Tax on Financial Transactions
An implementation guide

Foreword by Philippe Douste-Blazy
Chairman of UNITAID
Under Secretary-General of the United Nations
on innovative financing for development

SEPTEMBER 2011
Foreword

The crisis that we are currently experiencing demonstrates the urgent need to establish conditions for a globalisation of solidarity. While Western countries are paying the consequences of this crisis in the destruction of jobs, the tribute being paid by countries of the South is measured in human lives. Launched in 2006 by the governments of Brazil, Chile, France, Norway, and the United Kingdom and France, UNITAID, a veritable laboratory of innovative financing for development, is the first example of a contribution to solidarity decided and approved at the national level but managed on a supranational level.

Through receipts collected on the tax on plane tickets, UNITAID provides sustainable, predictable and additional funding to buy medicines and diagnostic products at discounted prices for HIV/AIDS, tuberculosis and malaria patients in developing countries. Among its main projects, UNITAID funds the treatment of eight out of 10 children being treated for HIV/AIDS worldwide.

It is now time to widen the tax base of globalised activities. I am convinced that, after the micro-tax on plane tickets, the tax on financial transactions (FTT) is the next step towards wider use of the leverage of international solidarity to fund development.

It is encouraging to see a political consensus forming in France and many other countries, particularly in Europe, in favour of a FTT. It is now crucial to raise public awareness and ensure that this trend will lead to rapid results.

For this purpose, UNITAID has funded this study on the feasibility of such a tax. Carried out by the consultancy firm 99 Partners Advisory, this report is part of the search for innovative funding to achieve, alongside traditional development aid, the Millennium Development Goals set by all United Nations member states in September 2000.

A globalised economy calls for global solidarity; planetary challenges call for innovative policies. This must be one of the goals achieved by the Unilateral presidency of the G20, which has made it an official priority. This is a condition for a successful Cannes summit in November.

Philippe Douste-Blazy
Chairman of UNITAID
Under Secretary-General of the United Nations on innovative financing for development.
UNITAID has commissioned 99 Partners Advisory to develop a guide on how to implement a Tax on Financial Transactions (FTT) on a national basis. This guide will use France as the example country of implementation, on account of France's decision to put the FTT on the agenda of the G20 summit that it is hosting on November 4, 2011. This report constitutes UNITAID’s contribution to the debate on international solidarity taxes. It is part of UNITAID’s search for innovative funding to increase aid to developing countries and to fight against three diseases: HIV/AIDS, tuberculosis and malaria.

99 Partners Advisory was selected by UNITAID after an international call for tenders. 99 Partners Advisory is a Paris-based consultancy firm specialising in the financial industry, including investment banking, asset management, private banking, and capital markets. Composed of former executives of major banks (BNP Paribas, Deutsche Bank, Rothschild, etc), its skills cover all financial market business lines, from trading to middle office to settlement and delivery.

The consultants’ research was undertaken under the oversight of a steering committee set up by UNITAID, and composed of the following members:

- Mr. Khalil Elouardighi, head of advocacy at PLUS International AIDS Coalition;
- Mr. Pascal Armoudom, vice-president & partner of a management consultancy firm;
- Mr. Frédéric Martel, economist and strategy & planning officer at UNITAID;
- A managing director of a major international bank.

Note
The opinions expressed in this document are in no way binding for the institutions, organisations, or companies of which the Steering Committee are members.
Table of contents

List of abbreviations used ........................................................................................................5
Executive summary ....................................................................................................................7
1. Introduction ........................................................................................................................13
   1.1 Background and objectives of this guide to taxing financial instrument transactions ........................................................................13
   1.2 Key considerations in taxing financial instrument transactions ..................................................................................................15
   1.3 Constraints of the report ...............................................................................................18
2. A look at past and present financial transaction taxes .....................................................21
   2.1 The former unilateral tax on stock-market transactions ........................................21
   2.2 The UK stamp duty on financial transactions .........................................................25
   2.3 The Taiwanese tax on financial transactions .........................................................34
   2.4 A summary of the various financial transaction taxation systems .........................41
3. Legal feasibility of the unilateral tax on financial instrument transactions .................43
   3.1 Territoriality ..............................................................................................................43
   3.2 Legal feasibility of the tax ......................................................................................47
4. Presentation of the financial transaction process .............................................................57
   4.1 The main stages of financial transactions .............................................................57
   4.2 How European financial markets are organised ......................................................59
5. Scenario selection criteria .................................................................................................61
   5.1 Methodology for identifying proposed scenarios .....................................................61
   5.2 Estimation of the possible receipts for each taxation scenario .................................70
   5.3 Scenario evaluation criteria ....................................................................................85
   5.4 Summary of the four scenarios ................................................................................88
6. Conclusion and recommendation of a scenario ............................................................95
   6.1 Presentation of the selected taxation scenario .........................................................95
   6.2 Feasibility of the selected scenario .........................................................................107
   6.3 Potential tax receipts ..............................................................................................113
7. The way forward ..........................................................................................117

Appendices ........................................................................................................119

Appendix 1: How Unilateral financial markets are organised by category of financial instrument ......................................................................119
Appendix 2: Company tax offshoring ................................................................155
Appendix 3: Glossary ........................................................................................157
Appendix 4: Bibliography ..................................................................................165
List of abbreviations

ABSA  Actions à Bons de Souscription d’Actions  
(shares with equity warrants attached)

ABSO  Actions à Bons de Souscription d’Obligations  
(shares with bond warrants attached)

ECB  European Central Bank

BIS  Bank for International Settlements

BMTN  Bons à Moyen Terme Négociables  
(negotiable medium-term bonds)

CLS  Continuous Linked Settlement

CDS  Credit Default Swap

MiFID  European Directive on Financial Instruments Markets

DTCC  Depository Trust & Clearing Corporation

EFAMA  European Fund and Asset Management Association

EMTN  Euro Medium Term Notes

ETF  Exchange-Traded Funds

IMF  International Monetary Fund

FCP  Fonds Commun de Placement (type of mutual fund)

FCC  Fonds Commun de Créances  
(mutual fund invested in debt instruments)

IFU  Imprimé Fiscal Unique (single tax summary)

IRS  Interest Rate Swap

ISDA  International Swaps and Derivatives Association

OEICs  Open Ended Investment Companies (US)

OAT  Obligations Assimilables du Trésor (French Treasury bonds)

CIS  Collective Investment Scheme

OPCVM  Organisme de Placement Collectif en Valeurs Mobilières  
(type of mutual fund)

OTC  Over-The-Counter

GDP  Gross Domestic Product

ISP  Investment Service Providers
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDT</td>
<td>Direct Reporting of Transactions</td>
</tr>
<tr>
<td>RELIT</td>
<td>Règlement Livraison des valeurs Titres (France’s electronic settlement and delivery system)</td>
</tr>
<tr>
<td>RGAMF</td>
<td>Règlement Général de l'Autorité des Marchés Financiers (General Regulations of the AMF, France’s Financial Market Authority)</td>
</tr>
<tr>
<td>RGV</td>
<td>Relit Grand Vitesse (high-speed French electronic settlement and delivery system)</td>
</tr>
<tr>
<td>SDRT</td>
<td>Stamp Duty Reserve Tax</td>
</tr>
<tr>
<td>SICAV</td>
<td>Société d'Investissement à Capital Variable (type of French mutual fund)</td>
</tr>
<tr>
<td>MTF</td>
<td>Multilateral Trading Facility</td>
</tr>
<tr>
<td>NDS</td>
<td>Negotiable Debt Securities</td>
</tr>
<tr>
<td>TSDI</td>
<td>Titres subordonnés à durée indéterminée (subordinated debt)</td>
</tr>
<tr>
<td>TSR</td>
<td>Titres subordonnés remboursables (redeemable subordinated debt)</td>
</tr>
<tr>
<td>FTT</td>
<td>Tax on financial transactions</td>
</tr>
<tr>
<td>VAT</td>
<td>Value Added Tax</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>WFE</td>
<td>World Federation of Exchanges</td>
</tr>
</tbody>
</table>
Executive summary

The purpose of this executive summary is to summarise the guide to implementing the financial transaction tax (FTT) on a national basis. This guide will use France as its example country.

Core recommendation

This report recommends implementing an FTT design similar to the UK Stamp Duty, and applying it to bonds and derivatives transactions. At low rates, such a tax is estimated to generate over 12 billion euros annually in a country like France. Like similar FTTs in other countries, the FTT proposed here is unlikely to have a significant negative impact on the domestic financial markets of the countries who implement it.

Objectives

The purpose of this report is to design a guide to implementing a domestic, unilateral tax on financial transactions. The report uses France as its case study, as at the time of the report France is hosting the G20 summit and propagating the FTT in the summit’s agenda. UNITAID, on the initiative of its Chair, the Special Adviser to the United Nations Secretary-General on innovative financing for development, has funded this study, which was commissioned to the financial markets consulting firm 99 Partners.

Background

Taxation of financial transactions was a concept introduced by, among others, Keynes (1936) and Tobin (1972), in order to reduce speculation and volatility on financial markets. Such a taxation mechanism was later studied by a number of economists, including Joseph Stiglitz, Jean-Paul Pollin, Stephan Schulmeister, Rodney Schmidt, and Thornton Matheson. According to these authors, a tax on financial transactions is economically feasible.
Furthermore, the resources generated by such a tax could help fund the Millennium Development Goals, which were approved in September 2000 by the international community, to eradicate poverty in all its forms by 2015. To achieve this, an additional 150 billion dollars in financial assistance is needed. Clearly, this level has not yet been reached.

As consideration is being given in Europe and internationally to instituting a tax on financial transactions, the G20 summit in Cannes on 3-4 November 2011 will be an opportunity to launch a coalition of FTT pioneer countries, willing to simultaneously implement, a broad-ranging domestic tax on financial transactions, and to allocate the revenue raised to a common purpose: meeting the world’s greatest challenges, including pandemics, hunger, mass illiteracy, and climate change.

The scope of the tax

This report presents a procedure for taxing transactions in financial instruments: securities (shares, bonds, exchange-traded funds) and derivatives.

The following transactions are outside the scope of the tax design explored in this study: payment instruments, such as cheques or interbank transfers. Nor is taxation of foreign exchange transactions explored in this report, as this has been extensively explored in former reports. Importantly, many of the leading champions of the FTT do not have sole control over their own currency (for example, to institute a tax on foreign exchange transactions involving the euro, the agreement of all 17 euro zone member countries is necessary).

Throughout this report, the objectives have been to provide a guide to a tax that:

- may be created unilaterally
- has the widest possible tax base;
- is stable, permanent, and able to ensure a sufficient and predictable flow of receipts;
- is technically and legally feasible.

Taxation scenarios: an overview of existing taxes

Several countries already successfully tax financial transactions, including the United Kingdom, with the Stamp Duty Reserve Tax (SDRT), and Taiwan with its tax on futures transactions. Until 2008, France applied an impôt de bourse (financial market tax) on shares and bonds.

Pre-existing guides on how to tax foreign exchange transactions: see http://www.stampoutpoverty.org/download.php?id=402
Current situation

The UK SDRT levies a 0.5% tax on all transactions involving shares in British companies.

The Taiwanese tax applies to transactions on Taiwanese securities and on financial futures contracts entered into in Taiwan. The Taiwanese tax is paid by the seller in transactions involving securities and by both the buyer and the seller in transactions involving futures. The tax is collected by financial intermediaries. The tax rate varies with the category of financial instrument: 0.3% for shares, 0.1% for bonds, and a 0.1% to 0.0000125% range for futures.

Until 2008 a similar mechanism existed in France, called an impôt de bourse (financial market tax). This tax was due from buyers and sellers of “market securities” (i.e., shares, bonds and any other security traded on a regulated market) traded through an investment services provider or a market member. The tax rate was 0.3% for the portion of each transaction equal to or below 153,000 euros and 0.15% on the portion above this amount. The impôt de bourse was abolished in France in 2008.

Lessons learned for the unilateral FTT

A tax on financial instrument transactions can be introduced in a country on a unilateral basis.

The taxes that we reviewed here showed that there are many taxation scenarios, depending, for example, on the collecting agent, the tax event and the entity liable for taxation. Moreover, the tax rates applied must be set on the basis of the nature of the financial instrument, i.e., securities or financial contracts (derivatives).

There are also several options for establishing the link between a given financial transaction and a given country - the link which enables the country to tax the transaction. For instance, a country may tax all transactions that take place within its territory. Or, a country may tax transactions based on the nationality of the instruments being traded: if two persons anywhere trade a financial instrument from a given country, then this country can tax this transaction.

Taxation may apply to financial transactions regardless of whether they are negotiated on-exchange or off-exchange. It may apply not only to transactions in securities (shares, bonds, and units or shares in collective investment schemes), but also to transactions in derivatives.

How to structure the unilateral FTT

After reviewing various alternatives to taxation of financial transactions, we arrived at the following structure:
Taxing securities transactions (stocks and bonds)

The proposed method for collecting the FTT on securities transactions is to collect the tax primarily at the level of central settlement (central securities depositories). Any central settlement company, regardless of where it is located, is liable to pay FTT to a given country, from the moment that it markets its settlement services within that country. For those remaining transactions that are not centrally settled, the tax will be collected at the level of brokers and custodian banks.

Taxing derivative transactions

The proposed method for collecting the FTT on derivative transactions, is to tax those transactions where one of the parties to the derivative contract is a citizen or tax resident of the taxing country. Countries will also tax derivative transactions entered into via foreign subsidiaries of domestic companies. The tax will primarily be collected at the level of derivatives clearinghouses. For those derivative transactions that do not go through clearinghouses, the tax will be collected at the level of the liable contracting party itself.

Who will pay the FTT?

Just as companies pass on the VAT to their customers, financial intermediaries in charge of collecting the FTT will pass it on to theirs. Ultimately, it is the buyers and sellers of securities will pay the tax. As the FTT is a tax on transactions, those market participants that transact the most will pay the most tax. Households and private individuals originate a very minute share of financial transactions. The vast majority of transactions are originated by financial institutions, institutional investors, and investment firms (including hedge funds). Accordingly, institutional investors turnover their portfolios far less and therefore will pay much lower rates of financial transaction taxes than, for example, hedge funds.

Income from securities investments accounts for only a small portion of households’ total income. For example, in France, for 95% of households, income from securities investments accounts for only 1.6% of the overall income1. For the 0.1% richest portion of the French population, income from securities investments accounts for 24% of their total income. Only this top 0.1% will see the lower returns on securities investments impact their overall income in any significant way.

---

1 "Statistical statement 1921": Statistical Survey and Documentation Department of the Direction Générale des Impôts (Unilateral tax authority), Ministry of Finances.
How much will the FTT cost to collect?

A unilateral tax on financial instrument transactions is technically feasible without high collection and implementation costs. Central depositories, clearinghouses and negotiation platforms possess the technical means within their information systems for simplified collection. Collecting the tax will simply require the financial institutions concerned to make a few adjustments in their existing software, with little need for the tax authorities to create significant additional systems.

What are the estimated receipts?

The table below presents the estimated tax receipts of the proposed FTT (after applying adjustment indicators) across the G20 countries. The rate applied here is the median rate option set forth in the chapter devoted to the policy options on tax rates (see below). This is an approximation of the FTT revenue split between G20 countries.2

<table>
<thead>
<tr>
<th>N°</th>
<th>Country</th>
<th>GDP (€ bn 2010)</th>
<th>Estimated receipts (€ bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>South Africa</td>
<td>269.04</td>
<td>1.73</td>
</tr>
<tr>
<td>2</td>
<td>Germany</td>
<td>2,496.91</td>
<td>16.09</td>
</tr>
<tr>
<td>3</td>
<td>Saudi Arabia</td>
<td>334.13</td>
<td>2.15</td>
</tr>
<tr>
<td>4</td>
<td>Argentina</td>
<td>278.84</td>
<td>1.80</td>
</tr>
<tr>
<td>5</td>
<td>Australia</td>
<td>930.45</td>
<td>6.00</td>
</tr>
<tr>
<td>6</td>
<td>Brazil</td>
<td>1,574.15</td>
<td>10.14</td>
</tr>
<tr>
<td>7</td>
<td>Canada</td>
<td>1,185.37</td>
<td>7.64</td>
</tr>
<tr>
<td>8</td>
<td>China</td>
<td>4,426.73</td>
<td>28.52</td>
</tr>
<tr>
<td>9</td>
<td>South Korea</td>
<td>758.40</td>
<td>4.89</td>
</tr>
<tr>
<td>10</td>
<td>United States</td>
<td>11,038.33</td>
<td>71.13</td>
</tr>
<tr>
<td>11</td>
<td>France</td>
<td>1,944.82</td>
<td>12.53</td>
</tr>
<tr>
<td>12</td>
<td>India</td>
<td>1,158.19</td>
<td>7.46</td>
</tr>
<tr>
<td>13</td>
<td>Indonesia</td>
<td>332.22</td>
<td>3.43</td>
</tr>
<tr>
<td>14</td>
<td>Italy</td>
<td>1,547.64</td>
<td>9.97</td>
</tr>
<tr>
<td>15</td>
<td>Japan</td>
<td>4,110.91</td>
<td>26.49</td>
</tr>
<tr>
<td>16</td>
<td>Mexico</td>
<td>782.53</td>
<td>5.04</td>
</tr>
<tr>
<td>17</td>
<td>United Kingdom</td>
<td>1,692.49</td>
<td>10.91</td>
</tr>
<tr>
<td>18</td>
<td>Russia</td>
<td>1,103.31</td>
<td>7.11</td>
</tr>
<tr>
<td>19</td>
<td>Turkey</td>
<td>558.67</td>
<td>3.60</td>
</tr>
<tr>
<td>20</td>
<td>European Union</td>
<td>4,447.74</td>
<td>28.66</td>
</tr>
</tbody>
</table>

**TOTAL**  | 41,170.86  | 265.30 |

Average rate (in %)  | 0.0082% |

---

The average dollar/euro conversion rate in 2010 was applied $1 = € 0.7531.

The GDP figures of Germany, France, Italy and the United Kingdom were taken out.

Rough assessment of revenue split across G20 economies: if one factors in the differing degrees of financialisation of G20 countries’ respective economies, the revenue split is different. However, there is no authoritative indicator for financialisation.
Conclusion

In light of the above, the implementation of a unilateral tax on financial instrument transactions is feasible in the short term. All necessary conditions are in place, including a favourable context, the right timing, and immediate technical and legal feasibility.
Tax on Financial Transactions: an implementation guide

1 - Introduction

This report was prepared by "99 Partners Advisory", a Paris-based consultancy firm specialising exclusively in the financial services industry. The study that made this report possible was funded by UNITAID, which works to find innovative ways of funding the prevention and treatment of HIV/AIDS, tuberculosis and malaria in developing countries.

Established in 2006 by the governments of Brazil, Chile, France, Norway and the United Kingdom, UNITAID is a veritable testing ground for innovating funding mechanisms for economic development and is the first example of a contribution to solidarity decided and approved at the national level yet managed on a supranational level.

Through receipts from the tax on airline tickets, UNITAID provides sustainable, predictable and complementary funding to reduce the cost and increase the availability of medicines and treatments for HIV/AIDS, malaria and tuberculosis. Through its partners UNITAID funds the purchase of high-quality medicines and diagnostic products for patients in underdeveloped countries.

Among its major achievements, UNITAID funds the treatment of 8 out of 10 children being treated for HIV/AIDS worldwide.

1.1 Background and the purpose of this guide

In an environment that is currently receptive to the taxation of financial transactions, this report is intended to serve as a how-to guide for establishing unilaterales tax on the purchase and sale of financial instruments, using France as a case study.

1.1.1 Background

One of the subjects to be discussed at the 2011 G20 summit in Cannes, under French presidency, will be the search for innovative ways to fund development. One such way is to tax financial transactions. The need is indeed urgent. Although the UN member states have set specific funding targets for international solidarity, with the objective of an additional 150 billion US dollars a year in development aid by 2015, total annual

1 See France’s priorities for the G20 summit. Chapter 6, "Taking action for development": http://www.g20-g8.com/g8-g20/g20/francais/les-priorites-de-la-france/les-priorites-de-la-presidence-francaise/les-priorites-de-la-presidence-francaise.36.html

13
funding is currently much less. A multiplication of aid flows is therefore necessary in order to achieve the international community’s own Millennium Development Goals. These goals are to fight hunger, illiteracy, the exploitation of women, child mortality, HIV/AIDS and other epidemics, improving maternal health and protecting the environment.

1.1.2 Purpose of this report
This report seeks to provide guidelines for a unilateral financial transactions tax. It deals solely with the practical aspects of implementing such a tax, and not with its utility or desirability.

The legal, financial and technical aspects of the proposed tax system will be examined, with the objective of establishing a solid legal foundation for the taxation of financial transactions that is consistent with the operational requirements of financial markets, and based on realistic assumptions.

The main constraints of implementing this tax will be presented along with the results expected, and proposals will be made to alleviate these constraints and reduce any negative effects.

1.1.3 Methodology employed and taxation objectives
The study conducted has benefited from previous studies on financial transactions conducted by the Leading Group and the IMF, and from the experience gained from similar taxes in various countries, such as the UK’s Stamp Duty Reserve Tax, the Taiwan securities transaction tax and futures transaction tax, and the French impôt de bourse, which was abolished in 2008.

The Study Taskforce oversaw the preparation of this report by 99 Partners Advisory, which was funded by UNITAID. The objective was to propose a tax that would:

- generate substantial revenue
- comply with existing law and meet the operational requirements of financial markets
- be practical and enable rapid deployment
1.2 Key considerations in taxing financial transactions

Extremely large volumes of securities and derivatives are traded on global financial markets. According to a study presented to the European Parliament in January 2010, the volume of financial transactions exceeded global GDP by a factor of 70 in 2007, representing a total of almost 3,000,000 billion euros. In June 2011, the President of the European Commission, José Manuel Barroso, announced that legislation to create a European FTT would be proposed to the Council before November 2011.

Financial transactions form a significant tax base that is capable of generating substantial revenue and could constitute a new and innovative source of funding. Many studies have been conducted worldwide on the merits, feasibility and possible implications of taxing financial transactions. Reports on the taxation of financial transactions have been published by the International Monetary Fund, the Leading Group and various other organizations and researchers, such as Stephan Schulmeister and Rodney Schmidt. These studies deal with taxation at the global and sometimes European levels, but not on a national scale. This makes their recommendations less straightforward to immediately apply to unilateral taxes.

All of these studies agree on the merit of a tax on financial transactions (particularly as an innovative source of funding) and on its feasibility on an international scale. However, there are varying opinions about the collection base of such a tax and its possible effects. There is widespread agreement that the tax rate must be very low so as not to disrupt the functioning of financial markets. The rates proposed in the studies do not range higher than 0.5% of the amount of the financial transaction.

The International Monetary Fund estimates that even if, for example, the volume of financial transactions decreased by 65% due to a 0.05% tax, this would still the European Union to collect the equivalent of 1.6% of its GDP.

---

4 Zsolt Darvas and Jakob Von Weizsäcker, Financial transaction tax, ‘Small is Beautiful’, Directorate General For Internal Policies, Economic and Monetary Affairs
1.2.1 Literature review - the tax base

Examination of the relevant literature reveals several main options regarding the collection base for a tax on financial transactions. While some authors recommend the largest possible base, others prefer taxing only foreign exchange transactions or only securities traded in regulated markets.

A large tax base would offer the advantage of reducing the risk of substitution (i.e. that securities trading would shift to untaxed financial instruments) and of competitive distortions between financial instruments.

There is considerable disagreement regarding the taxation of derivatives. Some authors feel that transactions involving derivative instruments should be taxed just like any other, mostly to prevent them from being used as a substitute if, for example, transactions involving securities or debt instruments were taxed. Others, however, believe that taxing derivatives would be counter-productive since it would often mean double taxation on both the derivative itself and on its underlying asset, which is already taxed. Furthermore, the taxation of derivatives could prove more costly to implement given the current lack of an integrated and centralized trading system (making central counterparty clearing of derivatives is currently being debated at the European level).

A European regulation on the clearing and post-trade reporting of over-the-counter derivatives is currently being reviewed and is scheduled to be adopted in 2011. Among other things, the EMIR legislation calls for the migration of the trading of OTC derivatives to secure standardized platforms, and requires that these transactions go through a clearing house.

It should also be noted that the Basel III accord will require banks that do not use clearing houses for their derivatives transactions to maintain more capital.

The double-taxation argument is also used against plans to tax transactions involving shares in collective investment schemes.

Lastly, there have also been many studies that deal specifically with the taxation of forex transactions, whether spot or involving derivatives.

---

4 The European Market Infrastructure Regulation (EMIR).
As for interbank foreign exchange transactions involving a given country’s currency, a report published in 2005\(^9\) shows that it is technically feasible to tax them, either at the level of the world’s central clearinghouse for interbank foreign exchange transactions, or directly at the level of the accounts that this clearinghouse has with each central bank.

Since other studies have already dealt with this topic, it will not be discussed any further in this report.

### 1.2.2 Countries that already tax financial transactions

According to the International Monetary Fund’s report of March 2011\(^10\), Brazil, China, Hong-Kong, India, Italy, South Africa, South Korea, Switzerland, Taiwan, the United Kingdom and the United States, all impose unilateral taxes on financial transactions, at various rates and to various degrees.

According to this same report, Hong-Kong, Taiwan and South Africa obtained the most revenue from these taxes relative to GDP, at annual averages of 2%, 1% and 0.5% of GDP respectively.

---

\(^9\) Stephen Pratt, A Euro Solution, for the September 2006 issue of Stamp Out Poverty

\(^10\) See the list of countries that have a tax on financial transactions (page 8)

1.3 Constraints of a unilateral FTT

Various legal and technical constraints must be taken into consideration when taxing financial instrument transactions.

1.3.1 Territoriality constraints

The first constraint when designing such an FTT, is to make it applicable on a unilateral basis. In contrast with the various studies and reports published on this subject, that call for a global or possibly a European tax, this report presents guidelines for implementing taxation at a national level that does not require any prior international agreement.

Accordingly, section 3.1 of this report deals with the territoriality of the FTT. There are several criteria for determining territoriality, such as: tax residency; whether or not the issuer of the financial instrument is subject to domestic law; whether or not the financial transaction is executed in a place subject to domestic jurisdiction (i.e. in domestic financial markets).

1.3.2 Market-related constraints

There are also various technical, market-related constraints that must be addressed when taxing financial instrument transactions. This is because the rules and regulations that apply to transactions depend on the market in which they are executed. For example, when Global 500 company sells its securities to investors, the disclosure requirements that apply are completely different depending on whether it is marketing on a regulated exchange (eg NYSE Euronext) or off-exchange.

Off-exchange transactions are inherently less transparent, and are subject to less stringent regulations. In contrast, on-exchange transactions are much more standardized.

Besides on-exchange versus off-exchange transactions, another key distinction for the FTT is transactions in the primary versus secondary markets. The primary market deals only with the initial issuance of financial securities, and mostly equities and bonds. Once these securities have been issued and subscribed, they become available for trade on the secondary market. The same tax regime cannot be applied to these two markets. For example, European law prohibits the taxation of equities and bonds upon their issuance on the primary market11.

For most derivatives contracts (futures, swaps, hedging contracts, etc), there is no such distinction between primary and secondary markets. Therefore, when a derivatives market participant sells its market position, it simply enters into a new derivatives contract with a new party, instead of “selling” its previous contract to the new party. In the end, the new contract becomes an additional layer upon the previous contract, and this in effect transfers the market position to the new party.

11 European directive 2008/7/EC of 12 February 2008
Under most national laws, the concept of 'financial instrument' includes not only 'financial securities' (i.e. equities, bonds and shares in collective investment schemes) but also 'financial contracts' (i.e. derivatives contracts or simply derivatives).

In certain countries, spot transactions in foreign currencies are not considered financial instruments. Similarly, transactions involving payment instruments (such as cheques and interbank transfers) are not considered to be financial instrument transactions.

Circumvention

A key concern with financial transaction taxes is the risk that some parties to financial transactions may circumvent taxation by relocating a financial activity outside the territory of taxation, or by changing tax residency, or by substituting taxed instruments by untaxed instruments.

Several things can be done to reduce this circumvention risk. The Leading Group report of June 2010 proposes the following measures: (a) denying legal validity to transactions/contracts on which the tax is not paid; (b) giving a single entity a legal monopoly on transactions processing (such as the ECB enjoys in Europe on high-value payments), so as to reduce opportunities for circumvention; (c) raising capital requirements for financial institutions that bypass their local settlement system. A low tax rate may also dissuade market participants from using expensive means to circumvent the tax.

A tax with a collection base that includes all financial instruments traded in a country’s market (i.e. derivatives as well as financial securities) reduces the risk of substitution.

1.3.3 Issues not dealt with in this paper

This document concerns the implementation on a unilateral basis of a tax on financial instrument transactions. Other methods of taxing the financial sector, such as the following, will not be discussed herein:

- taxing foreign exchange transactions (see above)
- a value-added tax on financial services
- taxing financial activities (taxing profits made by financial institutions)
- taxing the assets and liabilities of financial institutions.

This report is therefore intended to serve as a guide for implementing a unilateral tax on financial instrument transactions. It will look at current and past taxation methods and will present studies of the legal, technical and financial feasibility of the various taxations scenarios to determine that which is most appropriate and effective.

12 Leading Group, Globalizing solidarity: the case for financial levies, June 2010
2 - Current and past taxes on financial transactions

Some countries currently tax financial transactions, such as the United Kingdom, South Korea, Switzerland, South Africa, Hong-Kong and Taiwan.

The following taxes will be examined in this chapter: the former French impôt de bourse (abolished on 1 January 2008 under the 2008 Budget Act); the UK’s existing Stamp Duty and Stamp Duty Reserve Tax (SDRT); and Taiwan’s existing taxes on securities and futures transactions.

2.1 The French impôt de bourse

The French impôt de bourse was established under articles 978 to 985 of the General Tax Code and was abolished as of 1 January 2008.

2.1.1 Taxable financial instruments

This tax applied to all types of securities except for those specifically exempted. This included equities, bonds, annuity bonds and non-voting shares in state-held companies provided that they were traded on a regulated market.

This tax did not however apply to the trading of:

- Bills of exchange, promissory notes and other commercial paper
- French treasury bills.

2.1.2 Taxable transactions

The impôt de bourse applied only to the purchasing and selling of the above securities.

However, the following transactions did not constitute a purchase or sale of the taxable securities:

- their transfer by notarized deed
- lending
- exchange or contribution during mergers
- issuance on the primary market.
- transactions involving shares in SICAVs (open-ended mutual fund), unless traded on a regulated market (which is very rarely the case for SICAVs).
The impôt de bourse made no distinction between spot and forward transactions.

Lastly, to be taxable the aforementioned securities also had to be traded through an Investment Services Provider (credit institution or investment firm) or a member of the 'regulated market', i.e. the official stock-exchange.

Similarly, the sale or purchase of securities in a foreign market on behalf of a third party by one of the aforementioned market participants was also subject to the impôt de bourse.

Only securities that were traded on the Marché Libre (a non-regulated market) were not subject to this tax.

2.1.3 Exemptions
A certain number of transactions were however exempted from tax:

- consolidation of unlisted equities
- counterparty transactions
- transactions involving bonds that are not exchangeable or convertible into equities or subject to an escalation clause or profit-sharing in the issuing company
- transactions ordered in France and executed on a US stock exchange (this exemption was allowed in view of a tax treaty between France and the United States)
- transactions in shares in companies with a market capitalization of less than 150 million euros
- transactions involving debt-securitisation vehicles (FCC)
- transactions to increase corporate capital
- transactions effected by non-residents
- repurchase agreements
- transactions totalling less 23 euros.

2.1.4 Tax base and taxable event
The impôt de bourse applied to the amount of the securities purchased and sold. In other words, both purchases and sales were taxed. However, security transactions on a foreign stock-exchange via an intermediary in France were subject to only one taxation.
The taxable event occurred upon the spot or forward purchase or sale of the taxable securities, on the day the transaction was concluded.

2.1.5 Tax rates and assessment

The tax rate on stock-exchange transactions was 0.3% up to a value of 153,000 euros and 0.15% on the fraction above this amount.

These rates were applied uniformly to all securities, whether equities, bonds or government annuities, and whether traded spot or forward.

The tax was calculated by:

- applying the tax rate(s) to the amount of the taxable transaction
- deducting an allowance of 23 euros per transaction
- up to a ceiling of 610 euros.

2.1.6 Reporting obligations

Investment services providers (ISP) and the members of the regulated market had to provide French tax authorities with the following:

- a declaration of existence
- a register in which transactions were chronologically recorded
- tax collection forms.

The tax was paid monthly by the intermediary that handled the transaction, i.e., the ISP or the regulated market member.

2.1.7 Advantages and disadvantages

This tax had a rather large scope since it covered both French and foreign equities and bonds traded on the regulated French market. It was also easy to implement and collect and applied to both sales and purchases as well as to transactions in a foreign market by French tax residents.

However, it did not apply to transactions in unregulated markets and OTC markets or to derivatives transactions (futures, options, etc).

This tax generated receipts of 240 million euros for the French Treasury in 2007, the last year of its existence. Since it was limited by a ceiling of 610 euros per transaction its receipts were relatively small in comparison with those of the Taiwanese tax or the UK’s SDRT.

Another limitation of the impôt de bourse is that it applied to French tax residents only, which created competitive distortions in favour of non-residents. In contrast, the SDRT taxes all purchasers of UK equities, whether residents or not.
The SDRT therefore gives no market participant any reason to avoid doing business in London, since it is charged on all transactions in UK equities, whether the purchaser is based in London or not.

2.1.8 Sales of unlisted shares

The impôt de bourse did not apply to the sale of unlisted shares, which were subject to a 3% stamp duty up to a maximum of 5,000 euros, this maximum limit applying to each transfer of equities.

This stamp duty still applies to all unlisted equities and is very similar to the UK Stamp Duty mentioned above. It is based solely on what the taxpayer declares and must be paid to tax authorities within one month after the equities are sold.

This 3% tax is calculated using a special tax form that is filed with the tax authorities when payment is made. Either the seller or the purchaser of the unlisted equities may pay the tax.

Unlike the UK Stamp Duty, failure to pay this tax to the French Treasury department will not invalidate the sale or transfer of the unlisted equities. However, up until 1982 transactions for which this tax was not paid could be invalidated under French law.

Purchasers and sellers of unlisted equities who fail to pay this tax expose themselves to a fine of 40% of their tax liability and penalty interest, to be paid to the French Treasury.
2.2 The UK Stamp Duty on financial transactions

The purchase of UK securities is subject to either:

- Stamp Duty Reserve Tax (SDRT) on paperless share transactions, that is collected either from the CREST electronic settlement platform or directly from brokers and custodians;
- Stamp Duty, on paper-based share transactions.

The Stamp Duty on share transfer forms was established in the United Kingdom under the United Kingdom Stamp Act of 1891, which has since been amended numerous times.

The Stamp Duty Reserve Tax on dematerialised transactions was instituted in 1986.

2.2.1 The Stamp Duty Reserve Tax (SDRT)

This tax is applied to the purchase of UK-listed equities at a rate of 0.5% and is paid by the purchaser of the securities, whether a UK tax resident or not.

SDRT may be collected in two ways: either via the central settlement system for UK-listed equities (CREST, also known as Euroclear-UK), or, when securities are not settled through CREST, directly via securities brokers.

Chapter 14 of the UK Stamp Duty Manual specifies that the transfer of UK equities to a foreign settlement system requires the payment of a 1.5% “exit tax”. Such transfers usually serve the purpose of issuing foreign depositary receipts against UK shares. The reason for the SDRT exit tax is that subsequent transactions in these foreign depositary receipts will be settled via the foreign securities depositories concerned, and will therefore not lead to SDRT collection in CREST.

2.2.1.1 Taxable securities

The SDRT is levied on transactions involving:

- the existing equities of companies registered in the UK and of foreign companies that are traded in the UK
- shares in UK unit trusts or open-ended investment companies (OEIC)
- stock options
- the rights detached from existing equities that enable the purchase of other equities.
The SDRT does not apply to new issues of securities, which are traded on the “primary market”, but only to existing equities and their associated rights and options, which are traded on the “secondary market”.

The Stamp Duty is also levied on equities issued by foreign companies and held in the United Kingdom in CREST/Euroclear-UK13.

Securities issued in the UK must be held in CREST, which is the UK’s sole Central Securities Depository.

There are many exemptions to the SDRT tax collection base. The main ones are:

- equities that are donated or lent to charitable organisations
- equities that are transferred to public organisations
- futures
- equities that are transferred between companies belonging to the same group (yet Stamp Duty still applies)
- equities transferred for the purpose of a corporate restructuring, provided there is no change in the shareholder ownership structure
- equities that are lent for legal purposes.

2.2.1.2 SDRT payment

This 0.5% tax is applied to the cash amount paid to purchase securities.

If the payment for UK equities is not made in cash but by exchanging shares, options or other securities, the SDRT must still be paid and is calculated on the value of these securities.

The SDRT is collected via:

- the CREST central settlement system.
- any other similar central settlement system that may be approved by Her Majesty’s Treasury for operation on the UK securities market14. This includes those depositories approved for the central settlement of shares in a unit trust or OEIC.
- securities brokers and/or custodian banks, for those transactions not leading to central settlement.

Transactions not leading to central settlement:

Between the purchaser of a UK equity (who must pay SDRT) and HM Treasury (who must receive SDRT), there exist at least two layers of financial intermediaries, who are involved in collecting SDRT and transferring it to HM Treasury.

The first intermediary is CREST/Euroclear-UK, which collects SDRT on all of the transactions it settles. The second intermediary is the purchaser’s broker, who after purchasing the security on behalf of the buyer, pays CREST/Euroclear-UK both the price of the security and the applicable SDRT. The broker then charges its client (the purchaser of the security) for the price of the security, for the SDRT, and for its own broker fees.

13 Section 10.5 of the UK Stamp Duty Manual
14 Section 1.20 of the UK Stamp Duty Manual
If the broker does not need to go through CREST/Euroclear-UK to settle the transaction, it will then be responsible for collecting the SDRT from its client and paying it directly to HM Treasury. This is the case for example when a broker has two clients that are counterparties to the same transaction: both ends of the transaction cancel each other out, and the broker does not need to have CREST handle the delivery of the securities. However, the SDRT must still be paid.

Transactions involving shares in unit trusts or OEIC are known as “off-market” transactions and are also subject to SDRT.

CREST/Euroclear-UK pays the SDRT to HM Treasury each month.

UK tax authorities regularly monitor the compliance of broker-dealers and CREST participants with the SDRT Regulations, and have the power to ask them to provide records of transactions and proof of tax payment.

HMRC reserves the right to audit brokers to ensure that they have collected SDRT and paid it in due time. Late payments are subject to a daily penalty interest charge and fines may also be imposed in proportion to the unpaid amount. For example, incomplete reporting of the names of sellers and purchasers and other information is subject to a 100 pound fine.

The same SDRT rules apply, although at a tax rate of 1.5%, when securities are “removed from” the CREST settlement system. Those CREST/Euroclear-UK members who manage foreign depositary receipts programs or who run multilateral netting platforms, must register with CREST any securities they remove from the system, and pay the 1.5% “exit tax.”
2.2.2 Application to transactions involving shares in investment funds

Investment fund transactions

It should first of all be noted that pension funds are not subject to SDRT, since they do not market their investment portfolios in the form of negotiable shares. Purchases of UK equities by UK investment funds are subject to “normal” SDRT requirements. This means that UK investment fund transactions are either:

- not exempted and therefore subject to SDRT
- exempted and therefore not subject to SDRT (e.g., transactions in debt securities).

This distinction is useful in determining how SDRT may be applied to the sale or purchase of shares in investment funds.

Transactions involving shares in investment funds

In principle, the sale of shares in UK investment funds is subject to SDRT at the base rate of 0.5%. However, the SDRT will be reduced when:

- fund redemptions exceed subscriptions over the given period. The tax is reduced by multiplying its amount by the ratio of shares subscribed over shares redeemed.
- the fund has purchased assets during the period that are not subject to the SDRT. The amount of tax that the fund’s subscribers owe depends on the fund’s purchases. If the fund invested in non-taxable assets, such as debt securities, then the subscriber does not have to pay SDRT.

2.2.3 The Stamp Duty (on paper transactions that require a share transfer form)

Unlike the SDRT, which is dematerialised and applies directly to the transactions themselves, Stamp Duty is a tax on the documents used to transfer ownership of a UK equity. Ultimately these two taxes both apply to the same types of transactions, except that they are electronic in one case and paper-based in the other. Stamp duty is rounded upward to the nearest five-pound multiple and five pounds is the minimum duty on any transaction.

21 Section 15.43 of the UK Stamp Duty Manual
22 Section 15.5 of the UK Stamp Duty Manual
23 Sections 15.29, 15.35 and 15.37 of the UK Stamp Duty Manual
Furthermore, when a share purchase exceeds 1,000 pounds, the share transfer certificate will not be valid unless it bears the stamp and seal of HM Revenue and Customs, which proves that Stamp Duty has been paid.

If Stamp Duty has not been paid and the share transfer certificate is therefore unstamped, the transfer of title to the shares will not be legally valid. Share registrars are prohibited from executing unstamped share transfer certificates. If the ownership of the securities is disputed in a UK court, the initial seller will still be considered to be the shares’ owner.

Stamp duty must be paid by cheque to HMRC within 30 days after securities are sold, along with the submission of the share transfer certificate. Shareholders that fail to pay Stamp Duty are subject to a 300 pound fine.

The UK paper-based Stamp Duty is very similar to France’s 3% stamp duty on the sale of unlisted equities (see above).

2.2.4 Exemptions to Stamp Duty and SDRT

There are many exemptions to these two taxes. The most significant are those of Section 1.31 of the UK Stamp Duty Manual, which are:

- Transactions effected by “liquidity providers” and other “recognised intermediaries” operating on the London Stock Exchange (see above)
- Intragroup transactions (for Stamp Duty)
- The borrowing and lending of securities
- The merging of investment funds or the conversion of a unit trust into an open-ended investment company.

The first exemption merits an explanation. Those “Liquidity providers” or “market-makers” are exchange members who provide a service to the exchange and help it run more smoothly. These are called “recognised intermediaries”. They are exempted from SDRT for those transactions they make as part of providing this “service” to the exchange24,25. For all the other transactions they make, they remain liable to SDRT26.

24 Section 12.6 of the UK Stamp Duty Manual
25 Section 12.9 of the UK Stamp Duty Manual
26 Section 12.10 of the UK Stamp Duty Manual
2.2.5 The tax’s impact on UK companies

There are no empirical studies that show that the SDRT has had a negative impact on UK equities. Relevantly, no significant effect on UK companies can be observed when comparing the price/earnings ratios of UK companies with that of French or German companies (countries where there is no tax on financial transactions).

The price/earnings ratio (or P/E) is the ratio of a company’s share price over its earnings per share. The average P/Es of Europe’s three largest stock markets on 24 August 2011 were:

- CAC 40: 13.6
- FTSE 100: 13.3
- DAX: 14.7

It can be seen that despite a substantial 0.5% tax on equity transactions, the FTSE 100’s average P/E is very similar to that of the exchange’s competitors. This shows that UK-listed companies are much appreciated by investors and are doing well. The tax has had no significant effect on the price of UK equities in comparison with share prices in countries that do not tax share transactions. A half-percent tax on share acquisition does not seem to significantly impact share acquisition decisions.

The chart below compares which European exchanges companies prefer to list their shares on:

<table>
<thead>
<tr>
<th>Number of companies listed in 2009 and 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: World Federation Exchange</td>
</tr>
</tbody>
</table>

NYSE Euronext (Europe) also includes the Brussels, Amsterdam and Lisbon exchanges. Although the number of listed companies has increased in all of Europe’s major financial centres, the London Stock Exchange boasts the largest number of new companies listed in 2010, with over three times as many as NYSE Euronext.
And yet the UK tax applies to all shares listed in Great Britain, whether British or foreign. The taxing of UK equity transactions therefore does not seem to have significantly reduced investor demand for these securities. The taxation of secondary transactions seems to be a very minor consideration for issuers, when deciding where to list their securities.

The chart below shows the increase in the volume of financial instruments issued on Europe’s three largest stock exchanges as recorded by centrale depositories.

Clearstream Banking Frankfurt recorded 1,944,000 new financial instruments in 2010, the bulk of which were derivative contracts. Two-thirds of the new financial instruments that Euroclear France recorded were short-term debt instruments. CRESTCo did not provide figures by type of financial instrument.

These two charts show the vitality of London’s stock market, despite its 0.5% tax on equity transactions.

2.2.6 Advantages

The collection of the SDRT is simple and effective since it is mainly achieved through the CREST settlement system.

The SDRT also applies to the equities of foreign companies that are traded in the United Kingdom.

This tax is paid by both UK residents and non-residents.
The 0.5% tax does not seem to have turned security issuers away from the UK market in favour of other markets with no such tax. In fact there were more IPOs on the LSE than in the French or German markets. Furthermore, the 1.5% exit tax levied on CREST/Euroclear-UK participants that transfer UK equities to foreign depositories represents a substantial cost that tends to keep securities in the CREST/Euroclear-UK system and thus ensure a steady stream of tax receipts collected at the normal SDRT rate of 0.5%.

Chapter 14 of the UK Stamp Duty Manual specifies that the transfer of shares to a foreign settlement system or their issuance in another system requires the payment of a 1.5% "exit tax". This is because subsequent transactions involving these securities will be mediated by foreign intermediaries, and will not be subject to the SDRT.

A government has the ability to prohibit custodian banks operating within its territory from issuing foreign receipts against domestic shares. A government may also set strict conditions for such issuance. Among such conditions, a government may require collection and payment of SDRT on foreign transactions in depositary receipts issued against its domestic shares. In this case, the custodian bank who wants to participate in a depositary receipt program becomes liable to ensure collection and payment of SDRT on foreign transactions in such receipts. It then behoves this custodian bank to arrange for the collection and payment of the tax, from the foreign central securities depository whom the foreign custodian will contract to manage the settlement of secondary transactions in these receipts.

The table below shows the regularity of the tax's revenue yield:

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount (£ bn)</td>
<td>2.9</td>
<td>2.6</td>
<td>2.6</td>
<td>2.7</td>
<td>3.5</td>
<td>3.8</td>
<td>4.2</td>
<td>3.2</td>
<td>2.9</td>
</tr>
<tr>
<td>% of total tax receipts</td>
<td>0.9</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.9</td>
<td>0.9</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>% of GDP</td>
<td>0.27</td>
<td>0.23</td>
<td>0.22</td>
<td>0.22</td>
<td>0.27</td>
<td>0.28</td>
<td>0.29</td>
<td>0.22</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Source: HMRC
A second solution, in order to deal with the risk of substitution of shares for foreign depository receipts, is to create an "exit tax" at a higher rate than the base rate, as is the case in the UK with the SDRT. This would dissuade major market participants from transferring their securities into a foreign central depository.

The risk that a company would relocate to another country merely to avoid a tax on secondary securities transactions is deemed to be small (see Appendix 2: Corporate relocation for tax purposes).

Firstly, securities issuers are mainly concerned with the primary market, where they sell the securities they issue. A tax on the secondary market would not necessarily hit them. Secondly, even for those taxes that do hit companies (e.g., income tax), empiric observation shows that it is in fact rather rare for large companies to move to another country in order to avoid taxes. Finally, this emigration phenomenon does not seem to be any more frequent in those countries that currently have relatively high taxes on financial transactions, such as Taiwan, Hong Kong, South Africa and the United Kingdom.

Another way to prevent domestic securities from fleeing to foreign depositories would be to require domestic companies (and their subsidiaries) that are considering issuing depository receipts to be held by a foreign central depository, to first request authorisation from the national Financial Markets Authority, or from the national tax authority (or both). The FMA, for example, could verify that such issuance is not intended to avoid tax, and then grant approval. Companies would be billed for the cost of this approval process. This would however increase the time required to issue depository receipts.

Lastly, the domestic central depository could be granted a legal monopoly. All securities issuance in the country, by resident or non-resident issuers, would be legally required to be held in the country’s own central depository, and none other.
2.3 The Taiwanese tax on financial transactions

Taiwan has two types of taxes on financial transactions: the Taiwan securities transaction tax and the Taiwan futures transactions tax.

The tax on securities transactions was instituted on 12 September 1946 and was amended on numerous occasions throughout the 20th century.

In response to the global financial crisis, in 2010 Taiwanese authorities decided to temporarily exempt corporate bond transactions from the tax. Trades involving Taiwanese government bonds and convertible bonds were already exempted. In contrast, Switzerland continues to tax all transactions in bonds, including government bonds.

The Taiwanese Securities Transaction Tax Act applies to the following types of securities:

- Equities
- Stock certificates
- Taiwan depositary receipts (TDR), which enable foreign companies to trade on Taiwanese financial markets.
- Bonds (temporarily suspended in 2010).

The Taiwanese Futures Transaction Tax Act came into effect on 20 July 1998 and applies to both futures and options.

The Taiwan Stock Exchange (TWSE) is Taiwan’s main market for equities. The country has two other regulated markets: the Gre-Tai Securities Market (GTSM), where bonds and the shares of small and medium-size companies are traded; and the Taiwan Futures Exchange (TAIFEX).

2.3.1 Payer and tax rates

The following tax rates are applied to financial instruments traded on regulated Taiwanese markets:

- 0.3% on equities
- 0.1% on stock certificates, covered warrants and TRDs
- 0.1% on corporate bonds
- 0.004% on equity futures
- 0.000125% on 30-day note futures
- 0.000125% on 10-year government bond futures
- 0.00025% on commodities futures
- 0.1% on options

---

The tax is paid by the seller of the financial instruments. Investors first go through a broker to place buy or sell orders on the exchange's automatic trading system. The payment for the securities upon delivery is then made into the broker's account and the broker deducts the tax from the payment, thus serving as the "collecting agent", and pays the tax to the Taiwan Treasury department.

The tax on futures transactions is paid by both the seller and the purchaser (and is thus levied twice). The tax base is the notional value of the contract upon maturity or delivery.

The tax on options is calculated on the premium paid and is also paid by both the seller and the purchaser.

The tax is paid to the Treasury the day after the transaction and is submitted along with the required payment documents.

The collecting agent must give the seller/purchaser of the financial instruments a receipt that certifies that the tax has been paid.

The collecting agent must also be able to provide a daily list of transactions that indicates:

- the seller's name and address
- the type of financial instruments sold, the issuer's name, their unitary price and the total amount of the transaction
- the amount of tax collected.

This list is sent daily to the Taiwan Treasury along with the tax payment and indicates the previous day's transactions.

2.3.2 The collecting agent and compliance monitoring by Taiwanese tax authorities

The collecting agent is either:

- the broker or registered market intermediary that places orders for investors
- the market participant that issues the futures or option contract

The Taiwanese tax authority has the right to inspect, at any time, the collecting agents' daily records of transactions and to check trading volumes and prices.

The Taiwanese tax authority can also ask collecting agents to provide any other documents it deems necessary and they have an obligation to do this.

2.3.3 Compliance monitoring measures and penalties

Anyone who informs the Taiwanese tax authority of fraudulent attempts by brokers to avoid paying the tax on financial transactions will receive 20% of the fine that the broker will have to pay. The tax authority never reveals the informant's identity.
This reward is not paid however when the informant is a civil servant or one of the participants in the arrangement to fraudulently avoid tax payment.

The collecting agent is also incentivized with a bonus if it complies promptly with its tax collection obligations.

This bonus consists of an annual payment of one thousandth of the tax collected for the Taiwan Treasury.

On the other hand, if a collecting agent fails to meet their tax collection obligations they may be fined 10 to 30 times the amount of the uncollected tax.

Late tax payments to the Treasury are also subject to a daily penalty interest charge of 2% of the amount of the uncollected tax.

Sellers of futures that collect the tax are entitled to the same bonus paid to collecting agents and are subject to the same penalties.

2.3.4 Penalties for sellers and purchasers

Sellers and purchasers of financial instruments who set up arrangements intended to avoid paying this tax may be fined 20 times the amount of the tax avoided. This fine is doubled for repeat offenders.

Penalty interest charges and fines of 10 to 30 times the amount of tax owed must be paid to the Taiwan Treasury within 10 days after notification of these penalties.

If payment is refused, a formal order to pay is posted at the entrance of the collecting agent’s office. If this is not possible because the office has been moved, the order to pay may also be published in the press for three days.

2.3.5 Appealing against penalties

A collecting agent that disagrees with the penalties imposed must still pay them to the Treasury and may then file a recovery claim with the Treasury, which will be examined within 20 days.

If no agreement is reached the dispute may be brought before the Taiwanese courts.

If the court decides in favour of the collecting agent the tax authority must reimburse the penalties collected and pay interest on this sum at the rate paid by Taiwanese banks.
2.3.6 Success factors

According to the Taiwan Treasury, the Taiwan securities transaction tax yielded 3.6 billion Taiwan dollars in 2010, while the Taiwan futures transaction tax yielded 156 million TWD.

The table below shows the regularity of Taiwanese FTT yields over the past 10 years:

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount (£ bn)</td>
<td>1.9</td>
<td>2.3</td>
<td>2.2</td>
<td>2.8</td>
<td>2.3</td>
<td>2.9</td>
<td>4.1</td>
<td>3.0</td>
<td>3.4</td>
<td>3.8</td>
</tr>
<tr>
<td>% of total tax receipts</td>
<td>5.2</td>
<td>6.5</td>
<td>5.9</td>
<td>6.7</td>
<td>4.8</td>
<td>5.9</td>
<td>7.8</td>
<td>5.6</td>
<td>7.2</td>
<td>6.7</td>
</tr>
<tr>
<td>% of GDP</td>
<td>0.65</td>
<td>0.77</td>
<td>0.72</td>
<td>0.85</td>
<td>0.65</td>
<td>0.79</td>
<td>1.07</td>
<td>0.77</td>
<td>0.91</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Source: Taxing Agency, Minister of Finance, Republic of China

There are various factors that explain the success of Taiwan’s taxation of financial transactions.

2.3.6.1 Integrated financial markets

The Taiwanese tax has a relatively large base, since it applies to equity securities, debt securities (until 2010) and derivatives contracts that are traded on Taiwan’s major financial markets: the Taiwan Stock Exchange (or TWSE) and the Gre-Tai Securities Market (GTSM), with respect to equity securities, and the Taiwan Futures Exchange (TAIFEX), with respect to derivatives contracts.

The tax collection process is very effective, as it is handled by the intermediary between the financial market and the end investor.

Trades in official Taiwanese markets cannot be conducted without a registered intermediary\(^30\) that must be approved in compliance with the Taiwan Stock Exchange Corporation Securities Borrowing and Lending Regulations. Authorised market participants are primarily insurance companies, banks, investment funds, financial institutions and possibly international institutional investors.

The tax also applies regardless of the tax residency of the investor or the contract issuer. Lastly, all trades in the above markets are cleared and settled by the Taiwan Depository and Clearing Corporation (TDCC). Post-trade activities are therefore perfectly integrated.

Securities and payments therefore necessarily transit through registered market intermediaries before delivery to end investors.

2.3.6.2 Verification and reporting incentives
The means of verifying compliance with this tax are quite sophisticated since they rely not only on brokers but also on securities issuers and individuals who may be aware of arrangements to avoid paying this tax and be rewarded for passing this information on to the Taiwan Treasury.

Taiwanese lawmakers have also provided various incentives, control measures and penalties to help ensure compliance, in Articles 5 to 11 of the Taiwan Securities Transaction Act and Articles 4 to 6 of the Taiwan Futures Transaction Act.

2.3.6.3 Tax rates are tailored for each type of financial instrument
There are mainly two reasons why such a broad range of tax rates is applied. The first is substitution risk. This explains why higher rates are applied to assets for which there is no easy substitute, such as equities, and lower rates to derivatives contracts, the notional value of which does not represent their actual economic value (for example, since the value of an option to purchase a given equity share must be less than that of the share itself, they shouldn't be taxed at the same rate).

Another reason why derivatives transactions are taxed at a lower rate is that their underlying asset may also be taxed. The lower tax rate reduces the effect of double-taxation.

One of the limitations of the Taiwan tax on futures transactions is that it does not tax derivatives contracts issued on foreign trading systems.

As a result, in 1998 when Taiwan instituted a 0.05% tax on futures, the Taiwan Futures Exchange (TAIFEX) immediately saw a drop in trading to the benefit of the Singapore stock exchange (SGX).

To bring some of the derivatives trades of Taiwanese firms back home, the government lowered its tax rate on derivatives from 0.05% to 0.025% in 2000 and again to 0.01% in 2006. In three years, the increased volume of derivatives trading in Taiwan made up for the decrease in tax revenue resulting from the lower tax rate.

In conclusion, the broad range of tax rates and their relatively low level for derivatives contracts, are two main reasons why the Taiwan tax was not massively circumvented, and is now so successful.
2.3.6.4 Competitive financial markets and tax reform

In order to promote Taiwan’s economic development and enhance its competitiveness, a series of major reforms have been made to the taxation of financial transactions.

To stimulate bond markets and make it easier for Taiwanese companies to raise capital in an increasingly competitive economic environment, the Securities Transaction Tax was amended in December 2009 to exempt the following securities for a period of seven years:

- securities issued by a new company or a company increasing its capital
- existing bonds approved by the relevant authorities
- securities that are gifted or inherited.

Furthermore, since 1 January 1990, investors do not have to pay capital gains tax on the Taiwanese securities they sell. However, capital gains, income and dividends from foreign investments are taxed at a rate of 20%.

If one looks at the tax situation in a country such as France, the picture is quite different. Since 2011, all capital gains by French tax residents made on the sale of securities or equity-related rights that are part of their personal estate are in principle subject to a 19% tax.

These reforms have enhanced the appeal of Taiwan’s financial markets.

2.3.6.5 Strong domestic investor demand

Taiwan’s average household saving rate in 2009 was 28.1%, its highest level in almost 30 years.

To capture these savings Taiwanese banks are developing a broad range of services for consumers and companies and most notably securities broking.

Furthermore, according to Frederick Grede’s 2006 study of the Taiwanese futures market, the country’s financial markets are booming, especially equity derivatives. Of the total population of 23 million, 2.5 million people bought or sold securities in the Taiwanese market in 2005. Non-professional investors are particularly interested in index futures traded on TAIFEX. Investors like index futures because they can take a long position on the Taiwanese market at relatively little expense and risk.

According to this report, the trading volume in Taiwan’s financial markets in 2005 for the three main types of investors was:

- 50% for professional Taiwanese investors
- 45% for non-professional Taiwanese investors
- 5% for foreign investors.

These figures show that domestic demand accounts for most of the growth of Taiwan’s financial markets.

2.3.7 The limitations of the Taiwanese tax

2.3.7.1 Collection base

Taiwan’s tax applies only to trades on the country’s regulated financial markets. As a result, OTC transactions, which are cleared and settled bilaterally, are not taxed, whereas they are in the UK.

Furthermore, when a company issues shares on a foreign stock exchange, or enters into a derivatives contract via a foreign subsidiary, these transactions are not directly taxed. Yet the Taiwan corporate income tax regime applies a 20% rate to financial income earned abroad.

The Taiwanese market also seems to be relatively closed, although it does show signs of opening up. Foreign banks and the subsidiaries of foreign financial institutions are subject to many restrictive regulations.

2.3.7.2 Relatively low receipts from derivatives

Derivatives are subject to much lower tax rates than other financial securities. According to Taiwan’s Ministry of Finance, they accounted for only 156 million TWD of FTT receipts in 2010.

[33 Source: Attorney Wei Li, in a study for Switzerland’s State Secretariat for Economic Affairs (SECO) entitled The accessibility of Taiwan’s financial markets (in Unilateral), May 2005. His report presents the requirements for foreign banks under Taiwan’s Regulations Governing Foreign Bank Branches and Representative Offices, of 5 March 2004.]
2.4 A summary of the three financial transaction taxation systems

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Taxed</th>
<th>Tax Rate</th>
<th>Tax Collector</th>
<th>Tax Payee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares, bonds, and derivative securities</td>
<td>Purchases and sales</td>
<td>0.2% on turnover</td>
<td>TSX International</td>
<td>The seller and the purchaser</td>
</tr>
<tr>
<td>The US Temporary Transaction Tax (TTT)</td>
<td>Purchases</td>
<td>0.1% for broker-based transactions</td>
<td>CREST</td>
<td>The purchaser</td>
</tr>
<tr>
<td>The UK Temporary Transaction Tax (TTT)</td>
<td>All financial transactions</td>
<td>0.3% on equity turnover</td>
<td>The seller</td>
<td>The buyer</td>
</tr>
</tbody>
</table>

A temporary tax exemption for Taiwan debt securities was decreed in 2010, in response to the global financial crisis.
Examination of these taxes on financial transactions reveals that equities are the easiest type of financial asset to tax—as shown by the UK Stamp Duty Reserve Tax and the former French tax on stock-exchange transactions)—particularly when their trading or clearing/settlement is centralised, as in a regulated market or on some settlement systems.

Taiwan’s FTT does not apply to off-exchange transactions. In many other countries besides Taiwan, off-exchange transactions represent too high a portion of overall transaction volume to permit such an exclusion. For example in France, 50% of equities and 90% of corporate bonds are traded off-exchange. Furthermore, Taiwan suspended its tax on corporate bond transactions in January 2010, mainly due to the difficulties that Taiwanese companies were having in raising capital in financial markets. Taiwan’s financial markets are quite different from others, in that there is no capital gains tax on transactions in Taiwan, whereas financial income earned abroad is taxed. These two factors favour Taiwan’s domestic market.

Another difference is that the purchaser generally pays the tax, and sometimes also the seller.
3 - The legal feasibility of the unilateral tax on financial transactions

The tax should apply to all transactions involving financial securities and derivative contracts and should apply uniformly regardless of whether they are traded on a regulated market or over the counter.

In order to analyse the legal feasibility of unilateral taxation of financial instrument transactions, we must first examine the various factors that determine the tax’s territoriality and the tax’s main characteristics with regard to domestic laws.

3.1 Territoriality

According to the General Agreement on Trade in Services, there are no international legal constraints against the taxation of financial instrument transactions. However, a unilateral tax on financial instrument transactions must comply with the GATS provision against hindering the free movement of capital. However, the GATS does allow its signatories to take measures that do restrict the free movement of capital, if they are necessary to ensure the stability and integrity of financial markets.

The fact that other countries with unilateral taxes on financial transactions are also GATS signatories shows that unilateral FTTs are compatible with the GATS.

3.1.1 Compatibility of a unilateral FTT with European law

Due to the fact that most FTT champion governments are in Europe, the proposed financial tax must comply with the European Directive of 12 February 2008 on indirect taxation, which prohibits any tax on the purchase of newly issued equities, bonds and other securities.

35 The General Agreement on Trade and Services (GATS) was instituted by the World Trade Organization in 1994.

36 Continuing the feasibility analysis of unilateral FTTs via the use of France as a case study, the only international legal constraint against a unilateral French FTT is a tax treaty between France and the US that stipulates that when orders for securities transactions are placed in France and executed on a US exchange, they are not subject to the French impôt de bourse. It would therefore be necessary to negotiate an amendment to this international agreement to ensure that transactions executed on a US exchange are not exempted from the future unilateral tax on financial instrument transactions. The tax exemption under the French-US tax treaty requires that the participants in the order placement process exempt the trades they execute on a US exchange.
This European Directive, therefore, prohibits any tax on the issuance of equity or debt securities ("primary market\(^{37}\)). However, it does allow the EU member states to tax secondary market transactions, and does not restrict at all the taxation of derivatives transactions.

A unilateral FTT should also avoid taxing in a way that discriminates between counties\(^{38}\). A country creating an FTT should be prepared to show that any differences in the treatment of taxpayers does not constitute discrimination.

Concerning compliance with the principle of the free movement of capital\(^{39}\), a government may enact legislation under the "public interest" principle, which overrides the free movement of capital in certain circumstances. This is the case with the UK’s SDRT, which has been found to fall under “public interest” clauses of EU legal provisions about free movement of capital.

### 3.1.2 Nationality constraints

#### 3.1.2.1 Payers

It must first of all be determined which physical or moral person engaged in a financial transaction will have to pay the FTT.

Since there are various persons involved, it is legally possible to levy the tax from either:

- the issuer of the financial instrument
- the purchaser or seller of the financial instrument
- the financial instrument’s custodian bank
- the financial market intermediary that receives and places the buy or sell order
- the clearing house
- the central depository that handles settlement.

It is legally possible to ground the tax’s territoriality on the domestic tax residency status of the above people or entities. Tax residents are commonly defined as:

- persons who have their home or main place of residence within the country
- persons who exercise a professional activity within the country, whether employed or not, unless they can show that this activity is incidental
- persons who have most of their economic interests within the country.

\(^{37}\) In 2004 the Court of Justice of the European Union rejected Belgium’s attempt to tax share issues. Belgium abolished this financial tax in 2006.


\(^{39}\) The EU member states adopted the principle of the free movement of capital under Directive 88/361/EC. Articles 56 to 60 of the Treaty of European Union govern the free movement of capital.
This last requirement applies to both natural and legal persons. Legal entities, for example, can be tax residents of a country when they have most of their economic interests in that country. This means that a company will be considered to be a tax resident of country X and taxable as such, only if it makes most of its investments in country X, if its head office is in country X, or if it obtains most of its business revenue in country X.

A government may also tax economic activities conducted within its territory by persons who are not tax residents. For example, services provided in the EU by non-EU individuals or companies are subject to the harmonised European value added tax (VAT).

Determining tax liability in this way enables country X to tax market infrastructures that are located abroad, yet are selling their services in country X, or operate in country X.

### 3.1.2.1.1 Taxation of domestic tax residents who purchase and/or sell financial instruments

France's former impôt de bourse used apply only to the transactions conducted by tax residents. It was paid by both purchasers and sellers.

If territoriality is based on the nationality of the securities issuer, or on the place of trade execution, it is legally possible to make the new tax apply to both the purchasers and sellers of financial instruments, regardless of their tax residency.

### 3.1.2.1.2 Taxation of domestic securities

It is legally possible to make the tax apply to issuers of financial instruments that are tax residents in country X.

This basically includes securities issued by companies that are registered to do business in country X and/or whose head office is in country X. In this case, only transactions in domestic financial instruments (i.e., securities issued by legal persons who are domestic tax residents) would be taxable. Trades involving foreign financial instruments however would not be taxed, even if made by tax residents. It should be noted that a tax that exempts domestic securities as they are issued on the primary market would have no direct impact on domestic issuers. Instead, this type of tax would only hit secondary traders, whose transactions provide no direct benefit to the original issuer of the securities being traded. This would be similar to the Taiwanese tax and the UK SDRT, since it would apply only to secondary transactions in financial instruments issued by a tax resident.
3.1.2.1.3 Taxation of other participants in the financial transaction

Another possible legal scenario for the unilateral financial tax would be to tax transactions when at least one of the persons/entities involved has tax residency status in country X (other than the financial instrument issuer, purchaser or seller) thus making them subject to domestic law.

Therefore, if any of the following are subject to domestic law, the unilateral financial tax would be like a sort of “toll” and could be applied against a very small base and/or at a very low rate:

- the Investment Services Provider (the market intermediary)
- the market operator (e.g. the country’s stock exchange)
- the clearing house or the settlement system
- the custodian.

In the case of the UK’s SRDT, taxation is based primarily on the flow of financial securities through CREST, a settlement system that was designed to process transactions in UK-listed securities.

3.1.2.2 Collecting agents, and transaction venue

Once the territorial linkage issue is cleared up, one needs to determine what categories of natural or legal person in the financial transaction process will be tasked with collecting the unilateral tax on behalf of the local Treasury.

It is legally possible to collect the tax from any of the following:

- directly by the purchaser and/or seller of the financial instrument (self-declaration)
- the custodian bank
- the financial intermediary that receives or places the order
- the clearing house
- operators of trade negotiation platforms (e.g. Euronext)
- or the central depository that handles settlement.

In order to make these financial intermediaries liable to collect the domestic FTT, it does not matter whether they are domestic tax residents or not, as long as they operate within the domestic market (operating within the domestic market makes them liable to comply with domestic laws for all their domestic activities, including with the tax laws).

In this case, the tax on financial securities could be primarily collected by all central depositories authorised to process domestic securities, while the tax on derivatives contracts could be primarily collected by clearinghouses authorised to handle domestic counterparties.
The unilateral FTT could also be payable when transactions in domestic financial instruments are processed through an Investment Services Provider (i.e. an investment firm), a member of a regulated or organised financial market, or over the counter. The ISP or the financial market member could collect the tax from the trading parties themselves, on behalf the local Treasury.

Finally, another legal option is to tax transactions executed on behalf of any natural or legal person who is a domestic tax resident, regardless of whether the collecting intermediary is a tax resident. However, in this case the tax would only apply to those purchases/sales made by the tax residents.

3.1.2.3 Taxable financial instruments

The unilateral FTT would apply to secondary transactions in all ‘financial instruments’, i.e. both ‘financial securities’ (equity securities, debt securities and shares in exchange-traded funds) and ‘financial contracts’ (i.e., derivatives). The concept of ‘financial instrument’ will be explained in greater detail herein.

The unilateral FTT could also apply to foreign financial instruments (i.e., issued by a foreign company) that are traded in domestic financial markets.

3.2 Legal feasibility of the tax

There are three possible taxation scenarios, based either on: the tax residency status of the purchaser/seller; the nationality of the issuer of the financial securities (or of the party to a derivatives contract) and the legal system that normally applies to a trade execution intermediary.

It is necessary to examine the tax’s legal feasibility for each of these scenarios.

3.2.1 Application and exemption of the unilateral FTT

3.2.1.1 Applicable financial instrument transactions

The tax would apply to both the purchase and sale of financial instruments, as defined above.

The following financial transactions would also be taxed:

- the transfer of financial instruments by notarised deed, since the tax would also apply to over-the-counter transactions
- the lending of financial instruments
- repurchase agreements
- the exchange or contribution of securities for the purpose of a business combination

40 In this type of transaction, the tax would be collected and drawn up by the notary that drew up the deed of transfer using a special tax form.

41 In this type of transaction, the tax would be collected and drawn up by the notary, attorney, solicitor or chartered accountant who normally draws up this type of deed using a special tax form.
Lastly, and as already indicated above, the financial instrument transactions tax would apply equally to both spot and forward transactions.

3.2.2 Coercive measures to ensure collection

Coercive measures are necessary to ensure that the tax will be collected and paid. In some situations, measures may be required to reduce the risk that collection and/or payment might be circumvented.

In some cases there will be little risk of circumvention, for example when transactions are cleared through a clearinghouse that is authorised to operate in the country’s financial market, or settled through an authorised central depository.

Ensuring that clearing and settlement are handled exclusively by authorised entities will considerably reduce collection and payment risk.

Although trades may still migrate toward foreign financial instruments, this does not seem to be a substantial risk, when the UK and Taiwanese equity markets (which currently tax financial transactions) are compared with the French and Germany equity markets, which have no FTT at present.

The methods used to collect FTT in Taiwan could serve as a model for the proposed general unilateral tax.

In Taiwan, compliance control measures engage not only financial-market professionals but also private individuals as well.

3.2.2.1 Incentives for people and entities involved in the transaction process

The UK SDRT provides for a 1.5% ‘exit tax’ when securities settled through CREST are ‘removed’ from the settlement system in order to issue a foreign depositary receipt or to be settled on another system. This is because, after removal from CREST, transactions in these UK securities will not generate SDRT.

This exit tax would have to be significantly greater than the base tax rate on financial instruments, in order to discourage the “removal” of securities from the settlement system managed by the central depository authorised to operate in the country’s financial markets. Austrian economist Stephan Schulmeister has proposed that the exit tax should correspond to at least 40 “transaction round-trips”.

In the Taiwanese system, there is a reward for people who inform the tax authorities of fraudulent arrangements by brokers to avoid paying tax on financial transactions. Informants receive 20% of the fine that the tax authorities impose on the collecting agent and tax authority does not reveal their identity. This reward is not paid however when the informant is a civil servant, or one of the very participants in the arrangement to fraudulently avoid tax payment.
The collecting agent is also incentivized with an annual bonus if it complies promptly with its tax collection obligations. It may thus receive one thousandth of the tax it collected for the Taiwan Treasury. On the other hand, if a collecting agent fails to meet its tax collection obligations it may be fined 10 to 30 times the amount of the uncollected tax.

Such incentive structures should be used for other unilateral FTTs, so as to encourage its collection and its payment to the local Treasury.

3.2.2.2 Compliance monitoring measures involving the seller or purchaser of financial instruments, or their custodian

The tax could be collected through the purchaser or seller of the security or their custodian by having them declare their purchases or sales on either:

- on their annual tax return, in the case of a natural person
- on their annual “tax package”, in the case of a legal person (a company or association).

A box would be provided in the “financial revenue” section on the personal income tax return and in the various tables of the annual tax documents that companies must submit to tax authorities.

This box would be used to report the amount of financial instruments sold during the year, as indicated in the annual tax forms that banks provide to their customers. People or entities with multiple securities accounts in more than one bank would consolidate the total amount of their sales for the year and indicate this amount in the appropriate box on their tax return.

The local Treasury would thus calculate the tax based on the securities sales indicated in personal tax returns and corporate tax and accounting documents.

Legal persons could pay the tax along with the balance of their corporate income tax or upon reception of a special payment notice.

3.2.2.3 Specific coercive measures for derivatives

In order to ensure that the tax will be effective over the long-term and not circumvented, the specific characteristics of derivatives transactions must be taken into account. Most notably, derivatives are not always cleared through a central counterparty.

Various incentives and coercive measures could be used to secure tax collection on these transactions.
3.2.2.3.1 Applying a stamp duty to off-exchange derivatives

To ensure the collection and payment of the tax on derivatives transactions, many of which are negotiated off-exchange, a stamp duty similar to the UK Stamp Duty should be used. This stamp duty would encourage collection and payment of the tax by:

- making legally invalid any derivative contracts that are not stamped (as the UK’s Stamp Duty Act already provides for, concerning unstamped share transfer agreements)
- prohibiting domestic parties to financial contracts from executing the obligations provided under any unstamped derivative contract
- imposing fines and penalty interest if stamp duty obligations are not met (as with the UK’s Stamp Duty Act).

The unilateral stamp duty on derivatives contracts would apply to all contracts to which one of the parties is a country X tax resident. Contracts entered into by foreign subsidiaries of companies that are country X tax residents would also be subject to this stamp duty (in order to avoid tax circumvention through subsidiaries).

When one of the parties to a contract is a tax resident (or a foreign subsidiary of one) and the other is a non-resident, the stamp duty would apply only to party who is a tax resident. If both parties are tax residents, then each would have to pay the tax, on its own half of the derivative contract. This system ensures that there will not be any double taxation.

This also ensures that the tax will be neutral to foreign counterparties of domestic companies, which is important to ensure that domestic companies can still find counterparties to trade with.

The unilateral FTT would require that derivative contracts be subject to paper or electronic stamping, and be registered with the local tax authority. If not stamped/registered, contracts would be unenforceable in court, and could expose the parties to the contract to financial penalties.

The tax could be made more coercive by defining the unlawful execution, by a derivative contractor, of the obligations contained in an unstamped derivative contract, as constituting “fraudulent use of corporate property”, thus making the company or its personnel directly liable.

Given the sums involved in derivatives markets, trading companies are unlikely to expose themselves to the risk of seeing their contracts invalidated and unenforceable (a contract that both parties know to be completely worthless in court or arbitration, ceases to have value).

Since derivative contracts are now mostly in electronic form, the domestic tax authority would set up an electronic stamping system. The derivative trade repository software that some derivatives clearinghouses are now using, can be adapted to enable electronic stamping.
For contracts that remain in paper form, the domestic tax authority will set up a system similar to the one that Her Majesty's Revenue and Customs uses to stamp paper share transfer orders.

The domestic tax authority could verify the compliance of derivatives transactions (mainly entered into by large financial institutions) by conducting ad hoc inspections similar to the broker inspections allowed and conducted under the UK Stamp Duty Act.

Failure to pay the tax and stamp the contract would make it legally invalid. This means that Administrative authorities, judges and other legal professions would be prohibited from issuing orders, pronouncing judgments, or taking any action, in respect of a derivatives contract that had not been duly stamped.

Virtually all national legal systems that have stamp duties, also have (or have had) the penalty of legal invalidity in case of unstamped dutiable documents. For example, in France, until 1982 government entities or courts were prohibited under French law from making any decisions in respect of unstamped documents. To discourage circumvention of the tax on derivatives transactions, countries will need to either expand or restore this type of penalty, and apply it to derivative contracts. This penalty would be necessary in order to avoid substitution from taxed securities to untaxed derivatives.

This coercive solution would require the following changes to laws and regulations:

- Institution of this tax in the General Tax Code
- Amendment of the civil law and law of contracts, to add this additional cause of contract invalidity
- Amendment of the civil court rules, to institute a simplified investigation procedure for declaring unstamped contracts invalid (a procedure whereby court officials easily verify that contracts presented in court are either exempt from stamp duty, or have been properly stamped, or are invalid).
- Amendment of several articles of legislation governing securities and financial markets, to integrate the principle that unstamped transactions shall be invalid.

Since in most countries lawmakers amend the above laws every year, and sometimes even several times a year, a country's laws could be rapidly modified in order to accommodate the taxation of derivative contracts.

It should be noted that France's first stamp duty (the droit de formule) was established by Colbert in the 17th century. It was an indirect tax. France's impôt de bourse (abolished in 2008) was a stamp duty as well. Failure to pay a stamp duty may be subject to a tax fine payable upon notification and even criminal prosecution, resulting in a fine and possibly even imprisonment.
France's General Tax Code used to have a provision (Article 895) that invalidated ‘unstamped’ document that was abrogated by the 1982 Amended Finance Act.42

According to this article:

"Notaries, bailiffs, court clerks and other public officers, lawyers, secretary-registrars and senior registrars shall not take any action, and government entities shall issue no orders, in respect of any document or register that is not stamped with the appropriate stamp of approval signature. Nor shall any judge or public officer mark, number or initial a register that is subject to stamp duty if any of its pages are not stamped”.

Countries will need to create, revive or expand this type of stamp duty provision, in order to dissuade non-payment of stamp duty on derivatives contracts.

3.2.2.3.2 Penalties for failure to pay FTT on over-the-counter transactions

If a person or entity liable for the tax (perhaps the collecting agent) fails to honour its tax payment obligation, it could automatically be subject to the payment of a fine, in addition the invalidation of the contract as described above.

For example, the collecting agent would also be fined for failing to comply with its tax collection and payment obligations.

3.2.2.3.3 Registering derivatives contracts with clearinghouses authorised to operate in a country’s financial markets

Mandatory registration of derivatives contracts with a clearinghouse authorised to operate in a domestic financial markets should be required (see below the distinction between central counterparty servicing of derivative contracts, versus simple multilateral netting servicing). Failure to register should be sanctioned with a financial penalty (fine or penalty interest).

The tax would be collected when the contract is cleared, and would be collected by any clearinghouse authorised to operate in the country's financial markets.

This solution offers several advantages: it tends to centralise collection in the clearing process, it can be set up relatively quickly and with little expense, meaning tax processing costs for the government are very low.

This mandatory registration solution is similar to the method provided for in the European Market Infrastructure Regulation (EMIR) which is expected to be adopted in 2011.

3.2.3 Determining FTT rates and payment

As already mentioned, the rate of the UK Stamp Duty Reserve Tax is 0.5%.

The recommended tax base for the unilateral tax on securities transactions is the transaction’s value.

For derivatives transactions, the tax base would be different between standard versus highly complex derivatives. The general rule could be to tax the notional amount of the contract (which would include futures, among other things). However, for certain types of derivatives, the tax assessment could be based on other factors than the contract’s notional amount. For options, for example, the tax could be based on the premium43 or perhaps the ‘pay-out’. For complex derivatives, when the notional value cannot be easily determined, post-trade flows could be taxed via the clearinghouse (or via the parties’ own post-trade44 management platforms, if applicable).

Applying a flat, fixed tax rate is not recommended. This would increase the size of block orders and the average value of transactions, which would decrease the taxable base. Proportional rates, based either on the notional amount of the contract or its post-trade flows, would be more effective.

Different rates for the various types of financial securities and contracts traded could also be considered, as in Taiwan45. Using different rates for different types of securities or derivatives would enable tax collection to encompass the full range of financial markets.

The highest tax rate would be applied to equities, since they are most difficult to replace with a similar asset.

Bonds would be subject to a lower rate, as there is less trading in secondary markets for bonds than in secondary markets for shares.

---

43 An option’s premium is the price at which it is purchased or sold.
44 These platforms are operated by banks and are used, for example, to keep positions on derivatives and manage margin calls.
45 Taiwan’s financial tax rates:
   • 0.3% on equities
   • 0.1% on stock certificates, covered warrants and TRDs
   • 0.1% on corporate bonds
   • 0.004% on equity futures
   • 0.000125% on 30-day note futures
   • 0.000125% on 10-year government bond futures
   • 0.00025% on commodities futures
   • 0.1% on options
Lastly, concerning derivatives contracts, there are several good reasons for maintaining a generally low rate:

- The fact that the value of any given derivative is necessarily less than that of its underlying asset (for example, owning an option to purchase a share is worth less than owning the share)
- the high risk that a non-taxed derivative will be substituted for a taxed derivative (there is no little substitution risk if a stamp tax is applied to all tax residents and their foreign subsidiaries)
- the indirect taxation of the derivative’s underlying “physical” asset
- the low transaction costs of derivatives contracts.

In conclusion, the unilateral FTT should have different tax rates that are closely aligned with each financial market’s trading activity and the substitution risk that exists between the various financial instruments.

A tax on financial transactions will have little impact on retail investors, particularly since income from financial assets accounts for only a small portion of aggregate unilateral household income. For example, in France, financial income accounts for only 1.6% of the total income of 95% of households. One has to reach the top 0.1% wealthiest households before one reaches a 24% share of total income that is derived from financial income.

3.2.4 Legislative procedure for enacting a tax bill

The proposal to create a tax on financial instrument transactions could be included among the “tax receipt” amendments to countries’ Finance Bills for 2012. The implementation of the tax would then depend on the Finance Bill process and schedule.
The “standard” legislative and regulatory procedure for implementing this tax is as follows:

1. An amendment to introduce the tax as part of the Finance Bill is drafted.
2. The amendment is submitted to the Finance Committee of the Lower House.
3. The Finance Committee\(^{47}\) considers the amendment.
4. The Finance Committee votes in favour of the amendment.
5. A plenary assembly of the Lower House passes the amendment.
6. The bill moves on to the Higher House.
7. The Higher House’s Finance Committee supports the FTT provision.
8. A plenary assembly of Higher House passes the bill with FTT provision.
9. If the Higher House rejects the bill or disagrees with the Lower House on specific points, a joint committee is formed to resolve disagreement.
10. The two Houses work out a compromise.
11. The bill is signed by the head of state and enacted, unless the Constitutional Court requires judicial review.
12. The new law is published in the Gazette.
13. The Fiscal Legislation department of the Tax Authority issues a “taxation instruction”, to explain how the law is to be applied. Taxation instructions are generally issued within 10 months of the publication of a Finance Act.

In conclusion, a new unilateral tax on financial instrument transactions is feasible from a legal standpoint, for all of the taxation scenarios presented. However, there are various legal constraints - European law, for example, prohibits taxation of the primary market.

To ensure that this tax on financial instrument transactions will be effective, its “technical” feasibility must also be examined, in light of the mechanics of financial transactions and the technical and organisational constraints of the financial services industry.

\(^{47}\) The “DDOEF"
4 - Presentation of the financial transaction process: France as a case study

In order to offer an operative mechanism for taxation of transactions on financial instruments, the main stages in carrying out these transactions must first be examined, along with a simplified model of the financial markets. This paper has opted to present financial transaction process after a real-life example: that of France. France was selected as the case study for this how-to guide on account of the French Presidency of the G20 at the time of writing this guide, and on account of France’s decision to put the FTT on the agenda of the G20 summit 2011.

A detailed view of French financial markets is presented in Appendix 1 (How French financial markets are organised by category of financial instrument). This will make it possible to identify the feasibility and technical constraints involved in instituting a tax on financial transactions.

4.1 The main stages of financial transactions

The diagram below shows how a transaction involving financial instruments unfolds:

Transmission of a buy/sell order: buy/sale request issued by the buy/seller on the market. When the order is issued, not all of the characteristics (price, date, quantity) of the final transaction are known.

Trading consists in matching buy and sell orders. In an over-the-counter transaction, buyers and sellers trade directly with one another. On-exchange trading can be done by a financial intermediary/broker or directly between professional clients on a market platform or through a multilateral trading facility.

Clearing consists in updating and unwinding financial instrument positions registered at clearing houses (which is also the central counterparty of buyers and sellers) and in monitoring cash margin calls.
Settlement/delivery is the procedure under which securities are delivered, normally in exchange for payment, to fulfill contractual obligations incurred from a transaction. The settlement/deliver instruction is issued by:

- the clearing house if the transaction was executed on-exchange or if the investors traded off-exchange and then called in a clearing house;
- the investor in all other cases of over-the-counter trading.

The instruction is then unwound at the central depository. The securities are credited to the account of the buyer's affiliate and debited from the seller's affiliate.

The diagram below presents the various stages of settlement/delivery when instructions are transmitted directly by the investors (over-the-counter, without the use of a clearing house).

The settlement/delivery process is triggered once each contracting party provides the relevant instructions to their respective account-keeping/depository.

Once the seller is informed of this instruction, he issues an instruction to order the delivery of the securities. Meanwhile, the acquirer/buyer issues an instruction to receive the securities.

Each instruction is inspected beforehand, to ensure that cash and securities match up correctly. Not until then are the instructions sent to the core depository, which then undertakes further inspections before ordering the transfer of the securities and cash between the two parties.

In France, settlement-delivery is provided by Euroclear France, which is the central depository of French securities and manages the ESES France financial instrument settlement/delivery system.

ESES France ensures immediate irrevocability of unwound positions through the simultaneous and raw processing of the transfer of the securities covered by the transactions and the settlement of the cash portion in central bank money.
4.2 How the European financial markets are organised

The diagram below presents the participants in securities processing, depending on the European country involved.
This diagram shows that NYSE-Euronext has developed along the lines of a horizontal model focused on listing and trading, whereas all other European exchanges have developed using a silo model including the entire processing chain, including clearing and settlement/delivery. The latter model is more integrated.

Only transactions involving equity securities (shares and similar securities), debt securities (bonds, negotiable debt securities, etc.), units or shares in collective investment schemes, financial contracts (or forward financial instruments) would be taxed.

Instituting a tax on primary market transactions runs into the European ban on taxing the issuance of stocks, bonds and other financial instruments. So the financial transactions tax will not apply to primary market transactions (remembering that the distinction between primary and secondary market does not apply to derivatives markets).

The order processing circuit differs with the financial instruments involved and the transaction venues. The proposed scenario will also have to take into account the lack of homogeneity in the circuits.

That means that if a tax was instituted on financial transactions, the degree of coverage would be different depending on the order processing stage during which the transactions will be taxed.

Hence, knowing how financial markets work and how transactions unfold on these markets will make it possible to determine exactly what transactions are covered and the taxable event for each taxation scenario considered.

5 - Scenario selection criteria

As a reminder, the purpose of the system is to propose a tax on transactions, i.e., purchases and sales, of financial instruments.

The selection of the target taxation scenario is guided by the objectives of the report, which are to propose a tax:

- that can be unilaterally instituted in a short period of time
- that has the widest possible tax base
- that is stable, permanent, and able to ensure a sufficient and predictable flow of receipts
- that is technically and legally feasible

The following process was followed to determine the target scenario:

- identification of potential scenarios
- estimation of receipts for each taxation scenario
- determination and application of qualitative criteria for assessing the scenarios
- analysis of selected scenarios
- selection of the target scenario

5.1 Methodology for identifying the proposed scenarios

In order to identify the target taxation scenario, it is first necessary to:

- determine the broadest possible range of scenarios that may be considered
- apply a number of filters to these scenarios leaving only the most relevant ones

5.1.1 Identification of all possible scenarios

Possible taxation scenarios were identified in two stages:

- determination of macro-scenarios
- determination of variables specific to each macro-scenario

5.1.1.1 Determination of macro-scenarios

Macro-scenarios for financial transaction taxation were proposed as a function of both transactions for which taxation already exists or has existed in other countries, and transactions that could potentially be taxed.
Seven macro-scenarios were identified. The following diagram shows the flow of a financial transaction in a simplified form and the role of the players who will be affected by the taxation:

It is possible to establish a unilateral FTT in country X, by taxing either:

1. All transactions carried out on a financial instrument issued by a person who is a tax resident in Country X (this scenario is based on the Taiwanese financial transaction tax)
2. All transactions carried out by a buyer/and or seller who is a tax resident in Country X
3. All transactions carried out through a broker who is a tax resident in Country X
4. All transactions carried out through a trading platform who is a tax resident in country X
5. All transactions cleared through a clearing house that is authorised to operate in country X (ie authorised to process instruments issued by country X residents)
6. All transactions settled through a central depository that is authorised to operate in country X (this scenario is based on UK stamp duty on financial transactions)
7. All transactions recorded in the books of a custodian bank who is a tax resident in country X
The legal notion of a participant authorised to operate in domestic market

Two of the proposed scenarios refer to this concept: the taxation of (i) transactions cleared through a clearinghouse authorised to operate in a country’s market and (ii) transactions settled through a depository authorised to operate in a country’s market.

This concept should be distinguished from that of nationality or tax residency. The notion of authorisation to operate is less restrictive, in the sense that both foreign or non-resident operators may be operating in any given country. However, foreign operators still require administrative consent from the local Financial Markets Authority to do so.

In practical terms, a US clearinghouse is often the central counterparty for transactions in French derivatives (i.e., derivative contracts where a French company is one of the two parties). Accordingly, the US clearinghouse will process the French derivative. This is only possible if it has first been licensed to process French derivatives, by the French Financial Markets Authority. The end result is that the US clearinghouse will be operating on the French financial market, without having nationality or even having an office in France, but under strict regulatory license from the local Authority.

Here, the tax-connecting factor is not nationality or location of the clearinghouse, but that of its clients, or that of the instruments that it processes.

A parallel may be made with the system of European VAT applicable to e-commerce. For e-commerce activities conducted by US firms within the EU, VAT is paid in the EU country in which the e-commerce service is consumed. Thus, if iTunes based in the United States sells an item of digital music over the internet to a customer located in France, iTunes must collect French VAT on this digital music, and pay this French VAT to the French Treasury.

Similarly, any country has the power to require any financial market infrastructure company around the world to collect and pay its domestic FTT, on those transactions that involve domestic instruments, regardless of nationality or location of these infrastructure companies. Failure to comply, on the part of any foreign financial infrastructure company, will result in denial from operating in the domestic market.

---

49 Article 258 B of the Unilateral General Tax Code
50 Article 258 A of the Unilateral General Tax Code
5.1.1.2 Determination of variables specific to each macro-scenario

Each of these macro-scenarios has three variables:

- the collecting/reporting agent
- the taxable person
- and the taxable event

5.1.1.2.1 The collecting/reporting agent

First of all, the collecting/reporting agent is the participant in charge of collecting the tax and/or reporting taxable transactions. It may be:

- the issuer
- the buyer/seller
- the intermediary
- the trading platforms (regulated exchanges and multilateral trading systems)
- the clearing house (central counterparty)
- the central depository
- the buyer/seller’s custodian

5.1.1.2.2 Taxable persons or final tax payers

Taxable persons or final tax payers are potentially the same as the collecting/reporting agents, but they will be determined according to types of financial instruments.

5.1.1.2.3 Taxable event

Finally, defining the taxable event determines the moment when tax becomes chargeable and may be levied. The events are presented in their chronological order:

- transmission of an order
- trading of an order
- clearing of the transaction
- settlement with securities and cash flows

Sixty or so possible scenarios were identified from the combination of seven FTT macro-scenarios and the three variables specific to each of them.

5.1.2 Elimination of unsuitable scenarios

The methodology pursued consists of applying, to each macro-scenario and each of the three variables, a filter based on constraints arising from the objectives of the tax.

5.1.2.1 Elimination of unsuitable macro-scenarios

Based on the objectives of the collection of the tax, a filter for substitution risk was applied to eliminate unsuitable macro-scenarios.

Substitution risk leads to the transfer of order flow volumes abroad, which means that the sustainability of the tax cannot be guaranteed.
Accordingly, the following scenarios were discarded:

- Transactions carried out via an intermediary resident in Country X for tax purposes carry a strong risk of order flow volumes being transferred to foreign intermediaries as demonstrated by the implementation of a Swedish financial transaction tax from 1984 to 1991.
- Transactions carried out via a trading platform resident in Country X for tax purposes present an exacerbated risk of the transfer of order flow volumes to foreign trading platforms (notably MTSs, most of which are located in the United Kingdom). Nevertheless, these platforms may be tax collecting agents. OTC transactions would not be included in the tax base under this scenario, however.
- All transactions recorded in the books of an custodian resident in Country X for tax purposes are also subject to the risk of the transfer of order flow volumes to foreign custodians.

The remaining macro-scenarios were retained because of the low risk of substitution: the introduction of a financial transaction tax would be unlikely to lead to the transfer of order flow volumes abroad.

Furthermore, it seems unlikely that the issuer would change its tax residence as a result of the introduction of the tax.

Substitution does not apply to either clearing houses or central depositories.

In fact, any central depository wishing to operate in the domestic market (i.e., wishing to market the central depository service to domestic issuers) will be required to collect tax, regardless of its geographic location, nationality or tax residence. The central depository is required to submit its operating rules to the approval of the Autorité des Marchés Financiers (AMF)\(^1\) and must be authorised by the latter to operate in the domestic financial markets.

---

\(^1\)Articles L 550-1 et seq, General Regulations, Autorité des Marchés Financiers.
Clearinghouses are also under the obligation to submit their operating rules to the approval of the local Financial Markets Authority\(^\text{52}\) in order to be able to operate in the local financial market.

In terms of transactions carried out by a buyer and/or seller resident in France for tax purposes, the low rates targeted are unlikely to “cause” tax evasion/relocation by buyers/sellers.

By applying the filter relating to substitution risk, the number of macro-scenarios considered was cut down to four, namely:

1. All transactions on a financial instrument issued by an domestic tax resident issuer
2. All transactions carried out by a buyer/and or seller who is a domestic tax resident
3. All transactions cleared through a clearinghouse that is authorised to operate in the domestic market
4. All transactions settled through a central depository that is authorised to operate in the domestic market

5.1.2.2 Elimination of unsuitable variables: application to collecting/reporting agents

The notion of coverage was the common filter applied to the three variables.

Concerning collecting/reporting agents, the issuer of financial securities was eliminated from the variables because it operates in the primary market only, whereas the majority of trades are carried out in the secondary market. It is also worth noting that the parties to a financial contract fall within the category of buyers/sellers (rather than issuers) because they do not issue new securities in order to raise funds.

The taxation of players operating at the trading level such as brokers and trading platforms was abandoned mainly because of the coverage involved under these scenarios (in terms of the tax base). Indeed, not all transactions are necessarily carried out through financial intermediaries or trading platforms, notably OTC transactions.

On the other hand, the nationality of these players has little effect on the collection of tax. For example, under the scenario in which French securities transactions are taxed, if a Belgian buyer purchases Renault shares via a multilateral trading system (MTS) based in London, the MTS may collect the tax from the buyer on behalf of the French tax authorities.

\(^\text{52}\) Articles L 541-1 et seq., General Regulations, Autorité des Marchés Financiers.
By applying this filter, the number of potential collecting/reporting agents was reduced to four:

- buyers/sellers who are domestic tax residents
- clearinghouses (central counterparties) authorised to operate in the domestic market
- central depositories authorised to operate in the domestic market
- custodian banks who hold domestic instruments

5.1.2.3 Elimination of unsuitable variables: application to the taxable person

The filter previously used to eliminate collecting/reporting agent scenarios based on the level of coverage also applies to the taxable person.

Whatever assumptions are used, the final cost of the tax will ultimately be borne by the buyer and/or the seller of financial instruments. The various participants in the order processing chain mentioned earlier will not cut their margins and will pass the rise in their costs onto the buyers and sellers. The final buyers/sellers that will pay the most tax are those that carry out the most transactions (investment banks and hedge funds).

Given the fact that the filter was applied according to the same criteria on the same variables, the entities that are potentially liable for tax are identical to the collecting/reporting agents determined in the preceding paragraph.

5.1.2.4 Elimination of unsuitable variables: application to taxable events

The same filter was applied for the taxable event.

Given the fact that none of the parties know the final price, or the quantity, or the details of the transaction when a buy/sell order is transmitted, the transmission stage of the order handling process was eliminated from the possible variables.

In addition, the trading stage involving the interaction of supply and demand may be carried out bilaterally in the case of an OTC transaction or multilaterally when brokers/dealers and/or a trading platform are involved. This stage covers 100% of transactions. It is also during the trading stage that the parties to a financial contract enter into the agreement.
The clearing stage covers the large majority of transactions because it consists in calculating the net position between two or more market participants. Clearing may be carried out bilaterally or through a clearing house that becomes the sole counterparty between the buyer and the seller.

Finally, the settlement stage allows the effective transfer of ownership against payment. This stage was considered to be comprehensive, because capital and debt securities transactions give rise to settlement via the central securities depository, except where the transactions are directly “netted” by the intermediaries. In the latter case, the intermediary will bring together the supply and demand of securities directly in its books, without settlement at the level of the central securities depository.

Subscriptions/redemptions of units or shares in collective investment schemes also give rise to settlement, which is mainly performed by mutual fund depositories.

Derivatives are a financial market where the concept of secondary market does not apply. Indeed, when player A in the derivatives market decides to sell to player B a position that it holds relative to player C, A does not sell to B the financial contract that binds it to C. Instead, A will enter into a second contract, with B. It is this second contract that transfers to B the position originally held by A over C. The first contract (with C) is not “sold on” as such.

The remaining taxable events after application of the filter were the trading, clearing and settlement stages.
5.1.3 Summary of retained macro-scenarios and variables

After identifying a set of taxation scenarios and applying filters to them, the following potential macro-scenarios and variables were retained:

**Macro Scenarios**

1. All transactions on a financial instrument issued by an issuer resident in Country X for tax purposes
2. All transactions carried out by a buyer/seller resident in Country X for tax purposes
3. All transactions cleared through a clearing house authorised to operate in the domestic financial markets
4. All transactions settled through a central depository authorised to operate in the domestic financial markets

**Variables**

- **Collecting/reporting agent**
  - Buyer/Seller
  - Clearing house
  - Central depository
  - Custodian

- **Taxable person**
  - Buyer/Seller
  - Clearing house
  - Central depository

- **Table event**
  - Trading
  - Clearing
  - Settlement
5.2 Estimation of the possible receipts for each taxation scenario

The process for estimating the amount of tax receipts that might be foreseen under each scenario was as follows:

- gathering of financial data
- application of the collected data to the proposed scenarios
- selection of tax scales
- impacts of circumvention mechanisms and determination of adjustment indicators
- simulation of the amounts of receipts envisaged under each taxation scenario

5.2.1 Gathering of financial data

It is worth stating at the outset that the research was concentrated on the volume rather than on the number of transactions. Taxation on the number of financial transactions would lead to an increase in block orders and a rise in the average value of transactions, and with it a reduction in the number of trades.

The financial data have been gathered in such a way that they can be used for the various taxation scenarios considered.

The main sources of financial data are the European Central Bank (ECB), the Bank of International Settlements (BIS) and the World Federation of Exchanges (WFE):
5.2.2 Application of the collected data to the proposed scenarios

Some of the financial data sought has not been published and/or is not directly usable for the proposed taxation scenarios.

Extrapolations were made from reliable data based on non-official assumptions in order to give a general idea of the missing data.

The French example:

It is hard to determine precisely the volume of transactions carried out on a financial instrument issued by an issuer resident in France for tax purposes. The approach taken in this report has been to apply France’s percentage share of global GDP in 2010 to the global volume of financial transactions taken from 2007.

\[\text{Credit transactions are not covered by this report.}\]
Similarly, the calculation of total transactions by buyers and/or sellers resident in France for tax purposes is based on an approximation. France’s proportion of volumes was calculated by applying the 2010 percentage share to total volumes traded worldwide in 2010 with a 25% discount to reflect the market.

The figures concerning equity and debt securities transactions resulting in clearing and settlement were taken from the European Central Bank’s database.


Given the proposal to tax units or shares in collective investment schemes, the figures from scenario 1 were also applied to scenarios 3 and 4.

In the case of derivatives, specifically the provision to tax financial contracts entered into by a French resident for tax purposes and its foreign subsidiaries, the data from scenario 1 supplement the financial securities data for scenario 4.

Figures are given in millions of euros in 2010

<table>
<thead>
<tr>
<th>Taxation scenarios</th>
<th>Equity security volumes</th>
<th>Debt security volumes</th>
<th>Units or shares in collective investment schemes</th>
<th>Notional value of futures</th>
<th>Option premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All transactions carried out on a financial instrument issued by an issuer resident in France for tax purposes</td>
<td>3 736 370</td>
<td>125 333 807</td>
<td>508 893</td>
<td>60 061 429</td>
<td>434 480</td>
</tr>
<tr>
<td>2. All transactions carried out by a buyer and/or a seller resident in France for tax purposes</td>
<td>2 802 278</td>
<td>94 000 355</td>
<td>556 842</td>
<td>45 046 072</td>
<td>325 880</td>
</tr>
<tr>
<td>3. All transactions cleared through a clearing house authorised to operate in the French financial markets</td>
<td>3 440 512</td>
<td>29 019 553</td>
<td>508 893</td>
<td>25 230 662</td>
<td>152 801</td>
</tr>
<tr>
<td>4. All transactions settled through a central depository authorised to operate in the French financial markets</td>
<td>5 437 125</td>
<td>85 901 702</td>
<td>508 893</td>
<td>60 061 429</td>
<td>434 480</td>
</tr>
</tbody>
</table>
The table showing the volume of trades in 2010 for each scenario and type of financial instrument reveals that the tax base is largest for debt and equity securities under scenario 1, which encompasses all transactions on financial instruments issued by issuers resident in France for tax purposes. Scenarios 2 and 4 also provide satisfactory coverage.

<table>
<thead>
<tr>
<th>Level of taxation</th>
<th>Corporate bonds</th>
<th>Government bonds</th>
<th>Short-term debt issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>All transactions involving a financial instrument issued by an issuer resident in France for tax purposes</td>
<td>32 001 346</td>
<td>27 042 656</td>
<td>66 289 804</td>
</tr>
<tr>
<td>All transactions carried out by a buyer and/or a seller resident in France for tax purposes</td>
<td>24 001 010</td>
<td>20 281 992</td>
<td>49 717 353</td>
</tr>
<tr>
<td>All transactions cleared through a clearing house authorised to operate in the French financial markets</td>
<td>5 697 751</td>
<td>9 135 626</td>
<td>14 186 176</td>
</tr>
<tr>
<td>All transactions settled through a central depository authorised to operate in the French financial</td>
<td>16 866 094</td>
<td>27 042 656</td>
<td>41 992 951</td>
</tr>
</tbody>
</table>
The sources and underlying assumptions of the data presented above are as follows:

<table>
<thead>
<tr>
<th>Taxation scenarios</th>
<th>Data sources and assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity securities</strong></td>
<td><strong>Debt securities</strong></td>
</tr>
<tr>
<td><strong>Sources:</strong></td>
<td></td>
</tr>
<tr>
<td>- Bruegel Policy Contribution: &quot;Financial Transaction Tax: small is beautiful&quot;, February 2010, Zsolt DARVAS &amp; Jakob VON WEIZSÄCKER</td>
<td></td>
</tr>
<tr>
<td>- IMF</td>
<td></td>
</tr>
<tr>
<td>- Agence France Trésor</td>
<td></td>
</tr>
<tr>
<td><strong>Assumptions:</strong></td>
<td></td>
</tr>
<tr>
<td>The volumes presented were determined on the basis of global volumes traded in 2007</td>
<td></td>
</tr>
<tr>
<td>The volume of financial transactions worldwide in 2007, based on the Bruegel Policy Contribution, is equal to 70 x GDP, i.e. for 2010: 43,142,037 (global GDP; source: IMF) x 70 = 3,019,942,590 million euros.</td>
<td></td>
</tr>
<tr>
<td>France’s percentage share of global GDP in 2010 was then applied to that volume. France’s GDP in 2010 was 2,555,439 million dollars (Source: IMF), equivalent to 1,779,224 million euros, i.e. 4.1% of global GDP.</td>
<td></td>
</tr>
<tr>
<td><strong>Calculation</strong></td>
<td></td>
</tr>
<tr>
<td>The volume of equities represents 3% of the total volume of financial transactions (source: Bruegel Policy Contribution)</td>
<td></td>
</tr>
</tbody>
</table>

**All transactions on a financial instrument issued by an issuer resident in France for tax purposes**

**Sources:** |
| - Bruegel Policy Contribution: "Financial Transaction Tax: small is beautiful", February 2010, Zsolt DARVAS & Jakob VON WEIZSÄCKER |
| - IMF |
| - Agence France Trésor |
| **Assumptions:** |
| Identical data to those in scenario 1 were used applying a discount of 25% to reflect the market |

**All transactions carried out by a buyer and/or seller resident in France for tax purposes**

**Sources:** |
| - Bruegel Policy Contribution: "Financial Transaction Tax: small is beautiful", February 2010, Zsolt DARVAS & Jakob VON WEIZSÄCKER |
| - IMF |
| - Agence France Trésor |
| **Assumptions:** |
| Identical data to those in scenario 1 were used applying a discount of 25% to reflect the market |

**Sources:** |
| - Euronext Paris |
| - the Luxembourg Stock Exchange |
| - European Central Bank: Statistical Data Warehouse |
| - Agence France Trésor |

**Assumptions:** |
The total number of active listings from French issuers in the Luxembourg Stock Exchange was 4,992 at end-2010 |
The total number of active listings from French issuers in Euronext Paris was 2,838 at end-2010, 2,631 including non-French tax residents. Note that all securities traded on the Luxembourg Stock Exchange are settled by depositaries in Luxembourg. All securities issued by Euroclear Paris are settled by Euroclear France. Trading volumes for CAT and BTAN Treasury notes are provided by Agence France Trésor. |

**Calculation** |
The volume of bonds and negotiable debt securities settled on Euroclear, prorated by the distribution of French tax residents to non-French ones, and then prorated by the ratio of bonds on the Luxembourg Stock Exchange to those on Euronext Paris
## Tax on Financial Transactions: an implementation guide

<table>
<thead>
<tr>
<th>Taxation scenarios</th>
<th>Equity securities</th>
<th>Debt securities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Sources</strong></td>
<td><strong>Sources</strong></td>
</tr>
<tr>
<td>All transactions cleared through a</td>
<td>European Central Bank: Statistical Data Warehouse</td>
<td>European Central Bank: Statistical Data Warehouse</td>
</tr>
<tr>
<td>clearing house</td>
<td>No restatements were made</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Assumptions</strong></td>
<td><strong>Assumptions</strong></td>
</tr>
<tr>
<td></td>
<td>Since the data provided by the ECB do not detail the</td>
<td>Since the data provided by the ECB do not detail the</td>
</tr>
<tr>
<td></td>
<td>distribution of debt securities by instrument, the</td>
<td>distribution of debt securities by instrument, the</td>
</tr>
<tr>
<td></td>
<td>same distribution was applied as that used for debt</td>
<td>same distribution was applied as that used for debt</td>
</tr>
<tr>
<td></td>
<td>securities settled by Euroclear France</td>
<td>securities settled by Euroclear France</td>
</tr>
<tr>
<td></td>
<td>No restatements were made</td>
<td>No restatements were made</td>
</tr>
<tr>
<td>All transactions settled through a</td>
<td>European Central Bank: Statistical Data Warehouse</td>
<td>European Central Bank: Statistical Data Warehouse</td>
</tr>
<tr>
<td>central depository</td>
<td>No restatements were made</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Calculation</strong></td>
<td><strong>Calculation</strong></td>
</tr>
<tr>
<td></td>
<td>Total amount cleared on debt securities by LCH Clearnet</td>
<td>Total amount cleared on debt securities by LCH Clearnet</td>
</tr>
<tr>
<td></td>
<td>SA, prorated by instrument type.</td>
<td>SA, prorated by instrument type.</td>
</tr>
</tbody>
</table>
## Sources and assumptions of data for financial contracts

<table>
<thead>
<tr>
<th>Taxation scenarios</th>
<th>Notional value of futures and warrants</th>
<th>Option premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sources:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Beaugat Policy Contribution: &quot;Financial Transaction Tax: small is beautiful&quot;, February 2010, Zsolt DARPAS &amp; Jakub VON WEISSECKER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- IMF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bank for International Settlements, OTC derivatives market activity in the second half of 2009, May 2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- World Federation of Exchanges, Data Warehouse, 2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Euro</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assumptions:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The volumes presented were determined on the basis of global volumes traded in 2010, both on- and off-exchange.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volumes provided are in dollars.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The conversion rate applied is $1 = €9.700018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The volume was then prorated by France's percentage share of global GDP, namely 4.1%.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Calculation for listed futures
- No restatements were made (source: World Federation of Exchanges)

### Calculation for listed options
- No restatements were made (source: World Federation of Exchanges)

### Calculation for futures traded OTC but executed on an organised exchange
- No restatements were made (source: World Federation of Exchanges)

### Calculation for options traded OTC but executed on an organised exchange
- No restatements were made (source: World Federation of Exchanges)

### Calculation for OTC futures
- No restatements were made (source: Bank for International Settlements)

### Calculation for OTC options
- The prorated amount applied to the notional value is generally 1 to 20. This rate of 5% was applied to the notional value of the OTC options to calculate the premium of those options (source: Bank for International Settlements)

### Cleared financial contracts

<table>
<thead>
<tr>
<th>Sources</th>
<th>European Central Bank: Statistical Data Warehouse</th>
</tr>
</thead>
</table>

### Assumptions:
The volume of transactions processed by clearing houses authorised to trade on the French market was 28,289 billion in 2010. The distribution of notional value between futures and options is 89% versus 11% according to BIS data. The ratio of premium to notional value on derivatives is generally 1 to 20 according to BIS data.

### Calculation
- The scale applied to futures is the rate applied to listed equity futures.
- The scale applied to options is the rate applied to listed options

### Assumptions:
The value of settled derivative trades are relatively insignificant

### Settled/ delivered derivatives

<table>
<thead>
<tr>
<th>Sources</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Assumptions</th>
</tr>
</thead>
</table>

The value of settled derivative trades are relatively insignificant
## Tax on Financial Transactions: an implementation guide

<table>
<thead>
<tr>
<th>Taxation scenarios</th>
<th>Volumes on units or shares in collective investment schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sources:</strong></td>
<td>- AMF, 2010 Annual Report</td>
</tr>
<tr>
<td><strong>Assumptions:</strong></td>
<td>AUM of collective investment schemes in France stand $1,542.1$ billion (source: Autorité des Marchés Financiers) A trading volume equal to one-third of total AUM was assumed</td>
</tr>
<tr>
<td><strong>Calculations:</strong></td>
<td>A trading volume equal to one-third of total AUM was assumed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Taxation scenarios</th>
<th>Volumes on units or shares in collective investment schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sources:</strong></td>
<td>- Bank of France, Annual Report, Balance of payments, 2010</td>
</tr>
<tr>
<td><strong>Assumptions:</strong></td>
<td>Tax residents held $362.1$ billion euros in units or shares of non-French collective investment schemes at end-2010 and $1,325.3$ billion euros in units or shares of collective investment schemes governed by French law So, French residents held $1,687.4$ billion euros in units or shares in collective investment schemes A trading volume equal to one-third of total AUM was assumed</td>
</tr>
<tr>
<td><strong>Calculations:</strong></td>
<td>A trading volume equal to one-third of total AUM was assumed</td>
</tr>
</tbody>
</table>
5.2.3 Selection of tax rates

The rates suggested in this report are directly based on the rates that have been successfully applied within the framework of the UK and Taiwanese taxes on financial transactions.

One factor in the success of the UK and Taiwanese taxes is the moderate tax rates that have been set by these governments. Limiting the tax burden in this way (0.3 percentage points of GDP in the case of the UK tax, which is restricted to equities, and 0.8 percentage points of GDP for the Taiwanese tax, which covers all financial instruments) limits the incentive for the players concerned to circumvent the tax55.

The rate of the former French tax on stock market transactions was set at 0.3% for the first 153,000 euros of each transaction and at 0.15% thereafter. This rate was applied regardless of the object of the trading, whether equities, bonds or government annuities and regardless of whether the trade in question was a spot or a forward transaction.

The Taiwanese tax applies to the trading of all types of financial instruments, such as equities and Taiwanese corporate bonds as well as futures. The rates applied are as follows:

- 0.3% for equities
- 0.1% for stock certificates, warrants and TRDs
- 0.1% for corporate bonds
- 0.004% for equity-linked futures
- 0.0000125% for 30-day debt futures
- 0.0000125% for 10-year government debt futures
- 0.00025% on commodity futures
- 0.1% for options

The UK SDRT, applies to equity purchases at the rate of 0.5%.

---

55 Leading Group “Globalising solidarity: the case for financial levies”, June 2010
The rates set out in the following table, which provides a summary of the scales that have been examined, were chosen to simulate the potential receipts for each scenario:

<table>
<thead>
<tr>
<th>Level of taxation</th>
<th>Low rate</th>
<th>Medium rate</th>
<th>High rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity securities</td>
<td>0.15%</td>
<td>0.2% (¹)</td>
<td>0.5%</td>
</tr>
<tr>
<td>Units or shares in collective investment</td>
<td>0.05%</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Corporate and municipal bonds</td>
<td>0.002%</td>
<td>0.01%</td>
<td>0.02%</td>
</tr>
<tr>
<td>Government securities</td>
<td>0.001%</td>
<td>0.005%</td>
<td>0.01%</td>
</tr>
<tr>
<td>Debt issues with a maturity of &lt; 1 year</td>
<td>0.0005%</td>
<td>0.001%</td>
<td>0.005%</td>
</tr>
</tbody>
</table>

(¹) Compared with the Taiwanese tax, which has a rate of 0.3% per transaction involving a debt security, the report selected the rate of 0.2% as the volume and base of the equity securities covered by the scenario are greater than in Taiwan.
The rates selected for derivatives are the following

<table>
<thead>
<tr>
<th>Level of taxation</th>
<th>Low rate</th>
<th>Medium rate</th>
<th>High rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed equity-linked futures</td>
<td>0.0025%</td>
<td>0.005%</td>
<td>0.01%</td>
</tr>
<tr>
<td>Listed interest rate futures</td>
<td>0.0005%</td>
<td>0.001%</td>
<td>0.002%</td>
</tr>
<tr>
<td>Other listed futures (commodities and exotics)</td>
<td>0.005%</td>
<td>0.01%</td>
<td>0.02%</td>
</tr>
<tr>
<td>Equity-linked futures traded OTC but executed</td>
<td>0.005%</td>
<td>0.01%</td>
<td>0.02%</td>
</tr>
<tr>
<td>Interest rate futures traded OTC but executed</td>
<td>0.001%</td>
<td>0.002%</td>
<td>0.004%</td>
</tr>
<tr>
<td>Other futures traded OTC but executed on-exchange (commodities and exotics)</td>
<td>0.01%</td>
<td>0.02%</td>
<td>0.04%</td>
</tr>
<tr>
<td>OTC equity-linked futures</td>
<td>0.01%</td>
<td>0.02%</td>
<td>0.04%</td>
</tr>
<tr>
<td>OTC interest rate futures</td>
<td>0.002%</td>
<td>0.004%</td>
<td>0.008%</td>
</tr>
<tr>
<td>Other OTC futures</td>
<td>0.02%</td>
<td>0.04%</td>
<td>0.08%</td>
</tr>
<tr>
<td>Listed options (premium)</td>
<td>0.025%</td>
<td>0.05%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Options traded OTC but executed on-exchange (premium)</td>
<td>0.05%</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td>OTC options (premium)</td>
<td>0.1%</td>
<td>0.2%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

The tax scale for financial contracts was chosen to encourage the parties to the contract to negotiate and settle transactions on central platforms. That is why the tax rates proposed for derivatives transactions that are both settled and traded on central platforms are half the rates applied to derivatives transactions that are only centrally settled but negotiated off-platform, which in turn are half the rates applied to derivative transactions that are neither settled nor traded on any kind of central system.

The difference between the rates applied to options and futures is due to the different tax bases for the two types of instruments. Futures are taxed on the basis of notional amount whereas options are taxed on the basis of premium payouts.
The proposed tax rate scale also takes into consideration the nature of the futures’ underlyings.

For example, the lowest rate is applied to interest rate futures. Interest rate derivatives account for a large proportion of volumes.

The rate applied to futures whose underlying is a stock or an index is five times higher than that applied to interest rate futures. This higher rate is due to the lower volumes and sometimes speculative nature of these derivatives.

The rate for other futures – mainly commodity or exotic derivatives – is twice as high as that applied to equity futures.

In the first instance, no distinction has been made between the different types of assets underlying options.

It should also be made clear that the rates for options are higher, because they apply only to the value of the premiums.

Nevertheless, certain complex financial contracts may give rise to circumvention. First of all, it is worth distinguishing between simple and complex financial contracts. Simple financial contracts are easy to standardise. Such standardisation is what the parties to the contract are looking for. However, flexibility in the drafting of some “complex” financial contracts may allow the notional value to be artificially reduced through special arrangements. In relation to this, it seems necessary to mention the possibility of switching from taxing the notional value to taxing the flow of cash and securities arising from the financial contracts

- either tax the flows through the intermediary of clearing houses in the case of financial contracts accepted for clearing,
- or tax the flows through the intermediary of the parties’ own post-trade management systems, in the case of financial contracts not accepted for clearing.
5.2.4 Impacts of circumvention mechanisms, and adjustment indicators

The introduction of a tax on financial transactions will not have a neutral impact on the financial markets. For this reason, the adjustment indicator incorporates the “maximum anticipated” fall in trading volumes due to circumvention of taxation.

The three risks associated with circumvention highlighted in this publication also appear in the IMF’s latest report\(^56\). These include:

- the non-reporting of taxable transactions
- the transfer of trading volumes abroad
- substitution into non-taxed financial instruments

The first risk seems low for FTTs where the bulk of collection lies with well-regulated market infrastructures (such as negotiation platforms, clearing houses, and depositories). Indeed, these players already charge their customers transaction fees and would simply be collecting the tax from them, not paying tax themselves. Given the penalties for non-collection, these players would have no interest in not collecting the tax (as is already the case for Euroclear-UK in the context of UK stamp duty). In the case of financial contracts that are not eligible to central counterparty servicing, a system whereby parties present their contract for electronic stamping (stamping without which the contract will be unenforceable and worthless) will ensure that the taxable transactions are reported, and the associated taxes paid.

Finally, the purpose of the report is to suggest a system of taxation that provides the widest possible tax base, in order to avoid any risk of substitution of a product (and particularly a switch from trading in equities and bonds to equity or bond derivatives).

---

Accurately anticipating expected impacts on trading volumes is a difficult exercise. The assumptions put forward are not based on official data.

<table>
<thead>
<tr>
<th>Level of taxation</th>
<th>Adjustment indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low rate (based on the impôt de bourse)</td>
<td>Medium rate (based on the Taiwanese tax)</td>
</tr>
<tr>
<td>All transactions on a financial instrument issued by an issuer resident in Country X for tax purposes (similar to the Taiwanese tax)</td>
<td>-5%</td>
</tr>
<tr>
<td>All transactions carried out by a buyer and/or seller resident in Country X for tax purposes</td>
<td>0%</td>
</tr>
<tr>
<td>All transactions cleared through a clearing house authorised to operate in the domestic financial markets</td>
<td>-15%</td>
</tr>
<tr>
<td>All transactions settled through a central depository authorised to operate in the domestic financial markets (similar to UK stamp duty)</td>
<td>-10%</td>
</tr>
</tbody>
</table>

For some financial instruments, intraday trading accounts for a significant proportion of trades. In order to incorporate this assumption into the receipt simulation, we increased the adjustment indicator for the following financial instruments:

- Treasury bonds,
- equity-linked futures and options,
- interest-rate linked futures and options

For these financial instruments, the indicators are the following: -50% if a low tax rate is applied, -60% for an average tax rate, and -70% for a high tax rate.
5.2.5 Simulations of receipts for each of the proposed scenarios taking the adjustment indicators into account

The table below presents the simulation for France for each scenario, applying the adjustment indicators presented in the previous paragraph.

<table>
<thead>
<tr>
<th>Taxation scenarios</th>
<th>Low rate</th>
<th>Average rate</th>
<th>High rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scenario 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equities</td>
<td>5,324</td>
<td>5,978</td>
<td>14,045</td>
</tr>
<tr>
<td>Debt securities</td>
<td>1,058</td>
<td>3,831</td>
<td>8,583</td>
</tr>
<tr>
<td>Units or shares in collective investment schemes</td>
<td>242</td>
<td>407</td>
<td>814</td>
</tr>
<tr>
<td>Financial contracts</td>
<td>750</td>
<td>1,200</td>
<td>1,962</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>7,374</td>
<td>11,217</td>
<td>26,305</td>
</tr>
<tr>
<td><strong>Scenario 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equities</td>
<td>4,203</td>
<td>4,484</td>
<td>9,008</td>
</tr>
<tr>
<td>Debt securities</td>
<td>830</td>
<td>2,723</td>
<td>5,709</td>
</tr>
<tr>
<td>Units or shares in collective investment schemes</td>
<td>278</td>
<td>445</td>
<td>780</td>
</tr>
<tr>
<td>Financial contracts</td>
<td>142</td>
<td>220</td>
<td>366</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>6,042</td>
<td>8,553</td>
<td>18,258</td>
</tr>
<tr>
<td><strong>Scenario 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equities</td>
<td>4,387</td>
<td>5,505</td>
<td>12,042</td>
</tr>
<tr>
<td>Debt securities</td>
<td>203</td>
<td>752</td>
<td>1,568</td>
</tr>
<tr>
<td>Units or shares in collective investment schemes</td>
<td>242</td>
<td>407</td>
<td>817</td>
</tr>
<tr>
<td>Financial contracts</td>
<td>142</td>
<td>220</td>
<td>366</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>4,973</td>
<td>6,892</td>
<td>14,790</td>
</tr>
<tr>
<td><strong>Scenario 4</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equities</td>
<td>7,340</td>
<td>8,699</td>
<td>19,030</td>
</tr>
<tr>
<td>Debt securities</td>
<td>620</td>
<td>2,220</td>
<td>4,642</td>
</tr>
<tr>
<td>Units or shares in collective investment schemes</td>
<td>242</td>
<td>407</td>
<td>817</td>
</tr>
<tr>
<td>Financial contracts</td>
<td>750</td>
<td>1,200</td>
<td>1,962</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>8,960</td>
<td>12,533</td>
<td>26,449</td>
</tr>
</tbody>
</table>

The estimated range of receipts is between 5 billion and over 25 billion euros per annum for the most intensive scenario.
Naturally, it is desirable to choose a scenario that is likely to achieve the levels of receipts hoped for using rates that are relatively neutral for the markets concerned.

### 5.3 Scenario evaluation criteria

The methodology used to identify the target taxation scenario requires a detailed examination of the following criteria:

- Level of receipts envisaged
- Anticipated impacts on the markets
- Technical and legal feasibility of the taxation
- Stability and sustainability of receipts

#### 5.3.1 Level of receipts envisaged

As a reminder, the purpose of the system is to provide a tax on that will affect financial transactions carried out unilaterally, defined as:

- the purchase or sale of a financial agreement
- an agreement that establishes a right or an obligation to buy or sell a financial instrument
- an exchange of payments based on a financial instrument, an interest rate, an index or a market event for example.

This definition clearly establishes that the tax is not limited to transactions involving the transfer of ownership of a financial instrument, but also applies to other types of financial instrument transactions that may not involve the transfer of ownership (e.g. unexercised options, flows linked to futures, forwards that do not give rise to a settlement of securities, and swaps), but that have a similar effect.

The expected level of receipts will be the critical factor that will ultimately decide between two scenarios with equal potential.

The amounts envisaged were presented in the table relating to the simulated receipts for each of the proposed scenarios. The estimated receipts vary according to two components: the tax base and the rate applied.

#### 5.3.2 Anticipated impacts on the markets

The introduction of a financial transaction tax is bound to have a direct impact on the financial markets.

However, it is difficult to make a quantitative assessment of the impact.
The beginnings of an empirical conclusion can nevertheless be drawn. First of all, a large number of countries already have significant financial transaction taxes: 2% of GDP in the case of Hong Kong; 0.8% of GDP in the case of Taiwan; 0.5% of GDP in the case of South Africa and Switzerland\(^5\), and 0.3% of GDP in the United Kingdom (IMF figures, March 2011). Secondly, these countries do not seem to be experiencing any particular problems in relation to either their financial markets or the access of their companies to capital and investors.

There is no reason to suppose that the introduction of a similar tax would do more harm in any given country than it does in the United Kingdom, Taiwan or South Africa.

Obviously, the taxation system must to the greatest extent possible avoid leading to the relocation of trading activities and of investors switching to non-taxed securities or financial products.

5.3.3 Legal and technical feasibility of the taxation

Certain “best practices” from existing or previous financial transaction taxes were examined above, in the review of the technical and legal feasibility of the taxation.

The international, European and local judicial and legal constraints were also examined above.

5.3.3.1 Legal feasibility

The introduction of a unilateral financial transaction tax requires care with respect to compliance with international law on the one hand, and the avoidance of multiple taxation phenomena on the other.

The introduction of a unilateral financial transaction tax must also ensure that it complies with frequent provisions on free movement of capital and non-discrimination. In particular, this means that the FTT must not introduce unjustifiable differences in tax treatment between taxpayers based on category or nationality.

---


5.3.3.2 Technical feasibility

The technical feasibility of introducing a tax on financial instruments, particularly as regards collection, must be determined at the outset. Thanks to the comprehensive computerization of transactions, FTTs are not administratively more difficult to collect than other taxes.

Concerning derivatives, regulations relating to mandatory registration and clearing are being adopted in many jurisdictions. These frameworks will help reduce trading risks and costs. Some experts believe that eventually only a third of OTC transactions will remain bilaterally settled.

Finally, proposals to introduce regional clearing systems are being considered. Such systems would become the central counterparty to all eligible transactions.

5.3.4 Stability and sustainability of receipts

A review of existing or previous FTT systems has helped to determine the best practices that ought to be implemented.

Based on the UK stamp duty system, the cost of collection by the tax authorities is likely to be low. Indeed, in 2009, the resources generated by the SDRT accounted for 0.2% of GDP and 0.7% of total funds collected by the UK Treasury (HMRC), while the cost of collecting and processing UK stamp duty was much less than 0.1% of the funds collected by HMRC.

5.4 Summary of the four scenarios

5.4.1 Scenario 1: Taxation of all transactions on a financial instrument issued by a national issuer resident for tax purposes

<table>
<thead>
<tr>
<th>Scenario 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collecting/reporting agent</strong></td>
</tr>
<tr>
<td>Central depository authorised to operate in the French financial markets</td>
</tr>
</tbody>
</table>

**Strengths**
- Coverage or tax base: MEDIUM
- All financial instruments issued by an issuer resident in Country X for tax purposes on the Country X’s financial markets
- All subscriptions/redemptions of units or shares in collective investment schemes governed by domestic law

**Weaknesses**
- Securities issued by a non-national tax resident on the French financial markets (e.g. Arcelor Mittal)
- Financial contracts that do not involve the settlement of securities
- All subscriptions/redemptions of units or shares in foreign collective investment schemes carried out by national tax residents

**INTERNAL**
- Centralisation of collection within a single entity that has an appropriate information system

**Judicial or legal feasibility:** HIGH
- Compliance with international, European and local law
- Absence of multi-taxation phenomena

**EXTERNAL**
- Risk of circumvention: LOW
- Any central depository wishing to operate in the domestic market (i.e. wishing to market the central depository service to domestic issuers) will be required to collect tax, regardless of its geographic location, nationality or tax residence

**Impact on the financial markets:** MEDIUM
- Low risk of non-reporting of transactions
- Reduction in the formation of speculative bubbles in Country X’s market
- Buyers switching to derivative products that are not subject to settlement
- Reduction in the volatility of Country X’s financial market
- Loss of competitiveness of Country X’s financial market place
- Reduction in the liquidity of Country X’s financial market
- Migration of mutual funds overseas (particularly Luxembourg)
### 5.4.2 Scenario 2: Taxation of all transactions carried out by a buyer/seller resident in Country X for tax purposes

**Scenario 2**

<table>
<thead>
<tr>
<th>Collecting/reporting agent</th>
<th>Taxable person</th>
<th>Taxable event</th>
</tr>
</thead>
</table>
| - Buyer/seller in the case of professional investors  
  - Custody account-keeper of non-professional customers | Buyer/Seller resident in Country X for tax purposes | Trading |

#### Strengths

<table>
<thead>
<tr>
<th>Coverage or tax base: HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>All transactions carried out by a buyer/seller resident in Country X for tax purposes</td>
</tr>
<tr>
<td>All subscriptions/redeemptions of units or shares in collective investment schemes made by tax residents of Country X</td>
</tr>
</tbody>
</table>

#### Weaknesses

<table>
<thead>
<tr>
<th>Technical feasibility: LOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactions carried out by a tax resident of Country X</td>
</tr>
<tr>
<td>Subscriptions/redeemptions of units or shares in collective investment schemes governed by the law of Country X made by non-Country X tax residents</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERNAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence of information systems among account keepers allowing disclosure of collection.</td>
</tr>
<tr>
<td>Transactions are recorded and professional investors' positions are monitored</td>
</tr>
<tr>
<td>Different administrative processing for professional and non-professional investors</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Judicial or legal feasibility: HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complies with international, European and local law</td>
</tr>
<tr>
<td>Absence of multi-taxation phenomena</td>
</tr>
</tbody>
</table>

#### Opportunities

<table>
<thead>
<tr>
<th>Risk of circumvention: HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in tax residence on the part of investors resident in Country X for tax purposes. However, this would be difficult to achieve given the amounts involved</td>
</tr>
</tbody>
</table>

#### Threats

| Difficult to monitor the completeness of all disclosures, which might lead to the under-reporting of transactions |

<table>
<thead>
<tr>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on the financial markets: LOW</td>
</tr>
<tr>
<td>Drop in the number of transactions carried out by French tax residents</td>
</tr>
<tr>
<td>Reduction in the liquidity of the market of Country X</td>
</tr>
<tr>
<td>Migration of mutual funds oversea (particularly Luxembourg)</td>
</tr>
</tbody>
</table>
5.4.3 Scenario 3: Taxation of all transactions cleared through a clearing house authorised to operate in Country X’s financial markets

| Scenario 3 |  |
|---|---|---|
| **Collecting/reporting agent** | **Taxable person** | **Taxable event** |
| Clearing house authorised to operate in the Country X’s financial markets | Buyer/Seller | Clearing |

### Strengths

- Coverage or tax base: LOW
- Instruments cleared through a resident clearing house authorised to operate in Country X’s financial markets
- All subscriptions/redemptions of units or shares in collective investment schemes governed by Country X’s law

### Weaknesses

- Financial instruments cleared bilaterally (OTC transactions)

### Internal

- Technical feasibility: HIGH
- Centralisation of collection within a few entities that appropriate information systems

### Judicial or legal feasibility: HIGH

- Complies with international, European and local law
- Absence of multi-taxation phenomena

### Opportunities

- Risk of circumvention: LOW
- A proposal to introduce a single European clearing system is currently being considered
- Trend towards the increasing standardisation of financial contracts and the obligation to go through a clearing house

### Threats

- Clearing houses are required to submit their operating rules to the approval of the local financial authority in order to be able to operate in Country X’s financial markets.
- Low risk of under-reporting of financial transactions
- Higher counterparty risk in the case of bilateral clearing
- Trend towards regulatory capital requirements for investors that do not go through a clearing house

### Impact on the financial markets: MEDIUM

- Reduction in the volume of OTC transactions using a clearing house, in favour of bilateral clearing
### 5.4.4 Scenario 4: Taxation of all transactions settled through a central depository authorised to operate in Country X's financial markets

#### Scenario 4

<table>
<thead>
<tr>
<th>Collecting/reporting agent</th>
<th>Taxable person</th>
<th>Taxable event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central depository authorised to operate in Country X's financial markets</td>
<td>Buyer/seller</td>
<td>Settlement</td>
</tr>
</tbody>
</table>

#### Strengths

- **Coverage or tax base**: HIGH
  - Securities deposited with a depository authorised to operate in Country X's financial markets
  - All subscriptions/redemptions of units or shares of Country X's law collective investment schemes
  - All financial contracts entered into by a tax resident of Country X (or one of its foreign subsidiaries)

- **Technical feasibility**: HIGH
  - Centralisation of collection within a single entity with an appropriate information system
  - High concentration of service providers authorised to carry out the service of mutual fund depository in Country X's financial markets

- **Judicial or legal feasibility**: HIGH
  - Complies with international, European and local law
  - Absence of multi-taxation phenomena

#### Weaknesses

- Securities deposited with a depository that is not authorised to operate in Country X's financial markets

#### Opportunities

- **Risk of circumvention**: LOW
  - Any central depository wishing to operate in the domestic market (i.e., wishing to market the central depository service to domestic issuers) will be required to collect tax, regardless of its geographic location, nationality or tax residence
  - French mutual fund depositaries are investment service providers licensed by the local financial authority
  - Low risk of under-reporting of financial transactions

#### Threats

- **Impact on the financial markets**: MEDIUM
  - Reduction in the formation of speculative bubbles on the Country X's financial market
  - Buyers switching to derivative products that are not subject to settlement
  - Reduction in the volatility of Country X's financial market
  - Loss of competitiveness in Country X's financial market place
  - Reduction in the liquidity of Country X's financial market
  - Migration of mutual funds overseas (particularly Luxembourg)
5.4.5 Selection of the target scenario

The following table provides a summary of the criteria examined above:
The SWOT matrices for the four selected scenarios show that scenario 4 is the most satisfactory overall.

It receives the maximum score for tax base, technical and legal feasibility and the sustainability and stability of the tax.

This scenario involves a tax collected primarily by financial transaction infrastructure companies authorized to operate in the domestic market. This scenario is similar to the UK SDRT system.

Financial contracts entered into by a tax resident or one of its foreign subsidiaries are also subject to taxation through stamp duty, based on the UK model. Stamp duty will be collected by derivative clearinghouses, or by the contracting party themselves. The taxable event will be the signing of a financial contract.

In the case of units or shares in collective investment schemes, the tax will be payable by the buyers and sellers. It will be collected primarily by the mutual fund depositories, upon settlement of the subscription or redemption.

This proposed FTT covers the vast majority of transactions on financial instruments targeted by the current tax proposal and is also highly feasible from a technical and legal point of view. Moreover, the tax will be sustainable, since the risks of circumvention appear limited, as does the anticipated impact on the domestic financial markets.
6 - Conclusion and recommendation of a scenario

A unilateral financial transaction tax is defined by the following parameters:

- the type of instruments taxed: this determines the tax base, which must be as broad as possible
- the taxable event: this corresponds to the stages of the order processing chain that give rise to the payment of tax
- the collecting/reporting agent: this is the player in charge of collecting the tax and/or reporting taxable transactions
- taxable persons or final tax payers: these are the parties that actually bear the cost of the tax
- the tax scale

6.1 Presentation of the selected taxation scenario

Building from the UK’s successful tax, this report recommends the implementation of a domestic FTT on:

- purchases of domestic financial securities, irrespective of the nationality or location of buyers; the tax is collected primarily by central depositories authorised to perform the settlement and delivery of transactions in domestic securities. For those transactions not centrally settled, the tax is collected either by custodians banks that are members of these central depositories, or by brokers authorized to negotiate domestic securities;
- transactions involving financial contracts to which one of the parties is a national (a national company or a foreign subsidiary of a national company); the tax is collected by clearinghouses (or, failing, collected through the post-trade contract tracking systems used by the parties themselves).
6.1.1 Parameters that determine the selected scenario

The scenario used in this report for the establishment of a unilateral financial transaction tax, using the example of France, consists of the following parameters:

1. Collection base: financial instruments
   - Equity securities
   - Debt securities
   - Mutual fund units or shares
   - Financial contracts

2. Taxable events
   - Cash settlement/Delivery of securities
   - Subscription/redemption of units or shares
   - Signing of the contract

3. Collecting/reporting agent
   - Central depository authorised to operate in Country X’s financial markets
   - Mutual fund depositary
   - Country X's parties to contract (and subsidiaries)

4. Taxable persons or final tax payers
   - Buyers and/or Sellers
     - Professional investors:
       - Banks
       - Insurance companies
       - Institutional investors
       - Hedge funds
     - Non-professional investors

An explanation regarding the choice of this taxation scenario is provided further in this report.
6.1.2 Collection base by financial instrument

Trading volumes and therefore the collection base differ according to the financial instruments traded.

6.1.2.1 Shares

The tax basis chosen is all transactions in shares issued from domestic company, and the primary collection method chosen is the central settlement of transactions.

In France, the central depository that is authorised to settle transactions in French shares, is Euroclear France. The figures used here for share trading volumes come from the European Central Bank’s electronic database.

In 2010, Euroclear-France processed settlement instructions for equity securities totalling 5,437,125 million euros\(^6\) (2.7 x the France’s GDP in 2010).

No reliable data is available about the volume of the remaining equity trades that are settled outside of Euroclear-France (e.g. transactions that are netted internally by a custodian or broker that is a member of Euroclear-France, before they reach Euroclear).

Since custodians and brokers bill their clients for all transactions – even those that do not need to go through Euroclear – these non-Euroclear transactions are easily traceable. The tax authorities will audit the accounts of custodians and brokers on a regular basis, to check that they are in fact collecting and paying the tax on those remaining transactions not settled in Euroclear.

6.1.2.2 Bonds

The data on the trading volumes of debt securities also come from the European Central Bank.

In 2010, Euroclear France processed settlement instructions on

- bonds totalling 16,866,094 million euros
- government securities totalling 27,042,656 million euros
- debt securities with a maturity of one year or under totalling 41,992,951 million euros.

A number of organisations other than Euroclear-France operate on the central depository market for bonds issued by French companies. The Luxembourg-based operator Clearstream, for example, acts as the central depository for a significant number of French corporate bonds.

6.1.2.3 Units or shares in collective investment schemes

As of 31 December, 2010, the total assets under management of collective investment schemes governed by French law was 1,542 billion euros61.

<table>
<thead>
<tr>
<th>Category of collective investment scheme</th>
<th>AUM € billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>General purpose fund</td>
<td>1,217.4</td>
</tr>
<tr>
<td>ARIA fund</td>
<td>15.7</td>
</tr>
<tr>
<td>Fund of hedge funds</td>
<td>8.7</td>
</tr>
<tr>
<td>Managed futures fund</td>
<td>0.3</td>
</tr>
<tr>
<td>Private equity fund</td>
<td>36</td>
</tr>
<tr>
<td>Employee savings fund</td>
<td>88.6</td>
</tr>
<tr>
<td>REIT</td>
<td>21.6</td>
</tr>
<tr>
<td>French real estate fund</td>
<td>8.8</td>
</tr>
<tr>
<td>SPV</td>
<td>84</td>
</tr>
<tr>
<td>French open-ended investment fund</td>
<td>61</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,542.1</td>
</tr>
</tbody>
</table>

Source: AMF 2010 Annual Report

We estimate that on average subscriptions/redemptions account for a third of total assets per annum.

In 2010, the total amount of subscriptions/redemptions stood at approximately one-third of total AUM, or 514 billion euros.

Consideration may be given to excluding money market funds from taxation since, given their low returns, there is a risk that they will disappear if subscriptions are taxed.

6.1.2.4 Taxing transactions that are not centrally settled

Various categories of securities transactions do not lead to a transfer of ownership at the level of the central securities depository.

Transactions netted by brokers or custodians

Several layers of intermediaries are likely to exist between the individual owner of securities and the central securities depository. The first of these is the owner’s broker, which acts as the intermediary between the owner and the market, each time the owner wishes to buy or sell a security. The next intermediary is the custodian of the securities.

61 Autorité des Marchés Financiers “Annual Report”
This will be a financial institution that is a direct member of the central securities depository, and which is responsible for the custody of the securities. Many brokers are not direct members of the central securities depository: they have only indirect membership through the account that they have opened with a custodian that is a direct member.

Each broker and each custodian will have many clients. When two of their clients carry out symmetrically opposite transactions, these two transactions “cancel one another out” at the level of the broker or the custodian. Transactions that cancel one another do not affect the overall securities position of the broker or custodian. In such cases, these intermediaries need not forward to the central depository the two opposing transactions that cancel one another out at their level.

Intraday and high-frequency trading

High-frequency trading is a trading practice that consists of taking a large number of positions, but for very short periods. It involves speculating on small fluctuations in stock prices, in an attempt to jump from one peak to another, and thus accumulate substantial gains little by little. High-frequency traders often retain their positions for less than a minute before selling. They do not need to keep their positions during non-trading hours; they sell them before the end of the trading day. Thus, intraday traders do not affect the overall end-of-day positions of their brokers or custodians, with the result that these transactions do not reach the central securities depository.

Options for capturing transactions that do not go through the central depository

Mandatory in-own-name registration: some countries have decided to go for mandatory in-own-name registration of securities (ie prohibiting the holding of securities in bearer form). In 2011, this measure is technically feasible thanks to the progress of computer technology. If all securities are registered in the name of their end owner at the level of the central securities depository, and holding securities in street name is prohibited, then all transactions will end up in the central depository.

Collection by brokers: intraday traders often open special securities accounts with their brokers, specifically designed for intraday trading. This allows them to benefit from reduced transaction fees from their brokers (owing to the fact that the broker itself does not have to pay delivery fees at the level of the central depository). This difference in charges makes it easy to identify transactions originating from intraday traders, and to require brokers to levy tax on such trades. A similar situation of collection by brokers already exists in the United Kingdom, with regard to the collection of stamp duty reserve tax on transactions outside of the central depository62.

Collection by trading platforms: it is also possible to collect the tax on intraday trading via the trade negotiation platforms (these may be actual stock exchanges, such as Euronext, or simple multilateral trading systems, like Chi-X, or even ad hoc platforms between a few major market participants). The introduction of the tax into law will require the trading platforms that operate in the domestic market (those that are

---

62 Collection of UK Stamp Duty on intraday and high-frequency trading: through the brokers for these transactions: see paragraphs 13.3 and 13.12 of the Stamp Duty Manual
authorised to process trades in domestic securities) to apply specific, SWIFT-style markers to the different categories of trading instructions that they process, depending on whether or not the transactions are intended to be centrally settled. Accordingly, instructions from brokers’ intraday clients will be directly identifiable by the trading platforms. The platforms will then be tasked with collecting tax on all transactions that are not intended to be transferred to the central depository.

6.1.2.5 Financial contracts

Taxable base and method of collection

The tax base for derivatives is more complex because it differs from product to product:

- standardised financial contracts (such as futures and certain swaps), the drafting of which is carefully regulated (only standardised contracts are accepted by clearinghouses);
- complex financial contracts, that have no clear guidelines governing the way they are drafted, and which are likely to be rewritten so as to artificially minimise the notional value stated on the contract.

To determine the role of derivatives clearinghouses in the collection of the tax on derivatives contracts, it is important to distinguish between the two main services that such clearinghouses provide.

The first is that of central counterparty (CCP): the clearinghouse becomes the universal counterparty to all participants, interposing itself between each buyer and seller. The advantage of this for the participants is that the clearinghouse is set up so that it cannot default. Consequently, each market participant gains the certainty that even if their ultimate counterparty fails, the clearinghouse will remain standing, and that all contracts between the market participant and the clearinghouse will be honoured.

The second service that a clearinghouse provides, is that of multilateral netting of deliveries. Instead of each participant having to deliver what it owes to each of the myriad other parties it has been trading with (and therefore having to carry out a large number of deliveries), thanks to the central clearinghouse it only has one delivery to make: to the clearinghouse itself.

Most modern clearinghouses function on an automated, computerized basis. But it is difficult for clearinghouses to accurately assess the risk associated with complex derivatives. Now, it is precisely this degree of risk that determines the amount of collateral that the clearinghouse must demand from the parties to the contract, before being able to act as the central counterparty: it is not compatible with their business model.

Nevertheless, on a purely technical level, there is nothing to stop a clearer from playing the role of a settlement intermediary between the two parties to a complex financial contract, as long as this clearinghouse is not itself liable for the contract’s obligations (i.e., as long as it is not itself a party to the contract). Indeed, if the clearinghouse is not a party to the contract, then the counterparty risk (the default risk) rests solely on the
two financial institutions that have entered into the contract. The clearinghouse does not take any risk at all: what it owes to each party is simply what it receives from the other, and nothing more.

The law that creates the tax on derivatives transactions should make it compulsory, for all domestic companies that enter into derivative contracts, to use a clearinghouse for post-trade settlement, regardless of whether the contract is eligible to CCP servicing or not. Clearinghouses will then work either as the central counterparty, for those standardised contracts that are eligible for CCP, or as a simple intermediary for cash payments and securities deliveries arising from the contracts, for those non-standardised complex derivatives that are not eligible to CCP servicing.

In this approach, contractual resort to an authorised clearinghouse at least for settlement servicing of derivatives, will be a mandatory condition for the stamping of domestic financial contracts (both electronic and paper stamping of contracts). Unstamped contracts will be deemed unenforceable. The tax authorities may involve the clearinghouses in the work of stamping domestic derivative contracts.

In the case of standardised financial contracts, the clearinghouses may levy the tax when the contract is accepted for CCP clearing, as a percentage of the contract’s notional value.

For complex financial contracts, where there is a high risk of the notional value being artificially lowered, the clearinghouses may levy the tax as a percentage of the cash and securities flows arising from the contracts.

Calculation of trading volumes and collectable amounts

It is difficult to determine accurately the volume of financial contracts entered into by the companies of a given country. The approach taken in this report has been to apply the sample country’s percentage share of global GDP in 2010 to the global volume of financial transactions from 2010.

French GDP accounted for 4.1% of the world total in 2010.

Data for derivatives transactions on regulated exchanges come from the World Federation of Exchanges\(^63\) for 2010.

Data for derivatives transactions traded on the OTC market come from the Bank for International Settlements (BIS)\(^4\). Note that French banks regularly feature among the leading players on the derivatives markets.

The conversion rate used is the average exchange rate for 2010\(^65\), namely $1 = €0.700918

---

\(^{63}\) World Federation of Exchanges

\(^{64}\) Bank for International Settlements, OTC derivatives market activity in the second half of 2010, May 2010

http://www.bis.org/publ/othy1105.htm

\(^{65}\) Source fxtop, http://fxtop.com/fr/
Applying both the figure of 4.1% for France’s share in global volumes and the euro/dollar exchange rate provides the following estimate for volumes of financial contracts entered into in France:

- Notional values for futures and certain swaps

Representing a collection base of €38,579,122.5 million d’euros

Representing a collection base of 300,603 million euros

Representing a collection base of 21,183,703 million euros d’euros
• Premium value for options and certain swaps

Representing a collection base of 77,138 million euros

Representing a collection base of 26,680 million euros

Representing a collection base of 330,842 million euros
6.1.3 Collecting/reporting agents

6.1.3.1 Tax on domestic equity and debt securities
Collection will be carried out primarily by the central securities depositories. This reduces the number of collecting agents and the cost of tax compliance audit. All central depositories wishing to operate in a country’s market (i.e., wishing to process the securities of this country’s issuers) will be required to collect tax, regardless of their geographic location, nationality or tax residence. Tax on transactions not centrally settled will be collected via custodian banks participating in authorized depositories, or via brokers authorized to process domestic securities.

6.1.3.2 Units or shares in collective investment schemes
Units or shares in collective investment schemes are deposited with mutual fund depositories, whose responsibilities include mutual fund account management and asset custody. Mutual fund depositories process subscriptions and redemptions and will be able to collect tax at the point of these transactions.

As of 31 December 2010, in a country such as France, there were 48 institutions approved to carry out the functions of a UCITS depository. However, the activity is highly concentrated, with 80% of the net assets of French UCITS deposited with the top three depositories. The low number of players and the concentration of the activity will help to keep collection costs low for the tax authorities.

In addition, mutual fund depositories possess appropriate information systems that may be used to set up arrangements for levying and collecting the tax.

6.1.3.3 Derivative financial contracts
In terms of notional amounts, the majority of derivatives transactions are negotiated off-exchange, with only 12% of transactions negotiated “on-exchange”.

The settlement of derivatives transactions takes place either through external clearinghouses, or through internal post-trade management platforms. As such, the tax may be collected via clearinghouses (if resort to them is made mandatory), or via the parties’ internal post-trade platforms (if resort to clearinghouses is not made mandatory).

---

6.1.4 Taxable persons or final tax payers
The identity of taxable persons or final tax payers depends on the type of financial instrument.

6.1.4.1 Equity and debt securities
Taxable persons will be buyers of domestic securities, i.e. securities issued by a legal person who is a national to the country levying the FTT.

This entails applying a system similar to UK SDRT, and extending it to debt securities. The reason to avoid imposing the tax on sellers is to avoid disincentives to placing securities on the market, which may harm market liquidity.

It may be counter-productive to attempt to exempt small shareholders or so-called “retail” customers from FTT. These market participants make few transactions anyway, and would pay little tax. Moreover, the distribution of investment capital and income within the population is itself sufficient to ensure that 99% of the population will not be affected by a tax on financial instrument transactions.

6.1.4.2 Units or shares in collective investment schemes
As far as units or shares in collective investment schemes are concerned, both subscribers and sellers will be liable for tax. Indeed, subscriptions and redemptions are almost always independent of one another and do not consist of the matching of orders like transactions on other financial instruments.

6.1.4.3 Derivative financial contracts
In terms of financial contracts, the taxable persons will be parties to derivative contracts who happen to be tax residents in the FTT country concerned. This shall encompass not only domestic companies, but also their foreign subsidiaries.

In the case of a derivative contract between a domestic company and a foreign company, only the domestic company will be liable for tax (only one tax gets collected).

In the case of a financial contract between two domestic companies, each will be liable for tax on its part of the contract (collection of two taxes).

Tying the derivatives tax to the nationality (or tax residence) of the party to the contract reduces the risk of relocation, insofar as it is more difficult for a bank, for example, to change its tax residence, than to change the location of its trading activities or its offices for signing financial contracts.

68 “Statistical statement 1921”; Statistical Survey and Documentation Department of the Direction Générale des Impôts (Unilateral tax authority), Ministry of Finance.
6.1.5 Tax rates applied

The proposed tax rates depend on the financial instrument concerned. Relatively low rates are being proposed here, compared to existing FTTs.

6.1.5.1 Tax rate for equity securities

The chosen rate for equity transactions is 0.2% per transaction. This is lower than the rates used in the United Kingdom and Taiwan owing to the fact that the FTT proposed here taxes all financial transactions, whereas the UK or Taiwan FTTs leave out some transactions untaxed.

6.1.5.2 Tax rate for debt securities

The proposed tax rate for debt securities distinguishes between the different types of instruments subject to tax:

- a rate of 0.01% on corporate and municipal bonds
- a rate of 0.005% on government securities
- a rate of 0.001% on debt issues with a maturity of less than one year (mainly negotiable debt securities)

6.1.5.3 Tax rate for units or shares in collective investment schemes

The tax rate for units or shares in collective investment schemes is 0.1% per subscription/redemption. It is important to establish a relatively low tax rate, in order to preserve the competitiveness of domestic marketplaces. Moreover, holders of units or shares in collective investment schemes could end up taxed twice, since a large proportion of the underlying investments will also be subject to tax.

6.1.5.4 Tax rate for financial contracts

The tax scale for financial contracts is based on the rates applied in Taiwan. Different rates are applied according to the category of financial contract entered into:

- 0.005% of the value of the contract for equity-linked futures
- 0.001% of the value of the contract for listed interest rate futures
- 0.01% of the value of the contract for other listed futures
- 0.01% of the value of the contract for equity-linked futures traded OTC and executed “on-exchange”
- 0.002% of the value of the contract for interest rate futures traded OTC and executed “on-exchange”
- 0.02% of the value of the contract for other futures traded OTC and executed “on-exchange”
- 0.02% of the value of the contract for equity-linked futures traded OTC
- 0.004% of the value of the contract for interest rate futures traded OTC
- 0.04% of the value of the contract for other futures traded OTC
- 0.05% of the premium for listed options
- 0.1% of the premium for unlisted options
- 0.2% of the premium for OTC options
These rates were chosen to encourage investors to trade on regulated exchanges (see section 5.2.3).

6.2 Feasibility of the selected scenario

In order to be effective, the financial transaction tax must be legally and technically feasible.

6.2.1 Legal feasibility

The financial transaction tax proposed here is legally feasible. The proposed tax is designed so as not to create differences in the tax treatment of taxable persons. This avoids legal issues of discriminatory taxation.

It is important to note that financial market regulation is evolving fast. For example, in Europe, the EMIR Directive (European Market Infrastructure Regulation) is likely to be adopted during the year 2011, and would include an obligation for financial contracts that are negotiated off-exchange to nevertheless be cleared through a clearinghouse. A draft CSD (central securities depositories) regulation is also being considered in Europe, and may provide for the establishment of a quality oversight system and may prohibit central depositories from combining their depository functions with banking activities. Finally, a draft SLD (securities law directive) is under review in Europe, and should lay the foundations for a legal framework for securities at the European level.

6.2.1.1 Equity and debt securities

The taxation of secondary transactions in equity and debt securities is legal (however, neither this conceptual distinction nor this legal limitation pertains to derivatives transactions). This paper proposes to leave primary securities issuance untaxed.

6.2.1.2 Units or shares in collective investment schemes

Taxation of secondary transactions in units or shares in domestic collective investment schemes is legal. Because collective investment vehicles are potentially invested in financial instruments also subject to tax, care must be given in the tax design to limit double taxation, especially as a domestic investment company wishing to set up a mutual fund can easily decide to do so in a neighbouring, untaxed country.

6.2.1.3 Derivative financial contracts

The taxation of derivative financial contracts transactions is more complex. Nevertheless, financial contracts transactions are increasingly cleared through central counterparties.

The taxation of financial contracts poses a technical and legal problem: how to ensure payment of the tax, when a large proportion of these contracts are both traded and settled bilaterally? From the legal point of view, there are a number of solutions to address this constraint.
First, a system of stamp duty based on the UK model should be established. The introduction of stamp duty could be accompanied by three enforcement measures:

- the invalidity of derivative contracts that have not been stamped,
- the non-executability of unstamped contracts
- financial penalties (fines, late payment interest) in the event of failure to comply with the obligation to pay stamp duty.

A domestic stamp duty on derivative contracts will cover any derivative contract entered into by a domestic company. The financial contracts entered into by foreign subsidiaries of domestic companies will also be subject to tax, in order to avoid any tax circumvention via foreign subsidiaries.

In the case of financial contracts between a domestic and foreign company, only the domestic company will be liable for stamp duty. If both parties are domestic, both will be liable.

The amendment to the Finance Bill that creates the FTT should stipulate that financial contracts are subject to stamp duty, and that the signing of such a contract is subject to stamp registration with the tax authorities, against penalty of fines and of legal invalidity of the contract. In order to emphasise the compulsory nature of the provision, the execution by company personnel of the obligations under an unstamped derivative contract shall constitute an abuse of corporate assets, and be personally binding upon the party to the contract or its employees.

A system of compulsory settlement of derivative contracts by a clearinghouse authorised to operate in the domestic financial markets may then be introduced, to facilitate collection and increase market transparency. Provision may be made for financial penalties (fines, late payment interest) for failure to register the financial contracts with a clearinghouse. Taxation will then be payable at the clearing level and may be collected by the clearinghouse.

### 6.2.2 Technical feasibility

#### 6.2.2.1 Collection on equity and debt securities

Tax will be collected primarily upon the settlement of transactions and centralised at the level of the central depository authorised to operate in the domestic financial markets.

The central depository already has an computer system able to apply automatic collection.

The centralisation of collection within a single entity that already has an information system that can be used for that purpose means it will be relatively low-cost for the tax authorities, and allow the system to be set up in a relatively short space of time.
Tax on equity and debt security transactions that are netted directly by an intermediary (broker, custodian) may be collected directly by that intermediary. It is proposed that collecting agents transfer FTT receipts to the designated body on a monthly basis, as the case under the SDRT, with the tax authorities reserving the right to carry out periodic on-site inspections of payment records.

6.2.2.2 Collection on units or shares in collective investment schemes
Collection will be carried out by fund share depositories, upon subscription/redemption. Fund share depositories already possess appropriate information systems that can be used to set up a system for levying and collecting the tax.

6.2.2.3 Collection on derivative financial contracts
Each financial contract must bear a reference to the method of its processing (paper-based or electronic) as well as the body, internal or external, responsible for the custody, management and settlement/execution of the contract.

If necessary, new SWIFT messaging rules will be created to facilitate the tracking and management of the tax on paperless derivative contracts.

Domestic parties to derivative contract will be required to make use of a clearinghouse, either as the central counterparty to the contract (for standardised derivatives), or as a simple intermediary in the settlement of cash and securities flows arising from the contract (for complex derivatives that are not eligible to CCP servicing).

The clearinghouses will collect the tax as a percentage of the notional value, in the case of standardised contracts eligible to CCP servicing, and as a percentage of post-trade flows, in the case of complex derivatives that are eligible for settlement services only (see paragraph 6.1.2.4 above).
The possibility of reproducing the Belgium collection system might also be considered; this is also operated by financial institutions participating in the market. Under the Belgian system, the financial institutions (the derivatives traders) themselves are required to:

- maintain records of their transactions that are subject to tax,
- report these transactions in a monthly tax filing,
- pay self-assessed tax when the tax return is filed.

The tax authorities process the tax returns and selectively audit those financial institutions that are considered to show a high risk of non-compliance.

It should be noted that the term "financial institutions" includes banks, brokers, issuing banks, fund managers and central banks.

Although there are no precise estimates of the cost of administering and overseeing Belgian tax, the costs seem to be low compared to other taxes, because 100 or so financial institutions are required to file monthly tax returns, which represents an acceptable administrative cost for the tax authorities.

### 6.2.3 Impacts of circumvention mechanisms and adjustment indicators

First, it should be mentioned that the planned tax system will reduce if not eliminate the risks of tax circumvention. In the case of transactions on equity and debt securities, the main way to avoid tax is to decide not to trade on these securities at all.

In the case of derivative transactions, given the denial of any legal protection to any unstamped contract, the legal risks would appear to outweigh any incentive not to pay the stamp duty.

Market distortion and tax avoidance effects are likely to be limited, although they are difficult to quantify and will depend on the responsiveness of the markets.

Moreover, the tax could be phased in gradually through time, and the tax scales adjusted to limit the impact on the financial markets and/or maximise receipts.

---

The impacts on the financial markets will also depend on the possibility of circumvention brought about by the introduction of the tax. The three main risks identified are:

- the non-reporting of and failure to catch taxable transactions,
- the risk of the transfer to untaxed, foreign financial markets,
- the risk of the substitution for non-taxed financial instruments
- the reduction in overall trading.

The establishment of a financial transaction tax will not be without effects on financial markets. For this reason, the adjustment indicator used here incorporates the “maximum anticipated” fall in trading volumes due to the circumvention of taxation. Anticipating impacts on trading volumes is a complex exercise and the assumptions put forward here are based on estimates.

An adjustment indicator of -20% was applied in relation to the trading volumes described above.

Initially, the introduction of a tax on equity securities is likely to lead to a slowdown in transactions, as the Bruegel report of 2010 suggests.

As far as debt securities are concerned, it is worth remembering that the tax will not apply to new issuance. That in itself means that access and financing conditions on the financial markets will not change. The main risk associated with tax circumvention is that secondary investors will turn away from buying domestic securities in favour of foreign stocks. The existing examples in UK, Taiwan and elsewhere do not substantiate this fear.

The volume of subscriptions/redemptions of units or shares in collective investment schemes may also be affected by the introduction of a tax on such instruments, as investment companies may easily domicile a fund in another country. Nevertheless, the advantages of setting up funds in these recipient countries already exists (especially for dedicated funds), whether or not a financial transaction tax is established elsewhere. Owing to strong competitive factors and the risks to these securities posed by efforts to bypass the tax on shares in domestic funds, the report recommends that a particularly low rate be applied here.
Finally, the tax scale is relatively low on financial contracts compared with other financial instruments, owing to the lower economic value of derivatives relative to their underlyings (owning an option to buy a share is worth less than already owning that share). The modest tax rate suggested here would help to avoid a major decline in the volume of derivatives trading.

Exploring the legal and technical feasibility of the tax should help to limit the potential for non-compliance. The International Monetary Fund\(^\text{70}\) considers that the following points may help to reduce non-compliance with the tax system:

- provide for a judicial and legal system for the payment of tax on financial transactions: the judicial and legal feasibility of the tax was given specific attention in this document.
- provide for an “exit tax” on the “exit” of securities from the domestic markets (see section 2.2.5): a system close to SDRT is set out in this report. A provision for depository receipt tax could be added to the system and would apply to trade in foreign depository receipts issued against domestic securities.
- apply a moderate tax rate: the maximum tax rate in the target scenario is 0.2% for equity transactions.
- ensure that “substitute products” will also be taxed: the tax base encompasses nearly all financial instruments traded on the markets, which limits the risks of substitution.

6.3. Potential receipts

The potential receipts resulting from the introduction of the unilateral financial transaction tax was simulated on the basis of the rates set out previously, using the example of France. An estimate was also made of the receipts that would be generated if the tax was applied to the G20 countries.

6.3.1 Potential receipts from the FTT system in France

The following table shows simulated receipts using the data concerning the trading volumes of each type of financial instrument, the relevant tax scale and the estimated adjustment indicators:

<table>
<thead>
<tr>
<th>Type of financial instrument</th>
<th>Estimated amount p.a. (€ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity securities</td>
<td>8,699</td>
</tr>
<tr>
<td>Debt securities</td>
<td>2,226</td>
</tr>
<tr>
<td>Units or shares in collective investment schemes</td>
<td>407</td>
</tr>
<tr>
<td>Financial contracts</td>
<td>1,200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12,532</strong></td>
</tr>
</tbody>
</table>

The estimated level of receipts is over 12 billion euros per annum, for a country like France.

However, a unilateral financial transaction tax could be introduced progressively, on several levels:

- at the level of the rate applied to financial instruments, i.e., progressively raising the scale in order to limit the impact on the domestic financial markets. A “rendezvous clause” could be included for example. In this case the rates applied when the tax was first introduced would be lower than those set out in this report (by 50% for example) and would be increased progressively to reach the target rates within a predetermined timeframe.
- at the level of the financial instruments affected by the FTT, starting with those for which collection arrangements can be set up more quickly, such as equity and debt securities.
6.3.2 Potential receipts from the taxation system if applied to the G20

A simulation was also made of the level of receipts that could potentially be generated by the application of the financial transaction tax at the G20 level. The simulation was based on the notion of GDP.

To simulate the receipts, the GDP figures of the G20 members were retrieved. The ratio representing France’s share in the G20 total was then calculated and applied to the simulated receipts for France in order to estimate tax receipts at the G20 level.

The GDP figures of the G20 members, and the estimated receipts of the proposed unilateral FTT (as a proportion of GDP), are presented here:

<table>
<thead>
<tr>
<th>N°</th>
<th>Country</th>
<th>GDP (€ bn 2010)</th>
<th>Estimated receipts (€ bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>South Africa</td>
<td>269.04</td>
<td>1.73</td>
</tr>
<tr>
<td>2</td>
<td>Germany</td>
<td>2,496.91</td>
<td>16.09</td>
</tr>
<tr>
<td>3</td>
<td>Saudi Arabia</td>
<td>334.13</td>
<td>2.15</td>
</tr>
<tr>
<td>4</td>
<td>Argentina</td>
<td>278.84</td>
<td>1.80</td>
</tr>
<tr>
<td>5</td>
<td>Australia</td>
<td>930.45</td>
<td>6.00</td>
</tr>
<tr>
<td>6</td>
<td>Brazil</td>
<td>1,574.15</td>
<td>10.14</td>
</tr>
<tr>
<td>7</td>
<td>Canada</td>
<td>1,185.37</td>
<td>7.64</td>
</tr>
<tr>
<td>8</td>
<td>China</td>
<td>4,426.73</td>
<td>28.52</td>
</tr>
<tr>
<td>9</td>
<td>South Korea</td>
<td>758.40</td>
<td>4.89</td>
</tr>
<tr>
<td>10</td>
<td>United States</td>
<td>11,038.33</td>
<td>71.13</td>
</tr>
<tr>
<td>11</td>
<td>France</td>
<td>1,944.82</td>
<td>12.53</td>
</tr>
<tr>
<td>12</td>
<td>India</td>
<td>1,158.19</td>
<td>7.46</td>
</tr>
<tr>
<td>13</td>
<td>Indonesia</td>
<td>532.22</td>
<td>3.43</td>
</tr>
<tr>
<td>14</td>
<td>Italy</td>
<td>1,547.64</td>
<td>9.97</td>
</tr>
<tr>
<td>15</td>
<td>Japan</td>
<td>4,110.91</td>
<td>26.49</td>
</tr>
<tr>
<td>16</td>
<td>Mexico</td>
<td>782.53</td>
<td>5.04</td>
</tr>
<tr>
<td>17</td>
<td>United Kingdom</td>
<td>1,692.49</td>
<td>10.91</td>
</tr>
<tr>
<td>18</td>
<td>Russia</td>
<td>1,103.31</td>
<td>7.11</td>
</tr>
<tr>
<td>19</td>
<td>Turkey</td>
<td>558.67</td>
<td>3.60</td>
</tr>
<tr>
<td>20</td>
<td>European Union²³</td>
<td>4,447.74</td>
<td>28.66</td>
</tr>
</tbody>
</table>

**TOTAL** | **41,170.86** | **265.30**

Source: IMF

¹The members of the G20 are as follows: South Africa, Germany, Saudi Arabia, Argentina, Australia, Brazil, Canada, China, South Korea, United States, France, India, Indonesia, Italy, Japan, Mexico, United Kingdom, Turkey, European Union.
²The average dollar/euro conversion rate in 2010 was applied $1 = € 0.7531.
³The GDP figures of Germany, France, Italy and the United Kingdom were taken out.
The amount collected by each country should be qualified by the level of “financialisation” of the G20 member countries.

France accounts for 4.72% of the total GDP of the G20 members, which means that France’s potential receipts must be multiplied by 21.71 to obtain a simulation of the tax receipts applied to the G20 members as a whole.

<table>
<thead>
<tr>
<th>Type of financial instrument</th>
<th>Estimated amount p.a. (€ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity securities</td>
<td>€ 184,153 m</td>
</tr>
<tr>
<td>Debt securities</td>
<td>€ 47,123 m</td>
</tr>
<tr>
<td>Units or shares in collective investment schemes</td>
<td>€ 8,616 m</td>
</tr>
<tr>
<td>Financial contracts</td>
<td>€ 25,403 m</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>€ 265,296 m</strong></td>
</tr>
</tbody>
</table>

The application of such a tax to the group of G20 countries could generate income in excess of 250 billion euros per annum, i.e., 0.64% of the total GDP of the G20 member countries.
7 - The way forward

This paper proposes a domestic tax on transactions in domestic financial instruments, primarily collected by the negotiation platforms, clearinghouses, and central depositories that are authorized to process these domestic instruments. Derivative transactions are taxed when one of the parties to the contract is a domestic company (or is the overseas subsidiary of a domestic company).

The implementation of the taxation system will require the enactment of legislation, the organisation of collection, and the administration of the tax by the tax authorities.

The tax will be introduced into law upon the occasion of a Finance Act, or Supplementary Finance Act.

The detailed regulations for the tax’s implementation may then be issued by the Tax Authority, within six months of the tax being turned into law.

The Tax Authority may set up a number of technical working groups to delineate these technical guidelines. Similarly, market infrastructure companies may wish to establish procedures for gathering and passing on transaction and tax data.

The tax authorities will then establish the human and technical resources needed to monitor collection and payment of the tax by the market infrastructures bound to collect it.

All market infrastructure companies are now fully computerised, and are already levying flat fees on each transaction carried out via their systems. As is already the case for UK SDRT, which is collected through CREST, the domestic FTT will simply be added to these existing fees charged by financial market infrastructure companies. Given the relative simplicity of the resources to be implemented in order to levy the tax, a period of six months from the enactment of the Finance Bill introducing the tax, to the start of collection, could be sufficient.
In other words, for those FTT pioneer countries introducing the tax in their Finance Acts of end 2011, collection of the FTT could start as early as 1 July 2012.

The success of the project, and its completion within the above timeframe, may be facilitated by the following factors:

- the clear definition of the scope of the transactions subject to taxation.
- a lack of exceptions and exemptions to complicate implementation.
- on the other hand, one should take account of the time needed for the tax authorities to develop an interface through which market participants may stamp financial contracts electronically, and the time needed for derivatives clearinghouses to integrate the tax into their IT systems (this also applies to central depositories).

Although the tax on financial instrument transactions is feasible whichever financial instruments are concerned, the complexity of the system that needs to be implemented may vary, and with it the associated timetable. In summary, therefore, it appears that an initial phase of a tax system targeting financial instruments settled through financial market infrastructures authorized to process domestic instruments may be implemented within a short period of time (six months).
Appendices

Appendix 1: How financial markets are organised, by category of instrument

The purpose of this section is to explain how financial markets function, in order to identify the technical feasibility and constraints involved in instituting a tax on financial transactions. Identifying some operational taxation scenarios requires looking in detail at how financial markets are organised and operated.

1.1 The concept of financial instrument under law

Many countries, it should be recalled, have instituted taxes on financial transactions, but the tax base of the financial instruments concerned has been rather narrow. The UK SDRT, for example, only covers shares, as was the case with the old French impôt de bourse. This report intends to propose a taxation mechanism with the widest possible tax base, including all financial instruments. It is therefore worth looking at the concept of financial instrument under French law.

Defining the concept of financial instrument under French law makes it possible:

- to determine if the concept of financial instrument covers all products traded on the financial markets and allows for future innovations by financial markets;
- to pinpoint the definition of “financial instruments” on which the financial transactions tax will be based.

Article L. 211-1 of the Monetary and Financial Code defines financial instruments as financial securities and financial contracts.

Financial securities are:

- Equity securities issued by joint-stock companies;
- Debt securities, with the exception of bills of exchange and cash vouchers;
- Units or shares in collective investment schemes.

Financial contracts, also called “forward financial instruments”, are futures contracts that are on a list drawn up by ministerial order.
1.1.1 The concept of financial securities

In France, financial securities are defined in both the Monetary and Financial Code and the Commercial Code.

Article L. 211-2 of the Monetary and Financial Code defines valeurs mobilières (securities) as financial securities. Article L. 228-1 of the Commercial Code provides that "valeurs mobilières are financial securities as defined by Article L. 211-1 of the Monetary and Financial Code, which attributes identical rights by category. Valeurs mobilières issued by joint-stock companies are in the form of bearer or registered securities, except in cases where the law or by-laws require all or some shares to be in registered form."

Some valeurs mobilières cannot be classified in any of the three categories of financial securities (equity securities, debt securities, or mutual fund units or shares) but are nonetheless considered as such. These include:

- **Covered warrants**, a listed financial product that can be traded just as shares are traded and that entitles its owner to buy or sell a share (or another security) at a pre-set price. This is a financial security that includes a derivative.
- **ETF** (Exchange-Traded Funds) are collective investment vehicles that replicate the performance of an index and that are traded in the same way that equities are.
- **Equity warrants**

### 1.1.1.1 Equity securities

**Equity securities** are defined by Article L. 212-1 A of the Monetary and Financial Code as "securities issued by joint-stock companies, including shares and other securities that provide, or could provide, access to capital or voting rights".

Shares are equity securities and include the following:

- **Ordinary shares**, as provided under Article L228-91 of the Commercial Code, are valeurs mobilières issued by joint-stock companies and providing access to equity capital or entitling their holders to the allocation of debt securities. Shareholders of a company issuing valeurs mobilières that provide access to equity capital enjoy pre-emptive rights to these valeurs mobilières prorated to the number of shares they hold.
- **Preference shares** as provided under Article L. 228-11, paragraph 1, of the Commercial Code, may be voting or non-voting shares that come with any sort of special rights on a temporary or permanent basis.
Such rights are defined in the by-laws in accordance with Articles L. 225-10 and L. 225-122 to L. 225-125 of the Commercial Code. Preference shares include:

- capital contribution shares,
- shares with equity warrants attached (ABSA),
- shares with bond warrants attached (ABSO),
- shares with priority dividend rights but without voting rights,
- shares with double voting rights,
- shares with multiple voting rights.

Equity transaction volumes on the main financial markets are presented in the table below:

![Equity transaction volumes on the main financial markets ($ billions)](source image)

Alongside shares exist alongside Depository Receipts. A Depository Receipt is a negotiable equity certificate in a company traded on a foreign market. It gives a foreign company tradable securities on a foreign financial market without having to go through an introductory public offer.

American Depository Receipts (ADRs), are the best-known certificates and have been offered since the 1920s. They are traded on US markets such as the New York Stock Exchange (NYSE) and the American Stock Exchange.

The American bank in charge of providing the certificate will demand that a certain number of foreign shares be deposited on the Depository Receipts. The bank manages dividend flows and the shareholder register on behalf of the issuer.
ADRs provide an indication of the share’s trend and opening price, information that complements the closing price on the domestic market.

During the time of day when both the Paris and New York markets are open simultaneously (from 3:30 p.m. to 5:30 p.m. Paris time), there are arbitrage opportunities in buying the share on the market where it is cheaper and selling it on the market where it is more expensive, while factoring in the effect of exchange rates.

GDRs (Global Depository Receipts) have taken over from ADRs and are generally listed on European markets such as the London Stock Exchange. ADRs and GDRs are generally denominated in US dollars but may also be denominated in euros.

Certificates can be traded on-exchange and over the counter.

Certificates entitled the investor to the same rights as an ordinary shareholder, such as voting rights and cash dividends. The rights of certificate holders are stated on each certificate.

Certificates are a way to increase international trading in a security, i.e., not just on local and foreign markets, but also promote the flow of information, technology, regulatory procedures and market transparency. They give investors and companies the advantages of a foreign investment without the obstacles involved in investing abroad.

Issuing certificates thus allows a company to enhance its exposure and raise capital on all international markets. They also make the stock more liquid. Moreover, in many countries, regulatory obstacles in particular, often keep foreign investors from investing on the local market. By issuing a certificate, a company can encourage foreign investments without having to worry about the barriers to entry that a foreign investor might face.

1.1.1.2 Debt securities

Article L. 213-1 A of the Monetary and Financial Code defines debt securities as “financial securities that each represents a financial claim on the legal entity or the debt-securitisation fund that issues them”.

- **Negotiable debt securities** are defined in Article L 213-1 of the Monetary and Financial Code as “financial securities issued at the issuer’s initiative that are negotiable on-exchange or over-the-counter, and that each represent a financial claim”.
- **Bonds** are defined in Article L. 213-5 of the Monetary and Financial Code) as “negotiable securities that, within the same issue, offer the same financial claims for the same nominal value”.

122
Government-issued securities (government bonds and Treasury Bills) are provided for in Articles L. 213-21-1 et seq. of the Monetary and Financial Code. Titres participatifs, which, as provided for in Articles L. 213-32 et seq. of the Monetary and Financial Code, are issued by public-sector joint-stock companies, limited cooperatives, mutual or cooperative banks, public-sector industrial and commercial corporations, insurance companies, agricultural cooperatives and their associations.

There are many types of exchange-traded debt securities:

<table>
<thead>
<tr>
<th>Debt securities</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiable debt securities</td>
<td>- Certificates of deposit, commercial paper, specialised financial institution bills</td>
</tr>
<tr>
<td></td>
<td>- Negotiable Treasury Bills</td>
</tr>
<tr>
<td></td>
<td>- Bons à Moyen Terme Négociables (BMTN, or medium-term negotiable bonds)</td>
</tr>
<tr>
<td>Bonds</td>
<td>- Convertible bonds</td>
</tr>
<tr>
<td></td>
<td>- Extendable bonds</td>
</tr>
<tr>
<td></td>
<td>- Exchangeable bonds</td>
</tr>
<tr>
<td></td>
<td>- Bonds with equity warrants attached</td>
</tr>
<tr>
<td></td>
<td>- Zero-coupon bonds</td>
</tr>
<tr>
<td></td>
<td>- Inflation-linked bonds</td>
</tr>
<tr>
<td></td>
<td>- Obligations Assimilables du Trésor (OAT, or French Treasury bonds)</td>
</tr>
<tr>
<td></td>
<td>- Titres participatifs (non-voting shares in public-sector companies)</td>
</tr>
<tr>
<td></td>
<td>- Subordinated debt securities (TSDI)</td>
</tr>
<tr>
<td></td>
<td>- Redeemable debt securities (TSR)</td>
</tr>
<tr>
<td>Government-issued securities</td>
<td>- Government bonds</td>
</tr>
<tr>
<td></td>
<td>- Treasury bills</td>
</tr>
<tr>
<td>Titres participatifs</td>
<td>- Issued by public-sector joint-stock companies, limited cooperatives, mutual or cooperative banks, and public-sector industrial and commercial corporations, insurance companies, agricultural cooperatives and their associations.</td>
</tr>
</tbody>
</table>

Source: Monetary and Financial Code
Bond transaction volumes on the main financial markets are presented in the table below:

<table>
<thead>
<tr>
<th>Financial Market</th>
<th>Bond Transaction Volumes ($ billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BVB</td>
<td>12,000</td>
</tr>
<tr>
<td>Milan</td>
<td>10,000</td>
</tr>
<tr>
<td>London</td>
<td>8,000</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>6,000</td>
</tr>
<tr>
<td>Paris</td>
<td>4,000</td>
</tr>
<tr>
<td>Stockholm</td>
<td>2,000</td>
</tr>
<tr>
<td>Milan</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Source: World Federation of Exchanges website

Note that bond trading volumes on Euronext Paris amount to about 27 billion dollars annually, ranking this market 18th worldwide, as the vast majority of transactions are traded over-the-counter or on MTFs.

For French issuers account for about one third of the euro-corporate market, but most of these issues are registered in Luxembourg, as the formalities there are simpler and less expensive.

In all, more than 70% of international bonds domiciled in Europe are listed in Luxembourg, totalling 4100 issuers from 100 countries (Source: Luxembourg Chamber of Commerce, 2006).

Since the early 2000s, bond issuers have turned massively to Luxembourg, where financial documentation procedures are simpler than in France.

The choice of financial market is dictated mainly by the following criteria:

- strategic (e.g., EDF’s issue of sterling-denominated bonds, because of its ambitions on the UK nuclear power market);
- technical and financial (e.g., Luxembourg, because it is easier and cheaper).
In general, companies choose to raise funds on French markets when the issue is targeted at French retail investors (e.g., EDF’s successful bond issue in summer 2009). This is why Euronext mainly has:

- older securities (titres participatifs and subordinated debt securities form 1985 and 1986);
- Convertible bonds whose issuer already lists shares on Euronext;
- Bonds issued specially for retail investors (OAT, EDF, Crédit Agricole, etc.).

Moreover, there is also a threshold on the bond’s nominal value: the Murcef law allows lighter formalities when a bond’s nominal value is equal to or greater than 50,000 euros, based on the principle that only retail investors need enhanced protection.

By way of comparison, there were 4992 total active listings by French issuers in Luxembourg in 2010, vs. 2387 on Euronext Paris.

Debt securities traded on the Luxembourg exchange are then cleared by LCH Clearnet S.A. The securities are deposited with either Euroclear Bank or Clearstream Banking Luxembourg.

The 2009 report on the secondary bond market describes the debt market as generally characterised by a lack of fungibility of securities from the same issuer. And, in the case of corporate bonds, most investors tend to subscribe to an issue and to keep it in their portfolio until maturity. The combination of these two factors results in a structurally inactive secondary market. It also results in two major investor categories:

- investors who buy bonds with the intention of keeping it until maturity (the “buy and hold” strategy): most of these are pension funds, sovereign-wealth funds, certain mutual funds and retail investors
- investors who manage their portfolios actively will invest in securities that offer greater liquidity.

The bond market is far more active among institutional investors who trade blocks of millions of euros in bonds over-the-counter, and rather inactive on exchanges such as Euronext. Based on this same report, 90% of secondary market corporate bond transactions are OTC.

---

1.1.1.3 Units or shares in collective investment schemes

Units or shares in collective investment schemes (CIS) are financial securities. CIS are listed in Article L. 214-1 of the Monetary and Financial Code:

- collective investment schemes investing in securities,
- securitisation vehicles,
- sociétés civiles de placement immobilier (real-estate investment funds),
- sociétés d’épargne forestière (forestry savings companies),
- collective investment schemes investing in real estate,
- closed-ended investment firms.

Article L. 214-1 of the Monetary and Financial Code also states that “any collective investment scheme or investment fund governed by foreign law other than closed-ended funds, must be certified by the Autorité des Marchés Financiers prior to being marketed in France”.

As of 31 December 2010, total assets under management by CIS governed by French law came to 1,542 billion euros.

<table>
<thead>
<tr>
<th>Type of CIS</th>
<th>AuM in € bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutual funds for the general public</td>
<td>1,217.4</td>
</tr>
<tr>
<td>Mutual funds with lightened investment rules</td>
<td>15.7</td>
</tr>
<tr>
<td>Mutual funds of hedge funds</td>
<td>8.7</td>
</tr>
<tr>
<td>Futures market mutual funds</td>
<td>0.3</td>
</tr>
<tr>
<td>Private-equity mutual funds</td>
<td>36</td>
</tr>
<tr>
<td>Employee-savings mutual funds</td>
<td>88.6</td>
</tr>
<tr>
<td>SCPI (a type of real-estate investment fund)</td>
<td>21.6</td>
</tr>
<tr>
<td>OPCI (a type of real-estate investment fund)</td>
<td>8.8</td>
</tr>
<tr>
<td>FCC (a debt securitisation vehicle)</td>
<td>84</td>
</tr>
<tr>
<td>FCT (a debt securitisation vehicle)</td>
<td>61</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,542.1</strong></td>
</tr>
</tbody>
</table>

Source: AMF 2010 annual report

77 Autorité des Marchés Financiers, “Annual report”, 2010
1.1.2 Notion de financial contracts

Financial contracts, also called “forward financial instruments”, are listed in Article D. 211-1 A of the Monetary and Financial Code:

- "Option contracts, futures contracts, swaps, future rate agreements, and all other futures contracts underlain by financial instruments, currencies, interest rates, yields, financial indices or financial measures that can be settled through physical delivery or in cash;
- Option contracts, futures contracts, swaps, future rate agreements, and all other futures contracts underlain by merchandise that must be settled in cash, or that can be settled in cash on the request of one of the parties only in the event of default or other incident leading to cancellation;
- Option contracts, futures contracts, swaps and all other futures contracts pertaining to merchandise that can be settled through physical delivery, as long as they are traded on-exchange or through a multilateral trading facility;
- Option contracts, futures contracts, swaps and all other futures contracts pertaining to merchandise that can be paid through physical delivery, not mentioned elsewhere in paragraph 3, and not intended for commercial purposes, that have the characteristics of other forward financial instruments, taking into account, particularly, that they are cleared and settled through a recognised clearing house or are subject to periodic margin calls;
- Futures contracts that transfer credit risk;
- Financial contracts with a contract for difference;
- Option contracts, futures contracts, swaps, future rate agreements and all other futures contracts underlain by weather variables, freight rates, emissions quotas or inflation rates or other official economic statistics that must be settled in cash or that can be settled in cash on the request of one of the parties other than in the event of default or other incident leading to cancellation;
- All other futures contracts underlain by assets, rights, bonds, indices and measures not mentioned elsewhere in paragraphs 1 to 7 above, that have the characteristics of other forward financial instruments, taking into account, particularly, that they traded on-exchange or through a multilateral trading facility, are cleared and settled through a recognised clearing house or are subject to periodic margin calls."
Article D. 211-1 A also states that “forward financial instruments also include option contracts, futures contracts, swaps and all other futures contracts on merchandise or emissions quotas other than those mentioned previously as long as they are subject to post-trade registration by a recognised clearing house or periodic margin calls”.

On the derivatives market there are two types of derivatives:

- standardised derivatives traded on-exchange;
- non-standardised derivatives traded off-exchange, or OTC.

The distinction should first be clear between the concepts of trading and clearing. Trading involves contracts entered into by the buyer and seller (directly or through an intermediary). Clearing comes after the trade and consists in updating and unwinding financial instrument positions registered at clearing houses (which is also the central counterparty of buyers and sellers) and in monitoring cash margin calls.

In on-exchange derivatives trades, the end investor sends a buy or sell order to the electronic platform, which matches this order with that of another investor in order to determine a transaction price. Each investor doesn’t know who the other one is. As soon as a transaction is executed on-exchange, it will be cleared by the clearing house chosen by the platform. The trading platform can also be the central counterparty for derivatives orders.

Trading can also be bilateral between two investors who agree on a transaction price. The transaction amount is then written into the contract and, if an electronic platform is selected, it is typed into the platform interface, so the platform can execute the order.

Investors can also trade a financial contract bilaterally (off-exchange) and then ask the clearing house of their choice to act as the transaction’s central counterparty. The clearing house may or may not agree to clear the transaction.
The various derivatives market structures are as follows:

<table>
<thead>
<tr>
<th>Market</th>
<th>Trading</th>
<th>Instrument</th>
<th>Market infrastructure</th>
<th>Confirmation of trade</th>
<th>Settlement/delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit</td>
<td>OTC</td>
<td>CDS</td>
<td>Interdealer: Crediterix, ICAP Dealer- to-client: MAX</td>
<td>DTCC Deferred/ Market Wire T-Zero</td>
<td>ICE Trust US BClear</td>
</tr>
<tr>
<td>Interest rates</td>
<td>Exchange</td>
<td>Short-term interest-rate futures government bond futures</td>
<td>Eurex, LIFFE, LM</td>
<td>Multilateral trading facilities</td>
<td>Eurex Clearing, Lifts Clear, CME Clearing</td>
</tr>
<tr>
<td>OTC IRS</td>
<td></td>
<td></td>
<td>Interdealer: ICAP, Dealer- client: TradeWeb, BBG</td>
<td>Market wire Trade express</td>
<td>SwapClear</td>
</tr>
<tr>
<td>Foreign exchange</td>
<td>Exchange</td>
<td>Futures and options</td>
<td>CME</td>
<td>MTF</td>
<td>CME Clearing</td>
</tr>
<tr>
<td>OTC Spots and options</td>
<td></td>
<td></td>
<td>Interdealer: EBS, TFS-ICAP, Reuters Dealer-client: FIAJI</td>
<td>Swift</td>
<td>CLS</td>
</tr>
<tr>
<td>Commodities</td>
<td>Exchange</td>
<td>Futures</td>
<td>CME, Liffe, ICE, LME</td>
<td>MTF</td>
<td>CME Clearing, Lifts Clear, ICE Clear, LCH Clearnet</td>
</tr>
<tr>
<td>OTC</td>
<td></td>
<td>Physical transactions, structured transactions, and swaps</td>
<td>EBS, LME Select, Traxport, Bloomberg Chat</td>
<td>Energy e-confirm (ICE), EFET</td>
<td>ICE Clear Europe, CME Clearport</td>
</tr>
<tr>
<td>Equities</td>
<td>Exchange</td>
<td>Futures and options</td>
<td>Eurex, LIFFE, CBOE</td>
<td>MTF</td>
<td>Eurex Clearing, Lifts Clear, OCC</td>
</tr>
<tr>
<td>OTC</td>
<td></td>
<td>Options, physical transactions, and swaps</td>
<td>ICAP, TFS, Tullet</td>
<td>Market wire</td>
<td>BClear</td>
</tr>
</tbody>
</table>

Source: European Commission report on derivatives markets, July 2009

These data pertain to both off-exchange and on-exchange financial contract transactions and are from the Bank for International Settlements (BIS)\(^9\). The amounts of financial contract transactions vary as a function of each type of financial instrument and the location of its transaction.

The first chart presents the notional amount of on-exchange financial contracts transactions for 2010 in billions of dollars:

![Chart 1](image1)

Source: BIS, 2010

The second chart presents the notional amount of off-exchange financial contracts transactions for 2010 in billions of dollars:

![Chart 2](image2)

Source: BIS, 2010

These two charts show that on-exchange transactions accounted for 10.16% of the total notional amount on financial markets. Off-exchange transactions therefore accounted for 89.84%.

However, the prospect of setting up a central clearing house for certain OTC financial contract transactions (which would help prevent the systemic risk that has become a major issue with governments and regulators) could ultimately limit off-exchange transactions.
Of course not all OTC financial contracts are eligible, but according to data from Tabb Group\textsuperscript{79}, 90% of OTC derivatives are sufficiently standardised to be traded on-exchange. Moreover, several initiatives to trade financial contracts on-exchange and then have them cleared through a clearing house serving as a central counterparty have recently been successful. Hence, some OTC contracts (swaps, CDS, flexible options, and others) could benefit from an on-exchange environment that in most cases meets the special needs of over-the-counter transactions.

The main data available pertaining to trends in markets for standardised financial contracts are from a special study carried out in May 2011 by the World Federation of Exchanges. The table below presents the growth of the market for standardised financial contracts since 2004:

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
\textbf{Year} & \textbf{Options} & \textbf{Futures} & \textbf{Total} \\
\hline
2004 & 12,000 & 9,000 & 21,000 \\
2005 & 13,000 & 8,000 & 21,000 \\
2006 & 14,000 & 7,000 & 21,000 \\
2007 & 15,000 & 6,000 & 21,000 \\
2008 & 16,000 & 5,000 & 21,000 \\
2009 & 17,000 & 4,000 & 21,000 \\
2010 & 18,000 & 3,000 & 21,000 \\
\hline
\end{tabular}
\caption{Growth of the market for standardised financial contracts since 2004.}
\end{table}

2010 was an outstanding year for standardised financial contracts traded on-exchange. After a sharp drop in volume growth in 2008 and 2009, volume growth in financial contracts returned to their pre-crisis levels: +25% in 2010.

The same study also details on-exchange financial contract transaction volumes worldwide. They surged by 25% in 2010. 22,400 billion financial contracts were traded on-exchange worldwide (11,300 billion futures contracts and 11,100 billion options), vs. 17,900 billion in 2009. The share of futures in the total number of contracts traded almost doubled between 2005 and 2010. In 2010, the number of futures traded for the first time exceeded the number of options.

\textsuperscript{79}Tabb Group is an American consultancy firm specialising in studies of individual financial markets: www.tabbgroup.com
The table below presents on-exchange futures trading volumes in 2009 and 2010:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CME Group</td>
<td>698</td>
<td>708</td>
<td>-1%</td>
<td>29 961</td>
<td>25 122</td>
<td>+19%</td>
</tr>
<tr>
<td>2 Eurox (1)</td>
<td>436</td>
<td>395</td>
<td>+10%</td>
<td>17 172</td>
<td>13 689</td>
<td>+25%</td>
</tr>
<tr>
<td>3 RTS</td>
<td>227</td>
<td>150</td>
<td>+51%</td>
<td>511</td>
<td>228</td>
<td>+124%</td>
</tr>
<tr>
<td>4 National Stock Exchange of India</td>
<td>156</td>
<td>196</td>
<td>-20%</td>
<td>670</td>
<td>585</td>
<td>+15%</td>
</tr>
<tr>
<td>5 Osaka SE</td>
<td>148</td>
<td>130</td>
<td>+13%</td>
<td>3 009</td>
<td>2 673</td>
<td>+13%</td>
</tr>
<tr>
<td>6 NYSE LIFFE (European markets) (1)</td>
<td>96</td>
<td>93</td>
<td>+4%</td>
<td>4 889</td>
<td>3 939</td>
<td>+24%</td>
</tr>
<tr>
<td>7 Korea Exchange</td>
<td>87</td>
<td>83</td>
<td>+4%</td>
<td>6 454</td>
<td>4 539</td>
<td>+42%</td>
</tr>
<tr>
<td>8 Singapore Exchange</td>
<td>59</td>
<td>52</td>
<td>+14%</td>
<td>NA</td>
<td>NA</td>
<td>-</td>
</tr>
<tr>
<td>9 Turkish Derivatives Exchange</td>
<td>57</td>
<td>65</td>
<td>-14%</td>
<td>209</td>
<td>151</td>
<td>+39%</td>
</tr>
<tr>
<td>10 Hong Kong Exchanges</td>
<td>43</td>
<td>43</td>
<td>-1%</td>
<td>3 091</td>
<td>2 633</td>
<td>+17%</td>
</tr>
<tr>
<td>Others</td>
<td>276</td>
<td>249</td>
<td>+11%</td>
<td>NA</td>
<td>NA</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>2 203</td>
<td>2 164</td>
<td>+5%</td>
<td>77 351</td>
<td>62 434</td>
<td>-</td>
</tr>
</tbody>
</table>


(1) Including OTC transactions registered on-exchange

Note: data from the World Federation of Exchanges are in dollars.

The exchange rate applied for conversion was the average euro-dollar rate for 2010, i.e., €1 = $1.3279.
1.1.3 Financial products not covered by the French notion of financial instruments

The following products and instruments are not considered financial instruments:

- Securities issued by partnerships (Article L. 211-1 of the Monetary and Financial Code to the contrary).
- Bills of exchange and cash vouchers (Article L. 211-1 of the Monetary and Financial Code).
- Transactions that are registered immediately or on a deferred basis, but that are still on a company’s actual balance sheet (e.g., sale of business goodwill, fixed financial assets, etc.).
- Cash lending/borrowing, with or without collateral (repos)
- Currency market transactions covering all spot market purchases and sales. These products are traded only over the counter. Currency contracts that are entered into on the forex markets are financial instruments.
- Payment instruments or means, such as account-to-account transfers, for example

In conclusion, the notion of financial instrument under French law covers financial market activity rather well and can serve as the basis for instituting a tax on financial transactions. Moreover, regulations are regularly updated in order to steadily reflect market trends and innovations.
1.2 Description of various types of markets

MiFID, which is the directive pertaining to financial instruments markets has opened up competition between order execution venues, including:

- regulated markets,
- multilateral trading facilities (MTFs),
- order internalisation on the intermediary's own account.

1.2.1 Regulated markets

Article L.421-1 of the Monetary and Financial Code defines a regulated market of financial instruments as a multilateral system that brings together or helps bring together, within its framework and based on non-discretionary rules, multiple buying and selling interests in financial instruments, as expressed by third parties, resulting in contracts on financial instruments admitted for trading under this market's rules and systems, and that function normally and in accordance with the legal provisions applicable to them. In France, Euronext Paris is the only regulated market, and that is where the shares of the largest companies are listed.

1.2.2 Multilateral trading facilities

A multilateral trading facility, as defined in Article L.424-1 of the Monetary and Financial Code is a system that, without possessing the quality of a regulated market, brings together, within its framework and based on non-discretionary rules, multiple buying and selling interests for financial interests, as expressed by third parties, in order to conclude transactions on such instruments. It may be managed by a certified investment services provider or by a market operator authorised for this purpose by the AMF.

There are many multilateral trading facilities in Europe for equities, including Chi-X, Nasdaq OMX, Turquoise, BATS Trading, NYSE Arca Europe, Tradegate, and Equiduct.

The main multilateral trading facility in Europe for convertible bonds is Vega-Chi.

Most of these multilateral trading facilities are located in London. They operate on French financial markets under the freedom to provide services. To operate on French markets they must be reported to the Autorité de Contrôle Prudentiel by the oversight authority of the member country that certified the operator as a multilateral trading facility (Article L. 511-24 of the Monetary and Financial Code).

---

80 The Markets in Financial Instruments Directive (MiFID) entered into force on 1 November 2007. MiFID's objective is to shift the competitive landscape of financial markets, particularly in ensuring competition between order-execution venues.
1.2.3 Systematic internalisers

A **systematic internaliser** is defined at Article L.425-1 of the Monetary and Financial Code as an investment services provider that, in an organised, frequent and systematic manner, trades for its own account by executing orders off-exchange and outside of a multilateral trading facility. This means that the systematic internaliser is the direct counterparty of its clients’ orders.

The General Regulations of the Autorité des Marchés Financiers states the conditions under which systematic internalisers execute their clients’ orders and provide access to their prices.

1.2.4 Over-the-counter markets

Meanwhile, **OTC markets**, which are non-organised and non-structured markets, are subject to lighter regulation than normal financial markets.

Transactions are direct between the seller and potential buyer (a bilateral interaction). Each transaction has its own market price and orders therefore follow prices – the opposite of a normal financial market. Supply and demand may be matched through a broker or a dealer (e.g., banks, insurance companies, etc.).

OTC markets have experienced a major upheaval with the increasing spread of electronic trading systems, particularly for derivatives.

Transaction terms are set down in contracts, including the parties to the contract, the conditions under which a contract is entered into, the obligations of the parties and the execution deadlines. In over-the-counter transactions, prices are not recorded by an authority that is independent of the contracting parties; disclosures are the responsibility of the parties; delivery of what is bought is under their own responsibility; and the buyer and seller therefore assume the counterparty risks, as they are in direct contact with each other.
1.3 Description of financial market participants

It is necessary to describe financial market participants, in order to define their status and role within the framework of a French financial transactions tax. The following participants interact throughout the process of placing and processing orders:

- Issuers / Counterparties
- Placement agents
- Subscribers
- Acquirers
- Sellers
- Brokers / Dealers
- Market platforms (regulated markets and MTFs)
- Custodians
- Clearing houses (Central Counterparties)
- Central depositories

1.3.1 Issuers / Counterparties

Pursuant to Article L.211-2 of the AMF General Regulations, financial securities may be issued only by the state, a legal entity, a fonds commun de placement (general mutual fund), a fonds de placement immobilier (real-estate fund) or a fonds commun de titrisation (debt securitisation fund). Moreover, Article L.411-1 of the Monetary and Financial Code states that a public offer of financial securities consists of the following operations:

- a document sent in any form and by any means to persons and presenting sufficient information on the terms of the offer and the securities on offer, so that an investor is able to decide whether to buy or subscribe the securities
- an offering of financial securities by financial intermediaries

The AMF General Regulations apply to persons or entities that make a public offer of financial securities or have them listed on a regulated market, as well as to equivalent instruments governed by foreign law.

After registering the issue, the issuer may access the market for the amounts of his choice, by issuing securities whose specifications may vary with funding requirements and market trends.

1.3.2 Placement agent

Securities are marketed by placement agents (or dealers). These financial intermediaries put potential investors in contact with the issuer. They are remunerated for advisory and other services in the form of a commission on the amount of funds raised.

---

81Book II – Financial Issuers and Disclosures; Title 1: Public offering of financial securities and their admission for trading on a regulated market.
1.3.3 Acquirer / subscriber and sellers

Acquirers / subscribers and sellers of financial instruments are considered as clients whose qualification varies with the criteria set by the Monetary and Financial Code.

1.3.3.1 Professional clients

Article L. 533-16 of the Monetary and Financial Code provides that a professional client is one who possesses the experience, knowledge and skills necessary to make his own investment decisions and to properly assess the risks incurred.

Article D. 533-11 of the Monetary and Financial Code lists the entities who, by their nature or size, could be classified as professional clients:

**By "nature"**

- Credit institutions;
- Investment firms;
- Other certified or regulated financial establishments (e.g., clearing houses, etc.);
- CIS and the firms that manage them;
- Insurance and reinsurance companies, and insurance company subsidiaries;
- Health insurance companies, federations of such companies, and personal-protection insurance companies;
- Pension reserve funds, professional pension institutions, legal entities administering a professional pension institution;
- Traders for their own accounts in merchandise or merchandise derivatives, who trade on futures or other markets;
- The Caisse des Dépôts and Consignations and other certified or regulated institutional investors;
- The French state, the Caisse de la Dette Publique, the Caisse d'Amortissement de la Dette Sociale, the Bank of France, the Institut d'Emission des Départements d'Outre-Mer, and the Institut d'Emission d'Outre-Mer;
- Other institutional investors that invest in financial instruments (e.g., investment firms, venture capital firms, sociétés d'innovation (companies having official “innovative” status);
- Entities governed by foreign law that are equivalent to those mentioned above or entities having professional client status in an EEA member-state;
- International financial organisations to which France or any other OECD member-state belongs (e.g., IMF, EIB, ECB, EFSF, etc.)

**By "size"**

- Entities meeting at least two of the three following criteria:
  - Total balance sheet equal to or greater than 20 million euros,
  - Net sales or receipts greater than or equal to 40 million euros,
  - Shareholders' equity greater than or equal to 2 million euros.
1.3.3.2 Non-professional clients

Clients who do not meet the above criteria are considered non-professional clients. However, clients meeting these criteria may request that they be treated as non-professional clients, and investment service providers may agree to grant them a higher degree of protection, based on the procedures laid out in the General Regulations of the AMF.

The MiFID directive (which came into force on 1 September 2007), which aims to strengthen the EU’s legislative framework for investment services and regulated markets, requires that investment service providers apply different rules, depending on whether their services are rendered to professional or non-professional clients (notably in assessing the client’s skill and financial experience, and in determining his investment profile, etc.).

1.3.3.3 Eligible counterparties

Eligible counterparties have little protection and are defined in Article 533-20 of the Monetary and Financial Code as:

1. a) the credit institutions mentioned;
2. b) investment firms;
3. c) other certified or regulated financial establishments;
4. d) insurance and reinsurance companies;
5. e) pension fund reserves;
6. f) persons whose main activity consists in trading for merchandise or merchandise futures for their own account;
7. g) collective investment schemes in financial securities, fonds communs de créances (general mutual funds) and sociétés civiles de placement immobilier (real-estate funds), as well as the firms that manage them;
8. h) companies that provide investment services only to legal entities that control them directly or indirectly;
9. i) companies whose investment service activities are limited to managing an employee savings system;
10. j) persons who provide an investment service on an accessory basis to a professional activity and where this activity is governed by rules that do not expressly forbid it;
11. k) merchandise brokers that provide an investment service only to their counterparties and to the extent necessary for exercising their main activity.

2. The French state, the Caisse de la Dette Publique, the Caisse d’Amortissement de la Dette Sociale, the Bank of France, the Institut d’Emission des Départements d’Outre-Mer, and the Institut d’Emission d’Outre-Mer.
3. a) Public international financial organisations to which France or any other member state of the Organisation for Economic Cooperation and Development belongs.

4. a) Legal entities meeting at least two of the three following criteria, based on individual accounting statements:
   - total balance sheet equal to or greater than 20 million euros;
   - net sales or receipts equal to or greater than 40 million euros;
   - shareholders’ equity equal to or greater than 2 million euros.

4. b) The investment services provider that enters into transactions with a legal entity.

5. Caisse des Dépôts and Consignations and other certified or regulated institutional investors.

6. On their request, legal entities coming under a categories of clients who may ask to be treated as professional clients.

7. Entities governed by foreign law that are equivalent to those mentioned in sections 1, 2 and 4.

Furthermore, Article L. 533-14 of the Monetary and Financial Code states that investment service providers may, on their own initiative or at a client’s request, treat as a professional client or a non-professional client a client who otherwise could be classified as an eligible counterparty, in accordance with Article L. 533-13 of the said Code.

This classification could be used in order to exempt non-professional clients from the tax, in order to avoid penalising a category of acquirer or seller whose transaction volumes (in number and amounts) are seen to be lower.

1.3.4 Brokers / Dealers

The end-clients are institutional investors, who are the source of most supply and demand. Without direct market access, end-clients go through intermediaries to find a counterparty, as only certified intermediaries may trade. The intermediaries they use are market professionals, either brokers or dealers or, most often, both.

**Brokers or financial intermediaries** act only as intermediaries, bringing buyers and sellers together, a service for which they are paid in the form of commissions, but take no position for their own account.

**Dealers** trade for their own account and provide liquidity to the market by placing themselves between sellers’ asking prices and buyers’ bidding prices (hence narrowing the spreads between the two). In practice, dealers often trade directly with end-clients, then sell their positions on the interbank market, in some cases through a broker.
The **financial intermediary or broker** may handle several tasks, including the reception and transmission of orders and delivery of financial products, as well as the keeping and managing of client accounts.

In France, brokerage is handled by investment services providers, an activity that is regulated by the AMF. Few brokers have headquarters in France. Brokerage has historically been much more developed in the United Kingdom.

Regulations covering investment service providers (ISP) are described in Book III on ISPs, in the RG-AMF. These are investment firms and credit institutions that have been certified to provide the investment services described in Article L. 321-1 of the Monetary and Financial Code, i.e.:

- Reception and transmission of orders for third parties,
- Execution of orders for third parties,
- Trading for their own account,
- Third-party portfolio management,
- Investment advisory,
- Bought deals,
- Underwritten offerings,
- Operation of a multilateral trading facility.

Each of these investment services requires certification from the Autorité de Contrôle Prudentiel or the AMF.

Investment service providers are defined by Article L.531-1 of the Monetary and Financial Code as credit institutions and investment firms.

A **credit institution** is a legal entity that in the course of its normal business, undertakes the banking operations defined in Article L.311-1 of the RG-AMF, i.e., receiving funds from the public, lending, and making payment means available to its clients or manages those payment means. Such establishments may also undertake certain related operations related to their activity, also defined in Article L.311-2 of the RG-AMF. When they constitute the provision of investment services as defined by Article L. 321-1, the related operations and custody activities are subject to the prior certification provided in Article L. 532-1.

Credit institutions may exist in the form of a Bank, a mutual Bank or cooperative, savings bank, a municipal credit society (caisse de crédit municipal) or a specialised financial company or financial institution.
An investment firm is a legal entity other than a credit institution, which provides investment services as part of its normal business.

1.3.5 Market platforms

Market platforms, which include regulated and organised markets (multilateral trading facilities) have already been defined in the section providing a description of the different types of markets.

1.3.6 Custodian banks

The activity of the custodian consists on the one hand, in registering financial instruments on behalf of their owners, i.e., recognising the holders’ rights to said financial instruments and, on the other hand, of keeping the corresponding assets in custody.

The custodian keeps and administers securities, in bearer or registered form, which have been entrusted to it on behalf of their owners. Custodians must receive prior certification or authorisation from the Autorité de Contrôle Prudentiel.

The Autorité des Marchés Financiers devotes a full chapter to rules of good conduct and professional obligations for the custodian.

1.3.7 Clearing houses

The functioning of clearing houses is described in Articles L.440-1 et seq. of the Monetary and Financial Code. Clearing houses monitor positions, margin calls, and, where applicable, the liquidation of positions.

They must be credit institutions in their own right. Their operating rules must have been approved by the AMF.

In concrete terms, the clearing house is the single counterparty for all market participants. It demands that guarantees be deposited with it on the day that a contract is entered into. In the event that a market participant shows an unrealised loss, it issues a margin call.

For Euronext’s European exchanges, for example, the Central Counterparty is the credit institution Clearnet, which is a wholly owned subsidiary of Euronext for all regulated and unregulated boards (Euronext, Alternext, Market Libre). LIFFE (a derivatives market) has developed its own clearing house since the first quarter of 2009.

81 bis Chapter II of Book III of the AMF General Regulations is devoted to custodian and depository specifications.
1.3.8 Central depository

The Central depository is the entity in charge of organising and managing the process of unwinding market trades. The Central Depository serves, first of all, as a veritable "notary" for securities, keeping a registry of financial instruments issued and checks that the total amount of each issue admitted to its operations is equal to the sum of the financial instruments registered in the accounts of its members (account-keeper/depositories). It also ensures circulation of financial instruments by handling spot market transactions. Meanwhile, it makes the necessary arrangements so that the rights attached to financial instruments registered in current accounts can be exercised. And, finally, once securities have been credited on the buyer's account and cash has been credited with the clearing house member, it handles delivery (i.e., movement of positions of financial instruments) and settlement (i.e., movement on a cash account).

1.4 Mechanism for reporting financial transactions to the Autorité des Marchés Financiers

Based on a review of the existing mechanism for disclosing financial transactions, the mechanism could be used for instituting a tax on financial products by identifying the perimeter of such disclosures:

- the financial instruments concerned,
- the transactions concerned,
- the establishments concerned (reporting the transactions and receiving the declarations).

1.4.1 Background

Directive n°2004/34/CE pertaining to markets in financial instruments ("MiFiD"), which was transposed into French law on 1 November 2007, added to the General Regulations of the AMF Financiers (RG-AMF) the obligation for investment service providers (ISPs) to disclose all transactions on financial instruments admitted for trading on regulated markets in countries that are party to the European Economic Area agreement or on an organised multilateral trading facility (MTF) as defined by Article 424-1 of the RG-AMF, regardless of where and how the transaction was executed. The AMF has developed and made available to investment service providers a computerised Direct Transaction Reporting (DTR) system.

Investment service providers are financial establishments certified by the Autorité des Marchés Financiers and/or the Autorité de Contrôle Prudentiel to provide the investment services mentioned in Article L. 321-1 of the Monetary and Financial Code and the services related to investment services mentioned in Article L. 321-2 of said Code.

Investment service providers are financial establishments certified by the Autorité des Marchés Financiers and/or the Autorité de Contrôle Prudentiel to provide the investment services mentioned in Article L. 321-1 of the Monetary and Financial Code and the services related to investment services mentioned in Article L. 321-2 of said Code.

1.4.2 Identification of reporting parties

All investment service providers who transact in a financial instrument admitted for trading on a regulated market of a country that is party to the European Economic Area agreement or on an organised multilateral trading facility must report these transactions.

Investment service providers are financial establishments certified to provide one of the following investment services:\n
1. reception and transmission of orders for third parties,\n2. execution of orders for third parties,\n3. trading for one’s own account,\n4. third-party portfolio management,\n5. investment advisory,\n6. bought deals,\n6.1. underwritten offerings,\n7. non-underwritten offerings,\n8. the operation of a multilateral trading facility as defined by Article L. 424-1 of the Monetary and Financial Code.

1.4.3 Transactions that must be reported

Transactions coming under Direct Transaction Reporting are purchases and sales of financial instruments, regardless of execution venue, including regulated market, multilateral trading facility, systematic internaliser or over-the-counter. However, the following transactions do not have to be reported:\n
1. temporary sale of securities,\n2. exercise of options and covered warrants,\n3. primary market transactions (i.e., allocation, issue and subscription).

Both own-account and third-party transactions must be reported. The provision of the investment service of receiving and transmitting orders does not need to be reported.

1.4.4 Financial instruments that must be reported

Transactions on a financial instrument admitted for trading on a regulated market of the European Economic Area or on an organised multilateral trading facility must be reported.

---

84 Article L. 321-1 of the Monetary and Financial Code
85 Article 5 of European Regulation n°1287/2006
86 Article 315-46 IV of RG-AMF
87 Financial instruments are financial securities and financial contracts, in accordance with Article L. 211-1 of the Monetary and Financial Code.
However, transactions on unlisted securities, French negotiable debt securities, units or shares of unlisted mutual funds, and forward financial instruments not traded on a MTF (i.e., traded over-the-counter) do not have to be reported.

1.4.5 Reporting waivers

Article 315-48 of the AMF General Regulations in effect since 1 November 2007 provides that the entities mentioned in Section I of Article 315-46 are not required to report to the AMF transactions that they undertook when the report is sent to the AMF through

- a regulated market or MTF of a country that is party to the European Economic Area agreement, for transactions executed in their systems, as long as the rules of the multilateral trading facility distinguish between own-account transactions and transactions on behalf of its members;
- an order-matching or reporting system that meets the criteria set in an AMF instruction.

In practice, the information systems of regulated markets (e.g., NYSE Euronext) and MTFs comply with the provisions of AMF instruction no. 2008-01 of 18 October 2007, which means that reporting parties would be granted this waiver.

Investment service providers must report the following transactions to the AMF, on which no waivers are possible:

- over-the-counter transactions (when an ISP trades directly with a counterparty);
- transaction by or with a systematic internaliser;
- on-exchange transaction by an ISP or an MTF of which it is a member, when the information system of this market or MTF does not comply with the rules of AMF instruction no. 2008-01 of 18 October 2007;
- “internal” transaction between two managed portfolios.

1.4.6 Reporting content

Reporting of transactions involving a financial instrument admitted for trading in a country that is party to the European Economic Area agreement or on an organised multilateral trading facility (MTF) as defined by Article 424-1 of the RG-AMF includes the following information:

---

48 These regulated markets and MTFs are provided by the AMF in the list of regulated markets and MTFs reporting to the AMF, which was approved on 15 October 2007.

49 These order-matching and reporting systems are provided in the list of candidates for status as an AMF-authorised reporting system, which was approved on 15 October 2007.
• identity of the entity subject to the reporting obligation (BIC code);
• identity of the entity submitting the report;
• financial instrument involved in the transaction (ISIN ticker if there is one, or the equivalent ticker for forward financial instruments);
• identification of the trading venue;
• direction of the transaction for the reporting party;
• quantity of securities or contracts traded;
• unit price of the transaction (excluding fees);
• total amount of the transaction;
• identity of counterparty;
• transaction time stamp (with the exact time of trade);
• date of settlement/delivery;
• nature of transaction (own account or third party);
• single reporting ID number;
• cancellation indicator.

1.4.7 How to report

The reporting party may report transactions directly or indirectly through a reporting party subcontracted for this purpose and using the DTR system.

In conclusion, the Direct Transaction Reporting mechanism is a solid base of data which could be used for a tax on financial transactions.

Some financial instruments are not affected by this mechanism, including derivatives not traded on an MTF, unlisted securities, French negotiable debt securities, etc. Perhaps a study should be done on whether to subject transactions on these instruments to AMF reporting obligations, in order to make the mechanism more comprehensive.

It would appear that all market participants are affected by the Direct Transaction Reporting mechanism. A mechanism allowing the tax-collecting entity to have access to these data could therefore be set up.
1.5 How the markets function

Markets can function differently, depending on the following factors:

- where the order is executed;
- how the transaction is cleared;
- how the securities are settled and delivered.

1.5.1 Functioning of a regulated market/multilateral trading facility with a clearing house that is a member of the central depository’s system
For on-exchange trades using a clearing house that is a member of the settlement/delivery system of the central depository:

The **first step** consists in transmitting an issue/sale or buy/subscription order to the market. At this stage of the transaction, not all the specifications (price, date, quantity, etc.) are known.

The **second step** is execution by matching buy and sell orders. This can be done by a financial intermediary / broker or directly on the market platform.

Post-trade, clearing is the **third step** in processing securities transactions. It generally includes the following operations:

- reception and registration of individual transactions from the trading system;
- calculation of net positions of clearing house members;
- managing the risk control mechanisms;
- the substitution of the seller and buyer as the central counterparty guaranteeing the completion of the transactions

The **fourth and fifth steps** consist in transferring raw orders from the clearing house to the settlement/delivery systems.

The **sixth and seventh steps** are registering the account-to-account transfer between the custodians of the buyer and seller in the books of the central depository, which then unwinds the reciprocal commitments of the buyer and seller and records the transactions, thus ensuring the definitive unwinding of the transactions, i.e., the delivery of securities to the buyer and, in exchange, the payment of funds to the seller.

This integrated diagram in which the clearing house is a member of the central depository is the most commonly used one in France, with LCH Clearnet SA (Clearing house) and Euroclear France (Central depository).

This order processing and unwinding circuit is used, for example, for transactions on equity securities, on-exchange-traded bonds and listed derivatives.
1.5.2 Functioning of a regulated market/multilateral trading facility with a clearing house that is not a member of the central depository’s system

The explanations are identical to those of the previous diagram, with the exception of the fact that the clearing house has no direct access to the settlement/delivery system of the central depository. It works with the central depository via local depositories that are members of the central depository’s settlement/delivery system.

The difference between this process and the previous one is in steps 6 and 7, corresponding to the central depository’s recording of an account-to-account transfer between two local depositories. The central depository unwinds the reciprocal commitments of the buyer and seller and records the transactions, thus ensuring the definitive unwinding of the transactions, i.e., the delivery of securities to the buyer and, in exchange, the payment of funds to the seller.
1.5.3 Functioning of an over-the-counter market

In an OTC market, trading is bilateral between the issuer/seller and the subscriber/acquirer. Investors can nonetheless use an electronic platform for making contact and for recording the transactions. If investors use an electronic platform, the transaction must be cleared by a clearing house.

If the trade does not use a platform, investors may still use a clearing house as the transaction's central counterparty. However, clearing is usually directly between market participants.

For settlement/delivery, the process is no different from the above diagrams.

All financial instruments may be traded over-the-counter. The secondary bond market is almost exclusively OTC (in 90% of cases, according to the AMF\textsuperscript{90}). Units or shares in collective investment schemes are traded exclusively OTC.

\textsuperscript{90} Autorité des marchés financiers, "Le marché obligataire secondaire", 16 December 2009.
1.5.4 Focus on settlement/delivery of securities transactions

In order to fine-tune the explanations, the next paragraph will be devoted to detailing the role of each participant in the settlement/delivery system.

First of all, the central depository is in charge of unwinding. This is a major player as it is the only one, for a given issue of securities, which knows the total number of outstanding securities. It is said to keep the issuer’s account.

It also keeps the first-level intermediary accounts, which act as local depositories for this security. The security is settled and delivered definitively when the central depository records the account-to-account transfer between the two local depositories.

And, lastly the central depository is generally also the operator of an information system that allows it to automatically handle settlement/delivery, as well as corporate actions on securities of which it is the depository.

In France the central depository of securities is Euroclear France. Euroclear France operates a settlement/delivery system known as RGV, which means RELIT (as in Règlement/Livraison de Titres Grande Vitesse, or High-Speed Settlement/Delivery of Securities). Most major French banking establishments, as well as a number of foreign establishments are members of Euroclear France (i.e., they hold securities accounts with it) and act as local depositories for securities issued in Euroclear France.

RELIT’s basic principle is to simultaneous exchange of securities for cash. Either the instructions are unwound, with the seller receiving his payment and the buyer, his securities, or no transfer is made.

RELIT has imposed transaction-unwinding standards on all financial intermediaries. The cut-off times are three trading days for cash market securities, and the trade-unwinding date for trades on the SRD deferred settlement service is the last trading day of each calendar month.

Meanwhile, local depositories operate as intermediaries (or agents under SWIFT terminology) by transmitting the settlement/delivery instruction to the central depository of which they are members. They act on behalf of an custodian (in the case of OTC transactions) or a clearing house (for regulated and organised markets) by giving them access to the central depository’s settlement/delivery system.

Note also that the role of the custodian, which is a service provider who, on behalf of the end investor (acquirer or seller), keeps his securities and cash accounts, monitors settlement/delivery of his transactions, and handles corporate actions (e.g., coupons, dividends, capital increase, etc.) in his portfolio.

As in most cases the end investor is likely to transact on all possible markets, the custodian relies on a network of local depositories for access to each central depository.
And, lastly, settlement/delivery requires delivery of the securities from one party to another. It is generally on a cash-on-delivery basis, meaning that if a counterparty does not have enough cash, the delivery of securities is blocked. Similarly, a failure to produce the securities means that the corresponding cash will not be credited.

Cash settlement is either simultaneous, or after the delivery of the securities, depending on the central depository. When the securities depository is also the cash custodian, the two flows are handled by the same information system and are generally simultaneous. When the cash account is held at the central bank, the cash may be transferred with a lag, but not of more than one day. The principle of cash on delivery therefore results in the temporary blocking of securities.

Unilateral delivery is possible, or franco, i.e., without simultaneous movements in either direction. This is the case of a margin call, which is responded to with a unilateral delivery of securities.

It is also conceivable that one may wish to deliver securities as collateral for reception of borrowed securities. But as the central depositories generally do not have a “delivery on delivery” mechanism for this type of operation, the parties make two reciprocal unilateral deliveries, but it is then not possible to condition the unwinding of one by the unwinding of the other.

The principle also applies to the currency market, where the payment of an amount in one currency is conditioned on the crediting of the corresponding amount in another currency. This is “payment on payment”. This is the case, for example, of CLS (Continuous Linked Settlement) on the foreign-exchange markets.
1.6 Overview of how French financial markets are organised

In France, financial markets are managed by the market operator Euronext.

On Euronext itself, shares in the largest companies are listed. To be admitted on Euronext a company must submit three years of certified accounts and disseminate information about itself to investors in accordance with the European “Transparency” directive. There is a single trading board for all stocks. However, they are classified into three compartments based on their market capitalisation:

- A: market cap >1 billion euros
- B: market cap <1 billion and > 150 million euros
- C: market cap <150 million euros

Alternext is a supervised but unregulated market open to mid-sized companies.

The Marché Libre is accessible to the smallest companies that do not meet the requirements to be listed on Euronext.

LIFFE is the regulated market where derivatives (options and futures) are traded.

The following financial instruments are traded on Euronext Paris:

- stocks (Euronext, Alternext, Market Libre),
- bonds,
- covered warrants and certificates,
- trackers,
- EDRs (European Depository Receipts) for foreign companies,
- Short- and long-term interest, market indices.

Foreign companies wishing to list in the United States do so most often in the form of ADRs (American Depository Receipts). These registered certificates are issued by a US bank in exchange for a number of shares in the foreign company registered on its books. The bank manages the dividend flows and the shareholder register on behalf of the issuer. ADRs are classified from 1 to 4, based on the level of disclosures required by the Securities and Exchange Commission, the market oversight authority, with level 3 corresponding to a full listing.

During working hours when both the Paris and New York markets are open simultaneously (from 3:30 p.m. to 5:30 p.m. Paris time), there are arbitrage opportunities in buying the share on the market where it is cheaper and selling it on the market where it is more expensive, while factoring in the effect of exchange rates.
Euronext bought LIFFE (London International Financial Futures and Options Exchange) in early 2002. Euronext's and LIFFE's derivatives activities were merged under the name Euronext Liffe, later renamed NYSE Liffe, which is a single, centralised market in London, that, for example, absorbed MATIF (France's international futures market), which was closed by Euronext Paris.

NYSE LIFFE's derivatives market now trades:

- short-term interest rates (STIRs)
- bonds
- swaps
- shares
- commodities

Because of ongoing mergers and projects within major banking groups, regulated markets are competing more and more with internal markets developed on a stand-alone basis or with other banks. The ability of the French financial transactions tax to capture off-exchange volumes therefore seems decisive in guaranteeing a solid level of coverage.

Only those transactions involving equity securities (shares and similar securities), debt securities (bonds, negotiable debt securities, etc.), units or shares in collective investment schemes, financial contracts (or forward financial instruments) will be taxed.

Instituting a tax on primary market transactions runs into the European ban on taxing the issuance of stocks, bonds and other financial instruments. So the financial transactions tax will not apply to primary market transactions.

The order processing circuit differs with the financial instruments involved and the transaction venues. The proposed scenario will also have to take into account the lack of homogeneity in the circuits.

That means that if a tax was instituted on financial transactions, the degree of coverage would be different depending on the order processing stage during which the transactions will be taxed.

Hence, knowing how financial markets work and how transactions unfold on these markets will make it possible to determine exactly the transactions covered and the taxable event for each taxation scenario considered.

---

Appendix 2: Company tax-avoidance relocation

Background

One effect often attributed to instituting a tax on financial transactions is tax-avoidance relocation by companies that issue financial securities. There are no empirical studies showing that instituting such a tax causes an increase in the number of tax-avoidance relocations by companies.

The phenomenon of tax-avoidance relocation is seen mainly in “large” companies and service companies located in France or elsewhere in Europe that have decided to concentrate profits in countries where corporate taxes are the lowest. In Europe, these are mainly Switzerland, Luxembourg and Ireland.

While the Corporate income tax is 33.33% in France, it is 6.44% in Switzerland (plus a negotiable tax at the cantonal level), 12.5% in Ireland and 28.80% in Luxembourg. Resident joint-stock companies are generally taxed on their worldwide income.

A French company will not necessarily relocate its headquarters but might set up a holding company in a country offering advantageous corporate taxes, in order to practice transfer pricing.

For French tax authorities, the harmful effects of tax-avoidance relocations are as follows:

- lower tax receipts nationally (corporate tax) and locally (the taxe professionnelle, or local business tax)
- the lack of employee profit-sharing
- fewer employee-representative bodies and prerogatives

Mechanisms of company tax-avoidance relocation

In France, several mechanisms allow French companies to relocate for tax reasons, mainly by setting up holding companies in other countries (such as Luxembourg, Switzerland and Belgium). Tax exemption mechanisms, for example, exist for holding companies set up in Luxembourg:

- “29” holding companies are tax-exempt;
- SOPARFI (sociétés de gestion de participations financières, or financial holding management companies) are exempt from paying taxes on their dividends if they come from companies that are at least 10% owned or if the financial stake carries a purchase price of at least 1.2 million euros and is held for at least one year. Capital gains on the disposal of financial stakes are also tax-exempt if the stake is of at least 10% in the subsidiary or of a value of at least 6 million euros and if it is held for at least one year.
Meanwhile, France as no legal ban or restrictions on setting up holding companies abroad for tax reasons other than in countries and territories that have been deemed non-cooperative.

**Limits to tax-avoidance relocation by companies**

In absolute terms, prohibitions or dissuasive tax legislation could penalise the competitiveness of French companies and make France less attractive for foreign investment. Nevertheless, the government has taken measures to reduce tax-avoidance relocation of French companies’ income. For example, for French companies located in one or more countries deemed non-cooperative by the Ministry of the Economy, Industry and Employment, 50% of the passive income of these entities (dividends, interest and royalties) will be levied.

Measures to promote attractiveness are also regularly adopted, such as assistance in setting up companies or tax credits for research, (e.g. a tax credit on 30% of R&D spending up to 100 million euros and 5% beyond that), in order to make France more attractive and, hence to reduce tax-avoidance relocation.

For example, France’s level of economic competitiveness adds another dimension to the issue of tax-avoidance relocation by companies. In theory, the more economically competitive a country is, the less that companies located there would find it in their interests to relocate for tax-avoidance reasons.

A parallel can also be drawn with countries that have instituted a tax on financial transactions. A comparison shows that the United Kingdom and Taiwan, both of which have instituted such a tax, are ranked more highly than France (ranked 12th and 13th, respectively). This is one more argument showing that instituting a tax on financial transactions does not harm a market’s competitiveness.

---

92 Loi de Finances Rectificatives (updated budget) for 2009, whose measures against tax havens entered into force on 1 March 2010.

93 By virtue of Article 238-0 A of the General Tax Code, the Ministry of the Economy, Industry and Employment has set, through an order published in the official government journal of 17 February 2010 the list of countries and territories considered non-cooperative: Anguilla, Belize, Brunei, Costa Rica, Dominica, Grenada, Guatemala, the Cook Islands, the Marshall Islands, Liberia, Nauru, Niue, Panama, the Philippines, Saint-Kitts-and-Nevis, Sainte-Lucia, Saint-Vincent and Grenadines.
Appendix 3: Glossary

**ISDA master agreement**: contract pertaining to the OTC derivatives that are most commonly used internationally. It is part of a set of documents designed to make OTC derivatives complete and flexible. The framework consists of a master agreement, a calendar, confirmations, standardised definitions, and a credit support annex. The ISDA master agreement is published by the International Swaps and Derivatives Association. The master agreement is a convention between two parties that states the standard conditions for all transactions between these parties. Each time that a transaction is entered into, there is no need to renegotiate terms, as the master agreement applies automatically.

**Collecting agent**: in charge of collecting the tax and/or reporting taxable transactions.

**Placement agent**: markets securities by putting potential investors in contact with the issuer.

**Brokers or financial intermediary**: brings buyers and sellers together, a service for which it is paid in the form of commissions, but takes no position for its own account. It can handle several tasks, including the reception and transmission of orders, delivery of financial products, as well as keeping and managing client accounts.

**Clearing house**: a financial entity whose purpose is to eliminate counterparty risks, particularly on derivatives markets. In concrete terms, the clearing house is the single counterparty of all market participants. The clearing house monitors positions. It demands that guarantees be deposited with it on the day that a contract is entered into. In the event that a market participant shows an unrealised loss, it issues a margin call. For Euronext’s European exchanges, for example, the Central Counterparty is the credit institution Clearnet, a wholly owned subsidiary of Euronext, for all regulated and non-regulated boards (i.e., Euronext, Alternext and the Market Libre).

**Clearing**: calculation of the net position between two or more market participants. Clearing can be on a bilateral basis or through a clearing house, which then serves as the single counterparty between buyer and seller.

**Financial contract**: also called a forward financial instrument, this can be an options contract, a futures contract, a swap or any other forward contract. There is an almost infinite number and variety of underlying products, but are mainly on the equity, credit, interest-rate, currency and commodity markets.
Dealer: trades for its own account and provides liquidity to the market by placing itself between sellers’ ask prices and buyers’ bid prices (hence narrowing the spreads between the two). In practice, dealers often trade directly with end-clients, then sell their positions on the interbank market, in some cases through a broker.

Central depository: entity in charge of organising and managing the process of unwinding market trades. The Central Depository serves, first of all, as a veritable “notary” for securities, keeping a registry of financial instruments issued and checks that the total amount of each issue admitted to its operations is equal to the sum of the financial instruments registered in the accounts of its members (account-keeper/depositories). It also ensures circulation of financial instruments by handling spot market transactions. Meanwhile, it makes the necessary arrangements so that the rights attached to financial instruments registered in current accounts can be exercised. And, finally, once securities have been credited on the buyer’s account and cash has been credited with the clearing house member, it handles delivery (i.e., movement of positions of financial instruments) and settlement (i.e., movement on a cash account).

Derivatives: family of financial products that mainly includes options, futures, swaps, and combinations thereof, which are all underlain by other assets (equities, bonds, commodities, interest rates, indices, etc.), from which they are, by design, inseparable, including equity options, index futures, etc. Their value depends on, and is derived from, the value of other assets called underlying assets.

Dividends: remunerate providers of equity capital (shareholders) and are in general paid out from the net profits of the previous financial year but may also be taken from retained earnings or reserves.

Stamp duty: fee on the sale of listed or non-listed shares and on real-estate assets: although failure to pay a registration duty (or stamp duty) will invalidate the taxed transaction under English law, under the Civil Code, the parties to the transaction will be held to their contractual obligations.

Distortions between financial markets: caused by price inefficiencies, which are often temporary, between different securities or contracts.

Price elasticity: measures how sensitive demand is to changes in asset prices.

Issuer of financial instruments: persons or entities that make a public offer of financial securities or any equivalent instruments based on foreign law, or who have listed on-exchange.

Investment firm: legal entity other than a credit institution, which provides investment services as part of its normal business.
Credit institution: legal entity that, in the course of its normal business, undertakes banking operations, such as receiving funds from the public, lending, and making payment means available to its clients or manages those payment means.

ETF or (Exchange-Traded Funds): A mutual fund that replicates the performance of an index and that is traded in the same way that equities are.

Taxable event: the stages of order processing that trigger payment of the tax, i.e., in chronological order: order transmission, order execution, transaction clearing, settlement and delivery with flows of securities and cash. It is the moment that will trigger the collection and payment of the tax.

Futures contract: firm commitment to buy or sell an agreed quantity of an asset at an agreed price and on an agreed future date. Futures are standardised and listed products; they are underlain by assets in a standard amount and at fixed maturities.

Forward Rate Agreement (FRA): used to set an interest rate today for a future transaction. This product also offers the apparent advantage of being booked off the company's balance sheet. It is worth pointing out that if it is not the actual counterparty of a future real flow (i.e., a hedging transaction), this product can be used speculatively.

Market intermediary: receives and transmits buy and/or sell orders.

Financial instruments: equity securities (shares and similar securities), debt securities (bonds, negotiable debt securities, etc.), units or shares in collective investment schemes, financial contracts (or forward financial instruments).

Systematic internaliser: investment services provider that, in an organised, frequent and systematic manner, trades for its own account by executing orders off-exchange and outside of a multilateral trading facility. This means that the systematic internaliser is the direct counterparty of its clients' orders.

Institutional investor: includes banks, insurance companies, pension funds and mutual funds.

Futures market: market that offers standardised futures contracts in order to achieve liquidity that is sufficient to buy or sell all sorts of assets, including currencies, interest rates, hard and soft commodities, and energy. Futures markets participants can hedge by setting the price today on a transaction that will occur in a few months. Conversely, other users may seek to assume risks through the leverage produced by the forward payment of the transaction price. However, clearing houses are there to eliminate the counterparty risks that futures market users would be subject to if such users were not active on the market.
Spot market: market on which the purchase or sale of a security is settled immediately.

Over-the-counter (OTC) market: non-organised and non-structured market subject to lighter regulation than normal financial markets. Transactions are direct between the seller and potential buyer (a bilateral interaction). Each transaction has its own market price and orders therefore follow prices - the opposite of a normal financial market. Supply and demand may be matched through a broker or a dealer (e.g., banks, insurance companies, etc.).

Free Market: this is an unregulated market, which means that the securities traded on it have not been subject to the normal vetting process for admission, and that their issuers are not subject to disclosure and transparency requirements. The Market Libre used to be called the Market Hors Cote.

Organised market: mainly multilateral trading facilities, such as Chi-X or Turquoise.

Notional amount: applies to financial contracts and is equivalent to the theoretical amount to which the differential between the guaranteed rate and the variable rate applies in contracts for managing interest rate risk (e.g., FRAs, Swaps, etc.). The notional amount is never exchanged between contract buyers and sellers.

Primary market: relates solely to the issuance of financial instruments. Primary market transactions include allocation, issue and subscription.

Regulated market: multilateral system that brings together or helps bring together, within its framework and based on non-discretionary rules, multiple buying and selling interests in financial instruments, as expressed by third parties, resulting in contracts on financial instruments admitted for trading under this market’s rules and systems, and that function normally and in accordance with the legal provisions applicable to them. In France, Euronext Paris is the only regulated market, and that is where the shares of the largest companies are listed.

Secondary market: after being issued and subscribed, financial instruments are traded on the secondary market.

Trading: matching of buy and sell orders. In an over-the-counter transaction, buyers and sellers trade directly with one another. On-exchange trading can be done by a financial intermediary/ broker or directly by professional clients on a market platform or through a multilateral trading facility.
Bonds: negotiable securities that, within the same issue, offer the same financial claims for the same nominal value.

Foreign-exchange transactions: executed on foreign-exchange markets and including all buy and sale transactions on the spot or forward markets. Forex products are traded only over the counter.

Option: contract between two parties through which one party gives the other the right (but not the obligation) to buy from it (call option) or sell to it (put option) an asset in exchange for a premium. The purchase (or sale) of this asset is at a set price (the strike price) during a given period (during the period of exercise for “American” options) or at a set date (date of exercise for “European” options). Options are based on the principle of remunerating risk.

Block order: differs from ordinary orders when the quantity of securities offered for sale or requested for purchase by far exceeds the usual daily trading volume when the prices are outside the market range. A block trade is only for specific securities and for a given quantity and are supervised by the market regulators. But it must also take the other side of market orders at the offered price.

Small investors: individual persons making a low number of transactions during the year and in amounts that are “low” when compared to volumes traded on the financial markets.

Investment services provider: investment firms and credit institutions certified to offer investment services.

Settlement/delivery: procedure under which securities are delivered, normally in exchange for payment, to fulfil contractual obligations incurred from a transaction.

tax resident: individual person or legal entity who meets the following criteria:

- has their home or principle residence within the country;
- exercise a professional activity within the country;
- has the centre of their economic interests within the country.

Counterparty risk or default risk or credit risk: a measure of the counterparty’s ability to honour its commitments.

REPO (repurchasing agreement): transaction in which two parties agree simultaneously on two transactions: a security is sold for cash payment and then bought back later at a pre-set date and price. This transaction is an agreement to lend cash in exchange for the loan of securities. The security backing the repo serves as collateral for the transaction. The temporary sale of securities or receivables comes with an actual transfer of ownership. If ownership of the collateral is transferred to the buyer, this is a delivery Repo. The buyer is entitled to use the securities during the repo period but must return them to the seller upon maturity.
Swap: trade between two entities for a certain period of time. Of course, both entities must see an advantage in a swap, which can cover either financial assets or financial flows. In general use, the word “swap” means an exchange of financial flows (calculated on the basis of a theoretical reference called the notional amount) between two entities for a certain period of time. Unlike an exchange of financial assets, a swap of financial flows is an over-the-counter transaction with no effect on the balance sheet that modifies the interest-rate or currency conditions (or both simultaneously) of the current or future assets and liabilities.

Multilateral trading facility (MTF): system that, without possessing the quality of a regulated market, brings together, within its framework and based on non-discretionary rules, multiple buying and selling interests for financial interests, as expressed by third parties, in order to conclude transactions on such instruments. There are many multilateral trading facilities in Europe for equities, including Chi-X, Nasdaq OMX, Turquoise, BATS Trading, NYSE Arca Europe, Tradegate, and Equiduct.

Settlement system: ensures immediate irrevocability of unwound positions through the simultaneous and raw processing of the transfer of the securities covered by the transactions and the settlement of the cash portion in central bank money. In France, settlement-delivery is provided by Euroclear France, which is the central depository of French securities and manages the ESES France financial instrument settlement/delivery system.

Custodian of financial instruments: activity consisting, on the one hand, in registering financial instruments on behalf of their owners, i.e., recognising the holders’ rights to said financial instruments and, on the other hand, of keeping the corresponding assets in custody.

Equity security: securities issued by joint-stock companies, including shares and other securities that provide, or could provide, access to capital or voting rights.

Debt security: financial securities that each represents a financial claim on the legal entity or debt securitisation vehicle that issues it. Includes negotiable debt securities, bonds, government-issued securities or titres participatifs (non-voting shares).

Financial transactions: acquisitions and divestments of financial instruments.

Transmission of a buy/sell order: buy/sale request issued by the buy/seller on the market. When the order is issued, not all of the characteristics (price, date, quantity) of the final transaction are known.
Unit trust: UK equivalent of a French Fonds Communs de Placement (FCP).

Contract value: applies to futures contracts and is equivalent to the change in the contract’s price over time, which will converge with its underlying asset as it approaches maturity.

Market volatility: a measure of fluctuations in the value of an asset and, hence, its risk. It is calculated mathematically in the form of the standard deviations of returns on the asset.

Covered warrant: a listed financial product that can be traded just as shares are traded and that entitles its owner to buy or sell a share (or another security) at a preset price.
Appendix 4: Bibliography

- Autorité des Marchés Financiers, “Annual report”, 2010
- European Commission, “Financing the EU budget: report on the operation of the own resources system”, 29 June 2011