalancing financial authorities' loss of control over **global finance.** Regulators and supervisors have lost control over global financial markets, including where "risks lie in the system". Recent reports by the FSB, the BIS, the IMF and the OECD have acknowledged that (deeply worrying) reality, at least implicitly. Unlike insurance schemes, an FTT has the great merit of providing governments with a powerful regulatory tool that would not depend on the ability of the supervisory authorities to price or assess risk. An FTT would be able to do this on its own and would apply to all transactions, irrespective of who sits behind the counterparties and the accuracy of their balance sheets. An FTT would not be a panacea for the much needed re-regulation of global finance. However, it would provide a regulatory solution in terms of both tackling asset price volatility and bringing global banking back to its original function of financing the real economy. In a sense an FTT is the ideal 'low-cost' instrument at a time when the international financial supervisory framework is in tatters and will take a decade to rebuild (the time it took for Basel II to be implemented formally). If you can't price a risk, kill it.
- The parameters and scope of the tax:
  - Setting targets for reducing trading volume and considering a multi-tiered system per counterparty, and per type of transactions. Considering that an FTT would meet both financial stability and financing development objectives, a key challenge is to set the desirable tax rate and thereby the reduced level of trading that would

- on the one hand, eliminate harmful speculative trading, while on the other hand maintain the well-functioning of the market in terms of serving the real economy. A multi-tiered tax system could help in this regard if one makes the assumption that certain categories of counterparty or of transaction are more prone to speculative trading than others. However the fact that expected reductions in trading volumes are drawn from assumptions rather than actual empirical estimates, constitutes a weak point in the argument for an FTT. The use of the expertise and resource of the IMF and the OECD among others would be well spent money in plugging this empirical gap
- Bringing all OTC derivatives under the scrutiny of regulated markets. In comparison to Baker and Jetin, Schulmeister proposes the widest coverage of transactions: traditional forex, exchange-traded derivatives and as well as the OTC world (foreign exchange-interest rate-, equity-, commodity- and credit-related OTC derivatives). This is all the more welcome as it would cover the Credit Default Swaps which helped trigger the initial subprime crisis in the first half of 2007. And it would ensure level-playing field between exchange-traded and OTC markets (a tax applied to exchange traded products only could actually lead to migration of trades away from exchanges towards OTC). Feasibility, however, is a matter of concern, since the tax would be collected without the support of basic market infrastructure provided by an organised exchange (hence the need to accelerate current G20 commitment to standardize and regulate OTC products).

### The size of revenues and tax collection:

- The size of FTT revenue may need to exceed \$100bn. The time has passed since the end of the 1990s when an FTT of, say, \$20-40bn per year would have been sufficient for the financing of global public goods. For the decade to come, there is a need to address the financing of the MDGs, together with climate change mitigation and adaptation measures. To make matters worse, the budget constraints that OECD governments will face as a result of the current crisis are putting OECD welfare and public services at risk. Altogether the global OECD resource gap − MDG, climate change, fiscal consolidation − could well range between \$600-700bn per year for the next decade. Given that the primary issue facing governments today is how they will fund their respective resource gaps, then surely now is the time to take the FTT option very seriously.
- matic level, more work remains to determine how to make the collection and administration of FTT revenues effective. Given the excessive concentration of foreign exchange and derivatives markets, one could expect the US and the UK to take the lion's share of any FTT tax collection system. The two economies face the toughest fiscal challenges in the years ahead and, as far as the US is concerned, the toughest challenge in meetings its ODA commitments. The practical payment arrangements for an FTT could provide more de-concentrated streams of revenue (the tax could be paid in full by the ordering party, or split with the beneficiary counterparty, or whatever other proportion).

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### Annex 1: Proposals of FTT by Schulmeister, Jetin & Baker et al. respectively

(\$ bn, 2007)	Scope of transactions	Tax rate	Annual revenues	Trading volume reduction
				CONT
Vorld				
chulmeister Forex spot, exchange-	0.10%	917	-75%	
	traded & OTC deriva-	0.05%	655	-65%
	tives	0.01%	28615	-25%
etin	Forex spot, forwards &	0.10%	214	-67%
	swaps	0.1% (0.02% for banks)	191.6 <sup>16</sup>	- 64/67% (- 29% for nor financials)
JAFTA chulmeister	Forex spot, exchange-	0.10%	422	-75%
Chameister	traded & OTC deriva-	0.05%	301	-65%
	tives	0.05%	131 <sup>17</sup>	-25%
Latin	C 0			
etin	Forex spot, forwards & swaps	0.1% (0.02% for banks)	158	- 64/67% (- 29% for nor financials)
JS				WENT
Baker et. Al. Forex spot, exchange- traded derivatives	0.5% options; 0.01% forex & swaps; 0.02%futures	42.418	-50%	
	+ equity & bonds	+ 0.5% listed equity & 0.01%bonds	176.919	-50%
ASEAN + China, J	lapan, Korea & India			
etin	Forex spot, forwards & swaps	0.1% (0.02% for banks)	39.6	- 64/67% (- 29% for nor financials)
:U + Switzerland	& Norway			
etin	Forex spot, forwards & swaps	0.1% (0.02% for banks)	124.1	- 64/67% (- 29% for nor financials)
Schulmeister	Forex spot, exchange-	0.10%	336	-75%
	traded & OTC deriva-	0.05%	242	
	tives	0.01%	10820	-25%
:U				
Schulmeister	Forex spot, exchange-	0.01%	103	-25%
ochamierster	traded & OTC deriva-	0.10%	323	-75%
	tives	0.10/6	SZS	-/3/6

<sup>15 12</sup>bn Forex spot, 112bn OTC, 162bn exchange-traded derivatives

swaps

Forex spot, forwards &

Jetin

0.1% (0.02% for banks)

98.8

- 64/67% (- 29% for non-

financials)

<sup>16 20.7</sup>bn banks, 89bn financials, 81bn non-financials

<sup>17 6</sup>bn Forex, 26bn OTC, 99bn exchange-traded derivatives

<sup>18 7.8</sup>bn Forex, 7.1 futures, 4.2 options, 23.2 swaps

<sup>19 7.8</sup>bn Forex, 7.1 futures, 4.2 options, 23.2 swaps + \$ 26.2 bonds & 108.3 listed equity

<sup>20 4</sup>bn forex, 57 OTC, 47 exchange-traded derivatives

### Annex 2: Jetin's discussion on differentiated tax rates and market elasticity

Of the three FTT proposals addressed by this paper, Bruno Jetin's (JETIN 2009) is the closest one to the original Tobin tax project. Jetin uses an equivalent scope of transactions; that is, the "traditional" foreign exchange markets: foreign exchange "spot" transactions (\$1tr daily in 2007) to which is added forwards and foreign exchange swaps (\$2tr).

Based on the BIS Triennial report of 2007 and previous work conducted by the Belgian, Finnish and French governments in the early 2000s, Jetin suggests different elasticity (and therefore post-tax reduction in trading volume) depending on the counterparty:

- Elasticity of -1.5 for banks. Because pre-tax transaction costs are low for registered banks and broker dealers, they will be particularly sensitive to an FTT, whatever the rate, and will overreact: the reduction expected in their trading volume should outpace in size the increase of the transaction costs generated by the FTT (i.e. +10% increase in the transaction costs leading to -15% in trading);
- Elasticity of -1 for other financial institutions who accordingly will react to an FTT proportionally (i.e. +10% increase in the transaction costs leading to -10% in trading);
- Elasticity of -0,5% for non-financial operators who will be less sensitive to an FTT due to the already high pre-tax transaction costs that they endure (i.e. +10% increase in the transaction costs leading to -5% in trading).

Assumptions about the elasticity of market operators are crucial in determining the revenues. The higher the elasticity, the lower is the correlation between tax and revenues. Given the high level of elasticity of banks, a high FTT on their transactions might be counterproductive if one wishes to maximise the revenues. As shown in the graph below, a 0.02% tax on transactions by banks would generate more revenues (\$20.7bn) than a 5-times higher 0.1% tax (\$19.7).

Another key step in defining the appropriate rate per counterparty is defining the upper ceiling in reduction in trading volume that can be tolerated in the interest of financing the real economy. Jetin suggests a maximum of -2/3 reduction in volume beyond which the tax would not only become counterproductive in terms of revenues, but would have disruptive effects on liquidity of markets.

The combination of the above leads Jetin to prefer a 0.02% tax against a higher rate of 0.05% for banks. As shown in the graph below, the additional reduction in banks' trading volume generated by a 0.05% tax compared with a 0.02% would outweigh the benefits obtained by the marginal increase in revenues. The same trade off between tax rate and trading volume reduction takes place at a higher tax rate for "other financial institutions" and for non-financial companies as shown on the graph. For them a 0.1% tax rate would remain within the range of volume reduction that would be tolerable for market functioning (respectively -66% for other financials, -29% for non-financial companies).

Overall Jetin's proposal consists in an FTT differentiated per counter party: a "small" rate of 0.02% for banks, a bigger rate of 0.1% for other financial institutions and for non-financial corporations. This FTT would cover the "traditional" foreign exchange market, to the exclusion of all derivative products, be it traded on organised exchanges or OTC. The revenues generated would

amount to \$ 191.6bn based on 2007 figures worldwide, \$ 158 for NAFTA alone, and \$ 99bn for the EU (figures do not add up presumably because of double counting of transactions between the US and the EU).

