The Estimation of Financial Transaction Tax Revenues as a New Own Resource of European Union Budget[1]

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Abstract

   The discussion about the possible taxation of the financial sector has started in the European Union as a result of the financial crisis. Taxes on financial transactions could be used as regulatory tools and also as the new own resource of public revenue. Nevertheless, it is a question, whether the financial transaction tax (hereinafter as FTT) can represent sufficient resource in order to fully replace GNI (Gross National Income) contribution of EU Member States into the EU budget. The aim of the paper is to estimate the value of FTT revenues as a new possible own resource of EU budget. The empirical results represent that the FTT revenues could be range between EUR 24.9 – 28.3 bn. for EU-11 per year.

Keywords: *EU budget, financial transaction tax, FTT revenues, GNI contribution*

JEL Classification: G1, H1, H2

1. Introduction

   The discussion about the possible taxation of the financial sector has started in the European Union as a result of the financial crisis which has spread to the Europe from the United States in 2008. European Commission concluded that European Union should lead the efforts to introduce system of levies or taxies on financial institutions. Since the discussion about the consequences of financial crisis had rather global character, the ideas about the new forms of taxation have been shaping on three international platforms. While the aim of the first two – G-20 and International Monetary Fund (hereinafter as IMF) was mainly to find a tool, which could help to regulate the financial sector and could help to collect

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back the money invested into the sector during the crisis, European Union added to the idea the third dimension – in June 2011 European Commission promoted financial transaction tax as a new possible own resource of the European Union budget in addition to customs duties and value added tax (hereinafter as VAT). On 28th September 2011, the Commission published a draft of the directive introducing a common system of financial transaction tax, to be implemented by Member States by 1st January 2014. After some of the EU Member States rejected the implementation of financial transaction tax, European Commission decided to introduce the tax through enhanced cooperation – i.e. that the implementation takes place only in the EU Member States willing to participate.

European Union Member States individually committed to support the financial sector for a total about EUR 4.6 trillion (i.e. 39% of EU-27 GDP in 2009). Those public interventions have significant budgetary consequences (strongly felt in Greece, Spain or Italy) and imposes a heavy burden on the present and future generations.

Therefore there is a strong consensus not only on the level of the European Union but also internationally, that financial sector should contribute to the public finance more fairly. Moreover, with respect to the fact, that the crises was the result of complex interaction of market failures, global monetary and financial imbalances and weak supervision, it has been argued, that taxes could be used as regulatory tools.

As a reaction on the costs of the financial crisis which were paid out from the public money, some of the countries immediately introduced temporary measures in order to collect back the paid out money. For example temporary Bank Payroll Tax was introduced in the United Kingdom; similar temporary measure was also introduced in France.

Some of the countries, even EU Member States already have practical experience with taxation of financial transactions. In the United Kingdom, financial transactions are subjected to a Stamp Duty or Stamp Duty Reserve Tax in the amount of 0.5% of the consideration for the transfer of the shares. The securities transfer tax is levied also in Switzerland on domestic and foreign securities where a party to the transaction is a Swiss security leader. Also China is imposing transaction tax on securities trading since the opening of Shanghai stock exchange in 1990. The tax rate is 0.1% of the value of the shares as of the date of the transfer.

The aim of this paper is to estimate the FTT revenues and to research, whether the FTT revenues would be sufficient to fully replace own resource of EU budget – GNI contribution.

2. Theoretical Background

The first empirical studies on the estimation of FTT revenues were done through static models based on the annual turnover of financial transactions, not taking into account price-elasticity of foreign exchange trading. As mentions (Bayer, 2013) static models are relatively simple, since they are not much dependent on the quality and volume of input data The first author dealing with the topic of estimations of revenues of FTT levied on EU level was Spahn (2002). He estimated the revenues from the Tobin tax levied at the tax rate of 0.01% on USD 16.6 bn. and at the rate of 0.02% (in combination with 0.01% rate for wholesalers) on USD 20.8 bn. The estimation is based on yearly turnover of foreign exchange transactions based on data from Bank of International Settlements. Subsequently, Spratt (2005) was researching the possible revenues arising from levying stamp duty in the UK at the rate of 0.005% on sterling foreign transactions based on annual turnover of sterling foreign exchange transactions. According to the estimations, the implementation would raise USD 2.07 bn.

In 2005 the study of Jetin and Denys (2005) introduced new dynamic model for the estimation of the revenues from FTT. They used the sophisticated methodology for estimation of the revenue based on hypotheses concerning the fiscal evasion and fraud and the sensibility of the volume of transactions to the tax rate (the volume elasticity) in dependence on the transactional costs:

$$\boldsymbol{R} = 250 \times \tau \times \boldsymbol{V} \times \left(1 - \boldsymbol{ev}\right) \times \left(1 + \frac{2\tau}{\boldsymbol{k}}\right)^{\varepsilon} \tag{1}$$

where
- R – represents the annual revenue,
- 250 – the number of business days per year, τ represents the tax rate,
- V – the market turnover before tax,
- ev – represents fiscal evasion,
- k – the pre-tax transaction cost,
- ε – represents the volume elasticity.

Based on the above presented model, they estimated the amount of the annual revenue based on the application of the tax rate at the level of 0.01% on USD 6 – 10 bn. and at the level of 0.1% on USD 10 to USD 38 bn. In the model they expect the pre-tax transaction costs in the amount of 0.02% and 0.1% and the elasticity in the amount of 1.5.

Further, Schulmeister, Schratzenstaller and Picek (2008) used a similar assumption (not employing elasticity factor), expecting the reduction in transaction volume as a result of FTT introduction. They estimated that the imposition of

FTT would raise between USD 202 – 266 bn. on the global level and between USD 28 – 143 bn. on the European level (depending on the tax rate). Subsequently, Schulmeister (2011) using the same methodology as Schulmeister, Schratzenstaller and Picek (2008) estimated on the data from 2010, that the potential revenue from FTT could raise around USD 310 bn. in Europe, when applied at the tax rate of 0.05%.

In contrast, McCulloch and Pacillo (2011) used modified formula of Jetin and Denys (2005):

$$R = 250 \times \tau \times V \times \left(1 - ev\right) \times \left(1 + \frac{\tau}{k}\right)^{\varepsilon} \qquad (2)$$

In that model the tax rate is not multiplied by 2, because the authors did not assume that it may lead to a simultaneous reduction of the bid price and an increase of the ask price. In the model they expected the elasticity in the amount of 0.8 and transaction costs in the rate of 10%.

The revenues from FTT were estimated by authors at a global level between USD 147 bn. and USD 577 bn. excluding OTC (over-the-counter) contracts and from USD 482 – 1.631 bn. including OTC markets.

The same formula was also applied by the European Commission (EC, 2011c), which estimated the annually FTT revenue around EUR 57 bn. for EU-27. The model used the transaction costs of 0.06% of transaction volume for equity and bonds, of 0.07% for OTC derivates, of 0.03% for exchange derivates and of 0.024% for FX Spot Market. Further, it expected the value of elasticity between –2 and 0 and the value of evasion between 10% and 90%, depending on the financial product.

Schulmeister and Sokoll (2013) calculated the revenue from imposition of FTT in the amount of USD 70.7 bn. for EU-27. The estimation is based on methodology of Schulmeister, Schratzenstaller and Picek (2008) and was further developed. It consists of several steps including specification of the most important regional market places for transactions established in the European Union, specification of the most important countries of residence with market shares, estimation of relocation of transactions and matrix of transaction between the 13 countries of residence in each of the regional markets. Although their investigation is sophisticated, the study abstracts from the issuance principle, which was newly introduced in second proposal of FTT directive. This is mainly caused due to the fact, that it is very difficult to determine the impact of this principle on the estimation of revenues and as added by European Commission (EC, 2013c), such comprehensive data mining and analysis was not possible to perform as most of the data needed are not public yet.

And finally, as the initial proposals to establish the FTT covering the EU-27 failed, and the enhanced co-operation approach was adopted by the EU-11, applying the same model as in 2011, European Commission (EC, 2013b) estimated the annual revenues from FTT between EUR 30 bn. and EUR 35 bn. for EU-11.[2]

The following table summarizes the methods applied for the estimations of FTT revenues in the European Union.

T a b l e 1

Survey of Estimation of Annual Revenues from FTT on the EU Level

Author	Geographical	Tax rate	Elasticity	Model reflects issuance principle	Total revenue
Spahn (2002)	EU level	0.01 – 0.02%	none	No	USD 16.6 – 20.8 bn.
Jetin and Denys (2005)	EU level	0.01% 0.1%	0.5 1	No	USD 6 – 10 bn. USD 10 – 38 bn.
Spratt (2005)	EU level	0.005%	none	No	USD 2.07 – 4.4 bn.
Schulmeister, Schratzenstaller and Picek (2008)	EU-27	0.01% 0.05% 0.1%	none	No	USD 28.6 – 38.1 bn. USD 35.7 – 95.3 bn. USD 47.7 – 143 bn.
Schulmeister (2011)	EU-27	0.05%	none	No	USD 310.9 bn.
European Commission (EC, 2011c)	EU-27	0.01 – 0.1%	–2 to 2	No	EUR 57 bn.
Schulmeister and Sokoll (2013)	EU-11	0.01 – 0.1%	none	No	EUR 70.7 bn.*
European Commission (EC, 2013b)	EU-11	0.01 – 0.1%	–2 to 2	No	EUR 30 – 35 bn.

*With relocation effect.

Source: Research by the authors.

European Commission (EC, 2011a, b, e, f; 2013b) mentioned that FTT would not have a negative impact on economic performance, due to the fact that the FTT could be used either to reduce public debt, or to reduce other taxes or for productive public investment. European Commission (EC, 2012) suggested FTT as a potential candidate on new own resource of EU budget, which would help EU Member States significantly reduce their GNI contribution into the EU budget. According to the estimates presented by the European Commission (EC, 2012), the FTT would reduce EU Member States' GNI contributions to the EU budget by 50% if it would be introduced for EU-27.

3. Methodology

The estimation of revenue from FTT is based on the similar model used by European Commission (EC, 2011c; 2013b). The model can be expressed as following:

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[2] See COM (2013) 71 final.

$$R = \tau \times V \times E \times \left(1 + \frac{\tau}{c} \right)^{\varepsilon} \qquad (3)$$

where

- τ – the tax rate,
- V – the annual transaction volume,
- E – interpreted as relocation and fiscal evasion,
- c – describes the transaction costs in percent of the transaction volume,
- ε – an elasticity which describes the effect of a tax increase on the transaction volume, i.e. the tax base.

The assumptions for the estimation of revenues on FTT (financial transaction tax) are similar as in the impact assessment of European Commission (EC, 2011c; 2013b) and as in the study of Schulmeister and Sokoll (2013). The methodology used by European Commission (EC, 2011c; 2013b) and methodology used by Schulmeister and Sokoll (2013) differs in the application of the different values of parameters in the formula (3).

Due to the latest development of the regulations on the financial markets in the European Union, our methodology differs in the values of the parameters employed in formula (3). The estimation procedure performed in the paper is based on following assumptions.

The tax rate is applied in accordance with proposal of FTT directive, i. e. in the amount of 0.1% in case of the financial transactions other than those related to derivates contracts and of 0.01% in case of financial transaction related to derivates contracts.[3]

The annual transaction volume is collected from Federation of European Stock Exchanges (FESE) in case of equities, bonds and derivates and from Bank for International Settlement (BIS) in case of foreign exchange markets and for OTC derivates. The data are collected for 2010.[4]

In the light of the methodological difficulties, firstly, the data are collected and the estimation of revenues is performed for EU-27, for there are no data on EU-11 available. Therefore, for the estimation of revenue for EU-11 were used proxies – the size of economics of the FTT jurisdiction (measured by the GDP) and the size of the financial sector of participating economics (measured by the value of added of the sector before taxes).[5] The data used for the estimation are presented in the following Table 2.

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[3] See Art. 9 of COM (2013) 71 final.

[4] According to the fact that the estimation of revenues is increased over time, as showed by Schmidt and Bhushan (2011) and European Commission (EC, 2011c), in our view, the using of one annual dataset is sufficient for the assumption of revenues. The annual data for 2010 were also used by Schulmeister and Sokoll (2013).

T a b l e 2

Trade Volumes in National Amounts for 2010 (bn. EUR)

Equity Trading	Bonds Trading	Total for Securities	Exchange Traded Derivates	OTC Derivates	FX Spot Market	FX Swaps	FX Outright Forwards	Total for Derivatives
6.5	12.1	**18.6**	52.0	34.778	243.250	25.0	6.0	**361.028**

Source: FESE; BIS; EC (2011c).

The relocation and fiscal evasion represent very important factor mainly in case of derivates where there is the biggest risk of non-taxation. The estimation of relocation and tax evasions is based on the impact assessment of European Commission (EC, 2011c). In this study the relocation and evasion for FX Spot Market is expected to be 40%, for Exchange Traded Derivates, OTC derivates, FX Swaps and FX Outright Forwards 90%. The evasion for equity trading and bonds is assumed to be 10%.

Whereas that the OTC market is fully globalized the European Union in its impact assessment assumes the high relocation and fiscal evasion, therefore the parameter was set on 90% of the value of relocation. As shows the experiences from France and Italy, the tax base could largely disappear leaving no substantial revenue. As mentions (Coelho, 2014), the introduction of FTT in France in 2012 and in Italy in 2013 led to the decrease on OTC markets by 85% in Italy and by 45% in France. However, due to the MiFID (Markets in Financial Instruments Directive[6]) and EMIR (European Market Infrastructure Regulation[7]) it can be assumed that the fiscal evasion and relocation will be reduced approximately by the 10 percentage points. New measures for monitoring and regulating financial instruments, including OTC transactions, can increase the efficiency in combating relocation and fiscal evasion (EC, 2011d). Based on these regulations, we can expect that the relocation and fiscal evasion will be lower than the European Union originally assumed.

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[5] The similar procedure was applied by European Commission in the impact assessment SEC(2013) 28 final and SEC(2011) 1102 final). European Commission (EC, 2013a) pointed out that it is need to resolve the problem with the transaction carried out outside the European Union and with the transaction of the European party which is acting in the name or for the account of a non-European party. For this reason the proxy is used and the data are collected for all European Union. It could be reasonably assumed, as European Commission (EC, 2013a) added, that revenue estimations at the aggregate level taking the cumulative turnover at the place of transaction in all Member States may serve as a proper proxy for the potential revenue for EU-11, because both above-mentioned effects tend to work in opposite directions and it is possible to abstract away from them.

[6] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments amending Directive 2002/92/EC and Directive 2011/61/EU.

[7] Commission delegated regulation No. 285/2014 of 13 February 2014 supplementing Regulation (EU) No. 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on direct, substantial and foreseeable effect of contracts within the Union and to prevent the evasion of rules and obligations.

The transaction costs were estimated in the impact assessment published by the European Commission (EC, 2011c) as 0.06% of transaction volume for equity and bonds, as 0.03% of transaction volume in case of exchange derivates, as 0.07% of transaction volume for OTC derivates and as 0.024% of transaction volume[8] for FX Spot Market. Nevertheless, with respect to the new EMIR regulation and new MiFID directive, we expect the transaction costs to be higher approximately by 0.01 percentage points than the European Commission in the impact assessment.

The elasticity is defined as the relative change in the transaction volume to a relative change in the tax rate.[9] According to the European Commission (EC, 2011c; 2013b), the elasticity may take values from 2 to –2, depending on the type of product. For the estimation of the revenues, the elasticity is assumed to be –1.5 and 1.5 (EC, 2013b).[10] The reason for this expectation is the fact that the FTT tax base is defined very broadly and due to the issuance principle (newly comprised in the FTT directive proposal) the elasticity is expected to be smaller. And further, with respect to new EMIR regulation and new MiFID directive, we expect that the payment of the FTT will properly be ensured and monitored. Based on that, we expect the average sensitivity to changes in the taxation of financial instruments between –1.5 and 1.5.

4. Results

The main results of the research are summarized in the below stated Table 3. The paper assumes the elasticity of –1.5 and 1.5, which is lower than –2 and 2, assumed by the European Commission. Based on the performed research we conclude that FTT introduced through enhanced cooperation could raise the revenue around EUR 28 bn. per year. As was already mentioned above, as the proxy for the calculation of the share of EU-11 served GDP of EU-11 (i.e. in 2010 the GDP in PPS (purchasing power standard) of the EU-11 was 66.6% of the EU-27 GDP).

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[8] See SEC(2011) 1102 final.

[9] The impact assessment of the European union (SEC(2011) 1102 final, mentioned, that elasticity means that a 1% increase in the tax rate leads to a 1% reduction in the tax base. As noted by Jetin and Denys (2005), the different financial institutions can be more or less sensible to the same transaction cost increase. It should be noted that financial companies are more sensitive to taxes than non-financial companies. Further, the authors added, that the higher the sensibility of trades is, the higher the reduction of volume. According to the available evidence in the literature, the highest elasticity is found for taxes on financial transactions particularly on futures transactions and for other transactions can be very low (for example for spot transactions), as is noted in the impact assessment (EC, 2011c, Vol. 10). As stated in impact assessment, the span of tax elasticity for transactions is different and for spot may be from 0.5 to 1.5, for futures from 0.5 to 2.5, for equity trading and bonds from –0.5 to –2.

[10] The literature does not comprise hardly any paper on estimating elasticity on financial markets. The main research on elasticity was performed by Matheson (2011) and by McCulloch and Pacillo (2011).

T a b l e 3

Hypothetical Revenue from the Particular Products in the EU-27 Level for 2010 (bn. EUR)[11]

Product	Tax rate	0.1%					0.01%				
	Elasticity	*1.5*	*1*	*0*	*–1*	*–1.5*	*1.5*	*1*	*0*	*–1*	*–1.5*
Equity trading		–	–	6.5	2.7	1.7	–	–	0.7	0.6	0.5
Bonds trading		–	–	12.1	5.0	3.2	–	–	1.2	1.1	1.0
Total for securities		**–**	**–**	**18.6**	**7.7**	**4.9**	**–**	**–**	**1.9**	**1.6**	**1.5**
Exchange Traded Derivates		28.6	36.7	41.6	–	–	5.2	5.2	4.2	–	–
OTC derivates		21.8	25.7	27.8	–	–	3.1	3.1	2.8	–	–
FX Spot Market		–	–	73.0	18.5	9.3	–	–	7.3	5.6	5.0
FX Swaps		–	–	20.0	5.1	2.6	–	–	2.0	1.5	1.4
FX Outright Forwards		–	–	4.8	1.2	0.6	–	–	0.5	0.4	0.3
Total for derivatives		**50.4**	**62.4**	**167.2**	**24.8**	**12.5**	**8.3**	**8.3**	**16.7**	**7.6**	**6.6**
Total for all categories		**50.4**	**62.4**	**185.8**	**32.5**	**17.4**	**8.3**	**8.3**	**18.6**	**9.2**	**8.2**

Source: FESE; BIS; EC (2011c; 2013b) and author's calculation.

With regard to the difficulties in the estimation of revenues from FTT, the model in this paper is based on more conservative approach. This fact is indicated by the results in the following table.

The estimated revenue is lower than the revenue estimated by the European Commission and ranges between EUR 24.9 bn. and EUR 28.3 bn. per year for EU-11. The differences are caused mainly by different datasets and different estimations of elasticity, relocation effect, fiscal evasion and transaction costs as indicated in the methodology.

T a b l e 4

The Estimation of Revenue on FTT for EU-11(bn. EUR)

Type of products	Estimation based on the real economy*	Estimation based on the size of the financial sector**
Shares	1.4	1.2
Bonds	2.6	2.3
Derivates	24.3	21.3
Total	**28.3**	**24.9**

* Measured by the GDP of the EU-11 (i.e. in 2010 the GDP in PPS of the EU-11 is 66.6% of the EU-27 GDP) (Eurostat data).

** Measured by the value added of the financial sector before taxes (i.e. in 2010 the sum of net operating income of the EU-11 of the total EU-27 size is 58.5%) (ECB data).

Source: FESE; BIS; EC (2011c; 2013b) and author's processing.

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[11] According to the results in Table 4, there is used the elasticity of 0. With respect to the zero elasticity, this is only theoretical case due to the assumption that any change in tax burden would have no effect on the volume of trading (i.e. on tax base). As regards the empirical evidence on elasticity in the impact assessment of the European Commission (EC, 2011c), there is presented that the elasticity could be very low for specific financial instruments, but not zero. In this sense, we cannot expect that the financial institutions will not react on the FTT.

At present, trading levels could generate the revenue from FTT of EUR 24.9 bn. to EUR 28.3 bn. It is obvious from the above stated Table 5 that the derivates trading would generate the largest amount of the revenue. It is necessary to mention that even though the EU-11 represents the economics which involve 70% of the European Union GDP, most of the EU-11 countries are not considered to be the main financial centres. Therefore, it is highly debatable, whether these states may generate sufficient revenue from financial transaction tax.

Further, assuming the fact, that development of the FTT tax base would be copying the evolution of EU GNI, the European Commission suggested that two thirds of the tax collection would be used to finance EU expenditure. It means that EU Member States applying FTT could therefore save about 29% of their GNI contribution into the EU budget. The estimated amount of decrease in the GNI contribution is presented in the following Table 5.

T a b l e 5
Total National Contribution of EU-11 in 2012 and Estimated Reduction in GNI Contribution of EU-11 when Applying FTT (mil. EUR)

State	GNI	GNI own resource	UK correction	Reduction in GNI granted to NL and SE	VAT own resource	Total national contribution	Estimated reduction on FTT
Austria	305 028.30	2 390.95	26.88	20.30	326.98	**2 765.11**	–694.90
Belgium	376 906.00	2 953.09	188.56	25.26	475.78	**3 642.69**	–858.28
Estonia	16 584.50	121.40	8.10	1.00	23.00	**153.50**	–35.28
France	2 066 637.00	15 783.16	999.93	136.79	2 877.05	**19 796.93**	–4 587.18
Germany	2 730 080.00	20 616.96	224.33	175.80	1 803.19	**22 820.28**	–5 992.06
Greece	208 200.00	1 364.71	87.92	13.14	215.60	**1 681.37**	–396.64
Italy	1 556 843.00	11 803.66	778.33	103.82	2 294.39	**14 980.20**	–3 430.59
Portugal	160 565.90	1 318.93	81.23	10.58	235.27	**1 646.00**	–383.33
Slovakia	69 417.70	524.50	33.10	4.60	83.95	**646.15**	–152.44
Slovenia	35 118.70	262.90	16.50	2.30	51.86	**333.55**	–76.41
Spain	1 048 100.00	7 777.79	498.48	68.20	1 317.14	**9 661.61**	–2 260.52
Total	**8 573 481.10**	**64 918.04**	**2 943.35**	**561.80**	**9 704.20**	**78 127.40**	**–18 867.61**

Source: EU Budget Financial Report 2012 and own research.

As is shown in Table 5, EU Member States applying FTT could save EUR 18.9 bn., i.e. approximately 29% of their GNI contribution into the EU budget. The estimation of revenues from FTT reaches approximately EUR 28.3 bn. Based on that, we can conclude that introduction of FTT through enhanced cooperation in EU-11 cannot fully replace GNI contribution of respective EU Member States into the EU budget.

This fact the authors consider as the main reason for the conclusion that FTT revenues from EU-11 cannot be considered as the sufficient resource for full replacement of GNI contribution of EU-11.

5. Discussion

5.1. Risk in Drop of Trade Due to the Relocation Effect

As stated by Alworth and Arachi (2012), according to the above-performed analysis, there is a presumption that the FTT revenues are very uncertain, mainly due to the potential risk of the adverse economic developments (risk of drop trade) and due to the tax-avoidance as a result of the small area in which the FTT is applied.

The size of FTT revenues is also affected by the fact that the introduction of the FTT through enhanced cooperation does not fulfil principle of vertical equity. Based on this principle the subjects who are well-off should pay higher tax. In the view of this fact the institutions from FTT area (EU-11) will not be in the same situations as the financial institutions from the EU-17. That means that the financial institutions from the EU-11 should not pay the comparable tax as other institutions from the EU Member States not applying the FTT. It can be also stated, that FTT has a progressive distributional effects – i.e. the impact is growing proportionally with the incomes. The main profitable financial activities take place on financial markets other than the EU-11 markets. This is mainly due to the fact that EU-11 area lacks the biggest financial markets in EU as for example London.

Further, as noted by Sphan (2002) the FTT may be imposed on capital outflows and inflows to and from tax havens. However, the issuance principle could bring about an incentive to relocate trading of financial (capital) instruments from stock exchanges in the FTT jurisdiction to stock exchanges in non-FTT states. As added by Schulmeister and Sokoll (2013), if Euronext/LIFFE offered trading in a "clone" of these derivatives in London and these new instruments would be legally considered as issued in the United Kingdom, i. e. outside FTT jurisdiction, then some portion of the respective trading at EUREX in Frankfurt might move to London.

European Commission (EC, 2013b) noted, that the financial companies weight the costs and risks of going abroad against other modalities to provide services across borders without establishing a fully fleshed local presence (for example, banks may do this by offering cross-border lending). New technological advances have made financial companies increasingly able to provide many types of financial services across the borders without the need to establish foreign branches and large tax differentials may therefore lead to a concentration of financial activities in low tax locations.

5.2. Risk of Negative Effects on GDP Growth

The FTT is also connected with the risk of negative effects on the GDP growth, as mentioned by European Commission (EC, 2013b). The Commission itself estimates that in the case of FTT tax revenues used for productive public

investment, the net effect of introducing FTT on the long-run level of GDP would be expected to be in the range between –0.1 and 0.1 percentage points. In contrast, Griffith-Jones and Persaud (2012) examine positive impacts and conclude that they are more than likely to compensate the negative effects, therefore the impact of introducing an FTT on the level of GDP, considering all the things, is likely to be positive, at around +0.25%. Indeed, their analysis suggests that the overall positive impact on GDP growth could be higher, and they identify a number of channels through which the FTT could support sustainable growth. Outside of economic models, there are a many factors that contribute, directly and indirectly, to growth and it is important not to exaggerate the effects of the FTT itself.

Furthermore, it is certainly the case that many of the countries that do have FTTs have not been growth laggards, such as: South Korea, Hong Kong, India, Brazil, Taiwan, South Africa and Switzerland, as mentioned by Twarowska and Szołno-Koguc (2013). On the contrary, Griffith-Jones and Persaud (2012) mention that they have been amongst the fastest growing economies in the world.

In order to eliminate negative effects on GDP, the proposed FTT comprises certain avoidance strategies. Firstly, the tax base is defined very broadly as regards products, transactions, types of trade and financial actors, as well as transactions carried out inside a financial group. The scope of the suggested FTT covers transactions relating to all types of financial instruments. It means those which are negotiable on the market, money-market instruments, and shares in collective investment undertakings as well as derivates agreements. It is important to mention, that the scope of the tax is not limited just on the transactions in organised markets, but covers also transactions in other types of markets including OTC markets. When a derivate agreement results into the supply of the financial instrument, the supply is also subjected to taxation.

Secondly, the proposal is based on the residence principle and newly also on the issuance principle. This territorial principle with the issuance principle should mainly prevent relocation to tax havens and to jurisdictions outside of the FTT zone. This relates mainly to shares, bonds and equivalent securities, money market instruments, structured produces, units and shares in collective investment undertakings and derivates trade on organised trade venues or platforms. In other cases, the principle of residence is in force. Generally, with respect to the issuance principle, the transaction is taxed in the EU Member State, where the issuer was established. The person involved in such transaction will be deemed to be established in that EU Member States and the FTT will be payable by this person in that state. The difference compared to the first proposal on FTT is that the original draft was based only the residence principle and the financial transaction could be taxed only in the state where the financial actor was established.

At present, this means that the location of the transaction plays the significant role with respect to the taxation.

Finally, by splitting of the tax rates, the proposal tries to minimise eventual impacts on the costs of capital for non-financial investment purposes. Therefore, the proposal suggests that the tax rates should not be lower than 0.1% in respect of financial transactions other than derivate agreements and 0.01% in respect of financial transactions related to derivates agreement.

Conclusions

In the late 1980's to mid-1990's, there was much discussion about the FTT in the context of minimising the volatility of financial markets or as a revenue source of global proportions that could be used in the fight with poverty. That discussing platforms were not able to reach consensus on global level and therefore FTT failed to be implemented at the global level. Nevertheless, the last financial crisis generated many ideas about the introduction of new additional tax on financial institutions again.

It is necessary to mention that while at the beginning the introduction of FTT was understood mainly as a tool for the regulation of the financial markets, the financial crises in 2008 changed the perceiving of this type of tax and since that time FTT is understood exclusively as the tool for recovering the costs and raising the revenue into the public budget. According to the tax theory, FTT might raise substantial revenues. However, the exact amount of the tax revenue is highly uncertain and would very much depend on the tax base and applied tax rates. The revenues are also crucially dependant on the reaction of the market operators.

With respect to the fact that European Commission explicitly mentioned the idea, that FTT is considered as the candidate on new own resource of the budget which might partially replace GNI contribution of EU Member States, the research revealed that revenues from FTT introduced through enhanced cooperation cannot replace GNI contribution of EU-11 fully, but can reduce the contribution by 29% (in comparison with the 50% presented by the European Commission when the tax would be introduced for EU-27).

As the main reason why FTT would decrease GNI contribution of EU-11 by 29% can be considered the fact that the implementation strategy was changed and it is considered to be implemented through enhanced cooperation and not in the form of directive (i.e. for EU-27).

In case that the European Commission would search for the solution of full replacement of GNI contributions of EU Member States , FTT would have to be implemented in combination with other new tax on the EU level in order to raise sufficient revenue. Although the research revealed that some forms of FTT are

already levied in some EU Member States, applied taxes differs significantly, mainly in the subject and object of taxation, as well in the tax rates. Therefore the possibility to compare the experiences is very limited.

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