# The options of financial sector taxation

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#### Abstract

Financial, economic and debt crisis has increased the attention paid to the financial sector taxation. Due to the different impacts of the crisis on individual countries, consensus has not been achieved yet. The main expectation is that a new tax on the financial system could dissuade harmful speculation by financial markets and its revenues would appear to be a fair way of recovering the costs of the crisis. The aim of the paper is to evaluate the financial transactions tax and the financial activities tax as alternatives of possibility of financial sector taxation. The FTT and the FAT represent two different approaches to taxation. While the FTT is a turnover tax on financial transactions, the FAT is a profits and remuneration based tax. Due using different tax bases, the FTT achieves comparable revenues with significantly lower tax rate than the FAT. The most important precondition is to introduce and apply financial sector tax in all the countries of the world at the same time, thus, the financial market would not provide an opportunity to evade them, what can be done easily in the global environment of transactions.

Keywords: taxation, financial transactions tax, financial activities tax, Tobin tax, financial institutions *JEL codes: G18, H21, H25, H27* 

#### 1. Introduction

Politicians, economists and bankers have debated a case for introducing new taxes on financial sector at various times over the last thirty years. The need for a new financial sector tax was shown by the financial crisis in 2008 and its devastating impact on the world economy.

In 2009, the G-20 leaders tasked the International Monetary Fund (IMF) to explore "the range of options countries have adopted or are considering as to how the financial sector could make a fair and substantial contribution toward paying for any burdens associated with government interventions to repair the banking system." In its response, IMF (2010) adopted a dual approach: First, it recommended the adoption of levies on financial institutions to pay for the resolution of troubled institutions in the event of future failures and crises. Second, it examined the possibility of raising revenue from the sector's activities more generally (IMF, 2010). The report considered the possible use of financial transactions tax (FTT) for the latter purpose, but ultimately favored the use of the financial activities tax (FAT) levied on the sum of financial institutions profits and wages, variously defined. Generally, there are other options for taxing the financial sector, e.g. bonus taxes, a surcharge to the corporate income tax for the financial sector, a global leverage tax or a currency transaction levy. Countries try to find a fair method how to tax only "guilty subjects" and not to increase a tax burden in general (Solilova and Nerudová, 2013). Due to the different impacts of the crisis on individual countries, consensus has not been achieved yet. But the main expectation is that a new tax on the financial system could dissuade harmful speculation by financial markets and its revenues would appear to be a fair way of recovering the costs of the crisis.

The aim of the paper is to evaluate the financial transactions tax (FTT) and the financial activities tax as alternatives of possibility of financial sector taxation. The aim of the paper is not to present current discussions, proposals and development of FTT or FAT in the European Union and IMF. The paper is focused on general effects and impacts on taxing financial sector and institutions. There are used standard scientific research methods in the paper. The paper is divided into theoretical and empirical part. In the theoretical part the method of description is mainly applied, the empirical

part of the paper presents the analysis of impact of FTT and FAT implementing, so the method of analysis, comparison and synthesis are applied. Finally in the conclusions the method of induction, deduction and synthesis are applied.

## 2. Financial sector taxation - goals and possible instruments

The question as to whether new taxes should be levied on the financial sector to complement regulation and bank levies has been a topic since the beginning of the economic crisis. In this debate, three main policy goals can be identified (EC, 2010):

- Taxes could enhance the efficiency and stability of financial markets and reduce their volatility and the harmful effects of excessive risk-taking which can create negative externalities for the rest of the economy. In particular, the financial sector might be too large and take too much risk due to actual or expected state support (resulting in moral hazard), information asymmetries and remuneration structures which together with macroeconomic developments contributed to the recent crisis.
- The financial sector has been particularly profitable in the last two decades and there is a desire to ensure that the financial sector makes a fair and substantial contribution to public finances.
- The financial sector is seen to bear a major responsibility in the occurrence and extent of the crisis. The financial sector could therefore contribute via increased or new taxes to fiscal consolidation in the aftermath of the crisis. These additional taxes could also be justified by the fact that the sector received substantial government support during the recent crisis and not all of it might be recouped.

In addressing the three policy goals outlined above a number of tax instruments have been discussed in recent months. Different instruments and tools have been discussed, decided or already enacted in several countries, such as:

- Bonus taxes impose a surcharge on bonuses paid to employees in specific sectors and which are above a defined threshold.
- A surcharge to the corporate income tax for the financial sector.
- A currency transaction levy this tool would have the same principle as the FTT but would target currency conversions only. Contrary to the FTT, the levy is not designed to change market behaviour as such. The study of Schmidt (2008) argues that the very low rate of 0.005% would lead to only negligible effects on markets. It is designed as a pure revenue raiser.

In following sections, the focus will be on the financial transactions tax (FTT), the financial activities tax (FAT) and the leverage tax. The reason for not including above instruments is that increased profit and bonus taxation is covered by the FAT, while a currency transaction levy is part of a general FTT.

#### 2.1 The financial transactions tax

Generally, the concept of a financial transactions tax is based on application of a tax to all financial transactions in particular those carried out on organized markets such as the trade of equity, bonds, derivatives, currencies, etc. It would be levied at a relatively low statutory rate and would apply each time the underlying asset was traded. The tax collection or the legal tax incidence should be – as far as possible – via the trading system which executes the transfer. Shaviro (2012) summarizes in his paper a history of the FTT.

### 2.1.1 Types of financial transaction taxes

Although the FTT is connected and understood as Tobin tax in most cases, several different tax instruments are referred to generally as "financial transaction taxes." Matheson (2011) defines a securities transactions tax (STT) as a tax on trades in all or certain types of securities (equity, debt and their derivatives). It may include original issuance (similar to a capital levy), or be restricted to secondary market trades. Though an STT may be levied as a flat fee per trade, it is more commonly an ad valorem tax based on the market value of the securities.

A currency transaction tax (CTT), or Tobin tax is a securities transactions tax imposed specifically on foreign exchange transactions and possibly also their derivatives: currency futures, options and swaps. It is often used as a pecuniary foreign exchange control in lieu of administrative and regulatory measures. Šperka and Spišák (2012) analyze positive impact of Tobin tax introduction together with the risk analysis on the stability of financial market.

A capital levy or registration tax is imposed on increases in business capital in the form of capital contributions, loans and/or issuance of stocks and bonds. It may encompass all forms of business capital or be limited to a particular type of capital (e.g., debt or equity) or form of business, such as corporations or partnerships. A registration tax may also be charged to individuals on bank loans and/or mortgages.

A bank transaction tax (BTT) is a tax on deposits and/or withdrawals from bank accounts. Most commonly seen in Latin American and Asia, BTTs are usually imposed on an ad valorem basis as a percentage of the deposit or withdrawal. BTTs effectively tax purchases of goods and services, investment products and factor payments paid for with funds intermediated by banks.

Some G-20 countries levy insurance premium taxes. These special sales taxes are often imposed on insurance premiums in order to compensate for real or perceived undertaxation of the insurance industry under an income tax and/or value added tax.

A real estate transaction tax is levied on the value of land and/or structures when sold. This type of tax is quite common at both national and subnational levels. Real estate cannot migrate offshore, and buyers frequently must pay this tax to register title to their property and ensure their ownership rights (while sellers wish to ensure that their futures liabilities are eliminated). The base of a real estate transaction tax is thus less elastic than the base of a securities transaction tax, making it easier to enforce.

## 2.1.2 Options of FTT by a definition of the tax base

In order to give a range of potential revenues, two basic (but very different) scenarios are discussed in European Union platform. The discussed options differ in their definition of the tax base and they are called FTT1 and FTT2 (EC, 2010).

#### • A broad based FTT (FTT1)

The first variant is to tax stock, bond and derivative transactions on exchanges as well as over-the-counter (OTC) traded instruments. For stocks and bonds the value of the transaction constitutes the tax base, for derivatives the notional (or underlyig) value of the contract. This is FTT1 which has a very broad tax base due to the inclusion of derivatives. The revenue raising potential of the tax as well as its economic effects depends on the design of the tax and especially on the tax bases selected. In general, the tax base is usually defined as the value of the transaction.

For derivatives, the determination of the transaction value is more complex. In principle, one could argue that the value of the notional value could be the tax base. Given the sometimes high leverage of certain derivatives this has two effects. On the one hand, taxing the notional value creates a very large tax base. On the other hand, the tax payment is large compared to the actual price paid for the contract. While this could reduce leverge taken by means of these contracts it would also increases the costs for companies when hedging risk. Also, taxing the notional might lead to double taxation in the case where the underlying is traded and taxed at the spot market if for example an option is executed. Instead of taxing the notional, an alternative way of taxing derivatives could be to tax the actual price only. However, this would reduce the tax base significantly. Taken together, there remain important issues with regard to the definition of the tax base for derivatives.

## • A narrow based FTT (FTT2)

The narrow based FTT is based on the conservative assumption that only bonds and stock transactions are taxed. These two scenarios describe two potential tax bases, one at the high, and the other at the low revenue end. In case of an implementation of an EU-wide FTT, it will depend on a precise definition of the EU tax scope and base whether it is closer to the broad FTT1 or the narrow based FTT2.

#### 2.2 The financial activities tax

Possible reasons for introducing FAT can be summarized as follows:

- FAT raises additional revenue from the financial sector to pay for past and/or future bailouts
- FAT can be served as a substitute for VAT on financial services
- It compensates for other forms of undertaxation/implicit subsidisation of the financial sector
- FAT limits the size of the financial sector (which is excessive due to implicit too big to fail subsidies)
- FAT also induces specific behavioral changes as crowd back excessive risk taking.

The IMF (2010) has introduced the financial activities tax within its G-20 report which focuses on making the financial sector pay for public interventions. In line with the proposal, FAT would be levied on the sum of profit and remuneration of financial institutions. In practice, several countries already apply some versions of FAT (for details see the study of IMF, 2010). The IMF proposes three alternative versions of the FAT:

#### • The addition method (FAT1)

A broad version of the FAT would be to tax the sum of wages and profits defined in cash-flow terms, i.e. with full expensing of investment and no deduction for financial costs. In other words, the base would be the profit, minus capital formation, plus wages. As such, this tax base would proxy value-added by taking the sum of cash-flow profit and remuneration for each tax period. It has been used in some countries as a surcharge applied to sectors that are fully or largely exempted from VAT. In fact, such a system is also known as the addition method VAT.

## • The rent-taxing (FAT2)

The FAT can also be designed to tax rents only. Such a tax would be designed by taxing remuneration and cash-flow profit above a defined level of profit. The threshold for cash-flow profit could exclude 'normal profit' by the application of either an Allowance for Corporate Equity (ACE, which allows the deduction of a notional allowance for equity) or a definition of profit which would include both real transactions and financial transactions. For remuneration, the threshold would be more arbitrary and could include a benchmarking exercise across sectors.

#### • The risk-taxing (FAT3)

A third version of the FAT would tax excess return due to unduly risky activities. This version of the FAT is very similar to the rent-taxing FAT. The difference is that both exempt the normal profit either automatically or by the application of a rate that is designed to be roughly similar to the cost of debt-financing (in the case of ACE), while for the risk-taxing FAT, the threshold is in addition set at a level based on what is considered as excessive return to (average) equity. Therefore, parts of the rents could theoretically be untaxed as long as the return to equity does not exceed this threshold.

#### 3. Expected effects and revenues

In most of countries, one element of the financial sector, the banking sector, is both of high economic importance and relatively concentrated. For the EU27, the assets of banks and the amount of private credit represent about 140% and 130% of GDP respectively, while the amount of bank deposits and the stock market capitalisation of the banking sector are about as high as GDP. The average combined share of assets of the three largest banks in each Member State is about 70% (IMF, 2010).

The FTT and the FAT represent two different approaches to taxation. While the FTT is a turnover tax on financial transactions, the FAT is a profits and remuneration based tax. Estimating revenue changes when reforming existing taxes is already a difficult task since behavioural changes due to tax rate or base changes are often difficult to predict. Estimating revenue for newly introduced taxes which have (at least for the FTT to some extent) the goal to change market behaviour and structure significantly is even more challenging. Therefore, all revenue estimates should be interpreted with great caution and serve mainly to give an order of magnitude. Moreover, notwithstanding the often substantial projected receipts, the consequences of governments increasing their reliance on this relatively volatile sector for their revenues should be considered carefully.

#### 3.1 The financial transactions tax

The rationale for the FTT is based on two assertions about the tax. Firstly, it is seen to improve the functioning of financial markets through curbing harmful short-term speculation and reducing volatility by making it less profitable. Secondly, it is expected to raise significant amounts of revenue, even if the tax rate is very low – look at Table 1.

Table 1: FTT estimated revenues

Tax base	Tax rate	Revenue in EU27 (€ billion)	Revenue in EU27 (€ billion)		
Securities:					
Shares	0.1%	6.8	4.6		
Bonds	0.1%	12.6	8.4		
Derivatives:					
Equity linked	0.01%	3.3	1.8		
Interest rate linked	0.01%	29.6	16.5		
Currency linked	0.01%	4.8	2.7		
Total		57.1	34.0		

Source: author's calculations based on EC (2013b)

As was already noted, there are several types of financial transaction taxes. Each has its own purpose. Some have been implemented, while some are only proposals. Concepts are found in various organizations and regions around the world. Griffith-Jones and Persaud (2012) state that there were 40 countries that had FTT in operation, raising \$38 billion (€29bn) in 2011.

For example, Belgium securities tax applies to certain transactions concluded or executed in Belgium through a Belgian professional intermediary, to the extent that they relate to public funds, irrespective of their (Belgian or foreign) origin. The "tax on stock exchange transactions" is not due upon subscription of new securities (primary market transactions). Both buyers and sellers are subject to the tax. The tax rate varies in accordance with the type of transactions. A 0.07% tax (subject to a maximum of €500 per transaction) is charged for distributing shares of investment companies, certificates of contractual investment funds, bonds of the Belgian public debt or the public debt of foreign states, nominative or bearer bonds, certificates of bonds, etc. A 0.5% tax (subject to a maximum of €750 per transaction) is charged for accumulating shares of investment companies and 0.17% (subject to a maximum of €500 per transaction) for any other securities (such as shares). Transactions made for its own account by non-resident taxpayers and by some financial institutions, such as banks, insurance companies, organizations for financing pensions or collective investment are exempted from the tax. Finland imposes a tax of 1.6% on the transfer of certain Finnish securities, mainly equities such as bonds, debt securities and derivatives. The tax is charged if the transferee and/or transferor is a Finnish resident or a Finnish branch of certain financial institutions. However, there are several exceptions. E.g. no transfer tax is payable if the equities in question are subject to trading on a qualifying market. Since 1 October 2004 India levies financial transaction taxes of up to 0.125% payable on the value of taxable securities transaction made through a recognized national stock exchange. The securities transaction tax (STT) is not applicable on off-market transactions. The tax rate is set at 0.125% on a delivery-based buy and sell, 0.025% on non-delivery-based transactions, and 0.017% on futures and options transactions. The tax has been criticized by the Indian financial sector and is currently under review. Since March 1 2013 Italy levies financial transaction tax on qualified equity transactions of up to 0.2% (0.22% in 2013) of the value of the trade. Financial transaction tax on derivatives of qualified equity transactions went into effect on September 1, 2013. The regulation is to apply the tax on the net balance of purchase and sale transactions executed same day on the same financial instrument by the same person/entity. In 2003 the Peruvian government introduced a 0.1% general financial transaction tax on all foreign currency denominated incoming wire transfers regardless of their country of origin, with the aim of raising finance for the education sector. The tax is to be assessed automatically but collected manually. In Switzerland a transfer tax is levied on the transfer of domestic or foreign securities such as bonds and shares, where one of the parties or intermediaries is a Swiss security broker. Other securities such as options futures, etc. do not qualify as taxable securities. Swiss brokers include banks and bank-linked financial institutions. The duty is levied at a rate of 0.15% for domestic securities and 0.3% for foreign securities. However, there are numerous exemptions to the Swiss transfer tax. These are among others: Eurobonds, other bonds denominated in a foreign currency and the trading stock of professional security brokers. The revenue of the Swiss transfer tax was CHF 1.9 billion in 2007 or 0.37% of GDP. The Swedish financial transaction tax was a 0.5% FTT applied to equity securities, fixed income securities and financial derivatives between 1984 and 1991. The Swedish FTT is widely considered a failure. The fact that only local brokerage services were taxed is in the literature seen as the main design problem of the Swedish system. Avoiding the tax only required using foreign broker services. This example confirms a precondition for using FTT globally.

Imposition of a broad-based securities transactions tax or currency transaction tax (Tobin tax) has been widely promoted in the wake of the financial crisis as a means of raising revenue and regulating financial markets. Supporting arguments for its adoption include progressivity and ease of implementation. Revenue experience from securities transaction taxes over the past two decades has varied widely (Matheson, 2011). France, Japan, Germany and Italy, which eliminated their stock market transaction taxes during this period, collected at most 0.2 percent of GDP in revenues from them since 1990 India's STT, enacted in 2004, has also raised revenues in this range. The U.K., South Africa, South Korea, and Switzerland have reaped significantly more than this over the past decade, 0.2–0.7 percent of GDP. Hong Kong and Taiwan have seen the most buoyant revenue of the countries shown, raising as much as 1–2 percent of GDP. Predictably, STT revenue displays a cyclical pattern, rising and falling with financial market activity.

The potentially large base of an securities transactions tax promises an opportunity to raise substantial revenue with a low-rate tax. Current estimates of the revenue potential of a low-rate (0.5–1 basis point) multilateral securities transactions tax on the four major trading currencies suggest that it could raise about \$20–40 billion annually, or roughly 0.05 percent of world GDP. A one basis point securities transactions tax on global stocks, bonds and derivatives is estimated to raise approximately 0.4 percent of world GDP.

However, financial transactions taxes create many distortions that militate against using an STT to raise revenue. STTs reduce security values and raise the cost of capital for issuers, particularly issuers of frequently traded securities. STTs also reduce trading volume: studies of existing STTs and other transaction costs suggest that the elasticity of trading volume with respect to transactions costs ranges broadly between -0.4 and -2.6, depending on the market studied. Markets with products for which there are more untaxed substitutes, such as derivatives or foreign listings, have higher elasticities. Lower trading volume in turn reduces liquidity and slows price discovery.

The FTT has been recently discussed and received attention from the European Parliament, the European Council and many of EU Member States (EC, 2013a). The main reason for the interest in the FTT is that the tax could address all three policy goals outlined above at the same time. In this sense, the tax might create a triple dividend by improving market efficiency, act as a contribution of the financial sector and raise substantial revenue. However, opponents argue that the FTT would not address the harmful effect of excessive risk-taking seen in the run-up to the recent crisis since it does not address or only in an indirect way the underlying market failures e.g. the misaligned incentives in the financial sector.

## 3.2 The financial activities tax

Contrary to the FTT, the FAT using is not sufficiently expanded in the world to conclude general conclusions and adequately evaluate pros and cons. There is some evidence that, at least in the U.S., remunerations and profits in the financial sector have been growing much more quickly than in other sectors of the economy since the 1980s. These 'economic rents' could be the result of the 'too big to fail subsidy' or central bank lending to banks at low interest rates or barriers to entry and restricted competition. FAT2 attempts to tax these economic rents and supernormal profits can be taxed using a cash flow tax or a corporate income tax plus allowance for corporate equity (ACE). Taxing supernormal wages is more difficult, probably some proxy should be used (focusing on bonuses alone is not enough, though). It is necessary to note on important advantage - FAT2 is neutral

with respect to input and financing choices, but not with respect to taxation, hence tax competition may be strong.

The revenue potential of the various forms of FAT will differ across countries, depending on the relative size, profitability and wage structures of their financial sectors, and may be constrained by the need to apply low rates where the impact on competitiveness or the risk of avoidance are of concern. Table 2 uses aggregate national account data for the financial sectors of most OECD countries to suggest the magnitude of the potential base under each form of FAT. Revenues can then be inferred by multiplying these figures by the statutory rate. All these estimates—which are for the pre-crisis year 2006—are to be interpreted, however, as no more than indicating broad orders of magnitude.

The estimated FAT1 base is reported in column 4. This is calculated as the sum of a profit component that broadly matches the R+F base (being gross operating profits less gross fixed capital outlays) and total wage costs. Averaging around 4.7 percent of GDP (excluding Luxembourg), the base is clearly sizable in many countries, and the corresponding revenue non-negligible. A FAT1 at 5 percent, for instance, is estimated to raise about 0.31 percent of GDP in the United Kingdom. The extremely high base in Luxembourg points to the importance for many countries of the border adjustment issue discussed above though there are no comparable and readily available data on exports of financial services in OECD countries with which to pursue this.

Table 2: Potential tax base of FAT and expected revenues (in % GDP)

_	FAT1					FAT2 FAT3			
		raii				FA12		FA13	
Country	Profits [1]	Capital formation [2]	Wages [3]	Tax base [4]= [1-2+3]	Revenue	Surplus wages [5]	Tax base [6]= [1-2+5]	Profit in excess of 15 percent ROE [7]	Tax base [8]= [5+7]
Australia	3.2	0.7	3.8	6.3	0.32	0.5	3.0	0.4	0.7
Austria	2.1	0.8	2.7	4.0	0.20	0.3	1.6	1.5	1.7
Belgium	2.2	0.8	2.8	4.2	0.21	0.3	1.7	1.1	1.3
Canada	3.0	1.3	3.9	5.6	0.28	0.5	2.2	0.3	0.6
Denmark	1.8	0.4	2.5	3.9	0.20	0.3	1.7	0.4	0.6
Finland	1.1	0.3	1.2	2.0	0.10	0.2	1.0	0.0	0.1
France	1.4	0.8	2.7	3.3	0.17	0.3	0.9	0.5	0.7
Germany	1.5	0.3	2.3	3.5	0.18	0.3	1.5	0.2	0.4
Hungary	2.1	0.3	1.9	3.7	0.19	0.2	2.0	0.6	0.8
Ireland	5.9	0.6	3.2	8.5	0.43	0.4	5.7	1.4	1.8
Italy	1.7	0.4	2.3	3.6	0.18	0.3	1.6	0.1	0.3
Japan	4.6	-	2.2	6.8	0.34	0.3	4.9	0.1	0.4
Korea	4.5	0.6	2.5	6.4	0.32	0.3	4.2	0.2	0.5
Luxembourg	14.9	0.7	9.0	23.2	1.16	1.1	15.3	4.6	5.8
Netherlands	2.7	1.1	3.3	4.9	0.25	0.4	2.0	0.2	0.4
Portugal	3.8	1.6	2.6	4.8	0.24	0.3	2.5	0.2	0.4
Spain	2.1	0.7	2.1	3.5	0.18	0.3	1.7	0.7	0.9
Sweden	1.2	0.6	1.9	2.5	0.13	0.2	0.8	0.4	0.5
United Kingdom	2.8	0.7	3.9	6.0	0.30	0.5	2.6	0.6	0.9
United States	3.2	0.9	4.4	6.7	0.34	0.5	2.8	0.2	0.5

Source: IMF (2010) and author's calculations

The FAT2 base estimates use the same profit component as FAT1 but the wage component simply assumes 12 percent of wage costs to be 'surplus.' Though not to be taken as having any precision, the estimates point to a substantial reduction (by more than half, on average) of the base.

The FAT3 estimates use the same wage component as in FAT2 but calculate the profit-related part as the excess of after-tax net income in the banking sector over benchmark return on equity (ROE) of 15 percent. The aggregate for each country is calculated as the sum of this additional return multiplied by equity. The simple average base for FAT3 is about 1.2 percent of GDP, and in some countries the base is sizable.

#### 4. Conclusion

The aim of the paper was to evaluate the financial transactions tax and the financial activities tax as alternatives of possibility of financial sector taxation. Designing a new tax could make the financial sector pay a fair and substantial contribution to public budgets and also would have corrective features against too much risk-taking is certainly not an easy task. The financial sector is indeed atypical in many dimensions. It is an input sector for all others by providing funding to companies and individuals. Its global and interconnective feature is barely matched by other sectors of the economy. Therefore, the failure of some of its components may endanger the whole economy.

The FTT and the FAT represent two different approaches to taxation. While the FTT is a turnover tax on financial transactions (and it is not usually considered to include consumption taxes paid by consumers), the FAT is a profits and remuneration based tax. As they use different tax bases, the FTT achieves comparable revenues with significantly lower tax rate than the FAT.

The most important precondition is to introduce and apply financial sector tax in all the countries of the world at the same time, thus, the financial market would not provide an opportunity to evade them, what can be done easily in the global environment of transactions made by the IT systems.

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