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Financial Transaction Taxes in the European Union

Thomas Hemmelgarn  
(European Commission)

Gaëtan Nicodème  
(European Commission, ULB, CESifo and CEPR)

Bogdan Tasnadi¹  
(European Commission)

and

Pol Vermote  
(European Commission)

January 2016

Abstract: The merits and demerits of financial transaction taxes have been heavily debated among economists, who remain divided on the effects of the taxes on trading volumes, market liquidity, and quotes volatility. In 2011, the European Commission put forth a legislative proposal for a common system of financial transaction taxes in the European Union. The proposal did not gather unanimity among all Member States and eleven asked to go ahead under the so-called enhanced cooperation procedure. In parallel, countries such as France and Italy have introduced their own taxes, while others of the group of eleven already had an FTT in place (Belgium and Greece). Discussions between Member States on the final design of the financial transaction tax are progressing, but to date no final decision has been made. This paper reviews the most recent economic literature on the effects of financial transaction taxes, with a focus on those recently introduced. It also details the proposals made by the European Commission.

Keywords: taxation, financial sector, financial transaction taxes, European Union
JEL Codes: G18, G28, G38, H21, H32

¹ This Paper is forthcoming in National Tax Journal, March 2016, 69(1). Corresponding authors: Bogdan-Alexandru.Tasnadi@ec.europa.eu and Pol.Vermote@ec.europa.eu. The views expressed in this paper are those of the authors and shall not be attributed to the European Commission. Errors and omissions are those of the authors only.
I. INTRODUCTION

The consequences of and lessons from the 2008 economic and financial crisis continue to dominate the political and economic debate in many countries around the world. While the major part of the debate focuses on the policy responses in areas such as financial regulation and macroeconomic policies to stabilize the economy, another important area of concern is tax policy and its role in the build-up of the crisis, as well as its potential to mitigate the risks of future crises.²

This debate on taxation is divided into two strands. One strand asks whether existing taxes have played a role in preparing the ground for the crisis. The most prominent example is the role played by the bias towards the use of debt in corporate and housing tax systems. The second strand is more concerned with the question of whether new tax instruments such as financial transactions taxes, bank levies, and financial activity taxes could help prevent financial crises in the future while also creating new sources of tax revenue.

The debate on financial transaction taxes (FTT) in the European Union (EU) and on the international level (IMF, 2010a,b) is an example of this latter strand. In the European Union, many policy makers believe that these taxes could indeed help raise revenue while mitigating the risk of financial crisis. In April 2010, the Services of the European Commission published a staff working document analyzing different sources of finance at a global level to finance challenges in development and climate policy (European Commission, 2010a). The document contained the first critical review of financial sector taxes such as bonus taxes, corporate income tax surcharges, and financial transaction taxes. In June 2010, the International Monetary Fund (2010a) published, upon the request of the G-20, an analysis that found a bank levy was the preferred option for a revenue contribution from the financial sector. The International Monetary Fund also proposed a Financial Activity Tax (FAT) as an additional source of revenue but was more critical of financial transaction taxes. In the European Union, the political discussion on Financial Sector Taxation started with a communication on “Taxation of the Financial Sector,” published in October 2010, together with a Staff Working Document (European Commission 2010b,c). These documents

² Comprehensive reviews of the role of taxes have been published after the crisis. Hemmelgarn, Nicodème, and Zangari (2012) describe the build-up of the crisis and the role that housing tax provisions played in the build-up. Hemmelgarn and Nicodème (2012) discuss in detail possible tax policy responses to the crisis, specifically taxes on the financial sector. Keen, Klemm, and Perry (2010) update International Monetary Fund (2009), which reviews possible channels through which tax policy has affected economic behavior and what tax policy responses should be considered. Finally, International Monetary Fund (2010a, 2010b) also provides thorough discussions of the options.
discussed the merits of an FTT and an FAT and were, at that stage, slightly more positive toward the latter option. The communication also announced an Impact Assessment (IA) further analyzing these two options. This IA was published in September 2011, together with a legislative proposal for an FTT, which was the favored option after the in-depth analysis.3

This paper begins by discussing the recent economic literature on the effects of a FTT. Next, it explains the 2011 and 2013 proposals for introducing a FTT in the European Union and the discussions on its design. Finally, it describes the two recent introductions of FTT in France and Italy.

II. A BRIEF OVERVIEW OF THE RECENT ECONOMIC LITERATURE

In recent years, substantial literature reviews on financial transaction taxes have been published (Matheson, 2011; Hemmelgarn and Nicodème, 2012; Pomeranets, 2012; Gomber, Haferkorn, and Zimmermann, 2015). This article does not repeat those reviews but will instead describe the main lines of arguments and focus on the effects of the recent FTTs in France and Italy.

The key element of the debate is whether an FTT can prevent speculation without affecting the positive roles of financial markets too much. Stiglitz (1989) and Summers and Summers (1989) argue that increasing transaction costs will decrease volatility and shift capital used for speculation toward more beneficial activities. Others such as Matheson (2011) think that the balance will tilt toward negative net effects, leading to lower transaction volumes, higher volatility, lower liquidity, and higher costs for the economy. Recently, Davila (2014) proposes a model of competitive financial markets to derive the optimal (i.e., welfare maximizing) financial transaction tax at the equilibrium. He finds the optimal tax rate to be positive as the reduction in non-fundamental trading creates gains that outweigh the losses due to reductions in fundamental trading.4 Lendvai, Raciborski, and Vogel (2014) use a general equilibrium model to assess the effects of a transaction tax on equity in the European

3 The documents related to the 2011 proposal can be found at “Further Background Information,” European Commission, http://ec.europa.eu/taxation_customs/taxation/other_taxes/financial_sector/ftt_background_en.htm. After the proposal was made, additional analyses on the FTT have been published (“The Original Proposal of 28 September 2011 … and Its Fate,” Taxation of the Financial Sector, European Commission, http://ec.europa.eu/taxation_customs/taxation/other_taxes/financial_sector/index_en.htm#fate). The FAT has not been further reviewed once the decision for an FTT was made.
4 Coelho (2014), however, criticizes the paper on the grounds that only trader welfare is taken into consideration, disregarding the welfare of non-market participants, and that the analysis is only about the corrective features of taxation, disregarding other welfare aspects such as addressing the VAT exemption of the financial sector or the taxation of economic rents.
Union. Their simulation for a transaction tax that would raise revenues equivalent to 0.1 percent of EU GDP shows a long-term decrease in GDP of about 0.2 percent. Theoretical papers are relatively inconclusive because their results depend on assumptions on the size of non-fundamental trade (noise traders), the size of information asymmetry, and the functioning and structure of the financial markets.

The empirical literature has attempted to measure the effects of financial transaction taxes on financial market characteristics. Following the typology proposed by Pomeranets (2012) and Gomber, Haferkorn, and Zimmermann (2015), four main aspects have been researched: volatility, volume, liquidity, and cost of capital. The early analyses of Umlauf (1993) and Campbell and Froot (1994) for the introduction of a 1 percent tax on equity trade in Sweden in 1986 have been influential in thinking about the effects of a financial transaction tax. They indeed find a dramatic decrease in volume with a relocation of many transactions outside of Sweden, higher volatility, and lower liquidity. However, other studies of the effects of financial transaction taxes in different parts of the world offer a more varied picture. The design of the tax is likely to be key for the effects.

An increase in volatility is found in several other papers (Baltagi, Li, and Li, 2006 for China; Hau, 2006 for France; Pomeranets and Weaver, 2011 for New York), but other contributions find either no effect (Roll, 1989; Saporta and Kan, 1997) or a negative relationship (Jones and Seguin, 1997 for the United States; Liu and Zhu, 2009 for Japan). There is a larger consensus on the effect on trading volume, as a financial transaction tax is associated in most papers with a statistically significant — and sometimes substantial — decrease in trading volume. The effects on liquidity have been less studied, but the few available papers (Pomeranets and Weaver, 2011; Chou and Wang, 2006) find a reduction in liquidity after the introduction of a financial transaction tax. In a recent paper, Deng, Liu, and Wei (2014) compare stock trading in Hong Kong (with many institutional investors) and mainland China (a less mature market), and find that the stamp duty decreases volatility in the latter but increases it in the former. They conclude that a financial transaction tax can have the desired impact on volatility in less mature markets but the opposite effect in more mature ones. Finally, a question remains as to whether or not financial transaction taxes increase the cost of capital. Here, again, the evidence is scarce. In one of the few papers to examine this issue, Amihud and Mendelson (1992) find that a 0.5 percent financial transaction tax would increase the cost of capital by 1.33 percent.

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5 See European Commission (2010b) for a description.
The introductions of financial transaction taxes in France in 2012 and Italy in 2013 have generated a series of new studies. These papers apply new natural experiment methods, comparing the behavior of French or Italian financial assets affected by the new tax to unaffected foreign financial assets with similar characteristics. Several papers look at the effect of the French financial transaction tax. Becchetti, Ferrari, and Trenta (2014) use non-taxed French stocks (i.e., those under the one billion euro capitalization threshold); Meyer, Wagener, and Weinhardt (2015) use UK stocks as counterfactuals; Gomber, Haferkorn, and Zimmerman (2015) control with Germans stocks, and Colliard and Hoffmann (2015) use Dutch data. Coelho (2014) looks at the introductions of FTT in France and Italy and uses three alternative control groups: below-eligibility-threshold Italian and French stocks, American Depositary Receipts (ADR) (from the same company but denominated and traded in US dollars), and Dutch and Belgian shares as control groups. Finally, Rühl and Stein (2014) investigate the effects of the FTT in Italy and use British stocks as the control variables.

For France, all papers find a strong and significant decline in trading volume of an order of magnitude of close to 20 percent. Both Meyer, Wagener, and Weinhardt (2015) and Colliard and Hoffmann (2015) offer indications that the effects were the biggest on large and liquid stocks, as well as on institutional investors or those with high turnover. Coelho (2014) also finds a decrease in turnover, especially for liquid stocks and for the lowest two quintiles of market capitalization. For high frequency trading, her estimated tax elasticity is very high at –9 percent, compared to a general price elasticity of stocks of –3.6 percent. European Commission (2014b) considers, however, the evidence as mixed with trading volumes dropping prior to and after the introduction of the tax and recovering later to a certain extent.

Turning to liquidity, Becchetti, Ferrari, and Trenta (2014) and Meyer, Wagener, and Weinhardt (2015) find no significant effect of the financial transaction tax. The latter finds a decrease in bid-ask spreads — which could indicate greater liquidity — but also finds a decrease in order book volume — which may indicate the opposite effect. Gomber, Haferkorn, and Zimmerman (2015) find a decrease in order book depth, a measure of the market’s ability to overcome even large executions without leading to subsequent order imbalances and price variability. In contrast, Colliard and Hoffmann (2015) find an increase in bid-ask spreads and a decrease in market quality for stocks for which market participants appear to be a source of liquidity. Gomber, Haferokrn, and Zimmerman (2015) also find an

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6 The details of these taxes are described in the last section of this paper.
increased price differential between taxed and non-taxed platforms with an increase in the average price difference between the two of about 20 percent. Finally, while Gomber, Haferkorn, and Zimmerman (2015), Coelho (2014), and European Commission (2014b) find no significant effect on volatility, Becchetti, Ferrari, and Trenta (2014) find a significant decrease in intra-day volatility.

Turning to Italy, Rühl, and Stein (2014) find an increase in volatility and a decrease in liquidity. They do not however observe changes in trading volumes, although the authors suggest that these changes may have occurred in anticipation of the enactment of the tax at times outside their data range. Coelho (2014) also does not find a significant effect on trading volumes. She suggests this is due to more complex combinations of tax wedges used in the Italian version of the FTT design, which would offset much of the otherwise expected decline in exchange trading. Conversely, the decline in trading in Italian over-the-counter (OTC) markets is substantial (an 85 percent drop relative to the Spanish control group), probably due to the doubling of the tax rate compared to lit (i.e. organized) platforms. Coelho’s (2014) findings suggest a small overall impact of the Italian FTT on the volatility of affected stocks (except, again, for OTCs).

In thinking about these results, it is important to keep in mind that the available studies look at effects of financial transaction taxes for different periods of time, different countries, and different types of markets. It goes beyond the scope of this paper to carry out a meta-analysis, but such exercise could reveal important influences of tax designs, structures of financial markets, ex-ante liquidity and volatility, products traded, and types of interactions between actors on the markets.7

III. POLICY DEVELOPMENTS IN THE EU

A. The EU Financial Transactions Tax

1. The Initial Proposal of September 2011

In September 2011, the European Commission proposed a harmonized financial transaction tax for the EU with three objectives. The first was to prevent the fragmentation of the single market and avoid distortions of competition that could stem from numerous uncoordinated national approaches to taxing financial transactions. Second, the European Commission wanted to ensure that the financial sector made a fair and substantial contribution

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7 See, for example, Pelizzari and Westerhoff (2007).
to public finances. Finally, the proposal discourages financial transactions that do not contribute to the efficiency of financial markets or the operation of the real economy, thereby complementing regulatory measures aimed at avoiding future financial crises. This initiative was also considered a first tangible step toward taxing such transactions at the global level. It contributed to the international debate on financial sector taxation in general and to the development of a FTT at the global level specifically.

The proposed tax was wide in scope, covering financial transactions with all financial instruments (i.e., shares in companies and bonds and similar products — including depositary receipts, certificates, warrants that are negotiable on the capital markets, structured products, money market instruments, units or shares of collective investment undertakings, derivatives agreements, etc.). However, the proposal did not cover the primary market transactions of shares and bonds (and their equivalents) and other kinds of financial transactions relevant for businesses and citizens (e.g., payment services, supply of consumer and mortgage credits, company loans, insurance products, etc.). Moreover, spot currency transactions were not included in the proposed tax to preserve the free movement of capital and payments between EU Member States and between EU Member States and third countries, as guaranteed by the Treaty on the Functioning of the EU. The proposed tax thus needs to be distinguished from the “Tobin tax” (Tobin, 1974, 1978) or a tax on foreign exchange transactions.

The covered financial transactions included those on organized trading venues, such as regulated markets (exchanges), multilateral trading facilities, systematic internalizers, and organized trading facilities, in addition to over-the-counter transactions. Furthermore, the proposed tax included not only the purchase and sale of covered financial instruments but also the conclusion or modification of derivatives agreements, the transfers of financial instruments between entities of a group, and the repurchase, the reverse repurchase, the securities lending, and the borrowing of financial instruments in the scope of the proposed tax. The proposed FTT also taxed gross transactions before any netting and settlement, thus aiming clearly at including intra-day transactions.

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8 However, the subsequent trading of these via structured products is included.
10 This does not limit the transfer of ownership but rather the obligation entered into, mirroring whether or not the financial institution involved assumes the risk implied by a given financial instrument.
An essential feature of the proposed FTT was the scope of the proposed tax, which focused on financial transactions carried out by a financial institution acting as a party to a financial transaction either its own account, for the account of another in one’s own name (undisclosed agent), or acting in the name (and for the account) of a party to the transaction (disclosed agent). Consequently, transactions without any involvement of a financial institution – primarily targeted by the proposal – would not be taxable. The proposed definition of financial institutions that must be involved to have a taxable transaction is broad and essentially includes investment firms, organized markets, credit institutions, insurance and reinsurance undertakings, collective investment undertakings and their managers, pension funds and their managers, and other persons carrying out certain financial activities with significant financial transactions.

In summary, the proposal for a harmonized common FTT framework took a “triple A” approach, i.e., the tax should apply to all markets (such as regulated markets or over-the-counter transactions), all instruments (shares, bonds, derivatives, etc.), and all financial sector actors (banks, shadow banks, asset managers, etc.). This would ensure equal treatment of financial institutions, products, and markets in the EU, while minimizing potential distortions across different market segments and reducing the risk of tax avoidance, substitution of financial instruments, and relocation. Uniform definitions would tackle tax arbitrage in an environment of highly mobile transactions and both potential double taxation and non-taxation in the EU.

The application of the proposed tax and the Member States’ taxing rights were defined based on the residence principle. The essential condition for a transaction to be taxable under the first Commission FTT proposal is that at least one party to the transaction is established in an EU Member State and that a financial institution that is party to the transaction or involved in the transaction as an intermediary is established in the territory of an EU Member State. Taxation was proposed to take place in the Member State in which the financial institution is established, i.e., generally speaking where the headquarters or registered seat is established. If a financial institution is involved on both sides of a

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11 The rules on territorial application determine the geographical distribution of the tax revenue, based on the place of establishment of the financial institution involved in the transaction. Other solutions are taxation at the place of transaction or taxation at the place of issuance of the financial instrument. Taxation at the place of establishment of the financial institution was believed to result in a lower degree of concentration of tax revenue and to offer more possibilities to limit tax avoidance.

12 The Commission proposal includes a list of criteria determining “establishment” that must be applied in descending order of priority. The list starts with the Member State of authorization of the financial institution
transaction (as a party or intermediary), the tax can be levied twice, each time in the Member State of establishment of the financial institution. This residence principle also includes the so-called “counter-party principle,” which essentially means that a financial institution located outside the EU is liable for FTT if it is a party to a financial transaction with a counterparty established in the EU. This “counter-party principle” has been criticized for having illegal extra-territorial effects. The European Commission services have explained that the principle respects the requirements of international law concerning the existence and exercise of tax jurisdiction and does not entail any impermissible extra-territorial effects. As explained later, the residence principle has additionally been supplemented by elements of the issuance principle with a view mainly to strengthening anti-relocation. Financial institutions established outside the FTT jurisdiction would also be obliged to pay the FTT if they transact in certain financial instruments issued within this jurisdiction (see the discussion below of enhanced cooperation).

All in all, the application of these principles aims to ensure that taxation only takes place in the presence of a sufficient link between the transaction and the territory of the FTT jurisdiction and, consequently, that territoriality principles are fully respected. Moreover, these principles are subject to an exception if the person liable to pay the proposed tax can prove that there is no link between the economic substance of a transaction and the territory of the FTT jurisdiction. As a primary rule, it was proposed that the persons liable to pay the tax would be the financial institutions involved in a taxable transaction, and the proposed tax would be paid to the tax authorities of the Member State where the financial institution is (deemed to be) established. The proposal also includes provisions on joint and several liabilities in order to facilitate and ensure collection of the tax and provide incentives for tax

(with respect to transactions covered by that authorization), which is as a rule the Member State where the headquarters is located. The list also includes the Member State of location of a branch (with respect to transactions carried out by the branch), which is used for cases in which the headquarters/seat is outside the EU.

13 More precisely, a financial institution that acts as a party, either for its own account or for the account of another person, or is acting in the name of a party to the transaction to a financial transaction with another financial institution established in a Member State (according to the criteria explained in footnote 13), or with a party — that is not a financial institution — established in a Member State (essentially its registered seat or branch is in that State), that first financial institution is deemed to be established in that Member State.


compliance. Moreover, in order to avoid cascading of the proposed tax, it was proposed that when a financial institution acts in the name (disclosed agent) or for the account (undisclosed agent) of another liable financial institution, only the latter would be liable. Transactions made by the financial institutions on one’s own account are thus not included in this proposed “intermediate relief.” Furthermore, the proposal did not include specific provisions or exemptions relating to market making activity.

The Commission proposal provided only a few exclusions from the scope of taxation. For example, it was proposed that transactions with the European Central Bank or central banks of the Member States were excluded to avoid any negative impact on the re-financing possibilities of financial institutions or on monetary policy in general. Primary market transactions of shares and bonds or similar securities were also excluded from the proposal. In these cases, it was proposed to not tax either of the two sides of the transaction. Finally, in some additional proposed exclusions only one side of the transaction is not taxable - for example, the proposed tax does not apply to central counterparties (CCPs) (clearinghouses) when exercising the function of a CCP. For clearing purposes, CCPs interpose themselves in transactions and act as buyer and seller, which means that their side of the transactions in which they act as buyer and seller would not be taxable.

The rules contained in the FTT proposal to ensure timely payment of the tax, collection, and verification are basic and do not describe in detail obligations to ensure payment, such as registration of taxable persons, accounting, and reporting obligations, nor do they try to harmonize tax collections methods. Generally speaking, collection could be organized centrally — for example, by using existing market infrastructures such as central security depositories or central clearinghouses — or could be left to the market players (financial institutions liable to pay the proposed tax) with a possibility of delegation of payment to better equipped institutions. In this area, the Commission provided flexibility for Member States to maneuver in order to take account of differences in national systems, legislation, and financial markets organization.

16 In the 2011 Commission proposal, the issue and redemption of shares and units of collective investment vehicles (undertakings for collective investments in transferable securities — UCITS — and alternative investment funds — AIF) were excluded from the exemption, whereas in the 2013 proposal implementing enhanced cooperation, the exclusion was kept only for the redemption.

17 In this respect, a study was ordered by the Commission (“FTT – Collection Methods and Data Requirements,” European Commission, http://ec.europa.eu/taxation_customs/resources/documents/taxation/other_taxes/financial_sector/ftt_final_report.pdf).
The proposed tax rates are minimum rates\textsuperscript{18} of 0.01 percent of the notional amount for derivatives transactions and 0.1 percent of the price for other transactions.\textsuperscript{19} In terms of revenue, for the EU27 (based on the 2011 Commission proposal, which does not include Croatia), it was estimated that a broad-based FTT could raise approximately EUR 57 billion every year or 0.45 percent of GDP (based on 2011 data).

The European Parliament and the European Economic and Social Committee, which are both to be consulted in the decision-making procedure, as well as the EU Committee of the Regions, backed the 2011 Commission FTT proposal.

2. The FTT under Enhanced Cooperation

After its publication, the relevant working groups in the Council of Ministers representing the Member States’ governments discussed the original proposal. However, by mid-2012, there was no unanimous agreement at the Council level on the proposal for an EU-wide FTT, and it was clear that the principle of harmonized taxation on financial transactions would not receive the required unanimous support within the Council in the foreseeable future.\textsuperscript{20} Nonetheless, a number of Member States expressed a strong willingness to go ahead with the FTT. The door was therefore open for a subgroup of Member States to engage in the so-called process of “enhanced cooperation” as provided for in Article 20 of the Treaty on the EU and Articles 326 to 334 of the Treaty on the Functioning of the EU. Enhanced cooperation allows a number of Member States (a minimum of nine) to advance on specific policy issues based on the authorization of the Council of the EU. Enhanced cooperation has only been used thus far in two cases: divorce law and the language regime for patents. Its application in FTT would be the third case and the first in the tax area.\textsuperscript{21}

The major requirements for the establishment of enhanced cooperation under the Treaty on the EU and the Treaty on the Functioning of the EU are (1) the enhanced cooperation shall aim to further the objectives of the Union, protect its interests and reinforce its integration process, and shall be open at any time to all Member States; (2) the decision authorizing enhanced cooperation needs to be adopted by the Council as a last resort when it is established that the objectives of such cooperation cannot be attained within a reasonable

\textsuperscript{18} Member States could thus impose higher rates.
\textsuperscript{19} The tax rates would apply to both sides of a transaction, if, on both sides taxable financial institutions were involved.
\textsuperscript{20} In the European Union, unanimity is required in the Council for tax matters.
\textsuperscript{21} Not many studies or research papers have examined the application of enhanced cooperation in the area of taxation. However, see Law Society of England and Wales (2011), which provides some interesting insights.
period by the Union as a whole; (3) at least nine Member States have to participate in the enhanced cooperation; (4) the enhanced cooperation shall not undermine the internal market or economic, social, and territorial cohesion; (5) it shall not constitute a barrier to or discrimination in trade between Member States and shall not distort competition between them; (6) it shall comply with the Treaties and Union law; (7) it shall respect the competences, rights, and obligations of the Member States that do not participate in it (these non-participating Member States, in turn, will not impede the cooperation’s implementation by the participating Member States); and (8) the European Commission and the participating Member States have to promote participation by as many Member States as possible.

By the end of October 2012, the Commission had received requests to establish enhanced cooperation in the area of FTT from a group of 11 Member States (Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia, and the Slovak Republic), hereafter also referred to as the G-11. Those Member States asked to be allowed to introduce a common system of FTT under enhanced cooperation, based on the scope and objectives of the Commission’s initial proposal, while reference was also made in particular to the need to avoid evasive actions, distortions, and transfers to other jurisdictions. The Commission analyzed the requests to ensure its compatibility with EU law, also taking into account the interests of non-participating Member States. The Commission concluded that all legal conditions for enhanced cooperation set by the Treaties were fulfilled.

The act implementing the enhanced cooperation, however, would have to fully respect the relevant provisions of the “capital duty directive.” Essentially, the reasoning is as follows: By its nature, the objective of the establishment and functioning of the internal market and the avoidance of distortion of competition through harmonization of indirect taxes is equally pertinent within the scope of enhanced cooperation (i.e., among a smaller number of Member States) as it as among all Member States. This applies even if at the beginning (when others have the right to join), by necessity, the immediate benefits for the internal market would accrue only within this small group. At the scale of enhanced cooperation, this arrangement avoids the coexistence of differing national regimes and ensuing problems in the form of distortions of competition, deflections of trade between products, actors and

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22 This directive is the Council Directive 2008/7/EC of 12 February 2008 concerning indirect taxes on the raising of capital. Any potential Council Directive implementing enhanced cooperation in the area of FTT will have to respect the provisions of Council Directive 2008/7/EC so as to avoid any potential conflict between the two Directives. Indeed, the enhanced cooperation establishment has to respect Union law. Moreover, it would not be possible for the nine Member States to change the Council Directive to which the unanimity rule in the Council applies.
geographical areas, and incentives for operators to avoid taxation. Moreover, the mere coexistence of the legal system of harmonized FTT applicable, on the one hand, within the participating Member States and, on the other hand, within national legal systems of non-participating Member States cannot as such be considered a barrier, discrimination, or distortion of competition. In the absence of enhanced cooperation, an even greater number of legal systems would coexist. From this perspective, the enhanced cooperation diminishes the potential for distortions of competition, notably where it concerns distortions through non-taxation or double taxation. Furthermore, the system of enhanced cooperation would in no way affect the possibility for non-participating Member States to keep or introduce an FTT on the basis of non-harmonized rules, provided only that they comply with Union law obligations that are applicable in any case. Finally, the common system of FTT would attribute taxing rights to the participating Member States only based on appropriate territorial connecting factors. Enhanced cooperation in the area of FTT thus respects the competences, rights, and obligations of non-participating Member States.

The Commission also considered it appropriate and timely to authorize the establishment of enhanced cooperation between the 11 interested Member States and to set up a common system of FTT between them. Therefore, the Commission tabled its Proposal for a Council Decision authorizing enhanced cooperation in the area of financial transaction tax on October 23, 2012.\(^{23}\) In January 2013, the EU Council adopted the proposal and thus decided to authorize the eleven Member States to establish the requested enhanced cooperation,\(^{24}\) which occurred after the European Parliament gave its consent.\(^{25}\) This was the first time in the taxation area that an authorization to establish enhanced cooperation — as provided for in the Treaties — was launched to allow a limited number of Member States to proceed on the establishment of a common system.\(^{26}\)


\(^{24}\) In this case, qualified majority approval applied rather than the unanimity rule for taxes.


\(^{26}\) On April 18 2013, the UK asked the Court of Justice of the EU to annul the Council’s decision authorizing 11 Member States to establish enhanced cooperation in the area of FTT among other things because it allegedly authorizes the adoption of an FTT that produces extraterritorial effects. On April 30, 2014, the Court dismissed the UK’s action. The Court concluded that the arguments put forward by the UK were directed at elements of a potential FTT and not at the authorization to establish enhanced cooperation; the contested decision does no more than authorize the establishment of enhanced cooperation but does not contain any substantive element on the FTT itself.
3. The Main Features of the Proposal under Enhanced Cooperation

On February 14, 2013, the Commission adopted its Proposal for a Council Directive implementing enhanced cooperation in the area of FTT together with the revised impact assessment.27 A new proposal on the substance of the common FTT to be applied in the participating Member States had to be presented. As requested by the G-11, this proposal is very similar to the original one, and it respects all of its essential principles. It mirrors the scope and objectives of the original FTT proposal, while also strengthening the anti-relocation and anti-abuse principles. At that time, eleven Member States had a form of FTT in place, and, four of these came from the group of 11 (Belgium, Greece, France, and Italy).

However, the new proposal also made some adaptations. First, the new proposal takes account of the context of enhanced cooperation. This means in particular that the FTT jurisdiction is limited to participating Member States. It also means that transactions and parties that would have been taxed under the original proposal remain taxable but only in a participating Member State. It further means that it is ensured that Council Directive 2008/7/EC of February 12, 2008 concerning indirect taxes on the raising of capital remains unaffected (it is referred to in the aforementioned conditions on enhanced cooperation). In particular, financial transactions as part of restructuring operations or as part of the issue of securities as defined in this Directive were not to be subject to FTT. Additionally, the proposal refines some of the proposed provisions for the sake of clarity (e.g., a non-limitative list of which modifications of transactions are to be considered a new transaction of the same type and thus taxable has been added, and the exchange of financial instruments has been explicitly included in the list of taxable transactions). Finally, it further strengthens rules to limit tax avoidance by specifying that taxation follows the “issuance principle” as a last resort.28 If none of the parties to a financial transaction is established in a participating Member State29 but the transaction concerns a financial instrument30 issued in a participating

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28 See also the explanation given in relation to the original proposal of 2011.

29 The criteria to be considered “established” is set out in the proposal.

30 The application of the “issuance principle” concerns essentially shares, bonds and equivalent securities, money-market instruments, structured products, units and shares in collective investment undertakings, and derivatives that are traded on organized trade venues or platforms (OTC derivatives transactions are thus excluded from the application of the issuance principle).
Member State,\textsuperscript{31} the financial institutions involved in the transaction would be taxed in the participating Member State of issuance of the instrument. This addition reflects notably the requests of the interested Member States that referred to the need to avoid evasive actions, distortions, and transfers to other jurisdictions. Indeed, by complementing the residence principle with elements of the issuance principle, it would be less advantageous to relocate activities and establishments outside the FTT jurisdictions since trading in the financial instruments subject to taxation under the latter principle and issued in the FTT jurisdictions would be taxable anyway.\textsuperscript{32} Furthermore, a general and a specific anti-abuse rule (on depositary receipts and similar securities) have been added to the FTT proposal.

Technical discussions in the relevant Council working party started immediately after the Commission proposal was tabled. In the Council discussions, all EU Member States can participate, but only the 11 participating Member States will have the right to vote and agree by unanimity on the Directive. FTT revenue estimations for the G-11 are, based on the Commission proposal, in the range of EUR 30–35 billion per year or 0.4 to 0.5 percent of the GDP of the participating Member States.

**B. Prospects for an EU FTT Implemented under Enhanced Cooperation**

The discussions since February 2013 about the proposal for a Directive implementing enhanced cooperation in the area of FTT have focused on the main elements of the tax. There is no agreement yet, and unanimity between the 11 participating Member States would be needed. In order to facilitate a compromise among these Member States, the G-11 decided at the beginning of 2015 to better coordinate their work while keeping the discussions at EU-28 level. The main elements for discussion are the following.

\textsuperscript{31} To be issued in a participating Member State essentially means to be issued by a person who has his/her registered seat in that State. It means that, for example, a certificate, warrant, or an exchange-traded derivative is in the participating Member State where the issuer of it is established, as opposed to where the issuer of the underlying product (e.g., a share) is established.

\textsuperscript{32} In addition, one particular change due to the new context concerns financial institutions authorized or entitled to operate in a participating Member State, e.g., on an exchange but from outside that State (without establishment there). In such case, the financial institution will have to pay as a rule the FTT in that State for transactions covered by that authorization or entitlement.
1. Principles for Territorial Application

The rules on territorial application of the tax are important because they determine which participating Member State has the right to tax and thus to which country the tax revenue accrues. Different possibilities can be explored, including changing — for securities — the order of the criteria set out in the Commission proposal, for instance, to look first at the place of issuance of a share (establishment of the issuing company) in order to determine which participating Member State has the right to tax.

2. The Scope of the Tax: Financial Instruments and Transactions and Financial Institutions

Linked to the topic of territorial application, there is a possibility for participating Member States to tax only securities issued by entities residing in their respective jurisdictions, which could then leave the taxation of instruments issued by other entities as being optional. The issue of liquidity for some shares and bonds, and the impact on public debt are core elements. In May 2014, the G-11 ministers issued a declaration in which they indicated that they might decide to exclude public bonds from the scope of the tax in order to limit the potential negative impact on public borrowing costs and investors.

The taxation of shares/units of undertakings in collective needs to be considered in light of the potential for double taxation, as the Commission’s proposal included the redemption of shares/units of collective investment funds, the trading of these shares/units on secondary markets, and the trading carried out by these funds/fund managers in the scope of the directive. Furthermore, the potential negative impact of the taxation of repurchase agreements (repos) and securities lending/borrowing on the short-term financing of the financial sector and on public finances is of concern.\(^{33}\)

Because of the potentially negative effects on public financing costs, the exclusion of derivatives linked to public bonds is also a critical issue. Such a possible exception would have to be well-defined in order to avoid massive avoidance of the tax and significant revenue losses. The impact on the real economy is also of concern. However, it is rather difficult to

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\(^{33}\) There are massive misgivings about taxing repos and securities lending in the financial sector — see, for instance, International Capital Market Association (2013). However, there are also indications that this market segment was not completely disconnected from negative developments during the financial crisis — see, for example, Financial Stability Board (2012) and Gabor (2015).
draw an objective line between “speculation” and “hedging,” especially at the level of the tax authorities that will have to implement the tax.

Finally, another concern relates to the protection of pensions and old-age provisions (i.e., extra-retirement provisions not part of social security regimes), for instance, provided by pension funds. It can be argued whether or not the transactions of pension funds should be in the scope of the tax. However, since there are several similar products or even entities that serve this goal, an exception for pension funds would create an unlevelled playing field, alongside additional revenue losses.

3. The Taxable Amount

Since the relative burden on some financial instruments could be higher because of the nature of the proposed harmonized tax, a possibility to lower the impact of the FTT on short-term instruments such as repos, money market instruments, and certain derivatives would be to levy the tax on a taxable amount divided by a time-dependent factor. It is always an element of discussion whether the notional amount is the best choice as the taxable amount for derivatives. Using the notional amount as a one-size-fits-all solution is straightforward and easy to apply, but choosing the market price for derivatives when available (e.g., for options-like derivatives) could bring the taxable amount more in line with the “real economic value” of the transaction. Conversely, no distortions should be created between products, and the tax burden is defined by the combination of both the taxable amount and tax rate.

4. Gross versus Net Taxation

The European Commission proposed to tax gross transactions, before any netting or settlement of transactions. This form of taxation is feasible as the experience in certain countries shows (e.g., Belgium, Greece, and the UK). Some (G-11) Member States (e.g., France34 and Italy) based their national FTT on shares on net positions at the end of a trading day. However, taxing securities on the basis of net values at the end of the trading day would result in a massive loss of tax revenues. The issue of taxing gross or net transactions is linked with the discussions on how to tax a (securities) transaction chain that can include a large number of players in the case of transactions carried out on exchanges and with how to treat market-making activity.

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34 However, the French Parliament decided in October 2015 to extend the scope of the French FTT to intra-day transactions as of 2016. For more details, see “Amendement No. I-CF152,” Assemblée Nationale, http://www.assemblee-nationale.fr/14/amendements/3096A/CION_FIN/CF152.asp.
5. Transaction Chain

The Commission proposed to tax all the transactions that occur in order to satisfy an initial order before the product reaches the end investor (the so-called “chain” or “cascade”). There would be a limited exclusion from taxation, i.e., for financial institutions acting in the name and for the account of another financial institution (disclosed agent model) or in their own name but for the account of another financial institution (undisclosed agent model). Because of the regulatory obligation to clear more transactions through a central counterparty (CCP), the Commission proposed to exclude the CCPs from taxation. In addition to this exclusion, the Commission considered the role and a possible further exclusion of clearing members (to a CCP) and other financial institutions in case they provide clearing services to their clients that do not have direct access to a CCP.

6. Market Making

The Commission’s proposal does not contain any exclusion from taxation for market making in view of its objective to design a broad based tax with few exemptions and to avoid possible distortions. The national FTT in place in Greece, France, and Italy contains specific exemptions for market making activities in view of their perceived positive influence on market liquidity. The main difficulty in dealing with market making is separating it from proprietary trading. The concept of liquidity (as defined for securities) is not fully applicable in the case of the derivatives market unless there is a secondary market for derivatives. In addition, the concept of market making in the case of derivatives might not be fully equivalent to the secondary market for securities as the typical characteristic for market-making, i.e., the posting of firm, simultaneous two-way quotes of comparable size and at competitive prices, is missing/practiced in a different way. In general, a theoretical exemption of FTT for market making of transactions carried out over-the-counter (for instance, most of bond trading) would be difficult to monitor by the tax authorities and would result in a significant loss of tax revenues.

35 See, for instance, European Commission (2014a). “Proprietary trading” means using one’s own capital or borrowed money to take positions in any type of transaction to purchase, sell, or otherwise acquire or dispose of any financial instrument or commodities for the sole purpose of making a profit for one’s own account. This is done without any connection to actual or anticipated client activity or for the purpose of hedging the entity’s risk as a result of actual or anticipated client activity, through the use of desks, units, divisions, or individual traders specifically dedicated to such position taking and profit making, including through dedicated web-based proprietary trading platforms. “Market making” means a financial institution’s commitment to provide market liquidity on a regular and ongoing basis by posting two-way quotes with regard to a certain financial instrument, or as part of its usual business by fulfilling orders initiated by clients or in response to clients’ requests to trade, but in both cases without being exposed to material market risk.
7. Tax Rates

Tax rates must be considered in conjunction with the other elements of a FTT such as the financial instruments to be included in its scope and their taxable amounts. For example, in the case of products where the perceived negative effects of the FTT need to be dampened, a solution could be either to exclude them completely (for instance, public/government bonds) or to use a lower tax rate (for example, for private/corporate bonds, derivatives, etc.).

8. Tax Collection

As mentioned above, the choice of collection methods could be simplified as being a choice between (1) a model based on self-administration and delegation of collection responsibilities (declarations and payments submitted by the financial institutions) for all the types of financial transactions and on all markets and (2) a model based, where possible, on financial infrastructure (a more centralized approach) for certain types of financial transactions and markets, leaving the possibility of implementing the self-declaration system for the rest. The main advantages of the first model are ease of implementation in the short term, relatively low administration costs, and universality, while the main disadvantage is less monitoring and therefore possible revenue losses. The second model has the advantage of providing more (cross-) checking and the possibility of automating and integrating certain processes, while it would probably imply higher (initial) administration costs and not cover all transactions. At the request of the European Commission, Ernst and Young delivered in October 2014 a report on collection methods and data requirements for the FTT.36

IV. NATIONAL SYSTEMS INTRODUCED AFTER THE CRISIS

A. France

In 2012, in order to provide some impetus to the discussions at the European level regarding the FTT, France decided to introduce its own national financial transaction tax as of August 1, 201237. The French FTT has three components: (1) a tax on the purchase of shares of large French listed companies (with a market capitalization in excess of EUR 1 billion38).
wherever the trade is carried out, (2) a tax on “naked”/uncovered credit default swaps (CDS) on sovereign debt,\textsuperscript{39} and (3) yet another tax on cancelled orders, which is intended to target high-frequency trading. This FTT coexists with a registration duty that is levied on all (listed and unlisted) corporate entitlements sold in France.\textsuperscript{40}

1. The Tax on Transactions in French Shares

The tax applies only to listed shares of companies with their registered offices in France, wherever they are traded. The tax rate is 0.2 percent (increased in August 2012 from the rate of 0.1 percent, initially proposed in March). The buyer is liable for the tax, which is based on the price at which the shares are sold.

The legislation includes certain exemptions such as primary market transactions (issuance), intra-group transactions (for financial and prudential management), market making aimed at ensuring a liquid market and limiting share price volatility, repurchase and reverse repurchase, securities borrowing and lending agreements (carried out mainly for financing purposes), and transactions carried out by financial infrastructures (clearing houses and central securities depositories) as part of their “normal” activity of ensuring proper market functioning.

The collection of the tax is facilitated by the settlement service provided by the central securities depository (Euroclear France), which is partially financially compensated for its efforts with regard to reporting, collection, and other operations performed in the context of the French FTT. The accountable parties, which must provide the declarations and pay the financial transaction tax, are either the investment firms that have executed the transactions on their own behalf or on behalf of their clients or the securities account holder (custodian) of the investor when the transactions are not executed by investment firms/brokers (e.g., for OTC transactions).

2. Taxation of Naked Sovereign CDS

The taxable amount is represented by the notional amount of “naked”/uncovered CDS (purchased on the French market) on bonds issued by governments of EU Member States. The buyer of such an instrument is liable for the tax, and the tax rate is 0.01 percent. The tax is reported, recovered, and verified using the same procedures as for the value-added tax (VAT).

\textsuperscript{39} In effect, the tax covers the cases where buyers of such contracts do not hold the underlying government bonds referred to in the contracts or any other asset whose value is correlated with sovereign default risk.

\textsuperscript{40} For further details, see European Commission (2013, pp. 63–64).
3. Taxation of High-frequency Trading

In this case, the tax rate is 0.01 percent and is applied to the amount of cancelled orders. It applies in cases where the trading was carried out as high-frequency algorithm trading and the ratio of cancelled orders to all orders exceeded 80 percent. It has to be paid by all participants in the French market, irrespective of the trading platform they use.

It was estimated in 2012 that these taxes would generate a total tax revenue of EUR 530 million in 2012 and EUR 1.6 billion on a full year basis. In 2012, however, only EUR 198 million was collected with the tax on shares and EUR 1 million with the tax on naked CDS. The tax on cancelled orders did not yield any revenues in that year. The forecast for 2013 was revised to EUR 700 million and the one for 2014 to EUR 741 million. A part of the revenue is earmarked for contributions to development aid, EUR 40 million out of EUR 741 million. The review of the economic literature above provides additional information on the effects of the tax on trading volumes, liquidity, and volatility.

B. Italy

One year after France has introduced its national FTT, Italy also introduced its own system. It targets three categories of transactions: (1) shares and other instruments representing these instruments (for instance, depository receipts such as ADRs) issued by Italian resident companies; (2) derivatives — irrespective of whether they are cash or physically settled, securitized or not — whose underlying assets are in-scope Italian shares or where the derivative is based on the value of in-scope Italian shares; and (3) high frequency trading, defined as trading generated by a computer algorithm that automatically determines orders, where the ratio of orders amended or cancelled in a time frame shorter than half a second exceeds 60 percent of total orders entered.

The tax is applicable from March 2013 for equities and from July 2013 for derivatives. The tax on shares is levied on the purchaser, the one on derivatives is levied on both parties of

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41 For further details, see the information report in the 2013 law on public finance (“Rapport d’Information Déposé en Application de l’article 145 du Règlement par la Commission de des Finances, de l’économie Générale et du Contrôle Budgétaire sur l’application des Mesures Fiscales Contenues dans les lois de Finances,” Assemblée Nationale, [http://www.assemblee-nationale.fr/14/rap-info/i1328.asp](http://www.assemblee-nationale.fr/14/rap-info/i1328.asp)).
42 For further details, see the discussions about the draft budget law for 2014 (Projet de Loi de Finances pour 2014: Le Budget de 2014 et son Contexte Économique et Financier,” Sénat, [http://www.senat.fr/rap/l13-156-1/l13-156-114.html](http://www.senat.fr/rap/l13-156-1/l13-156-114.html)).
43 For further details about the legal framework, see [http://www.agenziaentrate.gov.it/wps/content/Nsilib/Nsi/Home/CosaDeviFare/Versare/Imposta+sulle+transazioni+finanziarie/SchedaInfo+Imposta+transazioni+finanziarie/](http://www.agenziaentrate.gov.it/wps/content/Nsilib/Nsi/Home/CosaDeviFare/Versare/Imposta+sulle+transazioni+finanziarie/SchedaInfo+Imposta+transazioni+finanziarie/).
the derivatives contracts, and the high frequency trading tax applies to all the participants on
the Italian market. The forecast for tax revenues was EUR 1 billion for 2013.

1. The Tax on Shares

In addition to the taxation of original derivatives contracts, physical transfer/delivery
of the relevant in-scope underlying securities is also taxed separately. The Italian FTT will
be due from the financial intermediary intervening in the trading activities, i.e., the
intermediary that receives an order from a client, including non-resident financial
intermediaries. It applies regardless of the buyer’s and seller’s residence/domicile or where
the transaction is executed or settled.

There are certain exclusions from the scope of taxation: inheritance or donations,
bonds converted into new shares or the receipt of new shares by the exercise of rights or
derivatives, the transfer of ownership of shares of companies with an average capitalization
lower than EUR 500 million in the month of November of the previous year, intragroup
transaction and corporate restructuring, securities financing transactions (repos and securities
lending/borrowing), purchases/sales for purposes of clearing and collateral by authorized
entities, etc.

The Italian legislation also includes a number of exemptions: for both parties of
transactions involving the EU or the European institutions, the European Central Bank and the
European Investment Bank, the central banks of EU Member States, etc.; for both parties of
operations related to ethical and socially responsible products; for parties involved in market
making and in providing liquidity on behalf of the issuer; for pension funds subject to
supervision, and for mandatory social security institutions (pillar I pensions).

The tax rate, applicable as in France to the net (end-of-day balance) of the settled
transactions for each security, is 0.1 percent (0.12 percent in 2013) on transactions taking
place on regulated markets and on multilateral trading facilities and 0.2 percent (0.22 percent
in 2013) of the value of the transaction in the case of other transactions.

45 Instead of providing a list of companies whose shares are not subject to tax (as in France), Italy provides a list of companies whose shares are exempt from the tax.
46 See Regulation (EU) No 648/2012 of the European parliament and of the Council on OTC derivatives, central
47 See EU Directive (EC) 2003/41/EC of the European parliament and of the Council on the activities and
2. The Tax on Derivatives

The FTT will apply to derivatives such as swaps, futures, options, cash notional forward agreements, and credit default swaps whose value is mainly linked to a taxable Italian security (including warrants, covered warrants, and certificates), regardless of whether the derivatives are physically or cash settled. Derivatives subject to the tax are those whose underlying value is based primarily on one or more of the financial instruments referred to in the legislation. The tax is levied as a fixed amount depending on the type of instrument and the value of the contract and is defined in a table with specific intervals depending on the notional amount/value of the contract.

3. The Tax on High-frequency Trading

The tax — at a rate of 0.02 percent — is applied to the value of the cancelled or modified orders that exceed 60 percent of submitted orders in trading day. The tax is due from the entity for which the inserted orders are generated.

C. Concluding Remarks

The merits and demerits of Financial Transaction Taxes have been heavily debated among economists. In the European Union, some EU Member States have maintained their existing taxes while others in particular France and Italy have introduced new ones. To avoid market fragmentation in the EU, the European Commission has proposed a harmonized Financial Transaction Tax for all Member States. However, such effort failed in 2012 due to the opposition of some EU countries. Eleven Member States however asked to go ahead in order to establish a common FTT based on the original proposal of the European Commission. This would constitute the first case of enhanced cooperation in tax policy in the EU. The Commission proposals aimed at a broad based tax with few exceptions. Essentially, the tax would apply to all financial transactions, except the primary market for shares and bonds. The proposed rates would be 0.1% of the price for transactions on securities and 0.01% of the notional amount for derivative products. The tax would apply as soon as at least one of the parties and a financial institution party to the transaction or intervening in the transaction is (deemed to be) established in a Member State participating in the enhanced cooperation. Discussions are ongoing between the participating Member States. At the time of
writing, ten (the eleven but Estonia) Member States have agreed early December 2015 on the core principles of a future common FTT. The discussions will resume in 2016.

REFERENCES


International Monetary Fund, 2010a. *A Fair and Substantial Contribution by the Financial Sector: Final report to the G20*. International Monetary Fund, Washington, DC.


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