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Globalizing Solidarity: The Case for Financial Levies

Report of the Committee of Experts to the Taskforce on International Financial Transactions and Development

GLOBALIZING SOLIDARITY: THE CASE FOR FINANCIAL LEVIES

REPORT OF THE COMMITTEE OF EXPERTS TO THE TASKFORCE ON INTERNATIONAL FINANCIAL TRANSACTIONS AND DEVELOPMENT

As convened on the 22nd of October 2009 in Paris by the Taskforce on International Financial Transactions for Development

Members of the group participated in their personal capacity. The views expressed do not reflect those of the institutions, organizations or companies to which they belong. While none of the group members disagrees with the general thrust and approach of the report, none would, either, fully support or endorse each and every specific reflection or recommendation.

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EXECUTIVE SUMMARY

1. This report is a response to the request of the Taskforce on International Financial Transactions for Development to assess the feasibility of innovative financing options to address global developmental and environmental challenges.

2. The aim of the report is to address a forgotten financial crisis: the vast shortfall in finance required to meet international development and environmental commitments. Estimates for this funding gap are in the range of $324-336 bn per year between 2012 and 2017 ($156 bn for climate change, $168-180 bn for ODA – Official Development Assistance). Compounding the challenge, the global financial crisis and recession, and the resulting fiscal consolidations, have seriously undermined governments' ability to meet their pre-existing commitments. The recent sovereign debt crisis in Europe has only served to underline the severe pressure which is continuing to be placed on the fiscal positions of many countries.

3. This report links the funding crisis directly to what is termed the "global solidarity dilemma". Put simply, the growth of the global economy has not been matched with effective means to levy global economic activity to pay for global public goods. If the global community fails to fund the required mitigative and adaptive measures, we face a shared risk of global economic, financial, social and environmental instability, which would undermine the foundations of globalisation. In the view of the Committee, resolving this dilemma is central to addressing the funding gap in a sustainable way.

4. Given this context, there is a clear need to investigate innovative ways of financing development and environmental goals. Given the scale of the funding gap, these will need to be of significantly larger scale than previously established innovative financing mechanisms. Our focus, therefore, is on mechanisms that can enable the wealth of the global economy to be channelled at a scale that can make a meaningful contribution to the crisis facing the funding of global public goods. This should be in a form that addresses the global solidarity dilemma and causes the least distortion to the real economy. Innovative finance, which we define as mechanisms based on global activities that can help to generate substantial and stable flows of funds, have a growing record of success. Notable examples include the air ticket solidarity levy and the International Finance Facility for Immunisation.

5. The Committee believes that the financial sector is the most appropriate point to levy such an innovative financing mechanism. The architecture of the sector is intertwined with the globalised economy, is a primary beneficiary of the growth of the global economy, and – with the liberalisation of the capital markets – has been pivotal to the development of the global economy. As such, the financial sector is uniquely placed as a channel to redistribute some of the wealth of globalisation towards the provision of global public goods.

6. This report analyses financing options against a number of criteria: sufficiency (where potential revenues are sufficient to make a meaningful contribution); market impact (where market distortions and avoidance are within acceptable limits); feasibility (where legal and technical challenges can be feasibly addressed); and sustainability and suitability (where the flow of revenues would be relatively stable over time, and the source suited to the role of financing global public goods). All the options considered are technically credible and have already been analysed, in different degrees of details, by respected economists and scholars. The purpose of the analysis is therefore to assess the following options against the set criteria.

- A financial sector activities tax
- A Value Added Tax (VAT) on financial services.
- A broad financial transaction tax
- A nationally collected single-currency transaction tax
- A centrally collected multi-currency transaction tax

7. As with the recent IMF report, the option of a "Financial Activities Tax" (FAT) levied on the sum of the profits and remuneration of financial institutions, and paid to general revenue is considered. While a FAT has many merits and is well suited to the IMF's remit, the Committee concludes that, it is not appropriate to the remit set by the Taskforce on Innovative Financing for Development. In particular, a FAT would leave the global solidarity dilemma unresolved. Moreover its broad implementation, designed to avoid a misallocation of resources and dislocation, would require time consuming (and possibly politically unachievable) elaboration of a commonly agreed taxable basis, tax rate and taxing assessment procedures. This is incompatible with the urgency facing the financing of global development and environmental challenges.

8. Although financial services have traditionally been exempted from VAT for technical reasons, advances in information technology have weakened the technical obstacles to such a tax. A financial services VAT based on the users of financial services might now be possible to implement. However divergent views on the notion and the scope of financial services (e.g. on the capital remuneration component) would require political choices at the international level. With respect to the remit of this Committee, the option has similar merits, but suffers from similar problems as a broad-based financial transactions tax (FTT).

9. In addition to traditional asset markets, a broad FTT would apply to nearly all financial transactions, such as futures and options as well as bonds, equities and commodities. The majority of the revenues would therefore be drawn from transactions that are already taxed in a number of countries. The FTT has the clear advantage of comprehensiveness, so that the revenues raised could be very high, but avoidance could be difficult to cope with. While this could be addressed in time, the technical and legal feasibility of such a wide-ranging mechanism remains uncertain. More importantly from the perspective of the Committee, the FTT is vulnerable to the issue of, what the Committee terms, "geographical asymmetry in revenue collection', as well as the "domestic revenue problem". Therefore, whilst an FTT might be appropriate within particular jurisdictions for specific fiscal or regulatory purposes, it is less well suited to the task of funding public goods at the global level.

10. A single-currency transaction tax (CTT), levied unilaterally, by a tax raising jurisdiction and its Central Bank through its Real Time Gross Settlement (RTGS) or similar settlement infrastructure (e.g. EU's TARGET), has the advantage of political feasibility. To be viable, it would not have to be universally adopted and enforced and so could be introduced unilaterally by any country, group of countries, or currency zone that wished to do so. It is also technically feasible. The national basis of collection, however, raises issues of revenue stability, as the tax base may be subject to erosion over time due to domestic financing pressures.

11. A global currency transaction tax (CTT) would apply to foreign exchange transactions on all major currency-markets at point of global settlement. An attractive feature of this option is that it appears to resolve the global solidarity dilemma. Although the financial sector, which benefits disproportionately from the globalisation of economic activity, would pay a significant contribution, the burden of payment would also ripple out from settlement institutions across global financial and economic activity. Revenue would not be raised in an asymmetrical manner by the nations with global financial centres, but would be spread across global activity to pay for global public goods. Global collection mechanisms also avoid the domestic revenue problem, enhancing stability. Despite these advantages, a global CTT has challenges. Principally, the tax would have to be scaled and other incentives weighed so that it did not lead to avoidance of centralised settlement. However, the Committee has concluded that these would not be difficult to introduce and are consistent with the direction of regulatory reforms currently being discussed to encourage centralised settlement, as well as with market trends in the same direction.

12. Following the assessment of options against criteria, the report concludes that a global CTT is the most appropriate financing mechanism for global public goods. The report reviews the complex legal and technical issues that surround the implementation of a Currency Transaction Tax at the point of settlement, and concludes that the implementation of a global CTT is technically and legally feasible.

13. There are two major policy tools to limit the scope for avoidance of a CTT. First, in a comparable to the UK technique of non-enforceability on relevant contracts untaxed by the Stamp Duty, the legal monopolies held by the Central banks of the currencies exclusively issued by those Central Banks offer a unique opportunity to frustrate, if not eliminate, geographical tax avoidance in an efficient way. Second, the Committee supports the

policy trend towards increased central settlement of foreign exchange transactions and proposals for regulators to apply an additional capital adequacy requirement for counterparties whose transactions are not settled through an approved settlement arrangement and, as a consequence, represent increased risk to the financial system. As the impact of such additional capital requirement would exceed the cost of the CTT proposed, it would discourage evasion of the CTT, even though its main aim would be prudential.

14. This option is recommended as it best meets the criteria as the most appropriate source of revenue to fund public goods and share the wealth generated by globalised economies. In the knowledge that financial institutions will pass on part of the cost of the levy, it would be distributed across global financial and economic activity. Proportional to their involvement, the economic market participants that participate in and benefit from globalisation, including the financial sector, would therefore pay a small fee to fund the global public goods that underpin and provide stability to the globalisation process. For this reason, we term our proposal a “Global Solidarity Levy” (GSL).

15. The proceeds of the GSL would be paid into a dedicated fund. The governance of both the levy raising authority and the fund must uphold principles of accountability, representation and transparency. This report evaluates the governance and operational requirements for the distribution and administration of the funds, and proposes the establishment of a new Global Solidarity Fund financing facility for global public goods.

TERMS OF REFERENCE

This report is the response of the Committee of Experts on Innovative Financing for global developmental and environmental challenge to the request of the Taskforce on International Financial Transactions for Development to assess the feasibility of innovative financing options for funding international development and environmental crises, including climate change mitigation and adaptation.

On 22 October 2009, twelve countries agreed to set up a Taskforce to explore several options for financing development based on an assessment of the feasibility of an approach focused on international financial transactions. The creation of the Taskforce on International Financial Transactions for Development built on the 2004 Declaration on Action Against Hunger and Poverty and recommendations of the Leading Group on Innovative Financing for Development and complements the work of the Taskforce on innovative financing for health systems.

To support the Taskforce report to the Leading Group, the Taskforce convened a committee of nine Experts ("the Committee of Experts") with competence in macroeconomics, tax, financial markets, development financing and legal matters to provide a report on the feasibility of different financial levy options to fund international development and climate change by June 2010. The Committee was asked to examine:

- how the levies would operate in practice;
- their conditions for implementation;
- their effects (cost/benefit analysis, possible risk of distortion);
- their coherence with existing development financial instruments and the objective sought (raising additional resources for development);
- The risks of distortion of competition and circumvention;

For more details on the terms of reference of the Committee of Experts, please see Appendix 2.

To produce this report, the Committee of Experts reviewed a large body of existing literature on financial transaction levy options and engaged in a programme of consultation with interested stakeholders, across London, Brussels, Paris, Washington and New York. The consultation programme included representatives of financial services and industry, civic society, and international and national financial and development authorities.

For more details of the Committee consultation schedule please see Appendix 3.

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INTRODUCTION: THE GLOBAL SOLIDARITY DILEMMA

The world seems entangled in an ever denser web of crises, spanning an ever wider gamut of policy concerns—global warming, poverty and inequity, failed and failing states, international terrorism and excessive financial volatility and crisis, caused to an important extent by under-regulated financial markets. In many countries, there is risk of flagging, if not negative, economic growth due to the effects of the continued financial crisis. Real or perceived fiscal constraints limit the ability of governments to maintain or increase their spending on financing development or mitigating climate change.

The world is passing through a transformation. Increasing openness of national borders and market integration have led to a growing volume of cross-border economic activity, and deepening policy interdependence among countries. As happened during earlier periods of major transformation, the reform of governance processes today, particularly in areas such as regulation and taxation, is lagging behind the change in private sector and commercial activity. The reform backlog leads to an accumulation and exacerbation of emerging inconsistencies and imbalances, so that lingering problems can assume crisis-proportions.

This is the situation in which we find ourselves today. It is a situation that urgently calls for policy innovation. In many actual and potential crisis areas new policy approaches have been identified. Just think of the many innovations in the field of mitigating, and adapting to, climate change, or the fight against global communicable diseases. So far, however the mobilisation of financial resources – finding for each respective challenge the right amount and right type of money, at the right time – has remained an important stumbling block.

Yet, globalisation has not only contributed to many of the challenges we are facing today. It also offers new opportunities for meeting these challenges. One such opportunity is to recognise that while less crisis-prone, more balanced and sustainable globalisation benefits all, it is particularly true for those most engaged in transborder economic activity-international business corporations, investors, traders, shippers, as well as travellers. They have a major stake in such global public goods as open economies and enhanced global stability and security. For example, airlines and maritime transport companies would benefit from averting the risk of storms and turbulences that might accompany global warming; and so would their clients, mainly international traders, investors and other travellers. Similarly, an outbreak of a communicable disease like SARS or avian flu could seriously jeopardize transnational economic and financial activity; and so would episodes of hunger and mass starvation in poorer countries due to droughts or flooding and other factors that could lead to a spiking of commodity prices. Furthermore, less and smaller financial crises would make the world economy a far more stable and prosperous place for investors, workers and consumers. Finally, there is also a broader argument that those benefiting from global economic activity have some responsibility to contribute towards social and environmental stability at the global level[1].

Studies on the costs of various crises have shown that inaction or delayed corrective action is often significantly higher than the costs of corrective action and prevention.

Globalisation and the growing human footprint on the natural environment have created a new operational international cooperation agenda: the provision of global public goods. This new strand of international cooperation calls for a new strand of financing.

One option for mobilising additional resources for this purpose would be to tap national budgets; and to the extent that joint, collective efforts at the international level have to be funded, to pool these resources internationally. But, although national funding for global challenges has increased in recent decades, it still falls short of what has been identified as being required for the most pressing problems, such as meeting the Millennium

Development Goals (MDGs), halting environmental degradation, or preventing the spread of communicable diseases.

One reason for this shortfall is that the provision of global public goods is still a relatively new and not yet fully developed and institutionalised strand of operational international cooperation. A further factor could be that voters no doubt prefer that their governments spend nationally collected revenue at home. National public goods suffer from such collective action problems. Individual actors and business corporations may not reveal their true preferences for a public good, because they prefer others to step forward and contribute to the financing of the good, which, once provided and in the public domain, they will then enjoy for free, without having contributed their fair share.

Global public goods suffer from even greater collective action problems, which tend to arise among states because of the nationally oriented focus of their policymakers and delegations to international negotiations. Although understandable and rational from a national perspective, this fact has often led to an under-financing of global challenges and allowed global problems to linger and assume crisis proportions. This represents what we call the Global Solidarity Dilemma.

The time is ripe for extending principles that are well-established within the national context to the international level. These are the “ability to pay” and the “beneficiary pays” principles.

Based on these principles, it can be argued that the main beneficiaries of more balanced globalisation should contribute to meeting the funding needs of global challenges, which, if left unaddressed, could seriously disrupt the efficient functioning of transnational economic activity.

Newly erupted crises tend to loom large initially and to grab at least for some time, the spotlight from earlier, yet still unresolved problems. This is also happening now. Policymakers and their constituencies are rightly pre-occupied with the current financial and economic crisis, which remains unresolved. However, this takes political attention away from issues like climate change or the fact that the MDGs will not be met in many countries by the target date of 2015.

There is a risk that the other crises will deepen, because they have been moved backstage by the current financial turmoil and its effects on national real economies. But, neglect of these crises demonstrates a lack of responsibility and may have irreversible and costly implications. It may place additional financial burdens on states and non-state actors at a time when they already face serious resource constraints.

If the world is not to enter into an ever-faster downward spiral of crises, we have, therefore, today to seek to tackle several of the most pressing global challenges.

For this reason, the search for new, additional finance sources is imperative.

REPORT

1 The Funding Gap: development, environment and global public goods

The funding gap for international development and environmental challenges can be seen in the broader context of the international community's inability to fund "global public goods". The Committee believes that this failure can be explained, to some degree, by the "global solidarity dilemma" described in the introduction to this report. The ability of nations to meet funding commitments can be stymied by free-rider effects and first-mover disadvantage in the international sphere, and undermined, particularly at the current time, by political and budget pressures at home.

Although in Monterrey in 2002 the developed world agreed to contribute 0.7% of Gross National Income (GNI) towards development spending and meeting the Millennium Development Goals (MDGs), this was a reconfirmation of a 25-year old commitment, which remains unmet. In December 2009, the Copenhagen Accord agreed on actions to prevent an increase in global temperature above 2 degrees Celsius relative to pre-industrial times. Estimates suggest that this will require annual funding of $30 bn from 2010 to 2012 and $100 bn a year by 2020 to address the needs of developing countries alone. Despite the scale of the funding required, some studies have demonstrated that the costs of inaction or delayed corrective action are significantly higher than the costs of acting now (Stern, 2006).

Combining the funds needed to meet the MDGs by 2015, the Official Development Assistance (ODA) target of 0.7 percent of GNI, and Environmental crisis targets, the resource gap is in the range of $324-336 bn per year between 2012 and 2017 ($156 bn for climate change[2], $168-180 bn for ODA).

Compounding the challenge, developed country governments are now struggling with vast fiscal consolidations as a result of the financial crisis and the global downturn it precipitated. The IMF estimated the net direct cost to advanced economies of the recent support to the financial sector at $862 bn, or 2.7% of GDP, which is likely to increase as result of new phase of sovereign debt crisis in Europe. In November 2009, the OECD predicted unprecedented post-war levels of government budget deficits and public debt for the coming decade. Total OECD government budget deficits and public debt are forecast to exceed 7.6 and 103% of GDP respectively by 2011, compared with 1.3 and 73% in 2007.

Based on UN estimates and its own projection for the ODA gap, the Trade Union Advisory Committee to the OECD recently estimated the resource gap in financing development and climate change at $324 bn per year for the 2011-2015 period (OECD, 2010a).

Against this backdrop of a quantifiable crisis of public funding in general, and for global public goods in particular, "innovative financing" has been receiving even more widespread interest as a source of predictable, sustainable and additional finance. This was clearly recognised by world leaders at Doha:

> *We recognize the considerable progress made since the Monterrey Conference in voluntary innovative sources of finance and innovative programmes linked to them...We encourage the scaling up and the implementation, where appropriate, of innovative sources of finance initiatives. We acknowledge that these funds should supplement and not be a substitute for traditional sources of finance, and should be disbursed in accordance with the priorities of developing countries and not unduly burden them. We call on the international community to consider strengthening current initiatives and explore new proposals*
>
> **(The Doha Declaration on Financing for Development, 2008)**

Innovative financing mechanisms have demonstrated their potential for securing additional resources for distribution to low-income countries. The success of the air ticket solidarity levy, as well as the governing body of revenue (UNITAID, International

Drug Purchase Facility) has shown it is possible to meet long-term needs through non-traditional financing mechanisms. Other innovations have demonstrated the ability of financial mechanisms to bring forward and focus long-term funding to the present (e.g. the International Finance Facility for Immunisation [IFFIm]), while the Advance Market Commitment pilot project (AMC) can be seen as an innovative way of using resources.

The air ticket solidarity levy

After 13 different countries expressed their interest in introducing this tax at the Paris conference held in March 2006, France was the first country of the Leading Group to implement it (July 2006), followed by ten other countries. The air ticket solidarity levy is charged to passengers taking off from airports in the countries implementing the scheme. The contributions levied at national level are then co-ordinated internationally for allocation, for the most part, to the UNITAID international purchasing facility.

The rate of the levy can be differentiated according to the level of development of participating countries and there is an additional option that enables to link the amount of the levy to the flight distance and/or the travel class. Rates can also be differentiated between domestic and international flights. In Niger, for instance, the amount of the levy for economy tickets is $1.20 for regional flights (within West Africa), and $4.70 for international flights. In the case of business/first class tickets, the levy is $6 for regional flights, $24 for international flights.

France is the main promoter of the airline ticket solidarity levy. All passengers taking off from French airports and travelling economy are charged €1 for European flights, €4 for international flights. The amount is ten times higher for business/first class tickets (€10 for regional, €40 for international). The fee has enabled France for example to generate an extra €160 million in conventional aid in 2009, of which 90% were dedicated to UNITAID international purchasing facility.

Passengers could theoretically try to evade the contribution by moving to another airport located in a non participating country. In practice however, the air ticket levy has had no significant effect on the growth of the air traffic of participating countries. The contribution was set with such a low rate that the cost of evasion would be much higher than paying the contribution. Moreover transit passengers are exempted from paying the levy. This way, the contribution is neutral as to the choice of the route between departure and final destination. Exemption also ensures neutrality between companies whether they operate direct routes or not: hubs located in participating countries are not penalised as compared to others in non participating countries. Exemption of transit passengers did not raise any legal or practical difficulty.

The implementation of the levy did not raise any major practical or legal difficulty. It is paid by passengers when buying their tickets as an additional fee to airport taxes. Airline companies are responsible for collecting the contribution which is added to the fees and charges already part of the plane ticket final price. Collecting costs are minimal.

International air transport is regulated by the Chicago Convention as well as bilateral treaties and agreements. None of those treaties prohibits the creation of a flat contribution on air tickets, whether on domestic or international flights. European regulations and WTO agreements also allow for such a flat contribution given that it is non discriminatory. The mechanism is based on territoriality, not nationality. All airline companies, whatever their nationality, have to levy the contribution if departing from an airport located in a participating country.

Given the scale of the funding crisis, this Committee was required to examine innovative financing models of significantly larger scale and different character than previously established. The criteria for assessment are elaborated in the next section.

2 Innovative financing mechanisms: criteria for assessment and primary areas of focus

2.1 Criteria

➔ Based on the term of its enquiry, the Committee has identified four criteria for assessing innovative financing options:

- Sufficiency
- Market impact
- Feasibility
- Sustainability and suitability

First and foremost, options must be capable of generating annual revenues on a scale *sufficient* to make a meaningful contribution that achieves visible impacts. As well as addressing the funding gap detailed above, this would also contribute to the task of restoring confidence in the effectiveness of global development cooperation.

Any mechanism that is likely to meet the revenue raising sufficiency requirements, particularly in relatively concentrated markets, can be expected to create distortions and incentives for avoidance. Consequently, *market impact* should be minimised, in terms of both undesirable changes in the way financial markets operate and the possibility of avoidance.

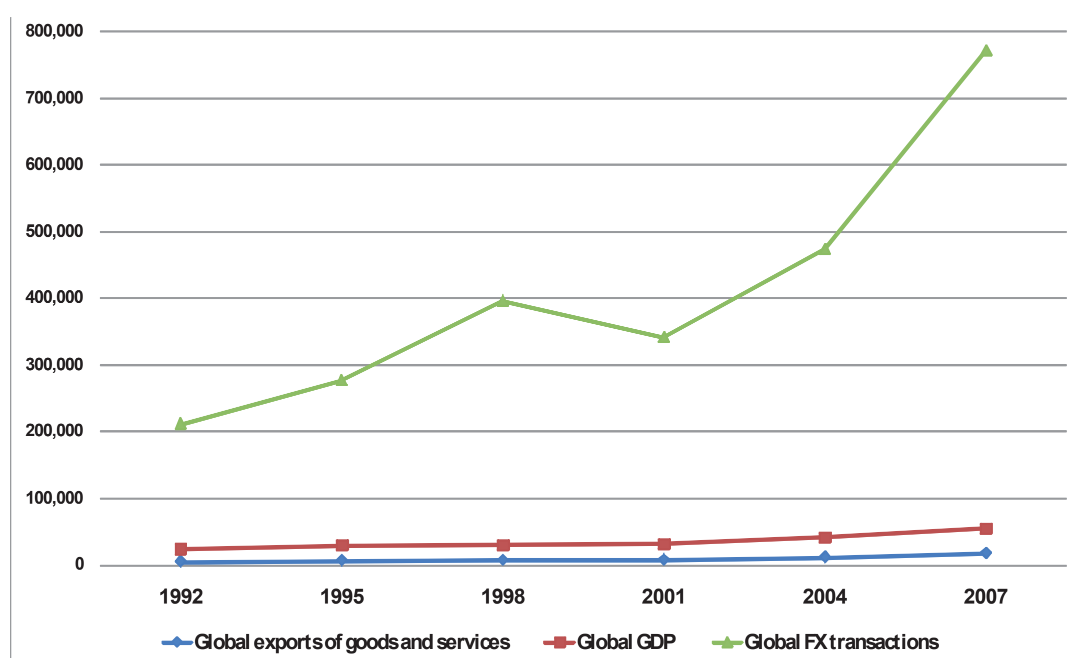
Third, the mechanisms must be both technically and legally *feasible*. Infrastructure should exist or be feasible to establish, and it should be operationally and legally possible to raise revenues at a low administrative cost. Key issues include whether the option is technical feasible; whether global agreements for revenue raising cooperation are required, including avoiding multiple taxation and tax avoidance; and whether the option compatibility with existing regulation and international obligations.

Fourth, annual revenues must be *sustainable* in that they are predictable and stable over time, and *suitable* in that the source and its mechanisms should be appropriate to the financing of global public goods.

Those that operate within the global economic architecture receive significant financial benefits. It is therefore appropriate that funding for public goods to support the economic and social stability that underpins the global economy should come from those who benefit most from participation within it.

Based on this analysis and its remit, the Committee believes that the international financial system is the most suitable source of revenue to fund global public goods. International finance has grown enormously in recent decades, far outstripping growth in world trade and production. The profitability of the sector has also increased, so that in the United States, for example, finance represents 40% of all corporate profits. Given its role at the centre of the globalisation process, innovative mechanisms applied at the level of the global financial system[3] would not just tax an activity that has relatively low taxation and concentrates a great deal of wealth, but would also ripple out through the world economy, so that global economic activity would be the ultimate source of funding for global public goods.

Annual FX transactions vs. Global GDP and Global Exports



Source: IMF and BIS

As is shown in the chart above, the growth in foreign exchange transactions alone has far outstripped that of world trade or global GDP. In 1992, the foreign exchange market was around 8 times larger than total world output. By 2007, it had grown to more than 14 times the size of the real economy.

2.2 The broader debate: multiple financial sector taxation

Financial sector taxation is not new or "innovative" in its own right. There is a long and distinguished economic theoretical tradition arguing in favour of financial taxes, starting with Keynes and Tobin, but also including Nobel Prize winners Joseph Stiglitz and Paul Krugman, as well as Lawrence Summers, John Williamson and Barry Eichengreen, amongst others. While the financial sector is already subject to traditional national taxes, such as income and corporation tax, this is not the case with VAT, suggesting that the sector may be under taxed.

Following the financial crisis, a number of countries have instituted or are evaluating financial sector taxation as a means to fund public support for the financial sector or as an insurance resolution fund for future crises at a national level. Examples include: the "Financial Crisis Responsibility levy" proposed by President Obama in the US; legislation in France and the UK for temporary taxes on financial sector bonuses; a stability fund paid for by the financial sector liabilities levy in Sweden; a proposed financial sector levy in Germany; and recent proposals for a EU bank Resolution Fund financed with ex ante levies on assets, liabilities or profits.

Responding to the G20 Pittsburgh Communiqué, the IMF evaluated the issue of financial sector taxation in response to the financial crisis. In line with its remit of recouping the cost of support for the financial sector and reducing the probability of future crises, the Fund's Interim Report suggested the need for two mechanisms, alongside better regulation and supervision:

- a "Financial Stability Contribution" (FSC) – initially applied at a flat rate on liabilities and assets, to pay the cost of supporting the financial sector. The FSC would accrue to general revenue.
- a "Financial Activities Tax" (FAT) levied on the sum of the profits and remuneration of financial institutions, and paid to general revenue (IMF, 2010).

The proposals made by the IMF have significant merit for their specific purposes of containing systemic risk and repaying the cost to national exchequers of the financial bail-out. However, addressing the development and environmental funding crisis presents very different, but equally important, challenges, and so is likely to require different solutions.

These challenges appear to exceed existing unilateral, bilateral and multilateral funding arrangements, and have been hugely exacerbated by the financial crisis and the anticipated period of global fiscal consolidation.

As these traditional channels seem ill-suited to the task of funding global public goods, the Committee has identified the global financial sector, rather than the respective financial sector in each country, as the most suitable source of revenue in this regard, not least because of the ability of financial sector taxation to spread the burden of payment of global public goods throughout the global economy. In contrast to the IMF, and reflecting our differing remits, options that can be expected to partially share the burden beyond the financial sector to the globalised economy as a whole are not considered inappropriate by the Committee. Furthermore, given the concentration of wealth and income in the financial sector, it is appropriate that a greater contribution is made by those most able to bear this. Financial sector taxes are therefore likely to be more equitable than alternatives.

3 Innovative financing options evaluations

The following parts of this report assess innovative financing options against the criteria described above. While each presents different technical or legal challenges, we have restricted this assessment to proposals that have been reviewed by other respected bodies and have been assessed as technically credible. What follows are the summary conclusions drawn from the Committee's in depth analyses.

The following levies are analysed on the basis of the criteria described above

- A financial sector activity tax
- A VAT on financial services
- A broad financial transactions tax (FTT)

- A nationally collected single-currency transaction tax
- A centrally collected global multi-currency transaction tax

3.1 A financial sector activity tax on (excess) profits and remuneration

➔ It should be noted that proposals to recoup the cost of public support for the financial sector and from subsequent economic crises, and/or to create an insurance fund to protect against future crises, are designed for a purpose distinct from that which is under investigation by this Committee. Our focus here is on proposals for more general taxation on the profits and remuneration of the financial sector to fund development and environmental goals.

Options to be considered within this category are the Bank Payroll Tax legislation implemented in the UK, the Bonus Tax in France, and the taxes proposed by the IMF, which were described above.

3.1.1 Sufficiency

➔ The revenue potential of a profit/bonus tax depends on the rate and the behavioural effects created by the higher tax burden in the financial sector. However, it is undoubtedly the case that there is significant revenue potential, as illustrated by the speed with which institutions have moved to pay-back government support and the return to high profitability across the banking sector.

Despite initial expectation that the UK Bank Payroll Tax would raise £550 million, tax receipts are now expected to be between £2 to £2.5 bn. The Fund estimates that a financial activities tax of 2% on British banks (with all salaries included into the base) would raise about 0.1-0.2% of UK GDP (£1.4 bn to £2.8 bn).

The French tax of 50% on bonuses above €27,500 paid to bank employees in 2010 is expected to raise €360 million (ibid).

The European Commission estimates that a surcharge of 5% on the tax burden for the financial sector could lead to additional tax revenue in an order of magnitude of €3-4 bn per year in the EU (European Commission, 2010).

Given that the proposals are designed for domestic purposes, the scope for additional funds to be made available for development and environmental crises is relatively low, if not zero. The funds potentially available are considerable but have already been earmarked for financial resolution funds or have flowed to general budget.

3.1.2 Market impact

➔ Approximating to a tax on rents or "excess" in the financial sector, proponents argue that the taxation of profits would not interfere with current regulatory reforms or with the pattern of market transactions (IMF, 2010).

That said, depending on its design a tax on bonuses could affect this pattern, by disincentivising excessive risk-taking. If this were the case, beneficial effects in terms of market stability could accrue (Griffith-Jones and D'Arista, 2010).

From the perspective of avoidance, there is a risk of the financial sector shifting profits and remuneration to low-tax jurisdictions or alternative compensations to avoid the tax. Proponents argue, however, that if applied at a low rate, the tax would not significantly influence current incentives for tax planning, particularly if adopted at broadly similar rates in a range of countries (IMF, 2010).

3.1.3 Feasibility

➔ Perhaps the greatest single of advantage of proposals of this kind is that they rely on existing tax bases and systems. There are also historical precedents for taxing the sum of profits and remuneration in the financial sector. Israel applies such a tax; the province of Quebec in Canada has a related tax; Italy applies a tax with broadly similar structure to all activities, including finance and insurance. France levies an additional tax on remuneration for firms, including financial (IMF, *op cit*).

However, there are considerable legal feasibility issues flowing from the need to internationally agree on a common tax basis and avoid multiple taxation. This can be related to the classic international legal problems of residence based taxation, such as the multiple international intra-group taxation and avoidance[4].

If global implementation of this option is to avoid a misallocation of resources and dislocation, it would require time consuming (and possibly unachievable) elaboration of a commonly agreed taxable basis, tax rate and taxing assessment procedures. This is incompatible with the urgency facing the financing of global development and environmental challenges.

3.1.4 Stability and suitability

The more broadly (in terms of institutions) and universally (in terms of jurisdictions) the mechanism is applied, the more stable the annual revenue streams are likely to be. However, past experience would strongly suggest that tax revenues would move in cycles reflecting the cyclicality of the financial sector itself.

For the purposes of this Committee's enquiry, however, the proposal suffers from two problems with regard to suitability. First, revenues would be disproportionately high in countries that host the (capital basis of) financial groups, which can be termed the "asymmetry of revenue collection" problem. Second, a significant part of the revenues would be drawn from the taxation of "domestic" financial transactions in large financial centres and would be nationally collected. Over time, therefore, political pressure to devote these resources to pressing domestic needs could be expected to grow, thus eroding the tax base for the financing of development. We term this, "the domestic revenue problem".

As a source of revenue for domestic purposes (fiscal or financial stability), as suggested by the IMF and other proponents, these issues do not apply. Such mechanisms thus seem well suited for the purposes proposed by the IMF, which differ from those of this Committee.

3.2 A VAT on financial services

Value Added Tax (VAT) is a major source of tax income not only for the European Union but for most countries in the world, with the notable exception of the United States. VAT is a broad tax applied to most forms of consumption, though different countries often exempt particular goods. However, for technical reasons discussed below, most financial services have been exempt from VAT in all countries.

3.2.1 3.2.1 Sufficiency

Estimating the revenue potential of a VAT on financial services is not an easy task, as indicated by the limited work to date. For the EU as a whole, Huizinga (2002) estimates that the extension of VAT to financial services could raise €12 bn, while for Germany alone, Genser and Winker (1997) estimated net revenues of DM 10 bn (€5 bn). Given growth in economic output and financial activity, and the expansion of the European Union, since these estimates were made, it is likely that these estimates would be larger today.

3.2.2 Market impact

One of the aspects of VAT that is often cited in favour of VAT is that it is difficult to avoid and non-distortionary. There is no reason to assume this would not be the case with a VAT on financial services. Indeed, the fact that financial services are traditionally exempt has itself created significant economic distortions[5].

The level of avoidance would be influenced by the extent to which a financial VAT was harmoniously designed and universally applied. While VAT is difficult to avoid within a given jurisdiction, and this would remain the case for financial activities that are unavoidably domestic, more mobile financial activities or transactions, particularly those detached from real economy activities, would be likely to relocate to jurisdictions where financial VAT was not imposed[6]. The best way to reduce the scope of these opportunities would be the adoption of comprehensive financial-sector VAT applied to all institutions by a relatively large set of countries.

3.2.3 Feasibility

Technically, the main difficulty concerns the determination of the value added from each single transaction. For instance, in the case of a spread between bank's borrowing and lending rates, it is difficult to distinguish between the value added from intermediation, the return on capital and the risk premium (which some argue should not be taxed). As a result, the financial services that can be taxed are those remunerated by fees, like brokerage services, safekeeping boxes, or investment advisory services. Financial services remunerated by spread, such as the acceptance of deposits, lending, money transmission services, guarantees and commitments, generally remain untaxed[7].

While practicality has been the justification of the exemption of VAT for financial services, this may no longer be the case. Both academic papers and feasibility reports suggest that it is technically feasible to implement a VAT tax system on financial services based on a cash-flow methodology and zero-rating for business-to-business financial services (Huizinga, 2002; European commission, 1996). While this is the case for any individual country, there remain significant challenges to implementation across the European Union[8].

Perhaps because of these difficulties, a number of countries, including France, have opted for a tax on financial sector wages as a substitute for financial VAT.

3.2.4 Stability and suitability

As VAT is designed to be passed on to the end-users or final consumers, the cost of the levy option is likely to be distributed across global financial and economic activity. All users of financial services, including households but also capital providers, would be taxed. In other words, if VAT on financial services was used to finance global public goods, the wealth redistributed would come from all end-users of financial services.

Since the financial VAT would be integrated into the regular VAT system, the legal feasibility should not be problematic. Moreover the international spread of the VAT model[9] has encouraged internationally harmonised taxation without the need of stringent international legal agreements.

Financial VAT, if not properly designed, may be subject to both the "asymmetric revenue collection" and "domestic revenue" problems. Countries with disproportionately large VAT end users of the financial sectors would pay a correspondingly high level of tax. As VAT on non-financial products is a major contributor to the national budgets of countries where such a system exist, it is unlikely that a financial VAT collected at the national level would be earmarked for the financing of global public goods.

3.3 A broad financial transaction tax

3.3.1 Sufficiency

While there are a number of FTT proposals currently being debated this Committee focuses its analysis on a broad FTT, as it has the potential to raise most revenue and proponents have asserted that it is possible. Proposals of this form are best described in Schulmeister (2009) where the FTT would be applied to all non-retail markets, including foreign exchange, exchange-traded and OTC derivatives.

Given the breadth of the proposed application, it is unsurprising that revenue estimates are very high. Schulmeister suggests that a rate of 0.01% would reduce trading volumes by 65%, but still raise up to 2% of global GDP, or $1,060 bn. Worldwide, a tax at 0.1% would generate revenues equivalent to 1.688% of world GDP: that is roughly $917 bn, $650 bn at a 0.05% rate and $286 bn at 0.01% (*ibid*).

In reviewing the Schulmeister proposal, both the IMF and European Commission question the estimates of total taxable volumes, and the resulting revenue estimates. For derivatives, which account for between 80 and 90% of total revenue estimates, the IMF has questioned whether the entire notional value of such transactions would constitute the tax base. Without the contribution from derivatives traded on OTC markets and exchanges the remaining tax revenue from spot transactions on exchanges would be between $72 bn, and $80 bn, or 0.15% and 0.17% of global GDP (IMF, 2010; European Commission, 2010)[10].

3.3.2 Market impact

Broad FTT proposals generally intend to modify the market, by disincentivising what is termed "speculative trading", which proponents argue would contribute to market and therefore macroeconomic stability. However, both the recent IMF and European Commission reports highlight the concern that an FTT could lead to increased short term volatility of asset prices by reducing liquidity. A review of the existing theoretical and empirical literature is beyond the scope of this report, but the findings are quite mixed on this point and turn on the time-horizon being considered (short-term volatility vs. medium-term cycles, with the latter being far less affected) and the mix of trading strategies in a given market (i.e. proportions of momentum vs. contrarian). Most studies, however, suggest that very low taxes would either reduce volatility or maintain it, especially when viewed over the medium term. Furthermore, some studies (e.g. Stiglitz, 2010) suggest that, when combined with adequate regulation and supervision, a small tax would contribute to financial stability by discouraging excessive level of transactions. In a review of the empirical literature, Schulmeister (2008) finds that 15 out of 21 relevant studies suggest that transaction taxes would be likely to reduce volatility.

The IMF also highlights the likelihood of geographical avoidance, through trading activity relocating to untaxed countries[11]. The case is underlined by the example of Sweden's adoption of a financial transaction levy in the mid 1990s, which led to a high proportion of the securities trading activity in Sweden moved to London and other financial centres. While factually correct, this criticism seems overstated, as the Swedish tax was set at a relatively high rate and is widely seen as having significant design problems[12]. Clearly, careful design to prevent geographical avoidance and asset and product substitution is essential to avoid major unintended consequences. This is shown

by the far more successful experience of the UK with the stamp duty on shares.

3.3.3 Feasibility

➔ Correctly, the IMF concludes an FTT should not be dismissed on grounds of administrative practicality as most G-20 countries already tax some financial transactions.

As pointed out by proponents of a broad FTT, the growth of the electronic communication and settlement of financial transactions undoubtedly make it more feasible to identify and tax transactions than was formerly the case. Feasibility is further strengthened by the increasing trend towards central settlement of OTC derivatives, driven by reduced risk and cost. OTC practitioners estimate that only a third of OTC will ultimately remain bilaterally settled.

From a legal perspective, the proposals on the table would need further refinement. Since unilateral introduction bears the risk of conflicts of taxing rights and multiple taxation, the appropriate framework for such regulations should be a multilateral treaty and/or regional instrument containing the basic tax characteristics, definitions and mutual assistance which States could than implement and integrate in their domestic legislation.

A proposed legal framework for a broad FTT

States would have to agree[13] to allocate among themselves their taxing rights/powers so as to distribute adequately the revenue collected according to agreed factors[14] by doing so they would also need also to agree to avoid double (or multiple) taxation.

In order to reduce tax driven geographical avoidance and asset and product substitution it would be better if States agree to an adequate common design of the tax including a harmonised definition of the taxable transactions[15] and assets[16], the taxable events, tax basis[17] and a range of tax rates, the taxpayers[18] and the criteria to recognise the financial intermediaries to be mandated and instructed to collect the tax[19].

The framework agreement would need to imply the mutual authorisation and mandate to collect each others' FTT through domestically based intermediaries[20], backed by domestic tax-collection authorities cooperating internationally[21]. Centralised collection of the FTT through the (registered) payment and settlement institutions could facilitate compliance, since any alternative for tax collection through centralised settlement/ payment institutions would imply additional compliance burdens[22].

Legal techniques could also contribute to the minimisation of the tax avoidance risks, such as the UK technique to make the enforceability of the transactions with shares issued by UK incorporated companies dependent on the payment of the stamp duty. Such a technique could be generalised, to include all transactions, which would encourage financial actors to pay the tax.

Overall, there remain important legal feasibility concerns around this option, particularly cross border intra and extra EU free movement of capital and the EU and WTO General Agreement on Trade in Services (GATS) liberalisation of financial services. The specific requirements for compatibility are considered later in this report, but it is clear that the explicit aim to modify market practice by discouraging "speculative" transactions and the proportionality tests developed in ECJ case law should thus be carefully scrutinised.

3.3.4 Stability and suitability

➔ A universally applied FTT could, in principle, raise significant sums. In practice, however, the Committee believes the same factors outlined previously in this report could undermine the stability of these revenues over time, as well as calling into question the suitability of the proposal for funding global public goods. First, not all financial transactions and underlying assets/product are equally linked into the globalised economy. Second, although there would be global benefits in terms of improving the efficiency of collection, the FTT could be seen as disproportionately affecting those countries that play host to major international financial centres. This is largely an issue of perception, however, as global financial centres host institutions from around the world with client bases spread broadly. Consequently, the impact of the FTT would be more widely distributed than a tax focused on purely domestic issues. Third, the revenues would be collected at the national level, making the proposal vulnerable to the "domestic revenue problem". However, at a later stage when implementation issues are overcome, a broad FTT could be a valuable source of finance, especially for domestic purposes. Thus it could ultimately complement options more appropriate to finance global public goods.

3.4 A nationally collected currency transaction tax

➔ This proposal is for a single-currency transaction tax, levied unilaterally by a tax raising jurisdiction with authority over Real Time Gross Settlement (RTGS) settlement infrastructure. While supporters assert that a currency transaction tax (CTT) could be levied unilaterally, most proposals argue for a coordinated series of CTTs agreed by the major trading currencies.

3.4.1 Sufficiency

➔ Assuming daily turnover of a little over $3 trillion, Schmidt (2008) suggests that a 0.005% CTT just on UK sterling would raise $4.98 bn, per year, Japanese Yen $5.59 bn, Euro 12.29 bn, and US dollar $28.38 bn The same research found that a co-ordinated transaction tax levied on all four major currencies would yield $33.41 bn annually, while a CTT on all major currencies except the dollar would raise $16.52 bn.

Other relatively recent estimates have produced similar figures. For example, when estimating revenues from a combined CTT of all major currencies, Nissanke (2004) suggests a range of $17-31 bn, while Spratt (2006) estimates total revenues at $24 bn.

3.4.2 Market impact

➔ Proponents of the tax seek to clearly differentiate the proposal from the original Tobin Tax, which deliberately sought to modify the market by disincentivising short-term, "speculative" transactions. Many recent incarnations have argued for a CTT purely on revenue-raising grounds, with the proposed rates being set very low so as to minimise market impact. Commonly, the proposed rate is 0.005%, or half of one basis point. However, as pointed out by Schmidt (op cit), the 0.005% rate applies to each leg of the currency trade (i.e. the currency bought and the currency sold), so that the combined rate on a total transaction is one basis point.

Each of the three studies cited above attempt to take account of the impact of the CTT on volumes. Schmidt estimates elasticity across the market at – 0.41, while the implied elasticity's for Nissanke and Spratt are – 0.12 to – 0.23 and – 0.11 respectively.

While designed to minimise impact, supporters accept that there would be a reduction in volumes, though they argue that the effect will be concentrated on high-frequency trading (more associated with destabilising effects on the financial sector and the macroeconomy), rather than low-frequency (more associated with pension funds or trade-related activities).

Schmidt (*op cit*) estimates the volume reduction on the basis of the ratio of the CTT to the spread, so that for currency pairs where spreads are tighter the reduction in volume would be greater.

Table 1. Average bid-offer spreads

Currency pair	2005-20066	2009-2010
$/Euro	2.95	2.42
$/Yen	3.39	2.30
$/ £	2.59	3.44
Euro/Yen	4	3.55
Euro/Sterling	5	2.67
Sterling/Yen	9	5.86

However, as shown in table 1, spreads have fallen in most markets since 2005/2006, with the results that the volume impact of a 0.005% CTT will be larger than that estimated by Schmidt, and the corresponding revenue estimates lower.

However, this needs to be set against the fact that total trading volumes have risen over the same period. Consequently, while Schmidt's estimates may underestimate the proportional reduction in volume from a 0.005% CTT, they also underestimate total transactions in the market. The net result of these changes in considered in subsequent sections.

It is likely that different trading strategies would also be differentially affected by a CTT, which could affect market behaviour. In particular, it is suggested that algorithmic trading[23] would be severely impacted by a CTT, even at a very low rate, and that this would have a significant effect on total market liquidity. To the extent that algorithmic trading is higher-frequency than other approaches, the impact of a CTT would be greater. The actual impact this would have on volumes is less clear-cut, however, and in the view of the Committee would be focused on high-frequency, momentum-based strategies[24].

On balance, it is probable that certain forms of algorithmic trading would be substantially affected by a CTT, but others would not. Also, it is difficult to justify the claim that market liquidity in general is dependent upon a form of trading activity that only came into existence a few years ago. Furthermore, many regulators and analysts are concerned about potential negative effects of algorithmic trading on financial stability; thus, some reduction of this activity may be beneficial for financial stability

3.4.3 Feasibility

Supporters of a unilateral CTT argue that a combination of the move to RTGS systems, through which a significant proportion of FX transactions are settled, and the automation and computerisation of the foreign exchange markets greatly increases the technical feasibility of a CTT, making it relatively straightforward to implement within any jurisdiction, and practically impossible to avoid for any individual currency regardless of where the transaction takes place[25].

In simple terms, currencies are held and ultimately settled within their own jurisdiction. Despite all the complexities of trading in different parts of the world, dollar holdings are held in US banks, Sterling in UK banks, Euros in Euro-area banks, and so on. Offshore currencies such as Eurodollars or Eurosterling are also ultimately based upon domestically held dollars or Sterling respectively.

Connecting the different components of national and international payment settlement systems are electronic message providers such as SWIFT[26], Which supporters argue could be used to transfer details of transactions to national revenue collection agencies, with revenues collected from settlement accounts held at the respective central bank[27].

The alternative to settling foreign exchange transactions through national RTGS systems is to use the Continuous-linked settlement (CLS) bank. CLS settles around half of global foreign exchange transactions, but is inextricably connected to national RTGS systems. Funds to settle transactions within CLS pass through these national systems for each of the seventeen currencies that are settled. Also, payment instructions from CLS member banks are submitted via the SWIFT messaging system. Supporters suggest that the collection of the CTT could therefore occur through settlement accounts held at the central bank, before or after the funds are transferred from the RTGS to the CLS system, as described above[28].

Critics of these proposals point out that there is no regulatory obligation to settle through particular RTGS systems and those different countries have very different relations between central banks and settlement systems. In the first instance, the imposition of a CTT through a particular system could thus provide an incentive for institutions to set up a rival, or encourage migration to an alternative system already in existence. In the Euro area, for example, the ECB RTGS system, TARGET2, and its securities settlement system, have a competitor (EBA) which has a 40% market share, compared with 60 percent for TARGET2. For the second point, central banks or regulatory authorities do not necessarily have direct control over large-value RTGS systems. For example, while in the UK CHAPS is owned and operated by the Bank of England, in the US CHIPS is privately owned.

Proponents argue that all large-value settlement systems require regulatory approval in one form or another, with the result that public influence over the operations of such a system is very high in practice. This applies to all possible settlement systems operating within a national jurisdiction, so that migration from one to another would not affect the feasibility of applying a CTT.

Second, while the information required to identify and tax all gross currency transactions passing through national RTGS systems or CLS may not be currently available to revenue raising bodies, this information exists and could be copied to central banks or other bodies were this to be made a requirement.

Third, it is suggested that the low tax rate proposed would limit incentives to build costly alternative settlement systems or to increase settling positions internally within banks in order to avoid the tax[29], and that there is no economic incentive for banks to move outside the existing frameworks, thus writing off capital expenditure.

Critics also suggest that the implementation of a CTT would increase incentives for banks to net obligations so as to avoid paying tax on the gross sums. However, given that the proposal for a nationally-based CTT relies upon existing messaging systems (such as SWIFT) which record all transactions, and on the (economic) incentives and (regulatory) pressure to settle within RTGS systems, this may not be a particularly strong critique.

For currencies and central banks that reflect a national jurisdiction, such as the GBP, JPY, USD, the levy would be raised by national revenue authorities relying on the central bank RTGS system. For the Euro, an EU/euro-zone agreement on devolving tax coordination between national tax authorities and the Eurosystem (Euro zone network of Central Banks), governed by the ECB would have to be reached.

A purely unilateral CTT does not run into the comprehensive international tax coordination requirements the FTT poses. In general there would be no need for an international agreement on the design of

the tax to prevent geographical avoidance and asset substitution nor the allocation of taxing rights and revenues. International double or multiple taxation is avoided if all States limit the tax to the transactions of their currency. That the two legs of a single transaction may be taxed each by the currency State is technically not double taxation. The lack of extraterritorial executive jurisdiction (i.e. collection abroad through foreign settlement institutions) is resolved through the coordination with the Central Bank, which as to the Euro zone may require appropriate EU agreement[30].

However, the tax could be seen as discriminating against foreign currencies and therefore transactions involving trade between countries with different currencies. Legal concerns have been raised on the compatibility of such a tax with the non discrimination principles and free movement of capital and payments between EU Member States and between EU Member States and third countries as well as regarding compatibility with GATS. The requirements for such compatibility are considered later in this report.

In conclusion, a unilateral single currency CTT, if properly designed and preferably embedded in international tax cooperation is legally feasible. The single currency approach has a strong and innovative systemic avoidance-proof dimension because of its integration in the monetary sovereignty of a State and its Central Bank. In international perspective it requires a thorough legal justification that meets the non-discrimination test implying a legitimate purpose that justifies possible restriction and that meets the standards of proportionality.

3.4.4 Stability and suitability

➔ Once the initial reduction in volume from the implementation of a CTT had occurred, revenue streams from a CTT, or group of CTTs, would be expected to be relatively stable. As we have seen, there is no scope for geographical avoidance and a similar argument can be made with respect to the possibility of using alternative instruments – in general terms, there is no alternative asset to a particular currency.

Positively from the perspective of this Committee's remit, foreign exchange transactions, by definition, relate to the activities of the global economy, and so are potentially well suited to the task of funding global public goods.

The issue of "asymmetry of global collection" is also less pronounced with this option than for those previously considered. Dependent upon the number of countries that wished to participate in a CTT of this form, revenues would be broadly aligned to relative engagement in international economic activity. In turn, this broadly corresponds to each country's weight in the global economy. Contributions to the funding of global public goods would therefore reflect the extent to which different countries are engaged in, and benefit from, globalisation.

That said, a unilateral CTT by only one country, or a small group of countries, would not have these advantages, which is a significant weakness. More fundamentally, the proposal fails to address the "domestic revenue" problem. Unilateral CTTs would be taxed and collected within national jurisdictions by domestic revenue raising agencies. The proceeds, therefore, would flow into general government funds in the first instance. While proponents generally envisage these then being passed onto an international body of some form, there is a clear risk that domestic spending pressures could undermine this process, which brings into question the long-term predictability and stability of nationally-collected CTTs as a source of revenue for funding global public goods.

3.5 A centrally collected multi-currency transaction tax

➔ While there are many similarities between a centrally collected, multi-currency CTT and the previous option there are sufficient differences for the Committee to conclude it warrants a separate assessment.

Unlike a unilateral CTT, this option is intrinsically multilateral in that it would be applied to all transactions, whatever currencies are involved, settled within the jurisdiction through central systems. At present, this is the CLS Bank[31], though the option is not specific to this particular institution. Rather, it refers to any and all centralised, multi-currency mechanisms for settling foreign exchange transactions. That said, centralised settlement of global foreign exchange transactions would appear to be a natural monopoly, suggesting that a plurality of such institutions is unlikely to evolve.

3.5.1 Sufficiency

➔ Estimates for this option are equivalent to those for the nationally collected CTT applied across all major currency groups. As we saw in the previous section, however, existing estimates

do not take account of changes in market volume or in bid-offer spreads in recent years.

To address this, we have estimated new figures for the potential tax base[32] and combined these with more recent data on spreads for the major currency pairs to arrive at a more accurate estimate of current annual revenues.

Table 2 gives volume estimates for the four major currencies at end 2009: Dollar, euro, yen and sterling.

Table 2. Annual Foreign Exchange Turnover Estimates, 2009 (US $ bn)

Dollar		Euro		Yen		Sterling	
USD/EURO	**Volume**	**EURO/JPY**	**Volume**	**JPY/GBP**	**Volume**	**GBP/OTHER**	**Volume**
Spot	87427.85	Spot	8020.80	Spot	603.55	Spot	4868.73
Forwards	28265.20	Forwards	2593.11	Forwards	195.13	Forwards	1574.05
FX Swaps	134996.11			FX Swaps	931.94	FX Swaps	7517.74
USD/JPY		FX Swaps	12384.81	JPY/OTHER			
Spot	42290.16	EURO/GBP		Spot	4799.69		
Forwards	13672.30	Spot	6589.91	Forwards	1551.73		
FX Swaps	65299.64	Forwards	2130.50	FX Swaps	7411.14		
USD/GBP		FX Swaps	10175.39				
Spot	28917.32	EURO/OTHER					
Forwards	9348.90	Spot	20618.01				
FX Swaps	44650.84	Forwards	6665.75				
USD/OTHER		FX Swaps	31835.98	Total	annual	$909,392 bn	
Spot	113014.48			Total	daily	$3,637	
Forwards	36537.30						
FX Swaps	174504.08						

Sources: BIS (2007); London Foreign Exchange Joint Standing Committee (FXJSC); New York Foreign Exchange Committee; Tokyo Foreign Exchange Market Committee; and author's calculations.

As can be seen, average daily turnover is estimated at $3,637 bn, which represents growth of around 20% from the last BIS Triennial Survey published in 2007, despite the fact that the intervening period has witnessed the most serious financial crisis in living memory.

Table 3 combines these volume estimates with the spreads presented in table 2 to give revenue estimates in three scenarios. In each case we assume that 87.5% of foreign exchange transactions are centrally settled (compared with the approximately 75% settled through CLS today). As a base case, price elasticity is taken to be – 0.43, following Schmidt (2008).

Table 3 CTT Revenue & volume reduction estimates 2009

	Scenario 1	Scenario 2	Scenario 3
Annual revenues (US $ bn)			
USD	28.63	29.42	21.34
EURO	12.75	13.13	9.22
JPY	5.76	5.94	4.12
GBP	4.47	4.57	3.57
Global	33.47	34.38	25.00
Volume reduction (% fall)			
Spot	14.60	14.60	14.60
Forward	14.60	11.68	14.60
FX Swap	14.60	9.73	50.93

Sources: as above, plus Olsen Financial Technologies for spread data.

In scenario 1, we assume that spreads are the same in all three market sectors (spot, forward, and FX swap), though they obviously differ for each currency pair. We also set elasticities at the same level across these three sectors. As we can see, the resulting global revenues would be $33.47 bn, which is very close to the figure produced by Schmidt (op cit). As suggested previously, the 20% increase in volume has been offset by the narrowing of spreads, leaving the revenue estimates broadly unchanged, using these assumptions.

In scenario 2, we increase the size of the spread in the forward and FX swap markets by 50 and 25% relative to spot, reflecting the fact that liquidity will be lowest in the forward market (due to there being a fixed settlement date), but also lower in the FX swap than the spot market. Here total revenues rise slightly to $34.38 bn, reflecting the fact that the CTT rate is a smaller proportion of the larger spreads and so has less of an impact on volumes traded.

For scenario 3, we again assume a uniform spread across the three types of market, but significantly increase the elasticity of FX swaps from – 0.43 to – 1.5. While this is essentially a sensitivity test, it is designed to show the effect of a major migration away from FX swaps. Here revenues fall substantially, but remain significant at $25 bn.

An important point to note is that these estimates are for transactions where only one “leg” of the trade is taxed. So, if pounds are sold and Euros brought, a 0.005% levy applies to the whole transaction rather than both sides of it. However, if both the UK and the Eurozone are participants in a CTT mechanism, there is no reason why both sides of the transaction should not be taxed. For example, the UK authorities may levy the selling of pounds and the Eurozone the buying of Euros. In this case, the revenue estimates would obviously rise substantially. While this would not be a straight doubling of revenues, as the effective rate on the transaction would have doubled reducing volumes considerably, a situation of a global CTT with both legs subject to a CTT for all major currencies would see total global revenues considerably in excess of the estimates presented here.

3.5.2 Market impact

➔ Table 3 also gives estimate for the potential market impact of a CTT in the three scenarios. The core estimate of a 14.6% fall is similar to that found in Schmidt (op cit), with the slightly greater fall here reflecting the narrowing of spreads in the intervening period. In scenario 2, we assume that both forwards and FX swaps have wider spreads than pertain in the spot market, reflecting their lower relative liquidity. Here, the impact on volumes is less for both of these markets. In the final scenario we assume very high price elasticity for FX swaps of – 1.5, which is reflected in a substantial (50%) fall in volumes.

In these estimates, we have assumed that 87.5% of foreign exchange transactions are settled centrally. In the rest of this sub-section, this assumption is explored.

Settlement in the global foreign exchange market is becoming increasingly centralised. Two factors have encouraged this trend. First, financial institutions are seeking to mitigate the settlement risk involved in foreign exchange transactions in different time-zones/jurisdictions. When one leg of a trade is transferred before the corresponding leg is received, the risk of a default preventing the completion of the trade raises serious risk for the institution involved. Second, as well as creating major risks for the individual institutions, the interconnectedness of global financial institutions is such that a failure in one could create serious systemic risk at the global level. As a result, financial regulators and central banks have encouraged centralised settlement on a payment-versus-payment (PvP) basis, where both legs of a foreign exchange transaction are transferred simultaneously, thus eliminating “Herstatt risk”[33] The primary means of addressing settlement risk in the foreign exchange markets has been through the creation of CLS bank, which settles currency transactions on a PvP basis across all time zones in one “window”.

The recent global financial crisis has added significant impetus to regulatory efforts to reduce systemic risk. These forces are highly likely to lead to a greater proportion of foreign exchange transactions being centrally settled over time. An open question, however, is the impact that a CTT applied through global settlement institutions would have on these trends. The size of this incentive for any given institution will be a function of the cost of the CTT (i.e. the rate times volumes traded) versus the costs of migrating to a different form of settlement. These can be broken down into four categories.

First, there are the direct fixed costs of abandoning the institutional infrastructure established to trade through CLS[34]. Second, there are the additional variable costs of trading through a non-centralised system, which is a) less efficient, b)

more expensive per trade, and c) would require significantly higher liquidity to be made available on a daily basis[35]. Spratt (2006) estimates that these variable costs savings amount to an annual benefit of $17.94 bn to CLS participants. Given that volumes traded have increased significantly since these estimates were made, it is likely that these savings have also increased. Third, the possibility of counterparty default in a non PvP system creates huge settlement risk. Though of low probability, the consequences of such an event would be devastating for any individual institution.

Fourth, these economic factors are accompanied by potential regulatory costs. The systemic risk created by the consequences of a major counterparty default in the foreign exchange market is significant, a fact brought home by the repercussions of the failure of Lehman Brothers in 2008[36]. Although the proposed reforms to financial regulation and supervision remain a work in progress, indications are that regulators will acquire greater powers to discourage activities perceived to be high risk, particularly where systemic impacts would be significant.

Non-centrally settled foreign exchange transactions would seem to fall squarely into this category, and the Committee understands that discussions are ongoing within the Basel Committee on Banking Supervision on the issue of applying higher capital requirements to foreign exchange transactions that are not centrally settled, reflecting the higher risks involved.

Many of the issues raised by derivatives in a centrally collected CTT are similar to those discussed above in the context of a nationally collected CTT. However, there are also some differences. Increasing amounts of foreign exchange derivatives are already centrally settled, largely because of the economic benefits to participants of doing so. Consequently, the application of a CTT through the settlement system of choice, combined with the regulatory pressure described, reduces the distinction between traditional and OTC foreign exchange transactions for the purposes of applying a CTT. Broadly speaking, therefore, applying a CTT to derivative transactions through central settlement systems raises the same issues as apply to the traditional FX market.

A consensus has developed among proponents that all "traditional" foreign exchange transactions should be taxed – spot transactions, *outright forwards* and *foreign exchange swaps*[37]. Concerning non traditional FX transactions that are not centrally settled, things are less clear. On balance, the view of the committee is that it is not desirable nor feasible to tax the notional values of these contracts as: a) most derivative contracts do not entail delivery of actual currencies; b) If options were taxed at the same rate as traditional FX transactions there would be an over-taxation issue[38]; and c) derivatives are not perfect substitutes for traditional FX transactions, and so would not offer a real opportunity of avoidance if traditional FX transactions were the only ones to be taxed.

However, while we think it is correct to leave FX options contracts untaxed, not least as they will be taxed in the spot market if the option is executed, the Committee believes that premiums would need to be subject to a multilateral CTT to create a level playing field. We have not included revenues from OTC derivatives in the estimates given above.

Finally, the risk that complex derivative instruments would be constructed to avoid a CTT is, in the view of the Committee, overstated. Financial innovation is essentially a cost-benefit decision. A CTT levied at a very low rate would be less than the cost such moves would entail[39].

Moreover, were non-centrally settled transactions to be unenforceable in legal terms – which is akin to the UK's stamp duty on shares – a robust legal environment to discourage avoidance would be created.

3.5.3 Feasibility

➔ High technical feasibility is an attractive characteristic of a centrally collected CTT. CLS, for example, already charges a small tax of 22 cents per $1,000,000 traded, which is equivalent to a CTT of 0.000022%. A CTT of 0.005% applied through CLS could therefore piggy-back on this infrastructure, increasing the existing rate to 0.005022%.

Participating States that would call upon central settlement institutions such as the CLS bank could impose a third party collection system[40] through the mutual mandate to those States that have the territorial jurisdiction over the settlement institutions.

A centrally collected CTT, would obviously require significantly more international legal arrangements than would the nationally collected version. It requires solutions for fundamental tax principles such as the principle of no taxation without representation[41], tax sovereignty, the practical legal principle of territoriality in executive tax jurisdiction and the international principles of non

discrimination and capital & trade liberalisation. However, in the view of this Committee, all those challenges can refer to experiences in international taxation that, if applied in combination, can provide the required solutions[42].

Establishing a global levy, with revenue collected centrally through currently wholly private global settlement infrastructure, requires a high degree of tax coordination and cooperation and a design that meets the standards of international economic law, particularly with regards to compatibility with existing legal liberalisation of capital and trade. The mutual legal mandate and instruction given to the central settlement and payment institutions, such as CLS Bank to collect the taxes for an international public entity according to the commonly agreed design could thereby address the risk of multiple taxation[43].

As in the unilateral CTT the centralised collection of the multi-CTT through the (registered) payment and settlement institutions would moreover facilitate the compliance by the market players and as such be an incentive since any alternative would be more costly[44].

On the issue of the international principles of non-discrimination and free trade, the multilateral CTT does not run into the legal issue of asset discrimination since the tax would not distinguish according to the currency involved.

The legal "monopolies" held by the Central banks of the currencies exclusively issued by those Central Banks offer a unique international legal opportunity to combine the tax technique with the specific international legal dimension of the currency trade (the national currencies being the exclusive legal tender within each of the participating jurisdictions). Such strong and systemic device would frustrate, if not eliminate, geographical tax avoidance in an efficient way, comparable to the stamp duty on UK – issued share transactions. It could be legally re-enforced by the UK technique of non-enforceability on non-taxed contracts, as suggested above.

3.5.4 Stability and suitability

➔ The stability of revenues from a centrally collected CTT will be largely dependent upon the evolution of the forex market, the robustness of the tax design and the degree of migration away from central settlement. Migration in turn will be determined by the strength of the economic and regulatory forces, including central bank monitoring, pushing in the other direction.

Assuming this balance is in favour of central settlement, however, this option has a number of other positive features. First, by avoiding national collection and disbursal, a centrally collected CTT overcomes the "domestic revenue problem", which is likely to undermine the predictability of revenues of time. Second, by being raised at the point of global settlement, a centrally collected CTT appears to offer a resolution to the Global Solidarity Dilemma described above. Applying a low tax to foreign exchange transactions settled centrally overcomes the "asymmetry of revenue collection" issue by linking the incidence of the tax with weight in the global economy. Also, assuming that financial institutions would largely pass on the burden of the CTT to their financial and corporate customers, the impact would be disbursed evenly and market based across the global economy, but again in proportion to economic market participants' engagement with it. As a result, the global economy would be lightly taxed in order to pay for the provision of global public goods, which is an appropriate means of raising this finance.

See Appendix 4 for a summary of these assessments in matrix form.

3.6 Central recommendation

➔ The most appropriate source of funding for global public goods is the economic activity of the global economy itself, with the impact being proportional to engagement in the international system. This can be thought of as a fee, or a levy applied to the global economic system for the financial benefits obtained from the use of the "global commons", with the proceeds being used to fund the global public goods. This equates to a global responsibility for the global public goods that underpin the stability of the system: equitable human development and a stable natural environment. We do not recommend levying this fee directly on all economic actors in the global economy, but of finding a means of financing that would see the costs widely disbursed throughout the international system, whilst making sure that an important part of the burden is born by those sectors that most benefit and are most able to make a contribution.

While all the options considered have value as potential mechanisms to raise public funds, they are not equally well suited to this particular task, which we have linked directly to the remit given to this Committee: to identify the best potential source of stable innovative finance to fund international development and environmental crisis mitigation and adaptation.

This is crucial. The global economy cannot serve its purpose without a solid foundation of social and environmental stability. Failure to provide stable long-term finance to support this will see development goals continue to be unmet and environmental change escalate alarmingly. This is not a recipe for long-term global stability, but for ever-rising levels of social unrest, driven by poverty, inequality and a rapidly deteriorating environment.

In the first instance, this reasoning led us to identify the global financial sector as the most appropriate source of revenues. International finance is inextricably linked with globalisation; it is the life-blood of the global economy. Global economic activity and global finance have co-evolved and are highly interdependent. Without finance globalisation would not be what it is, but the same holds in reverse. The growth of the international financial system is dependent upon globalisation.

Also, some aspects of the financial system are intrinsically international. On balance, this is a major reason why this Committee does not recommend general financial transaction taxes (FTTs), taxes on financial profits and remuneration (FATs), or an extension of sales taxes to the financial sector (VAT). While each of these proposals has merits, especially for domestic funding, we do not find them well suited to the task of resolving the "global solidarity dilemma" and financing global public goods. While all have international components, none are purely global and all would draw upon financial activity at the national level significantly. As a result, they are both subject to the "asymmetric revenue collection problem", and the "domestic revenue problem".

In the view of this Committee, the foreign exchange market, being the most internationally organised and integrated segment of the financial markets, and organising the international payment of investments, goods and services represents the best mechanism for achieving this goal. A small levy applied to international currency transactions would no doubt be partly passed on by financial institutions to their customers, other financial institutions (such as hedge funds) and corporations. These in turn would pass on some of the cost of the levy to their own customers, in a rippling process that would see part of the costs disbursed and shared throughout the international economy, in a way that broadly reflected the engagement of different participants, including the financial sector, with global economic activity. Within the financial sector, those actors that carry out more frequent financial transactions, such as hedge funds and investment banks, and who tend to be both highly profitable and pay high levels of remuneration, would pay a larger proportion of the total tax. This would also imply the tax was relatively fair, when compared with other options.

Two foreign exchange mechanisms were considered in this report. First, a nationally-collected currency transaction tax clearly holds considerable potential as a tax mechanism, particularly with regard to the difficulty of avoidance and the relative ease of establishing a mechanism within one national jurisdiction. However, in the considered view of this Committee, the fact that such financing would be collected at the national level makes it less suited to its mission: the task of financing global public goods than the alternative, centrally-collected, multi-currency CTT.

Levying a fee on foreign exchange transactions at the point of central, global settlement addresses directly the global solidarity dilemma. The most significant issue that this proposal raises is the incentive it could create to move away from central settlement of foreign exchange transactions. However, this Committee believes that, on balance, the economic and regulatory forces encouraging central settlement would continue to outweigh any such incentive.

Our understanding is that there is already an initiative at the Basle Committee to internalise the stability benefits of centralised settlement systems by adopting a capital adequacy requirement for trades not centrally settled in an approved mechanism. This requirement could either be made as an addition to Pillar 1 of the Basle Accord or as an initiative bought in through the mechanism of supervisory discretion in Pillar 2 which would not require any amendment to the Basle Accord. Such a move, if correctly calibrated, would further strengthen the forces encouraging central settlement

Combined with legal measures, such as tax compliance prescriptions in subordinate order, robust anti avoidance regulations and the lack of legal protection of enforceability of untaxed transactions, these forces would more than offset any disincentive created by the application of a CTT.

We further recommend that the proceeds are passed directly from the central settlement systems in which they are raised, to a body charged with financing international development and environmental crises. Some suggestions on how such a body could function are given below.

We use the word levy rather than tax deliberately. As argued above, this Committee conceives of these revenues as being a fee levied on the broad global economy to reflect access to the "global commons", and to the sharing of the wealth of globalised economies. Consequently it is not appropriate to think of this as a "currency transaction tax", but as a Global Solidarity Levy.

4 A Global Solidarity Levy: detailed assessment

4.1 Assessment of possible critiques

The remainder of this report is dedicated toward reviewing the issues that surround the implementation of a Global Solidarity Levy at point of global settlement of foreign exchange transactions. We weigh the merits of potential legal and technical criticisms of the proposal, and then discuss aspects of the body that would be needed to manage and invest the revenues.

In what follows we consider issues of implementation with this proposal. As well as drawing on the academic and policy literature, this is informed by submissions made to the Committee of Experts in the course of their enquiries.

4.1.1 Impact on corporate and retail sectors and global remittances?

The first consideration which is often cited is that a levy on currency transactions could adversely affect international trade. Proponents of this position argued that it is difficult to differentiate between foreign exchange "speculation", and transactions related to the real economy. Furthermore, during submissions to the Committee, the suggestion was made that it was potentially unfair to those making high-value retail payments, such as the purchase of property and a car, for example.

Although the foreign exchange market is more than 40 times larger than international trade in goods and services, the Expert group recognises that corporations do engage in hedging and other operations that multiply their engagement with the foreign exchange market relative to actual trading levels, and so will feel the impact of the CTT to some extent. However, the stated aim of the GSL is for the cost of the levy to be disbursed through the global economy, broadly in line with market participants' international economic engagement. Consequently, it is appropriate that corporations engaged in international trade should make a contribution.

Second, even for large retail purchases, a 0.005% levy would represent a small increase to one-off costs. For example, the increased cost of a $1,000,000 transaction would be $50. Again, we do not see this as having a significant impact.

The same logic applies to the impact upon remittances sent to developing countries. The scale of the proposed GSL is such that it would not be really noticed in such transfers. For example, a $1,000 transfer would be subject to a GSL of just 5 cents, and this would only be the case if the entire cost were passed on to the retail customer, which is unlikely.

The key point is that a GSL at the level proposed here, would not really be noticed in transactions of the scale and frequency made by consumers or those sending remittances home.

4.1.2 The levy would reduce volumes of algorithmic trading

While it is undoubtedly the case that algorithmic trading would be affected by the GSL, this is unlikely to be as severe as some have argued. As discussed previously in this report, the actual impact will depend on the type of algorithmic trading. For example, institutional investors seeking to break up and time their trades to reduce market impact will still need to execute these trades. In this regard, volumes are unlikely to be seriously affected, though the method of trading may well be.

The type of algorithmic trading that would be most affected would be high-frequency momentum approaches. Here, the levy would reduce the profitability of trades, and eliminate profitability for the most high frequency approaches.

Two points are relevant here. First, national regulators concerned with financial stability have questioned the social utility of such trading, and, second, it is clearly the case that algorithmic trading can co-exist with transaction levies, even at significantly higher rates than that proposed here.

Finally, we find the contention that a reduction of algorithmic trading would seriously impair market liquidity unconvincing. This form of trading did not exist ten years ago, when market liquidity was at a level that was perfectly compatible with efficient price discovery.

4.1.3 Would Intra-bank trade migrate away from central settlement infrastructure?

➔ A significant component of regulatory attempts to reduce settlement risk in the foreign exchange market has been to encourage central settlement, largely through the establishment of CLS Bank. This Committee is highly supportive of these efforts to reduce settlement risk, and so has carefully considered the implications of the proposed GSL in this respect. Also for the implementation of a GSL, the Committee considers that further regulatory encouragement for centralised settlement would have important financial stability benefits.

In this regard, we understand that developments are likely in this area. As mentioned above, we understand that there is already an initiative at the Basle Committee to introduce additional capital adequacy requirement for trades not centrally settled in an approved mechanism. This requirement could either be made as an addition to Pillar 1 of the Basle Accord or as an initiative bought in through the mechanism of supervisory discretion in Pillar 2 which would not require any amendment to the Basle Accord. Such an initiative would discourage to migrate from central settlement, and would also go with the grain of current regulatory thinking and practice to reduce systemic risk.

As a critical mass of economic and political power, G20 nations, the countries that host the larger international financial centres should agree in detail the governance and operational criteria for levy raising powers delegated to international settlement infrastructure. Relevant issues include: agreeing the national control and governance required to share tax sovereignty; agreement on the public policy imperative for the use of the funds.

To this end – and to determine the (inter)national administrative control of the international collection mechanism, the Committee recommends that finance Ministers and central banks of the G20 and the countries that host the larger international financial centres, the Bank of International Settlement (BIS) Board of Directors, and representatives of the World Customs Organisation Council, convene a inter-governmental tax commission, chaired by the International Monetary Fund (IMF), to produce formal proposals on the formation of an authority with formal oversight powers for licensed international settlement infrastructure and executive oversight of the proposed settlement institutions tax raising functions in conformity with the legislation in the jurisdiction of residence or operation of the settlement institution.

While our proposed mechanisms applies to all current and future central settlement systems, given the dominant position of CLS Bank, one impact of this reform could be to enhance its quasi-monopoly status. However, given that central settlement is a natural monopoly industry, the Committee believes that it may be appropriate for it to become a competitive regulated monopoly industry.

4.1.4 Compatibility with provisions for free movement of capital and payments?

➔ To secure compatibility the GSL should satisfy the requirements of a neutral "internal" taxation and respect the *non discrimination* principle. The GSL should be designed such that it is levied on all transactions connected to the territory irrespective of the currencies involved, of the place of residence of the counterparties and for residents or domestic currencies, irrespective of the place where the transactions take place (providing for prioritisation to avoid multiple taxation).

To respect the freedom of capital and financial services, the GSL should not restrict[45] EU movement of capital and financial services, i.e. not hinder the access of foreign capital providers, financial intermediaries and traders to the financial markets, nor restrict the cross border access to capital markets of its residents.

On the issue of whether the GSL, not being a levy on the cross border movement of goods services or capital may tax indirectly restrict trade in goods and services in the EU context, we conclude that it should be non-restrictive[46] from the legal-technical perspective as there is a too remote and non-causal relation with the forex transaction[47].

A similar reasoning applies under GATS: payments for "current transactions" may not be restricted. GATS does not liberalise capital movements nor payments as such, but only payments for the recompense of services in a sector where governments have made commitments to open that service sector to foreign competition. In the context of the GSL only the liberalisation of financial services is then to be considered[48]. Generally an exchange of currencies is a capital transaction, not a payment for a (financial) service nor necessarily a cross border transaction: the GSL is thus an internal taxation comparable in this perspective to VAT. A liberalisation of the payment of the commission fee or margin (an accessory) cannot as such imply

the liberalisation of the capital transfer. Moreover, under a proportionality test the tax cannot be seen to be so excessive as to constitute a restriction.

4.1.5 What is the risk of substitution of financial products /transactions to avoid the levy?

➔ A final concern is that avoidance measures may also result in a higher use of FX derivatives and contracts for difference which may also increase settlement risk. The suggestion is that products could be developed to get round the levy even if in substance it was an FX transaction, particularly transactions in commodities denominated in different currencies.

At its heart this is a cost-benefit issue. This Committee takes the view that as the benefit of avoidance would be very small, and the cost very large (i.e. excluding yourself from one of the most liquid, centrally settled markets, and from hedging and other risk management as well as legal protection) avoidance will not occur in a significant way. The rationale for this view is contained in various sections of this report.

4.2 Governance of the use of GSL funds

4.2.1 The use of funds

➔ The remit of this Committee is to raise funds for international development and environmental crises. In the first instance, this is inextricably linked to the challenge of meeting the MDGs by 2015, and so funds should be dedicated to sectors that require long-term stable funding, such as health, education, but also areas such as hunger and the prevention of food crises.

In the second instance, adaptation needs in developing countries are becoming ever more acute, and mitigation funding to enable poorer countries to switch to a low-carbon development path ever more needed.

One means of disbursing GSL funds would be to use existing vertical funds in these areas, of which there are many. However, given the innovative nature of the funding proposal, where we have sought to identify the mechanism most suited to funding global public goods, the Committee believes that a new, dedicated financial facility is more appropriate. We term this, the “Global Solidarity Fund”.

4.2.2 Governance of the Global Solidarity Fund

➔ In this report, the Committee has analysed innovative financing models that could provide a resolution to the Global Solidarity Dilemma and enable funding for global public goods to the socially optimal rate. To this end, we have recommended the establishment of a Global Solidarity Levy.

A Global Solidarity Levy, both with respect to the governance of the levy raising authorities and the governance of a distribution and administration body for the funds, must uphold principles of accountability, democracy, fair representation and transparency.

In this section, the Committee evaluates the governance and operational requirements for the distribution and administration of the funds – a new Global Solidarity Fund financing facility for public goods.

The UNITAID governance example

When considering issues of governance, UNITAID provides a good example. It was launched in 2006 with the aim to scale up access to treatment for HIV/AIDS, malaria and tuberculosis for the poorest people in developing countries by lowering the price of quality drugs and diagnostics and accelerating the pace at which they are made available. This relied on stable and predictable financial source generated by the air-ticket solidarity levy.

UNITAID composes of the Executive Board, the Consultative Forum and the Secretariat. The most important organ is the Executive Board. The Board is UNITAID’s decision-making body, responsible for establishing objectives, action plans and partnerships.

The Board consists of eleven members, including five representatives from founding countries (Brazil, Chile, France, Norway and the United Kingdom), one from Africa chosen by the African Union, one from Asia, currently from Korea, two from civil society (NGOs and communities of people living with the diseases), one from foundations, and one from WHO. This Board is chaired by Philippe Douste-Blazy, the former Foreign Minister of France.

As far as the composition of the Board that includes two NGO members concerned, it can be regarded as unique, since it could guarantee the voices of civil society are heard at the core of decision-making.

UNITAID has also created the Consultative Forum in May 2007 so that voices of countries, NGOs, companies and other stakeholders outside the Executive Board can be heard in the Board. There were 40-50 people participated in the first Consultative Forum together with all board members, exchanging information and views with each other.
Together with its Constitution that expresses transparency and accountability as core principles, UNITAID is more democratic, transparent and accountable than other conventional international organisations.
Several countries already introduced the air-ticket solidarity levy with a progressive scale based on destination and class. These include Chile, the Ivory Coast, France, the Republic of Korea, Madagascar, Mauritius and Niger which allocate all or a share of the revenues to a drug purchasing facility (UNITAID) aimed at combating the major pandemic diseases affecting the developing world. Others, like Brazil contribute by budget contribution based on air travel. About €170 million of the contributions to UNITAID originated in revenues from the airline ticket levy.

From the collection point(s), monies would have to flow to an entity that would assume fiduciary responsibility, and perhaps, also govern the allocation of the resources and be accountable to the international community for their proper use. We do not propose that the new body engages in directly using funds, but disburses financing to existing structure for implementation on the ground. While it is beyond the scope of this Committee to offer detailed recommendations on the governance of a Global Solidarity Fund, we believe that – building upon recent experiences – it is possible to offer principles for policy makers considering the governance and operational remit of the "Fund".

Achieving the appropriate governance framework requires balancing dual objectives: 1) how the fund can work with recipient national authorities in a collaborative and sustainable manner, and 2) responding to the constituency demand for effective measurable and measured results and accountability. Indeed the demand for effective measurable and measured results and accountability is a global interest.

4.2.3 Global Solidarity Fund governance and operational principles

- Strong, fair and clear accountability
- The Funds' operational governance should reflect a balanced, and perhaps rotating, composition from the developed and developing world, both Less Developed (LDC) and middle-income countries, from ("North and South")
- In accordance with precedent for innovative financing funds, the Fund's governance should include representatives of both the private sector (including the international financial sector) and civil society,
- At an operational level, mechanisms to monitor and evaluate progress should be transparent and set out from the outset. Building support for innovative financing for a focus on achieving results, developing the information and audit trails and performance monitoring.
- Limiting the fund to a clear mandate for receiving and administering the funds. So as not to contribute to the multitude of international development delivery organisations, it is not advised that the fund becomes involved in user-delivery. Rather the fund would allocate funds, based on principles agreed by its governing body.
- Mechanisms should be put in place to monitor the "additionality" of GSL funds, and ensure that they are not used to replace existing ODA commitments.

5 Options

➔ There are roughly four options in considering the establishment of a Global Solidarity Fund, as described in the interim report of the Japanese Commission for the Promotion of International Solidarity (the Terashima Commission). The first option is to establish it within existing organisations such as the World Bank (WB) and the IMF. The second is to establish a new body based on the governance of recently created bodies such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, and UNITAID. The third option is to create it in accordance with proposals by Heikki Patomäki (Currency Transaction Tax Organisation & the Council of Ministers and the House of Democracy) and Bruno Jetin (Fonds de solidarité pour le développement durable & the Council of States and the General Democratic Assembly). The final option is to combine elements of each of these.

The World Bank and the IMF are often criticised for their decision-making manner, i.e. "one dollar, one vote" system, which is regarded as undemocratic. On the other hand, a proposed Fund would benefit

from administrative support from an established international capacity building architecture. In particular, the Bank has a good track-record of creating Trust Funds with good management.

This first option could be a relevant choice, if and when the following conditions are to be met. The first is that democratic decision-making by various stakeholders is assured. Secondly, the access to the Fund must be easy in terms of procedure. Finally, the proceeds of the Fund should be used to leverage private finance by allowing the WB administrated Trust Fund to obtain more capital in the market.

Both the Global Fund and UNITAID have a unique governing body (see Box). Both organisations include representatives from civil society and the business sector from both developed and developing countries on the Executive Board, guaranteeing their voices are heard at the core of decision-making. UNITAID has also created the Consultative Forum so that voices of countries, NGOs, companies and other stakeholders outside the Executive Board can be considered in the Board. These features should be incorporated into the governance of a Global Solidarity Fund; whichever of the options described above is chosen.

The proposals of Patomäki and Jetin also warrant examination. Although they would require a long time horizon to realise, over the longer term this option has a potential to build transparent, democratic and accountable global governance in a comprehensive manner.

Given this, the Committee recommends adopting pertinent elements of the option 1 and 2 in the short term, but considering the third option in the long term. In other words, a Global Solidarity Fund could be created as a clearly identifiable trust fund with its own decision-making board comprising a range of stakeholders including civil society and business sector together with its Consultative Forum.

APPENDIX

Appendix I
References

– Baker, D., Pollin, R., McArthur, T. and M. Sherman (2009), “The Potential Revenue from Financial Transactions Taxes”, Center for Economic and Policy Research (CEPR) & Political Economy Research Institute, University of Massachusetts, December 2009.
http://www.cepr.net/documents/publications/ftt-revenue-2009-12.pdf

– Barker W., 2007, The Global Foreign Exchange Market: Growth and Transformation, Bank of Canada Review, autumn 2007.

– Bank of International Settlements, 2007, BIS 2007 Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2007, December 2007.

– Denys, L. A. “Implementation of the Currency Transaction Tax in the EU Legal Context”, in “Ready for Implementation. Technical and Legal Aspects of a Currency Transaction Tax and Its Implementation in the EU” Jetin, Bruno & Denys, Lieven:Part IV p. 184 – 228 edited by World Economy, Ecology & Development, e.V., Berlin, 2005.

– Denys, L.A. “Some brief remarks on securities transaction taxes and currency transaction taxes as EU taxes”, in “EU TAX”, ed. Michael Lang a.o. LINDE VERLAG,WIEN, 2008 p. 527-537 (reports of an international conference “EU-Taxes” organised by the Institute for Austrian and International Tax Law, Vienna University of Economics and Business Administration, July 5-7, 2007, Rust, Austria.

– Denys, L.A. “From Global Tax Policy to Global Taxation: The Case of the Global Currency Transaction Tax”, in “A Vision of Taxes Within and Outside European Borders”, ed. Hinnekens a.o., Kluwer Law International BV, The Netherlands, 2008, pp. 321–358.

– European Commission, 2010, “Innovative Financing at a Global Level”, Commission Staff Working Document SEC (2010) 409 final.

– European Commission, 2006a, Study to Increase the Understanding of the Economic Effects of the VAT Exemption for Financial and Insurance Services, Report carried out for the Commission by PricewaterhouseCoopers.

– European Commission, 2006b, Consultation Paper on modernising Value Added Tax obligations for financial services and insurances, Document MEX/06/314, and IP/06/602 on the Commission website.

– European Commission 1996, Value Added Tax. A Study of Methods of Taxing Financial Services, carried out for DG XXI by Ernst & Young.

– Huizinga, H., 2002, Financial services VAT, Economic Policy, October, pp.499-534.

– International Monetary Fund, 2010, A fair and substantial contribution by the financial sector, April.

– Jetin, B. 2006, “A Tax on Currency Transaction, Against Speculation and for Global Common Goods”, Symposium on “World Poverty and Global Welfare: Rethinking Globalization”. Organised by the Research Centre for Global Welfare, 9 October, Chiba University, Japan.

– Jetin, B., and L. Denys, 2005, Ready for implementation – Technical and legal aspects of a currency transaction tax and its implementation in the EU, World Economy, Ecology and Development (WEED), Berlin, November.

– Landau, 2004, Landau report on Innovative Development Funding Solutions commissioned by President Jacques Chirac, Paris, 2004.

– Macedo Cintra, M.A., Romano Schutte G. and Viana A., 2010, Globalização para todos – Taxação solidária sobre os fluxos financeiros internacionais., IPEA, Brasilia.

– Monacelli, D. and M. G. Pazienza, 2007, "VAT Exemption of Financial Services in the EU: An Assessment of the Italian case", working paper.

– Nissanke, M., 2004, Revenue potential of the currency transaction tax for development finance: a critical appraisal, in A. B. Atkinson (Ed.), New Sources of Development Finance, Chapter 4, Oxford University Press.

– Organisation for Economic Cooperation and Development, 2010a, The parameters of a Financial Transaction Tax and the OECD global public resource gap, 2010-2020, Trade Union Advisory Committee to the OECD, Paris, 15 February.

– Organisation for Economic Cooperation and Development, 2010b, "Development aid rose in 2009 and most donors will meet 2010 aid targets", 14/04/2010
http://www.oecd.org/document/11/0,3343,en_2649_34487_44981579_1_1_1_1,00.html

– Patomäki, H. and L.A., Denys, 2002, "Draft Treaty on Global Currency Transactions Tax", NIGD Discussion Paper 1/2002: Helsinki & Nottingham.

– Schmidt R., 2007, "The Currency Transaction Tax: Rate and Revenue Estimates", The North-South Institute (Canada), October.

– Schulmeister S., Schratzenstaller M., and O. Picek, 2009, "A General Financial Transaction Tax: A Short Cut of the Pros, the Cons and a Proposal", Österreichisches Institut für Wirtschaftsforschung (WIFO), September.

– Spahn, P. B., 2002, On the feasibility of a tax on foreign exchange transactions, Report to the Federal Ministry for Economic Cooperation and Development, Bonn, February.

– Spratt, S., 2006, "A Sterling Solution: Implementing a Stamp Duty on Sterling to Finance International Development", Stamp Out Poverty, London.

– Stern, N., 2006, Review on the Economics of Climate Change, H.M. Treasury, UK, October.

– Terashima Commission, 2009, Interim Report of the Japanese Commission for the Promotion of International Solidarity Levies.

U. Hag, I. Kaul, and I. Grunberg (eds), 1996, "The Tobin Tax: Coping with Financial Volatility", Oxford University Press: New York and Oxford.

– UNDP, 2007, "Fighting Climate Change: Human Solidarity in a Divided World 2007-2008", UNDP

– UNFCCC, 2007, "Investments and Financial Flows to Address Climate Change".

– West, K., 2007, "Algorithmic Trading: Behind the Trade." International Banking Systems Journal, 10–12, June.

Appendix II Terms of reference of the Taskforce on International Transactions for Development as agreed in October 22nd in Paris.

Background and objectives

1.1. Even before the current economic and financial crisis, the question of innovative financing, including a financial transaction levy or voluntary contributions on international financial transactions, aroused the interest of a number of countries and many NGOs.

1.2. The report submitted in 2004 to the United Nations Secretary-General by the quadripartite group made up of Brazil, Chile, Spain and France (Technical Group on Innovative Financing Mechanisms) raised the possibility of such a levy and concluded that: "Despite the (...) obstacles, the proposal to levy a tax on financial transactions at a very low rate would lead to the collection, on a stable and predictable basis, of a significant amount of resources for development while not interfering with the normal functioning of the market." The same report likewise raised the potential of credit-card based voluntary financing mechanisms for development.

1.3. The advisability of introducing such mechanisms has also been discussed in the Leading Group on Innovative Financing for Development since its inception in 2006, in line with discussions on the coordinated introduction world-wide of taxes to finance development using the same base. This would be a way to redistribute a small fraction of

wealth generated by globalized activities. The air-ticket solidarity levy is one such example.

1.4. The international economic and financial crisis has been another reason for the reemergence of the issue of innovative financing: its global impact underpins both the need to renew our approach to development and the need to mitigate external shocks in order to meet the essential needs of developing countries. The challenges related to attaining the Millennium Development Goals justify a "scaling up" of the use of innovative financing mechanisms. Today their added value is recognized: they can provide more stable and predictable finance flows, which complement traditional ODA and redistribute wealth generated by globalization and the opening up of borders. Proof of such renewed interest, the issue has been discussed in several international forums including the UN, the European Union. The G20 has also asked IMF, to "prepare a report on the range of options countries have adopted or are considering as to how the financial sector could make a fair and substantial contribution toward paying for any burdens associated with government interventions to repair banking system.", which may examine financial transaction taxes Many political leaders, representatives from international organizations and regulatory agencies have recently indicated that such a mechanism could be used to finance development and/or regulate international financial flows to reduce volatile flows and/or penalize excessive risk taking.

1.5. To address such a growing interest, at its Sixth Plenary Meeting in Paris on 28 and 29 May 2009, the Presidency of the Leading Group on Innovative Financing for Development, principal forum for galvanizing support for such mechanisms, recommended to create a task force to assess the technical and legal feasibility of a financial transaction levy and voluntary contributions based on international financial transactions and explore all options in this regard. The Taskforce on Innovative Financing for Health Systems chaired by Gordon Brown and Robert Zoellick is relevant to this initiative. At its meeting on 29 May in Paris, it retained the idea in its menu of options – including exploration of the feasibility of a financial transaction tax, taking account of its potential impact on financial markets, competition between financial jurisdictions and the relocation of capital flows.

The Paris Taskforce on International Financial Transactions and Development (IFTD): participants, aims and operation

2.1. The establishment of the Taskforce on International Financial Transactions and Development was recommended by the presidency's final conclusion of the Leading Group on 29 May in Paris. It is made up of representatives from the countries. As necessary, it will consult representatives from international organizations and NGOs. It will meet three or four times at ministerial level or at the level of senior officials from now until May 2010, deadline for the submission of a report to the Leading Group.

2.2. The first countries to have expressed interest in the task force and attended the preparatory meeting in Paris on 15 September 2009 are Austria, Belgium, Brazil, Chile, France, Germany, Japan, Norway, Senegal, Spain and the United Kingdom. As the Leading Group's Permanent Secretariat, France has offered to support and facilitate these discussions, which should remain open to a significant number of interested countries.

2.3. The Taskforce's objective is to define an updated menu of options with a view to exploring the feasibility of a tax or voluntary contribution on international financial transactions and thereafter its potential for financing for development. The Taskforce should, on the basis of proposals from the Committee of Experts, propose recommendations to the ministers. Participants will endeavour by all means to reach a consensus on these recommendations. The recommendations should be presented in order to how much support can be provided to them. To this end, the Taskforce will conduct a cost/benefits analysis of the different options in a realistic framework (including assessment of technical feasibility, potential revenues, market impact, spillover to the real economy etc.). In its recommendations, it will pay particular attention to the risks of distortion of competition and circumvention. It will seek to ensure objective debate on the issue by drawing a distinction between technical and legal feasibility on the one hand and political advisability on the other. 2.4. The work will analyse the place, role, volume of international financial transactions and its actors (banking sector including intermediaries and market regulators) in the global economy, the financial needs for development in the context of

the 2015 deadline to achieve the MDGs, and the way in which innovative financing based on financial transactions can contribute to achieving them. At the end of the process, it will be up to the political leaders to assess, drawing on the experts' work and if all the conditions are present, whether or not the mechanisms proposed should be introduced.

International Committee of Experts: participants, aims and operation

3.1. The Taskforce relies on a small group of high-level experts (8 to 10 maximum). The experts, chosen by consensus by the participating countries on the basis of their competence in macroeconomy, tax, financial issues and/or development financing and legal matters, are tasked with drafting a report on the different options available to be submitted to the Taskforce by May 2010. They will present a progress report by January 2010, a provisional report by March 2010 and a final report by April 2010.

3.2. The experts will be tasked with drawing up a report on the different technically possible options to finance development using taxes and voluntary contributions on financial transactions including how they would operate in practice, their conditions for implementation, their effects (cost/benefit analysis, possible risk of distortion), their coherence with existing development financial instruments and the objective sought (raising additional resources for development). They will address both the options for financial transaction levies, including a currency transaction levy and voluntary solidarity mechanisms based on international financial transactions (*cf.* initiatives in the banking sector in the areas of corporate environmental and social responsibility and ethical finance). Detailed questions to be addressed are attached. Others might be raised at a later stage.

3.3. Budget and meeting location. It will be important in securing funding to have a clear project plan, with estimates of costs involved. Voluntary contributions by task force members will cover the expenses of the Committee of Experts, unless otherwise covered by their employer. Wherever possible, experts will liaise through electronic means, e.g. videoconferencing/ e-mail, in order to sensibly manage expenses of the Committee. The Secretariats of the Taskforce and Committee of Experts will be ensured by the Leading Group Permanent Secretariat. The Taskforce and Committee of Experts Meetings could be held in participating countries upon their invitation.

Annex: Key questions to the International Committee of Experts

Background on international financial transactions

– What would be the rationale and motivation for a financial transaction tax and/or voluntary contributions by the financial sector? In particular, to what extent the financial industry itself could have a direct or indirect interest in this kind of initiatives?

– What are the main categories and types of international financial transactions likely to serve as a base for a possible solidarity contribution for development?

– What are their current levels of taxation (and the indirect contribution to development financing) globally? What are examples and experiences of existing (or past) financial transaction taxes on a national/regional level?

– How have the landscape of bank groups, the other financial players and the organization of transactions changed over time (concentration, geographical and sector-based developments in their activities; centralisation of transactions _or not on one/several markets and importance of the market of over-the-counter agreements and of internalisation of transactions) and what conclusions should be drawn for ongoing discussions?

– What are the main international legal public instruments that govern international financial transactions?

– What are the historical examples of such taxes and what lessons can be learned from these?

– How transactions are settled and contracted (settlement, over-the-counter transactions vs. official market exchanges) and how realistic, practical and likely are changes in the future; in particular to avoid additional costs (taxation)?

Financial transactions levies: feasibility and conditions

– What will the menu of theoretically available options to establish mandatory and / or voluntary solidarity contributions on financial transactions and services and financial flows, in a co-ordinated way at a global level?

– How can this be narrowed down to a feasible number of proposals to consider?

– What will the technical and legal feasibility conditions for the different options be?

– What are the required conditions for agreement on a global scale or those that could be implemented by the principal financial jurisdictions and/or a given region?

– What are the precautions and conditions needed to implement such a mechanism?

– Which bodies could be involved in depth scoping the feasibility of such a mechanism? E.g. do we need to draw on the cross-border expertise from the Bank for International Settlements or World Bank?

– What will the economic and financial impact of the different options be and how can it be limited (risk of capital flight / change of market place, lower trading volume, implications for risk management / hedging issues, circumvention, etc.)? What (extension of) public international legal instruments could serve the purpose of reducing such risks?

– Are there financial market segments that are less sensitive to capital and financial services relocation risks and circumvention and for which a levy would be more feasible?

– Should a totally new levy be introduced to finance development or can we consider an additional contribution to a levy that already exists (increasing its amount in a coordinated way by several countries)?

– How could the contributions be levied in the financial sector, given the territoriality principle when it comes to taxes? Which countries and financial centres would contribute most?

– Who would bear the financial burden of the levy / Who would be the end payer and how can we ensure that financial operators do not make certain categories of clients bear the brunt of this levy (low-income taxpayers, user of financial services in developing countries)?

– What could be the process and timeframe for the implementation of such mechanisms?

Possible proceeds and their use

– What would we need to know about this type of mechanism in order to assess its potential in terms of development financing depending on the possible bases and rates?

– What would be the distribution of the overall amount of tax revenues worldwide (who pays, who receives?)

– Who could be in charge of the monitoring and the report on the revenue collected from the tax?

– How stable and predictable can we expect financing to be?

– Will this type of levy be adapted to development financing? What type of needs (recurrent or otherwise) and objectives would be most appropriate for this type of resource?

– How can we guarantee that new instruments of financing do not hamper the already strongly fragmented aid infrastructure and hinder effective aid delivery?

– Is it coherent with other methods of funding for development?

– Is this funding mechanism more effective than other mechanisms?

Voluntary contributions

– Regarding voluntary contributions, what initiatives already exist (*cf*. voluntary contributions on credit card transactions) and how can we support and coordinate them?

– More generally, in the context of international standards in the area of corporate environmental and social responsibility (*cf*. the Equator Principles), what recommendations can be made so that banking institutions and their clients take more account of sustainable development issues (*cf*. socially responsible investment, ethical savings products, etc.)?

– What methods could countries use to urge the banking sector (including intermediary

institutions and market regulators) to contribute to financing development on a voluntary and coordinated basis?

– What could be the process and timeframe for the implementation of such mechanisms and could states contribute to them?

Political economy of change

– Who could be the supporters to the various options and their opponents?

Appendix 3
Committee work schedule

25 & 26 November 2009,
Scandic KNA Hotel, Oslo

First Working Meeting of the Committee of Experts

15 January 2010, Belgian Ministry of Foreign Affairs, Foreign Trade and Development, Brussels

Second Working Meeting of the Committee of Experts

1 March 2010, Institute of Chartered Accountants In England and Wales, London

First Consultation with interested stakeholders from Cicero Consulting, Bank of England, Standard Chartered Bank, CLS Bank, Ethical Currency Ltd, BDO LLP, KPMG, The Association of Corporate Treasurers, Deloitte LLP, RBS, War on Want, Stamp Out Poverty, Christian Aid, Cabinet Secretariat: European & Global Issues, SOAS, Citigroup, Standard Chartered Bank, Cabinet Office, Trades Union Congress, Ernst and Young, Grant Thornton UK LLP, CAFOD, Oversea Development Institute.

19 & 20 March 2010, New York and Washington D.C.

Second Consultation with interested stakeholders from Georgetown University, Center for Economic and Policy Research, Intergovernmental Group of Twenty-Four (G-24), Investment Company Institute, NYSE Euronext Strategic Analysis, International Monetary Fund, U.S. Chamber of Commerce, Vanguard, World Bank, ING Capital Markets LLC, Standard Chartered Bank, US House of Representatives Financial Services Committee, Investment Company Institute, Federal Reserve Bank of New York, Peterson Institute

23 & 24 April 2010, French Ministry of Foreign and European Affairs, Paris

Third Working Meeting of the Committee of Experts

Appendix 4
Assessment of options matrix

		FAT	VAT on Financial services	Broad FTT	Single-currency CTT	Global CTT
Sufficiency		?	?	✓	✓	✓
Market distortion and avoidance	Unlikely to distort market behaviour?	✓	✓	X	✓	✓
	Limited scope for relocation avoidance?	X	X	X	✓	✓
	Limited scope for (non-relocation) avoidance?	X	?	?	✓	✓
Feasibility	Technically feasible within existing architecture?	✓	✓	✓	✓	✓
	No major legal barriers to the levy?	✓	✓	✓	✓	✓
Stability and suitability	Stable revenues	✓	✓	✓	✓	✓
	Global purpose, activity and assets	X	X	X	✓	✓
	Central collection	X	X	X	X	✓

Legend:
X = negative assessment
? = ambiguous assessment (further research required)
✓ *= positive assessment*

Appendix 5
Glossary

Bid rate: the dealer's buying price for equities, bonds, foreign exchanges, etc.

Currency options: an option is a contract that gives the holder the right, but not the obligation, to buy or sell a currency at specified price within a specific timeframe.

Currency swaps: transactions where counterparts exchange and re-exchange both principal and streams of fixed or floating interest payments in two different currencies. Because the language and terminology used in swaps is different from that used for futures, newcomers think of them as essentially different products when they are really all variations on the same product. They therefore have the essential characteristics of futures – that an hedger can gain protection from an adverse rate movement but will not benefit from a favourable one.

Derivatives: a product whose price is derived from the price of an underlying asset – for example if dollars are the underlying asset, an option to buy or sell them at a given price is a derivative. Applied to options, futures, swaps, etc.

Foreign exchange swaps: transactions where one currency is swapped for another and then swapped back at a pre-agreed rate on pre-arranged date. The swap is one transaction which combines two deals, one spot and one forward. In the first deal a trader buys a currency spot and in the second simultaneously sells it forward for delivery at a later date. The trader will therefore returns to the original position at the end of the deal.

Futures: contracts for delivery of a specified unit of a specified unit of foreign currency at a fixed price at specified date. Futures contracts are in standard amounts whereas forward contracts are once-only transactions.

Herstatt Risk: cross-currency settlement risk that arises where the working hours of inter-bank fund transfer systems do not overlap due to time zone differences. In this situation, failure by one counterparty to settle its side of the deal starts a chain reaction of cross-defaults. It is named after a small German bank (Bankhaus Herstatt) which failed in June 1974 during the period it was supposed to settle a contract after having received the payment from the counterparty.

Offer rate: the dealer's selling price for equities, bonds, foreign exchange, etc.

OTC: Over the counter market. Dealing outside a trading exchange, with no clearing house standing between the two parties.

Outright forward (transactions): transactions that are settled in three or more working days after the deal date. For the most important currencies there are standardised markets for one-, two– three – six – and twelve month monies. For each maturity date there exists another exchange rate, which will normally deviate from the rate of spot transactions.

Settlement: delivery of a security by a seller to a buyer on or before the settlement date.

Spot (transactions): transactions that are settled in fewer than three days after the deal date. The spot rate is the current market price. As elsewhere in financial markets, rates are given as "bid and offer", that is buying and selling. Transaction costs are reflected in bid/offer spreads observed in markets [1]. The more liquids markets are, the lower spreads could be.

Spread: difference between a bid and offer rate.

1 The spreads also include risk premiums and premiums arising out of asymmetric information.

ENDNOTES

1. The terms of reference of the Committee of Experts mention the need to “redistribute some of the wealth of globalisation towards the provision of global public goods”.
2. The World Bank 2009 estimate of the cost of climate change adaptation for developing countries is $75-100 bn
3. We define the financial sector broadly, to include savings and investment banks, traders and intermediaries, institutional investors and asset managers, including hedge funds.
4. The solution in agreement on a “common consolidated tax base” approach allowing a system of apportionnement among taxing States, enhanced international cooperation facilitated by the expansion of the tax treaty protocols on administrative cooperation based on the OECD models for TEIA with financial off shore centres. Constitutional and international legal principles, including their proportionality requirement may be at odds with poorly designed excess profit and bonus taxation only on the financial sector.
5. For example, the exemption means that banks are not given rebates for the VAT that they pay on most of their purchased inputs. This puts them at a disadvantage with respect to banks located in countries (like the US) that have no VAT. Moreover, prices charged by financial institutions reflect the unrecovered VAT charged on their inputs, so that business users pay more than they would have in the absence of the VAT. On the other hand, use of financial services by final consumers is under-taxed, which has encouraged the growth of financial services relative to other sectors (Monacelli and Pazienza 2007).
6 Arbitrage across different financial products or financial institutions would be possible if the VAT treatment of largely equivalent financial instruments and/or institutions were different. To avoid this, all financial institutions, including banks, insurers and pension funds, would need to be subject to financial VAT (Huizinga, 2002). Moreover all financial services should be subject to such a VAT including for instance the trading of derivatives.
7. However, in the the ECJ Case “National Bank of Chicago” the margin was considered to be the taxable basis
8. In the EU, the VAT exemption for financial services is seen as a major obstacle to a more harmonised tax system. Since the mid-90s the European Commission has produced three reports attempting to develop a technical methodology to allow full taxation and input credit on insurance and financial services. Among the potential solutions identified, the possibility of applying an advanced cash flow method of charging VAT on financial services, known as the Truncated Cash Flow method is now considered the most promising method (EU Commission, 1996). The technical feasibility of such a scheme was confirmed by various studies but, for the European Commision, the “complexity of the system was seen as a strong negative factor” so that “the resultant benefits could not justify such a profound system change” (European Commission, 2006, pp.2-3). The European Commission has formulated proposals that are being discussed at the European Council of Ministers.
9. Lessons to be learned from the EU-VAT model is that the technique of harmonisation may suffice to develop an international tax system with shared tax sovereignty, adopting a common tax basis, contributing partly but directly to a supranational budget, solving double taxation with adequate common definitions of the place of delivery of goods and services (destination principle), its cross border collection mechanism through reverse taxation, with a disparity in rates that may hinder and distort trade not challenged under the freedom of goods and services, nor under GATS, its comprehensive case law of the EU Court of Justice that has the monopoly of (binding) interpretation, its national administration (and enforcement) of the tax accompanied by a well developed mechanism for cooperation between VAT authorities across the borders, including a computerised Vat Info Exchange System as well as a European Regulation on administrative cooperation (a legal instrument directly applicable in the national jurisdictions) and its coordinating EU VAT Committee of high level national tax agents headed by the EU Commission.
10. However, it is probable that the IMF estimates are an underestimate. While it may not be possible to tax all derivative transactions given current settlement systems and market practices, it does not follow that it is impossible to tax any derivative transactions. Assuming a 0.005% rate, we are left with a very wide range of possible revenue estimates, starting at $70-80 bn, and rising to $661 bn, with the likely figure being somewhere between the two.
11. Movement of capital being equally liberalised within the EU as in relation to third countries, the ECJ has nevertheless establish its case law such that the situation is not equal if the legal environment is not equal, especially when no International Tax Agreement allows an exchange of tax information so that tax driven restriction to free movement can be justified.
12. For example, the tax was not due on the basis of residency in Sweden, which encouraged Swedish residents to de-locate their transactions with Swedish shares abroad; the UK stamp duty, in contrast, taxes transactions in UK shares wherever they take place
13. The framework for such regulations should be primary a multilateral (tax) treaty and/or regional instruments (such as an EU-regulation e.g. the Common Customs Code – the Advocate General of the European Court of Justice compared a stamp duty on loan agreements to custom duties and charges with equivalent effect in the Sandoz Case – or an EU-directive e.g. the basic EU-VAT harmonization directive organizing the place of delivery of goods and (financial and other) services, including electronic business, or the EU – Saving directive, organizing the system of paying agents and shared taxation on interests, to which system several other States adhere e.g. Switzerland and off-shore centre, or the EU-Capital duty directive allocating the taxing rights to the State of incorporation of the issuing company). The numerous of traditional double tax treaties provides also adequate models for allocation of taxing rights and cooperation between taxing authorities.
14. Such as (personal scope) residence of (each of) the counterparties or the different intermediaries involved (brokers, bankers, settlement institutions etc) or the company that issued the financial assets (shares, bonds) issued and/or the markets (objective scope) e.g. the exchange where the assets are publicly quoted or the market places (dealing rooms etc) where the contracts are concluded, executed or settled etc
15. Transactions on (public) exchanges or off-exchange (OTC); derivatives; an exclusion of certain transactions such as derivatives and off-exchange transactions may run into (constitutional) equal treatment principles if the distinction is not justified or proportional to the purpose and goal of the FTT.
16. Idem; the re-characterization of asset-substitution may require the application of rather sophisticated and therefore inefficient legal/ tax abuse – doctrine. The ECJ has developed a broad concept of “wholly artificial arrangements” that can be disregarded for tax purposes (e.g. applicable to anti-avoidance tax regulations on “controlled foreign corporations” based in low tax jurisdictions).
17. E.g. notional values or the consideration (payment/margin) for the contracts? In the context of tax basis it is apparent that

the IMF-interim report refers to a cumulative effect of the FTT whereas Schulmeister responds that there is no cumulative trade but "independent" bets (implying that the bets are taxed on nominal values and not on the consideration/payment). Also the VAT experiences with financial services learn that it is difficult to distinguish margins & commissions from the transaction with the capital asset (incl. capital return/capital gain).

18. An exclusion of transactions at retail level (private individuals) may run into (constitutional) equal treatment principles if the distinction is not justified or proportional to the purpose and goal of the FTT.

19. Since the trade is almost exclusively electronically, non resident intermediaries could be required to register within (one of the cooperating) taxing jurisdictions along the line of the EU VAT Directives elaborated for no-resident electronic business operating within the EU markets.

20. Such as an EU-regulation e.g. the Common Customs Code (a regulation implementing the EU treaty) or an EU-directive e.g. the basic EU-VAT harmonization directive organizing the place of delivery of goods and (financial ago.) services, including electronic business, or the EU– Saving directive, organizing the system of paying agents and shared taxation on interests, to which system several other States adhere e.g. Switzerland and off-shore central, or the EU-Capital duty directive allocating the taxing rights to the State of incorporation of the issuing company). The numerous traditional double tax treaties provide adequate models for allocation of taxing rights and cooperation between taxing authorities.

21. An example can be found on the Art 27 OECD model tax treaties that organizes the cross border collection of taxes; the EU Directive on the cross border collection of taxes [revised 2010] may also be an updated source.

22. Compliance burden for the market-players (dealing through non registered intermediaries that collect the taxes) would than imply the filing of returns, paying and collecting taxes from counterparties, monitoring of the data of the transactions through the more detailed reporting to the market regulators, control by tax authorities e.g. on the basis of the reporting to and the monitoring by market regulators, the information required from the message systems such as SWIFT and similar institutions, and with the cooperation of the integrated Financial Intelligence Services in their watchdog functions in the domain of illicit flows (money laundering, financing of terrorism etc. To the extent that the revenue would be used for EU budgetary purposes (including the EU development funds) the EU legislation on the protection of the EU's "financial interests", implicating OLAF, would also apply.

23. Algorithmic trading has had a marked impact on trading volume. The combination of the professional trading community penetration into the interbank market and computer-based trading has led to a surge in the proportion of algorithmically sourced foreign exchange volume. It is estimated that, since its introduction, algorithmic trading has achieved an approximate market share of 30% on interbank platforms (Barker, 2007). Some analysts predict that algorithmic trading will eventually account for up to 70% or more of foreign exchange volume, similar to what has occurred in equity markets (West 2007). The widespread availability of retail electronic trading portals and inexpensive computer power has enabled even smaller speculative accounts (such as day traders) to participate in the foreign exchange market.

24. For example, the Committee received a submission that algorithmic trading is not necessarily "speculative", but is increasingly used by institutional investors to break up their trades into small bundles and drip-feed them into a market so as to avoid creating market movements. These trades will still need to be done, though the method chosen to execute them may change. The impact upon volume would therefore be minimal in this instance.

25. For these reasons, the Japanese Commission for the Promotion of International Solidarity Levies (The Terashima Commission) proposes the Japanese government to introduce this type of levy in its interim report (Terashima Commission, 2009).

26. A transaction between US dollars and UK sterling that involves more than one financial institution, wherever it notionally takes place, triggers transfers between accounts in the US and UK. These transfers are communicated between the institutions by global messaging systems, such as SWIFT in the UK and Fedwire in the US and settled through a large-value RTGS system, such as CHAPS in the UK, or CHIPS in the US. In each case, the transaction is recorded and the information conveyed to participants.

27. Some proponents (e.g. Spratt, 2006) suggest that a copied message of each gross foreign exchange transaction is transferred to the relevant central bank, enabling a record of cumulative tax liabilities to be created. The required CTT could then be transferred from the settlement account held by commercial banks within the relevant central bank as part of the normal process of settlement within the large-value RTGS system.

28. The only exception to this process is banks that do not hold settlement accounts in the relevant RTGS system. For domestic banks, transactions would be settled by a larger domestic bank, and for non-domestic banks, transactions would be settled with their relevant correspondent bank where their nostro account is held.

29. See Spratt (2006) for estimates in this regard.

30. The CB could thus be instructed to prescribe the necessary gross reporting of the underlying trade by the banks that hold currency/settlement accounts with the CB. This reporting could be matched by the domestic tax authorities that supervise the "third party" tax collection on the settlement accounts with the cooperation of the Central Bank, or the domestic banks/correspondent banks that net or settle the forex trade in preceding phases and controlled on the basis of data required from the resident global messaging systems. This may be reinforced by bilateral (multilateral) tax assistance with respect to the global messaging systems based outside the jurisdiction (and even more generally to supervise transactions that take place abroad). Forex trade within a group of companies can be taxed under a group-taxation system, audited and reported upon by the external group auditors.

31. In 2002, a consortium of central banks and global private banks established the Continuous Linked Settlement Bank to provide more certainty in the settlement of foreign exchange trading. The Continuous Linked Settlement Bank is the global hub of the settlement infrastructure. A unique, market led institution, it provides netting and settlement services to reduce to market players and provides an institutional framework for the world 17 main currencies. CLS bank has fifty nine member banks which are shareholders of the CLS Group, the holding company which owns CLS bank. These fifty nine shareholder banks are responsible for the corporate governance of the CLS bank and how it manages its data, risk exposures and membership services. In addition to the fifty nine member banks, there are currently 7070 participating institutions and entities using the CLS bank service. Of these third party participants, there are 6,620 investment funds, and 450 banks, corporate entities and other non-bank financial institutions. Therefore, the scope of the CLS bank network is broad and the scope of its foreign exchange settlement service extends as well to the foreign exchange transactions of these institutions and entities. The CLS Bank's growing share of the foreign exchange settlement market suggests that it will have institutional dominance in the future over the management and collection of data related to the value and volume of foreign exchange transactions. Nevertheless, its growing market share is fragile and could drop if member banks and their customers decided to settle FX transactions through more traditional ways, such as bilateral correspondent banking, or other alternative settlement arrangements. Nevertheless, member banks and their customer financial firms and institutions which settle through CLS gain substantial benefits and synergies in terms of risk reduction and would probably not want to sacrifice these significant cost advantages for the sake of paying a very low rate transaction tax on foreign exchange trading.

32. Most estimates of potential revenues rely on the BIS Triennial Survey of Foreign Exchange and Derivatives transactions. However, the last such survey took place in 2007, with the 2010 survey not scheduled to be published until after the Committee has reported. To address this, we have estimated global figures by collating volume data from the major foreign exchange trading centres – London, New York and Tokyo – and extrapolating trends to the global level.

33. "Cross-currency settlement risk that arises where the working hours of inter-bank fund transfer systems do not overlap due to time zone differences. In this situation, failure by one counterparty to settle its side of the deal starts a chain reaction of cross-defaults. It is named after a small German bank (Bankhaus Herstatt) which failed in June 1974 during the period it was sup-

posed to settle a contract after having received the payment from the counterparty." (BusinessDictionary.com)

34. A financial services IT research firm, the Tower Group, estimated that total spending on new and existing IT infrastructure by CLS members, user members and third parties was $183mn between 1999 and 2003.

35. Spratt (2006) suggests that the cost of each transaction processed through CLS is considerably lower than alternatives, bringing a net gain of more than $60 million per year to participants. The same author also points out that CLS's netting process results in liquidity requirements (i.e. the sums which institutions are required to pay into the system) being only 2% of the gross value of total transactions, which is estimated to bring an annual benefit of $5.4 bn to CLS participants. Finally, Spratt suggests that the CLS system has allowed for greater volume of trade with fewer staff, leading to significant efficiency gains of a little over $12 bn per year.

36. The German state-owned bank KfW transferred €300 million to Lehman Brothers on the day of its collapse, and because the deal did not go through CLS, KfW did not receive its dollar payment and was unable to recover the Euros.

37. According to CLS, 75% of the spot, swap and outright forward values are being settled through CLS. In October 2009, the total average value of payment instructions settled per day by CLS was $3.766 trillion.

38. For the seller of a currency derivative, managing it over its lifetime implies a continuous stream of spot transactions on a fraction of the underlying amount

39. There are two ways through which derivatives could enable to circumvent a tax on traditional FX transactions. First, the use of derivative products to synthetically reconstitute a spot transaction, for instance by combining a loan and two options transactions (a call and a put). Second, the use of derivatives to reconstitute FX swaps, for instance by swapping liquid securities denominated in two currencies (like Treasury Bills), in place of the currencies themselves. The question is therefore what is the likelihood of such avoidance behaviour. These operations are more expensive and riskier than the straight traditional FX transactions (spots or FX swaps) and would most likely not be worthwhile if the tax rate of traditional FX transactions were set sufficiently low.

40. The experiences with existing stamp duty, and securities transfer tax systems applied in the financial sector in many countries as well as the real estate transfer taxes; inspiration for extra territorial jurisdiction can be derived from experiences such as the paying agents system in the EU Saving Directive as expanded to many off shore centers, the US concept of qualifying intermediaries, and the experience in many jurisdictions of cross border withholding tax liability on wages, dividends and interests,.

41. Since domestic tax authorities are to supervise the tax collection the democratic control on that leg of the tax is exercised at domestic level. The expenditure side could be democratically controlled through the governance structure of the Global Fund that receives the revenues and allocates the funds as described hereafter.

42. It is clear that more than with an FTT or single currency CTT, States will have to agree to an adequate common design of the tax including a harmonized definition of the taxable transactions and assets, the taxable events, tax basis and tax rates, the taxpayers and the criteria to recognize the financial intermediaries to be mandated and instructed to collect the tax. States will have to agree to share their sovereign taxing rights/powers so as to (collectively mandate to) raise the revenue collected according to commonly agreed personal or objective territorial connecting factors to avoid double (or multiple)taxation. In the multi currency option however not the single country currency but the whole FOREX market within the participating jurisdictions comes within the scope: all transactions in all participating jurisdictions will be taxed, irrespective of the currencies involved, of the (residence of) the counterparties, of the intermediaries etc. As such the tax will be more neutral in its application and create an equal level playing field for all market players. Moreover it also enables to tax transactions with currencies of States that do not participate in the shared mechanism but who are traded within the jurisdictions of the participating States.

    This would largely simplify and facilitate its practical implementation at the level of the collecting settlement institutions and most likely raise more revenue than parallel single currency taxation.

    Multilateral introduction obviously eliminates the risk of conflicts of taxing rights and multiple taxation, but also implies the authorization and organization of the extra-territorial executive tax jurisdiction (collection) abroad. The appropriate framework would be a multilateral treaty and/or regional instrument containing the basic tax characteristics, definitions and mutual cooperation which the States could than implement and integrate in their domestic legislation.

43. *Cf.* the experiences with existing stamp duty, and securities transfer tax systems applied in the financial sector in many countries as well as the real estate transfer taxes; inspiration for extra territorial jurisdiction can be derived from experiences such as the paying agents system in the EU Saving Directive as expanded to many off shore centers, the US concept of qualifying intermediaries, and the experience in many jurisdictions of cross border withholding tax liability on wages, dividends and interests,.

44. *Cf.* endnote 22.

45. Restrictions can be justified under the EU jurisprudential rule of reason (reasons in the public interest are to be balanced against common market principles of free trade including capital e.g. recently Case C-567/07 Servatius of 1 October 2009 pt 25-31). This requires the levy to be non discriminatory, proportional to the purpose/objective of the levy that should be legitimate; e.g. with respect to stamp duties on loans contracted abroad: Case C-439/97 Sandoz of 20may 1999 pt 24-27. The latter is e.g. beyond doubt as regards the tax purpose of the measure as well as regards the aim to finance international development cooperation, which is one of the explicit EU treaty goals. (TEU art 21,2, d-g; TFEU art 208, 1, 2 and EU Commisioner Bolkenstein (Internal Market) covertly recognizing the public interest dimension of the Belgian CTT law on 1 September 2004, upon the request of the Belgian Minister of Finance: "Whilst one may argue that those objectives broadly are "in the general interest" it is unclear to me what their exact scope is(...)."

    The proportionality of the levies measured against the goals of the EU development policies and goals, taking into account the shortfall of the ODA funded through domestic and EU budgets is obvious. Also the proportionality of the levies assessed against its tax purpose is obvious: the distinctive tax objective pursued by the GSL is to tax specific transactions in a specific financial market and not to tax payments or transfers of money. The objective is to tax the exchange of two different specific kind of assets, i.e. currencies which, as well as both the transactions and the market, have a most direct link with globalization (cfr the suitability assessments in the options above). The tax envisages transactions that inherently carry the risk of the fluctuation of the value of the different currencies, risks that are influenced and measured by the internationally evaluation of their economies, the relative fluctuations and developments of the economies in which the currency is the exclusive legal tender.

    There is no manifest and evident less restrictive alternative taxation that could better attain the specific objective of the tax on transactions that have these characteristics of double assets traded on a global forex market (e.g. in one single currency or money where such valuation risks do not occur).

46. Based on the "rule of reason" test.

47. To the extent there would politically be deemed to be a (theoretical) indirect restriction of trade of goods and services among different currency zones within the EU that could not be justifiable under the same rule of reason test, political EU authorities may choose to allow GSL in this specific circumstances, a VAT input tax credit treatment for qualifying trade in goods and services (and thereby integrate and neutralize the GSL into the VAT chain).

48. Under the GATS definitions, for application to capital transactions, liberalization relates only to transfers that form "an essential part" of the financial service supplied cross-border ("mode 1") or for capital transfer for services in "mode 3" (commercial presence), it suffices to be related to the service (a commercial presence may entail incidental capital transfers such as for the establishment of the presence or the repatriation of gains).

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The Leading Group on Innovative Financing for development is an informal forum composed of 60 states, the main international organizations and NGOs from every continent. In October 2009, 12 countries of the Leading Group gathered in a Taskforce on Financial Transactions for Development to evaluate the feasibility of a contribution to financing for development from international financial transactions. The Taskforce commissioned internationally-recognised specialists on these issues to technically evaluate several options, carrying out studies in Brussels, Oslo, London, Paris, New York, Washington and Brasilia. We particularly thank Belgium, France, Norway and Spain for their financial support.

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