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THE IMPACT OF INTRODUCTION OF THE FINANCIAL TRANSACTION TAX IN CROATIA[86]

ABSTRACT

Financial sector was the trigger of the recent crisis due to harmful effects of excessive risk-taking. At the same time, its high profitability, low taxation and state support resulted in high moral hazard of financial institutions and different national approaches for financial sector taxation. Therefore, nine European Union countries have agreed to adopt a unified FTT along with enhanced cooperation which should come into force during 2018. The mMain benefits of implementation of FTT is to generate significant fiscal revenues, to properly share the cost of the crisis with the financial sector, and to reduce the possibility of a new crisis. Adverse effects primary include the declining effectiveness of pricing mechanism. FTT is a policy tool that can raise a substantial amount of revenue and reduce the size of financial trading in relation to the economy's level of productive activity. The aim of this paper is to investigate the possibilities of introduction of FTT in the European Union, with special reference to the question of the potential application in the Republic of Croatia. Preliminary analysis suggests the conclusion that the economic and fiscal effects of the introduction of FTT in Croatia could not justify the cost of its implementation. Due to the underdeveloped, illiquid and highly concentrated capital market, introduction of the new tax burden might discourage potential investors. Furthermore, tax base for the Croatian capital market is very narrow, because there is no trading in derivatives, which in the initial proposal made up the largest part of the tax base in securities trading.

Key words: financial transaction tax, public revenues, financial crises, Croatia

1. Introduction

Taxation of the financial sector is a current issue with regard to current negative economic and financial trends in the world, but also considering the fiscal significance of this repercussion on financial and economic developments. The financial market collapse of 2007 has pointed out the shortcomings in the regulatory and supervisory framework of the financial system and the tendency of financial institutions to speculative behaviour and excessive risk taking. The public interest was particularly focused on reforming the financial sector to ensure fair contribution to public finances and to provide fair and long-term growth. Therefore, in addition to im-

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provement of supervisory and regulatory structures and new legislation aiming to strengthen the European Monetary Union, the European Commission (EC) and some Member States have prompted the question of introduction of the Financial Transaction Tax (FTT). tax on financial transactions implies an indirect form of tax payable when undertaking defined forms of financial transactions (purchase and / or sale of securities). FTT is an expression of the EU's overall efforts to address some of the causes and effects of financial crises, but also an attempt to make the financial sector pay its fair share for its role in the outbreak of the financial crises.

After continuous postponement of its implementation, some EU states have maintained their existing taxes while others, including France and Italy, independently introduced new ones (in 2012 and 2013 respectively). The first formal initiative for the unification of levying the financial transaction came with the EC proposal in September 2011. Due to the lack of unanimous Member States' support for this initiative, eleven European Union countries (EU) have agreed to establish the common financial transaction tax (FTT) under the procedure of enhanced cooperation.[87] Discussions on this proposal are still ongoing in the Council. In parallel, the proposal to use some of its proceeds as an own resource to the EU budget has been abandoned. Presently, FTT legislation has been tabled by the EC and 9 EU countries have agreed to enact an FTT during 2018, namely Austria, Belgium, France, Germany, Greece, Italy, Portugal, Finland, and Spain[88]. However, taking into account the previous changes in the agenda, implementation delays are likely. However, there is a lack of quantitative analysis of potential positive and negative consequences of the introduction of unified European FTT, and it is possible to perceive the need to for a comprehensive assessment of various impacts of the FTT on wider economy (including tax revenues).

This paper analyses the possibilities of implementation of FTT in the EU, with special reference to the question of the potential application in the Republic of Croatia. It will assess the impact and effects of a hypothetical implementation of FTT in Croatia, which include revenue estimates and the impact on the domestic capital market performance. Although the Croatian Ministry of Finance announced in 2016 that it did not plan to participate in the implementation of EU FTTs, we hope that this paper will contribute to the interest of the scientific community for participation in

87 The EC initially proposed FTT to be implemented by all 27 Member States. However, following intense discussions in the Council, it was found that unanimity would not be reached on this proposal in the foreseeable future. Enhanced cooperation is when a group of at least 9 Member States decide to move ahead with an initiative proposed by the Commission, once it proves impossible to reach unified agreement on it within a reasonable period. It is only relevant to policy areas which require unanimity, and it aims to overcome the situation whereby certain Member States are prevented from advanlly withdrew in March 2016, and Belgium's ongoing participation is doubtful.

88 Slovenia finally rejected the introduction of FTT in 2016 because the current proposal involves a too narrow tax base. Current projections show that Slovenian state budget would only receive EUR 3 mil of increased tax revenues, but the cost of tax collection would amount to EUR .. Also, Estonia formally withdrew in March 2016, and Belgium's ongoing participation is doubtful.

researching new opportunities that would contribute to financial stability and crisis prevention. The main hypothesis is that, given the underdeveloped and illiquid Croatian capital market and the inability to generate substantial tax revenues, it is not opportune to introduce FTT into the Croatian tax system.

The remainder of the paper is organised as follows: The introductory remarks provide an insight into the subject and the research problem, followed by the design issues of the proposed European FTTs. The next section reviews the estimated effects of FTTs on revenues and economic efficiency in the EU. Prior to the conclusion, the authors conducted a preliminary analysis of the effects on the growth of tax revenues as well as the level of Croatian GDP. The impact of FTTs has also been perceived in terms of the financial system, especially for the domestic capital market. The last section offers conclusion.

2. Literature review

In general, financial transaction tax represents a turnover tax which covers transactions with different types of financial instruments. The well-known pioneers of introducing the FTT on securities markets are Keynes (1936) and Tobin (1978). The idea was first endorsed by J. M. Keynes in the work "General theory of employment, interest and money". He argued that speculation based on psychology drives market prices rendering them unable to allocate capital efficiently. Under his strong influence, J. Tobin originally proposed the idea of FTT on foreign exchange markets. His idea was to impose a specific tax model on financial markets that would "throw some sand in the wheels of speculation". The aim was to penalise speculators engaged in short-term trading and hence reduce instability in stock markets. Tobin's tax would be charged on all spot currency conversions that would alleviate the consequences of short-term, speculative activities on foreign exchange markets.

A significant theoretical contribution to the consideration of fiscal burden on short-term financial transactions was also provided by Stiglitz (1989) and Summers and Summers (1989). Their work suggest that introduction of new tax form would curb speculation trading. Westerhoff and Dieci (2006) and Bechetti *etal*. (2013) argue that FTT should strengthen the stability of financial markets by downscaling the noise trading and herding effects. A general FTT with a low and uniform tax rate will most probably reduce excessive liquidity in financial markets and, hence, mitigate the instability of asset prices (Schulmeister, 2010).

Contrary to these findings, some authors argue that a reduction in transaction costs is associated with a decline in stock return volatility (Umlauf, 1993; Jones and Seguin, 1997; Aliber *et. al*., 2003). In the light of disadvantages of FTT, literature points to lower market liquidity and higher capital acquisition costs. Matheson (2011) argues that it could lead to a reduction in trading for all categories which would result in higher market volatility. The impact of FTTs on trading volume and market liquidity

suggests that a narrowly based transaction tax would provide a strong incentive for traders to migrate to foreign markets and, furthermore, a reduction in trading volume would widen the bid-ask spread while decreasing market liquidity (Wang and Yau, 2012). The most fundamental assumptions of critics suggest that market efficiency would be reduced by introducing a new tax burden. Additionally, it would increase the capital cost depressing investment and, consequently, hindering economic growth. Findings for volatility change suggest either mixed or absent effect of FTT, while impact on returns is relatively straightforward and negative.[89] In the case of emerging countries, Baltagi (2006) proved that introduction of FTT will raise transaction costs as well as market volatility.

However, most of the mentioned deficiencies can be counteracted by adequate design and implementation of the FTT. By combining FTT with existing tax burdens on capital gains or other forms of capital income, it is possible to significantly reduce the share of speculative trading. Thus, the key decision when designing a tax model is to determine the adequate tax rate. It must be set at a sufficiently low level to have no impact on the market distortion while at the same time ensuring sufficient revenue in state budgets.

The importance of the issue is particularly emphasised by the fact that in the last two decades the share of speculative trading has significantly increased. The growing trend of these processes is particularly enhanced by the development of information technology and the introduction of high-frequency trading. The global economic and financial crisis has again prompted a debate among economists, governments, organizations and the public about the most adequate fiscal burden for the financial sector. Different national solutions underlined the need for fiscal consolidation within a single European market.

3. Key features of the unified European FTT

The European Commission (EC) put forward a proposal for a financial transaction tax (FTT) on 14 February 2013 *inter alia* to (London Economics 20131):

- avoid distortions of competition between financial instruments, actors and market places;
- ensure the proper functioning of the internal market for transactions in financial instruments.

The original proposal for FTT 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.). The base of the tax is very wide, covering transactions carried out by financial institutions on all financial instruments and markets when at least one

89 Comprehensive empirical literature review was given by Šramko (2015) .

party to the transaction is located in the EU. Nevertheless, according to the last proposal from February 2013 (EC, 2013), FTT would apply to the purchase of equity or derivatives for exchange-based transactions, but also to over-the-counter transactions. Tax rates are set very low, for basic financial instruments at 0.1% of the value of buying and selling transaction (except the primary market for shares and bonds), whereas the tax rates of 0.01% of nominal contract value are defined for derivative products (Olgić Draženović *et al*. 2016: 1067).

The tax combines a residence principle with an issuance principle, according to which any transaction involving a buyer or seller resident in the FTT-zone would be liable. Hence, all transactions by financial institutions based in the EU as well as by those based outside the EU are to be taxed as long as the transaction takes place in the FTT region. Taxing gross transactions on secondary financial markets at relatively low rates would prevent disruptions, ensure system stability and generate substantial public revenues. Furthermore, the proposal of the single European FTT leaves out of its scope traditional bank lending, deposit taking, currency trading, investment banking activities and the transactions carried out by the central banks of participating nations and the European Central Bank, with the European Financial Stability Facility and the European Stability Mechanism, and transactions with the EU institutions. FTT is aimed at financial transactions made by financial institutions on their own behalf or on behalf of their clients. Financial institutions are all entities that make more than 50% of their annual turnover through financial transactions, namely: investment companies, regulated markets, credit institutions, insurance and reinsurance companies, collective investment companies, financial leasing companies, with the exception of transactions carried out by central securities depositories and central banks. This implies that the scope of FTT is primarily limited to financial industry, while it excludes the impact on daily citizens' and small and medium enterprises' transactions.

This initiative was also considered the 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. FTT can be viewed as a supplementing regulatory tool for limiting undesirable market behaviour and preventing future instabilites. FTT will help create economic disincentives for speculative transactions as means to stabilise capital markets and reduce the frequency of crises. Also, there is an issue significant importance of FTT in the political sense and as a matter of economic justice.

4. Analysis of the revenue potential for European FTT

Taxing gross transactions on secondary financial markets at relatively low rates in general would prevent crises in the future and ensure safer and more stable financial markets. Besides reducing speculative behaviour of market participants and decreasing risk by disincentive to high

frequency trading[90], FTT should reduce the fragmentation of internal market and direct the financial sector towards long-term activities rather than being focused on the fees from short-term investments[91]. It will also make the finance fit for the purpose of long-term financing of small and medium-sized enterprises instead of being focused on the fees they get from short-term investments (Griffith-Jones and Persaud, 2015).

However, one of the main arguments for the introduction of the unifed European FTT is revenue raising which could be used for the achievement of policy goals, particularly at the supranational level. Matheson (2011) argues that collecting levies on exchange-based transactions in general would be easy and inexpensive to administer. Additionally, FTTs are meant to discourage financial transactions that do not enhance efficiency of the financial market and, consequently, to curb excess volatility observed in financial markets (Šranko, 2015). Davilla (2014) has paid attention to welfare implications of taxing financial transaction. The revenues that could be raised are in fact quite significant, despite deceptively low tax rates.

The European Commission considers various scenarios differing in the rate of relocation and evasion, the elasticity, and the tax rate. For shares and bonds, the turnover reduction is set at 10% or 15%, for derivatives trading at 70% to 90% depending on the scenario considered. Estimation of the macroeconomic effects of introduction of FTT using Dynamic Stochastic General Equilibrium Model is done by Lendvai (2010). The initial version of the European Commission model calculated a long-run loss of GDP of -0.53% from the FTT. In the updated model by the same authors of the study (Lendvai *et al*., 2013) a far lower estimate of the negative effect on growth was given, equal to only -0.2%. New estimations consider that only 15% investments by credit institutions in the EU are funded via the stock market (10%) or by debt securities (5%), while the rest of the external funding of European companies is done by bank loans and retained profits. Research findings point to lowering financial market volatility. Also, FTT would cause significantlreduction in high frequency trading, which represents 40% of EU financial transactions. This would imply a significant breakthrough for financial stability and growth without any costs to the real economy. Furthermore, primary markets would be excluded, as wouldfinancial transactions that do not involve financial institutions. If we take into account these additional effects, the net impact on long-term GDP would be only -0.1%.

90 There is a remarkable discrepancy between the levels of financial transactions and the levels of the “underlying” transactions in the “real world”. Trading in derivatives markets has expanded much more than trading in spot markets. Consequentky, derivatives trading in Europe was already in 2006 84 times higher than nominal GDP, whereas spot trading was “only” 12 times higher (Schulmeister, 2010: 5).

91 It is estimated that 70% of the profitability of banks comes from short-term clients and as a result, they do not invest in their long-term clients (Griffith-Jones and Persaud, 2015)

According to Griffth-Jones and Persaud (2012), the introduction of FTT could bring even more benefits to the European financial system, considering its contribution to reducing the risk of future crises. They estimated a positive effect on growth of 0.25% GDP. Table 1 below is an estimate of the effect on revenues and turnover, using the elasticity measures of the proposal for a 0.1% tax on equity and bond transactions alike. The table shows that, at this tax rate, reductions in equity volumes would be modest and the taxes raised still significant and the effect on turnover would be greater in the bond markets, but because of their size, the tax take would still be highly significant.

Countries	Current turnover, $ millions		Assumed max. loss of turnover (3) (4)		FTT revenues		
	Equities (1)	Bonds (2)	Equities	Bonds	Equities	Bonds	Equities & Bonds
Argentina	2,567	52,920	8%	33%	2	36	38
Australia	1,013,594	811,188	8%	33%	933	547	1,480
Brazil	859,258	763,560	8%	33%	791	515	1,306
Brazil	1,395,994	1,143,072	8%	33%	1,285	771	2,056
China	8,068,722	1,781,892	8%	33%	7,425	1,203	8,627
France/ Netherlands/ Belgium	2,010,284	3,847,284	16%	42%	1,691	2,230	3,921
Germany	1,467,487	2,032,884	16%	42%	1,234	1,179	2,413
Hong Kong	1,488,664	75,600	13%	42%	1,302	44	1,346
India	1,059,712	369,684	8%	33%	978	249	1,227
Italy	972,649	1,663,200	16%	33%	818	964	1,782
Japan	3,980,240	8,070,300	16%	42%	3,348	4,679	8,026
South Africa	251,365	91,476	6%	33%	236	62	298
South Korea	1,596,275	690,228	5%	33%	1,520	466	1,986
Spain	1,351,791	1,108,296	16%	42%	1,137	643	1,779
Switzerland	785,234	505,008	11%	42%	696	293	989
Taiwan	894,685	9,072	6%	33%	844	6	850
UK	2,505,677	3,031,560	7%	42%	2,335	1,758	4,092
US	27,540,235	23,566,032	16%	42%	23,163	13,662	36,825
G20	52,724,059	47,915,280	10%	37%	45,757	28,321	74,078
Less countries with FTT	40,517,508	42,747,264	9%	26%	34,303	24,968	59,271
Euro-6	5,802,211	8,651,664	16%	42%	4,062	5,016	9,896
Emerging	12,732,584	3,758,832	7%	33%	11,796	2,537	14,332

Assumptions	Equities	Bonds
FTT rate	**0.10%**	0.10%
Elasticity	**-0.6**	-0.6
Current transaction costs in most liquid markets		
Institutional	**0.20%**	0.04%
Retail	**0.50%**	0.18%
Average	**0.30%**	0.07%
Current transaction costs in less liquid markets		
Institutional	**0.45%**	0.09%
Retail	**1.13%**	0.18%
Average	**0.67%**	0.11%

Table 1. Revenue matrix – the FTT calculator

Schulmeister's (2010) findings implied that the main consequence of the FTT would be the reduction of excessive liquidity stemming from transactions which are very short-term oriented and that can be destabilising at the same time. A small financial transaction tax would dampen the fluctuations of exchange rates, stock prices and commodity prices in the short run as well as in the long run. At the same time, such a tax would yield substantial revenues and this would help governments consolidate their fiscal stance. It would affect the (relative) profitability of different types of activities within the financial sector. Financing, insurance and risk transformation would practically remain unaffected by a FTT whereas short-term trading would become more costly (derivatives transactions in particular).

The size of this reduction effect depends on the tax rate, pre-tax transaction costs and the leverage in the case of derivatives instruments. Most of these revenues would stem from derivatives trading at EUREX. Tax revenues from spot transactions of stocks and bonds would be small (less than 0.1% of GDP even at a tax rate of 0.1%). In Europe, tax revenues at a rate of 0.01% are estimated to range between 0.59% and 0.78% of GDP.[92]

Effects on the financial system could be wide-ranging and difficult to assess. However, some include cascade effects, sectoral shifts, geographical shifts, the possible impact on the ISE and on selected financial markets such as sale and repurchase agreement markets and sovereign debt markets. For financial intermediaries, introduction of FTT could lead to lower volumes of transactions and less liquid markets. The proposal may mean that intermediaries also face costs due to the administrative burden of collecting the tax (ESRI, 2012).

92 For the estimation of FTT revenues for the world economy as a whole as well as for the main regions, see Schulmeister (2010); Table 10: Hypothetical transaction tax receipts in the global economy In % of GDP, p. 52.

5. Analysis and estimation of the introduction of FTTs in Croatia

The Croatian financial system is bank-oriented and therefore,development of the financial sector is mainly determined by trends in the banking sector. By the structure of its financial institutions, it is still underdeveloped and not diversified enough. Banks are the most important financial institutions and bank loans represent the most important source of exterior financing of the economy. The main characteristic of the Croatian bank market is high market concentration, foreign ownership of the banks, high spread of interest margins, and prevalence of universal banking. The banks are statutorily authorised to offer a wide range of financial services. The non-deposit sector is relatively small and not diversified enough and it mainly consists of financial institutions like pension funds, insurance companies, investment funds, and brokerage houses in the money and capital market (Prohaska and Olgić Draženović, 2005: 26).

The Croatian capital market can be defined as underdeveloped, narrow and of low liquidity. It is characterised by low standards of corporate governance, inadequate application of accounting standards and concentrated ownership structure in the medium-sized and large companies. In addition, corporate governance, reporting to the investment public and the role of supervisory boards are not developed to the extent that would upgrade investors' confidence in the domestic capital market. The structure of financial markets is visible in Table 2, presenting the relative relevance of different types of financial instruments. It is evident that bank loans are prevalent, however, not to the extent in which the banks' assets dominate the total assets of the financial system. The reason is that the banks in their equity portfolios also have large portfolios of shares and bonds.

Financing in the Republic of Croatia		Amount			% of total amount		
		2002	2009	2015	2002	2009	2015
Bank loans (cons.)		92,292.9.1	252,428.3	253,132.3	71	60	55
Market capitalisation	Shares	28,325.6	135,368.2	128,137.1	22	32	28
	Bonds	8,996.4	36,255.8	78,993.8	7	9	17
	Structured products	-	-	1,724.2	-	-	
Total		129,614.9	424,052.3	460,263.2	100	100	100

Table 2: Financial Market Structure (mil. HRK)

Although the Croatian stock market has existed for more than twenty years and developed solid infrastructure as well as a modern legal framework, very low liquidity still places it in the emerging market category. By 2007, Croatian companies, financial institutions and government were increasingly financed by issuing securities which resulted in the improvement of institutional investors' development and strong growth of domestic capital market. However, almost a decade later, one can tell that activities in the domestic capital market are significantly reduced

and, in addition, traditional bank financing becomes even more significant. Although the pension system reform created a great demand for shares and debt securities, the ongoing problem is lack of high-quality financial instruments and their low liquidity.

Croatian institutional investors do not invest significant funds in non-domestic capital markets. Most investments are structured extremely conservatively and focus on long-term government bonds and, to a lesser extent, in domestic equities. For all these reasons, the introduction of FTT in Croatian regulatory framework would not be opportune, because the realised costs would exceed the benefits from the introduction of a new tax burden. Furthermore, taking into account the stability of financial institutions, along with the regulatory measures of the Croatian National Bank, state interventions in the financial sector have not been necessary after the emergence of financial crises.

According to Griffith-Jones and Persaud, FTTs' revenue matrix, total revenues for Croatia as an emerging country would be USD 0,507 mil.. Given the fact that in the Croatian capital market trading the use of derivatives has not yet been widespread and that speculative trading is of minor importance, the main reason (raising revenues) for the introduction of FTT is unacceptable for the Croatian capital market. Preliminary analysis of the possibilities of FTT in Croatia, according to this proposal, leads to the conclusion that Croatian capital market is not developed enough to generate substantial tax revenues. This simplified approximation of FTT revenues does not take into account the possible impacts on liquidity, cost of capital and market efficiency, by which results would be much worse.

Countries	Current turnover, $ millions		Assumed max. turnover loss (3) (4)		FTT revenues		
	Equities (1)	Bonds (2)	Equities	Bonds	Equities	Bonds	Equities & bonds
Croatia	446	99	7%	33%	0.415	0.092	0.507

Table 3: Revenue matrix – the FTT calculator for Croatian capital market

It can thus be concludedthat relatively small amounts of tax revenue would be generated by taxing transactions in the Croatian capital market. . Additionally, the taxation of turnover in securities on the Zagreb Stock Exchange would be insufficiently effective, especially with taking into account the essential administrative costs involved in the collection of the tax. This form of taxationwould thus be insufficiently productive. On the other hand, non-taxation of financial transactions in Croatia would impose a fiscal burden for domestic financial institutions when transactions take place in the Member States of the FTT jurisdiction or when trading in financial instruments is issued in these countries. Such a provision would cause an outflow of tax revenue outside Croatian borders (Milevoj, 2013: 34).

6. Conclusions

In the light of the financial market collapse of 2007, policy makers are looking for ways to tackle the systemic risk in the global financial system in order to achieve financial stability. This has caused frequent calls for unified taxation of financial transactions in the European Union. The main premise for the planned introduction of FTT recommended by the European Commission is that the financial sector has benefited most from the globalisation and liberalisation, but is still one of the most undertaxed industries. At the same time, it has been excessively publicly subsidised in the recent crises. European FTT should be levied at minimum tax rates and harmonised with different existing taxes on financial transactions. An undeniable advantage of introducing the FTT is in limiting speculative and high-frequency trading and disruptions, which should lead to the improvement of system stability. Moreover, it will ensure and generate substantial public revenues. It would thus raise the transaction costs and to certain extent discourage investment and increase asset price volatility. However, there is no consensus about macro-economic well-being considering GDP growth and tax revenues. The latest amendments of the personal income tax in the Republic of Croatia have further extended the tax base for capital gains, which regulates the taxation of dividends, interests and capital taxation.

References:

Aliber R. C., Bhagwan C., Shu Y. (2003.), Some evidence that a Tobin tax on foreign exchange transactions might increase volatility, *European Finance Review*, Vol. 7, No. 3, p. 481–510, doi: http://dx.doi.org/10.2139/ssrn.311700.

Becchetti, L., Ferrari, M., Trenta, U. (2013.), The impact of French Tobin tax, CEIS Research paper 266, Rome: Centre for Economic and International Studies, doi: http://dx.doi.org/10.2139/ssrn.2226983.

Burman, L. E. *et al*. (2016.), Financial Transaction Taxes in Theory and Practice, *National Tax Journal*, Vol. 69, No. 1, p.171-214, doi: dx.doi.org/10.17310/ntj.2016.1.06.

Davila, E. (2014.), Optimal Financial Transaction Taxes, Society for Economic Dynamics, 2014 Meeting Paper No. 114.

ESRI (2012.), The EU financial transactions tax proposal: a preliminary evaluation, available at: https://www.esri.ie/pubs/BKMNEXT217.pdf

European Commission (2013.), Impact assessment: Proposal for a Council Directive Implementing Enhanced Cooperation in the Area of Financial Transaction Tax, Analysis of Policy, Options and Impacts, WD28, EC.

Griffith Jones, S., Persaud, A. (2013.), The Financial Transaction Tax, available at: http://ec.europa.eu/taxation_customs/resources/documents/taxation/swd_2013_28_en.pdf

London Economics (2013.), The Impact of a Financial Transaction Tax on Corporate and Sovereign Debt, Report prepared for the International Regulatory Strategy Group, City of London, https://www.cityoflondon.gov.uk/business/economic-research-and-information/research-publications/Documents/research-2013/Impact-of-FTT-on-corporate-and-sovereign-debt-Final-PDF.pdf

Jones, C., Seguin, P. (1997.), Transactions Costs and Price Volatility: Evidence from Commission Deregulation, *American Economic Review*, Vol. 87, p. 728–37.

Keynes, J. M. (1936.), The General Theory of Employment, Interest and Money, Harcourt Brace, New York, NY.

Lendvai, J., Raciborski, R., Vogel, L. (2013.), Macroeconomic effects of an equity transaction tax in a general-equilibrium model, *Journal of Economic Dynamics and Control*, Vol. 37, No. 2, p. 466-482, doi: https://doi.org/10.1016/j.jedc.2012.09.010.

Matheson, T. (2011.), Taxing Financial Transaction: Issues and Evidence, International Monetary Fund Working Paper 11/54.

Milevoj, M. (2013.), Zajednički porez na financijske transakcije u Europskoj uniji: što je na raspolaganju Republici Hrvatskoj?, *Porezni vjesnik*, Vol. 22, No. 10, pp. 29-36.

Olgić Draženović, B., Maradin, D., Buterin, V. (2016.), Tax -framework of Croatian financial system, 5th International Scientific Symposium "Economy of Eastem Croatia – Vision and Growth", Mašek Tonković, A. (ur.), Osijek, Sveučilište Josipa Jurja Strossmayera u Osijeku, Ekonomski fakultet Osijek, p. 1060-1068.

Prohaska, Z., Olgić Draženović, B. (2005.), Consolidated Supervision of Financial Institutions and Financial Market in the Republic of Croatia, *Zbornik radova Ekonomskog fakulteta u Rijeci: časopis za ekonomsku teoriju i praksu*, Sveučilište u Rijeci, Ekonomski fakultet, Rijeka, Vol. 22, No. 2, p. 25-41.

Schulmeister, S. (2010.), Asset Price Fluctuations, Financial Crises and the Stabilizing Effects of a General Transaction Tax, SUERF - The European Money and Finance.

Spahn, P. (2002.), On the Feasibility of a Tax on Foreign Exchange Transactions, Report to the Federal Ministry for Economic and Development (Bonn).

Šramko, F. (2015.), The impact on securities transaction tax on market quality: Evidence from France and Italy, *International Journal of Economic Sciences*, Vol. 4, No 3, p. 52-93, doi: 10.20472/ES.2015.4.3.004

Stiglitz, J. E. (1989.), Using tax policy to curb speculative short-term trading, *Journal of Financial Services Research*, No. 3, p. 101-15, doi: 10.1007/BF00122795

Summers, L., Summers, V. (1989.), When Financial Markets Work Too Well: A Cautious Case For a Securities Transactions Tax, *Journal of Financial Services Research*, Vol. 3, p. 261-286.

Tobin, J. (1978.), A Proposal for International Monetary Reform, *Eastern Economic Journal*, Vol. 4, No. 3–4, p.153–59.

Umlauf, S. (1993.), Transaction Taxes and the Behavior of the Swedish Stock Market, *Journal of Financial Economics*, Vol. 33, p. 227–240.

Wang, G., Yau, J. (2012.), Would a Financial Transaction Tax Affect Financial Market Activity? Insights from Futures Markets, Policy Analysis, July 2012.

Westerhoff F., Dieci R. (2006.), The effectiveness of Keynes–Tobin transaction taxes when heterogenous agents can trade in different markets: a behavioral finance approach, *Journal of Economic Dynamics and Control,* Vol. 30, p. 293–322, doi: https://doi.org/10.1016/j.jedc.2004.12.004.

www.cnb.hr

www.zse.hr

Zator, M. (2014.), Transaction costs and volatility on Warsaw Stock Exchange: implications for financial transaction tax, *Bank i Kredyt,* Vol. 45, No. 4, p. 349-372.