

TAX INFORMATION EXCHANGE IMPACT ON FDI: TAX HAVENS CASE STUDY

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INTRODUCTION

Harmful Tax Competition, issued by the Organisation for Economic Co-operation and Development (“OECD”) in 1998, defines the basic criteria for identifying tax havens.¹ The criteria are described in the following manner: tax-free or only nominal taxes, the lack of effective exchange of information, lack of transparency, and insubstantial activities.² In 2000, the Global Forum on Transparency and Exchange of Information for Tax Purposes (a forum created by the OECD) prepared a list of uncooperative jurisdictions (“tax havens”).³ In order to remove themselves from this black list, the jurisdictions only had one choice: sign at least twelve Tax Information Exchange Agreements (“TIEAs”) or Double Taxation Agreements (“DTAs”) with a provision on the exchange of information in tax matters.⁴

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1. ORG. FOR ECON. CO-OPERATION & DEV. [OECD], *HARMFUL TAX COMPETITION: AN EMERGING GLOBAL ISSUE* 22–23 (1998); *see also* Jan Rohan & Lukáš Moravec, *Tax Information Exchange Influence on Czech Based Companies’ Behavior in Relation to Tax Havens*, 65 ACTA UNIVERSITATIS AGRICULTURAE ET SILVICULTURAE MENDELIANAE BRUNENSIS 721, 721 (2017) (Czech).

2. OECD, *supra* note 1, at 23; *see also* Rohan & Moravec, *supra* note 1, at 721.

3. OECD, *TOWARDS GLOBAL TAX CO-OPERATION: REPORT TO THE 2000 MINISTERIAL COUNCIL MEETING AND RECOMMENDATIONS BY THE COMMITTEE ON FISCAL AFFAIRS* 12, 17 (2000); *see also* Rohan & Moravec, *supra* note 1, at 721.

4. *See* OECD CENTRE FOR TAX POLICY AND ADMIN., *COUNTERING OFFSHORE TAX EVASION: SOME QUESTIONS AND ANSWERS* 10–11 (2009), <https://www.oecd.org/ctp/harmful/42469606.pdf> [<https://perma.cc/JN88-H62F>]; *see also* Rohan & Moravec, *supra* note 1, at 721.

The OECD is not the only institution that has tried to define tax havens. For example, the U.S. Congress,⁵ Lowtax Network,⁶ Tax Justice Network,⁷ and the International Monetary Fund⁸ have issued lists of jurisdictions with preferential tax regimes.

There are also many authors that have studied jurisdictions with preferential tax regimes. For example, Kerzner's research and Addison's research deals with the effect of TIEAs.⁹ According to Addison's 2009 study, TIEAs provide deficient measures to fight tax havens.¹⁰ According to his results, the non-tax haven jurisdiction should vigorously pursue "domestic policies targeting tax havens" because unilateral action is easier to enforce.¹¹

Braun and Weichenrieder's research, as well as our previous research, focuses on the effect of tax information exchange measures on taxpayers' re-domiciliation (i.e., whether the moment of TIEAs' and DTAs' conclusion with the offshore jurisdiction is associated with numbers of relocated companies to other jurisdictions in order to keep anonymity of their beneficial owners).¹² Braun and Weichenrieder focus on German multinational companies.¹³ Our previous research confirms Braun and Weichenrieder's theory that firms invest

5. Stop Tax Haven Abuse Act of 2007, S. 681, 110th Cong. § 101(b) (2007) (creating an initial list of "offshore secrecy jurisdictions," consisting of jurisdictions "which have been previously and publicly identified by the Internal Revenue Service as secrecy jurisdictions in Federal court proceedings").

6. *Headline Taxes Rates Around the World*, LOWTAX.NET, <https://www.lowtax.net/tax-rates/> [<https://perma.cc/JBN7-Q4DS>]; see also Rohan & Moravec, *supra* note 1, at 721. To learn more about Lowtax and their network of tax information websites, see *About Lowtax*, LOWTAX.NET, <https://www.lowtax.net/about.html> [<https://perma.cc/5TC7-SGT4>].

7. TAX JUSTICE NETWORK, TAX US IF YOU CAN 36–37 (2005).

8. Monetary Exchange Affairs Dep't, *Offshore Financial Centers*, INT'L MONETARY FUND (June 23, 2000), <https://www.imf.org/external/np/mae/osshore/2000/eng/back.htm> [<https://perma.cc/S6D8-3R5R>]; see also Rohan & Moravec, *supra* note 1, at 721.

9. See DAVID S. KERZNER & DAVID W. CHODIKOFF, *The OECD's War on Offshore Tax Evasion 1996-2014*, in INTERNATIONAL TAX EVASION IN THE GLOBAL INFORMATION AGE 53 (2016) (discussing the effects of TIEAs in the United States and Canada); Timothy V. Addison, *Shooting Blanks: The War on Tax Havens*, 16 IND. J. GLOBAL LEGAL STUD. 703 (2009) (discussing the effects of the TIEAs that the United States has entered into with states considered to be tax havens).

10. Addison, *supra* note 9, at 718 ("TIEAs will continue to be ineffective if the United States and other OECD member states do not enact more effective legislation to combat tax evasion and provide adequate incentives for tax havens to seek out tax evaders."); see also Rohan & Moravec, *supra* note 1, at 721.

11. Addison, *supra* note 9, at 720–21; see also Rohan & Moravec, *supra* note 1, at 721.

12. See JULIA BRAUN & ALFONS WEICHENRIEDER, DOES EXCHANGE OF INFORMATION BETWEEN TAX AUTHORITIES INFLUENCE MULTINATIONALS' USE OF TAX HAVENS? (Centre for Eur. Econ. Research, Discussion Paper No. 15-015, Feb. 23, 2015) (examining how the conclusion of these agreements affects the investment of German multinational enterprises in tax havens).

13. *Id.* at 1–2.

in tax havens not only for low tax rates but also for the secrecy that these jurisdictions offer.¹⁴

Cobham, Janský, and Meinzer deal with another perception of anonymity that tax havens offer.¹⁵ They have developed the Financial Secrecy Index (“FSI”), which evaluates jurisdictions pursuant “to their contribution to opacity in global financial flow.”¹⁶ Zucman focuses on the impact of TIEAs on bank deposits in uncooperative jurisdictions.¹⁷ Lighthart and Voget’s 2008 study is aimed at empirical determinants relating to income tax information exchange between the Netherlands and other countries.¹⁸

The effect of tax information exchange measures on portfolio investment in preferential tax jurisdictions is discussed by Hanlon’s 2015 study.¹⁹ There are a number of papers analyzing the TIEAs’ and DTAs’ effects on foreign direct investments, for example, Blonigen and Davies,²⁰ Baker,²¹ Coupé, Orlova, and Skiba,²² and Blonigen, Oldenski, and Sly.²³ These authors provide more specific evidence that implies DTAs and TIEAs may decrease or have no effect on the overall value of foreign direct investments in contracted countries.²⁴ It might be

14. *Id.* at 26; *see also* Rohan & Moravec, *supra* note 1, at 722.

15. *See* Alex Cobham, Petr Janský & Markus Meinzer, *The Financial Secrecy Index: Shedding New Light on the Geography of Secrecy*, 91 *ECON. GEOGRAPHY* 281 (2015) (discussing the incentive of financial secrecy in offshore tax jurisdictions).

16. *Id.* at 294–95; Rohan & Moravec, *supra* note 1, at 722.

17. *See* Gabriel Zucman, *Taxing Across Borders: Tracking Personal Wealth and Corporate Profits*, 28 *J. ECON. PERSP.* 121, 144–45 (2014) (discussing effect of agreements to share banking information); *see also* Rohan & Moravec, *supra* note 1, at 722.

18. Rohan & Moravec, *supra* note 1, at 722. *See generally* JENNY E. LIGTHART & JOHANNES VOGET, *THE DETERMINANTS OF CROSS-BOARDER TAX INFORMATION SHARING: A PANEL DATA ANALYSIS* (2008), <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.507.4779&rep=rep1&type=pdf> [<https://perma.cc/42KR-8CGV>].

19. *See* Michelle Hanlon, Edward L. Maydew & Jacob R. Thornock, *Taking the Long Way Home: U.S. Tax Evasion and Offshore Investments in U.S. Equity and Debt Markets*, 70 *J. FIN.* 257 (2015) (reaching the conclusion that “engaging in information-sharing agreements with tax havens decreases inbound portfolio investment from those havens”).

20. Bruce A. Blonigen & Ronald B. Davies, *The Effects of Bilateral Tax Treaties on U.S. FDI Activity*, 11 *INT’L TAX & PUB. FIN.* 601 (2004) (Neth.).

21. Paul L. Baker, *An Analysis of Double Taxation Treaties and Their Effect on Foreign Direct Investment*, 21 *INT’L J. ECON. BUS.* 341 (2014).

22. Tom Coupé, Irina Orlova & Alexandre Skiba, *The Effect of Tax and Investment Treaties on Bilateral FDI Flows to Transition Economies*, in *THE EFFECT OF TREATIES ON FOREIGN DIRECT INVESTMENT: BILATERAL INVESTMENT TREATIES, DOUBLE TAXATION TREATIES, AND INVESTMENT FLOWS* 687 (Karl P. Sauvant & Lisa E. Sachs eds., 2009).

23. Bruce A. Blonigen, Lindsay Oldenski & Nicholas Sly, *The Differential Effects of Bilateral Tax Treaties*, 6 *AM. ECON. J.: ECON. POL’Y* 1 (2014).

24. Baker, *supra* note 21, at 362 (concluding that these agreements have no effect on foreign direct investment); Blonigen & Davies, *supra* note 20, at 616 (concluding that these agreements “substantially reduce tax evasion practices which were a significant motivation for [foreign direct investment]”); Blonigen et al., *supra* note 23, at 17 (concluding that “there is no robust evidence of

caused by multinational companies' ("MNCs") re-domiciliation in order to keep their anonymity. On the other hand, the MNCs remaining in tax havens after the conclusion of TIEAs/DTAs may increase their investments thanks to more inviting tax conditions.

The aim of this Paper is to quantify the conclusive effects of tax information exchange instruments on foreign direct investments allocated to the Czech MNCs whose owners are from tax havens. This aim is based on Braun and Weichenrieder's 2015 hypothesis. The main research question is whether Czech MNCs that remain in preferential tax jurisdictions after conclusion of the agreements on exchange of information in collaboration with the Czech Republic increase their foreign direct investments compared to non-contracted jurisdictions. It means that Czech MNCs prefer favorable tax regimes instead of anonymity.

I. MATERIALS AND METHODS

To begin, we have utilized a classification analysis to divide countries into preferential and non-preferential tax jurisdictions. The tax havens' selection has been carried out on the basis of concluded and non-concluded TIEAs (and DTAs). In the framework's described analysis, it could be said that the Czech Republic has concluded approximately eighty-five DTAs and eight TIEAs since late 2014.²⁵

In order to determine the TIEAs' and DTAs' effect on foreign direct investments allocated to tax havens, the Difference-in-Differences Method (*dif-in-dif*) is being applied. The analyzed data was obtained from the Ministry of Finance of the Czech Republic and the Czech National Bank.²⁶ After the *dif-in-dif* method, the synthesis of findings was carried out in order to quantify and explain the impact of TIEAs and DTAs.

an average positive effect" of these agreements on foreign direct investment); Coupé et al., *supra* note 22, at 709 (concluding that "tax treaties do not reveal any robust effect on FDI flows").

25. Int'l Tax Dep't, *Double Taxation: Overview of Valid Contracts*, MINISTRY FIN. CZECH (Jan. 25, 2017), <http://www.mfcr.cz/cs/legislativa/dvoji-zdaneni/prehled-platnych-smluv> [https://perma.cc/UN2L-WNXX]; *see also* Rohan & Moravec, *supra* note 1, at 722.

26. MONETARY & STATISTICS DEP'T, CZECH NAT'L BANK, FOREIGN DIRECT INVESTMENT IN 2012, at § 4.2 (2014); STATISTICS & DATA SUPPORT DEP'T, CZECH NAT'L BANK, FOREIGN DIRECT INVESTMENT IN 2014, at §§ 3, 4 (2016).

<i>Jurisdiction</i>	<i>Entry into force</i>
British Virgin Island	12. 19. 2012
Jersey	03. 14. 2012
Bermuda	03. 14. 2012
Isle of Man	05. 18. 2012
Guernsey	07. 09. 2012
San Marino	09. 06. 2012
Cayman Islands	09. 20. 2013
Andorra	06. 05. 2014

Table 1: The list of concluded TIEAs with the Czech Republic as of the end of 2014 (Ministry of Finance of the Czech Republic).²⁷

The categorical periods are 2012 (the period marked as “before” concluding an agreement) and the third quarter of 2014 (the period marked as “after” concluding an agreement). Jurisdictions are divided into two groups. The first group, marked “Control,” includes foreign direct investments allocated to the Czech MNCs whose owners are from preferential jurisdictions without any DTA or TIEA concluded with the Czech Republic (in the monitored periods). In the second group, called “Treatment,” there are foreign direct investments allocated to the Czech MNCs whose owners come from preferential tax jurisdictions that the Czech Republic had not concluded any agreements for exchange of information in the period “before.” However, in the period marked “after,” the agreement with these jurisdictions was concluded by the Czech Republic.

A. *Model Description*

The proposed model of the TIEAs’ and DTAs’ effect uses the following equation and variables:

$$Y_{st} = \alpha * x_{0t} + \beta * T + \gamma * S + \delta * T * S + u_{st}$$

- Y_{st}is the outcome of interest (amount of foreign direct investments)
- α is the constant
- x_{0t} is the unit vector
- β is the parameter of exogenous variable T
- Tis the time period dummy variable
- γ is the parameter of exogenous variable S

27. Int’l Tax & Customs Cooperation Dep’t, *Double Taxation: Overview of TIEA Agreements*, MINISTRY FIN. CZECH (Jan. 25, 2017), <http://www.mfcr.cz/cs/legislativa/mezinarodni-spoluprace-v-oblasti-dani/prehled-dohod-tiea> [<https://perma.cc/QA94-GBKH>]; see also Rohan & Moravec, *supra* note 1, at 722.

S is the dummy variable that captures possible differences between the treatment and control groups (conclusion or not conclusion of the agreement)
 δ is the parameter of $T * S$
 $T * S$ is the product of the dummy variables for purpose to capture the required effect
 u_{st} is the residue²⁸

The variable “S” indicates the type of group. In the above model, there are two groups, “Treatment” and “Control.” The variable “S” is binary, i.e. $S \in \{0,1\}$.²⁹ For the Control group, the variable “S” takes the value of zero. For the Treatment group, the variable “S” takes the value of one. The variable “T” denotes the time period, which is divided on pre-treatment period, i.e. the period before agreement’s conclusion, and the post-treatment period, i.e. the period after agreement’s conclusion.³⁰ “T” is also a binary variable. The main purpose of this model is to discover the conclusive effect of switching “S” from zero to one.³¹ The variable “Yst” represents foreign direct investments allocated to the Czech MNCs whose owners are from preferential jurisdictions for a particular value of “S” in period “T.”³²

The equation’s modification is needed in order to measure estimations. In the equation there are numbers filled depending on the time period and group’s type. Subsequently, the constant and the unit vector are added. Finally, the equation can be estimated.

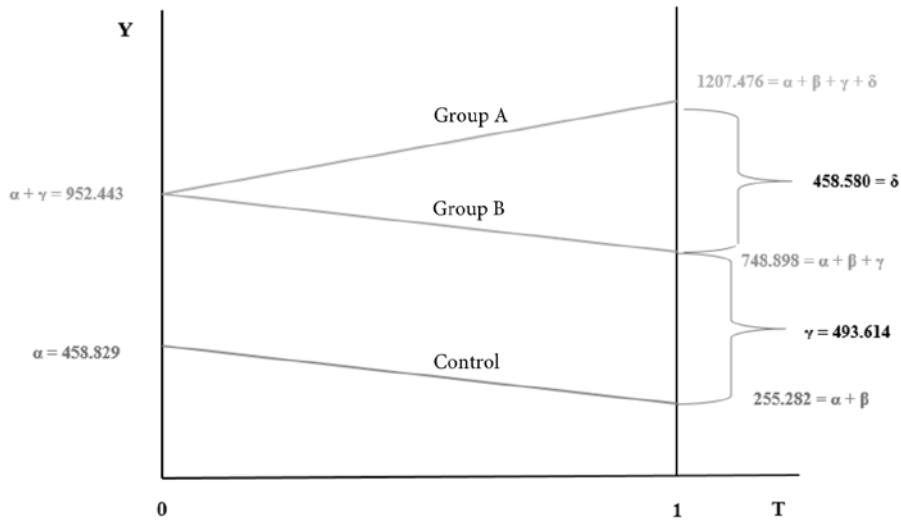
B. Results

On the basis of the mentioned equation the following parameters have been estimated:

α takes the value of 458.829
 β takes the value of -203.547
 γ takes the value of 493.614
 δ takes the value of 458.580

In order to calculate the impact of TIEAs/DTAs, the parameters mentioned above are put into the model. The mentioned values are denoted in millions of Czech Crowns (“CZK”). For a better overview of the results, see Graph 1 below.

28. Rohan & Moravec, *supra* note 1, at 723.
 29. *Id.*
 30. *Id.*
 31. *Id.*
 32. *Id.*



Graph 1: *Dif-in-dif* model in graphical view (authors’ own elaboration using the Czech Ministry of Finance and the Czech National Bank data).

The Control line illustrates the Control group, which includes foreign direct investments allocated to the Czech MNCs whose owners are from preferential tax jurisdictions that have no agreement for exchange of information with the Czech Republic in period “T0” and “T1.” Given that, there is a decrease in the amount of foreign direct investments by 55.6%, i.e., 458.829 million CZK to 255.282 million CZK.

Graph 1 depicts two other lines, Group A and Group B, that show the Treatment group, but each line is based on different assumptions. Both lines at period “T0” start at the same point—952.443 million CZK—due to non-conclusive TIEAs or DTAs. The Group B line at the period “T1” shows a hypothetical situation without any change of foreign direct investments allocated to the Czech MNCs despite the concluded DTAs or TIEAs.

This explains subsequent decreases from 952.443 million CZK in foreign direct investments to 748.898 million CZK. As can be seen in Graph 1, the Group B and Control lines are of equal measure because they depict the same situation and there is the same increase by β (203.547 million CZK) between the period “T0” and “T1.”

On the other side, the Group A line illustrates the real situation and the real development. This line shows the amount of foreign direct investments allocated to the Czech MNCs whose owners are from preferential tax jurisdictions that had no agreement in the period “T0,” but in period “T1” the agreements have concluded. Because of the DTA’s/TIEA’s conclusion there is an increase of the amount of foreign direct investments from 952.443 million CZK to 1207.476

million CZK. This increase cannot be considered as the final effect of concluded agreements on exchange of information.

The final impact is quantified by comparing the Group A line with the Group B line. The result is shown by δ . The final effect demonstrates that if there were not any concluded TIEAs and DTAs the amount of foreign direct investments would be 748.898 million CZK. After the conclusion of TIEAs or DTAs, the amount of foreign direct investments increases to 1207.476 million CZK. The result of conclusion of TIEAs/DTAs is a significant increase of foreign direct investments by 61.2%.

For transactions that are carried out with non-contracted jurisdictions (i.e., jurisdictions that do not conclude instruments for exchange of information), the Czech Republic applies a 35% rate withholding tax.³³ If there is a conclusion of such instruments, the taxation of transactions is amended by specific provision or the tax is withheld by a 15% rate.³⁴ These abovementioned results show that Czech MNCs remaining in preferential tax jurisdictions after conclusion of TIEAs/DTAs increase the amount of their foreign direct investments (i.e., they prefer favorable tax regimes instead of anonymity).

II. DISCUSSION

Our findings are mostly in agreement with Braun and Weichenrieder's 2015,³⁵ Baker's 2014,³⁶ Coupé et al.'s 2009,³⁷ and Blonigen et al.'s 2014³⁸ results. However, they mentioned that TIEAs and DTAs have had either a negative impact or no impact on foreign direct investments because of MNCs' re-domiciliation from tax havens to another non-contracted jurisdiction after the conclusion of tax information exchange instruments.³⁹ On the other hand, our results prove that Czech MNCs remaining in preferential tax jurisdictions after conclusion of TIEAs/DTAs increase an amount of their foreign direct investments. The MNCs benefit from better tax conditions resulting from DTAs or TIEAs. The opposite effects, compared to the authors above, could be caused by differences in the national tax systems. For instance, the Czech Republic has

33. Income Tax Act, Act No. 586/1992, § 36(1)(c) (Czech); *see also* *Czech Republic: Corporate Withholding Taxes*, PRICEWATERHOUSECOOPERS (May 25, 2017), <http://taxsummaries.pwc.com/ID/Czech-Republic-Corporate-Withholding-taxes> [https://perma.cc/XG7Z-P95D] (showing that countries with which the Czech Republic does not have an enforceable DTA or TIEA, are subject to a 35% withholding tax).

34. PRICEWATERHOUSECOOPERS, *supra* note 33.

35. *See* BRAUN & WEICHENRIEDER, *supra* note 12, at 26.

36. *See* Baker, *supra* note 21, at 362.

37. *See* Coupé et al., *supra* note 22, at 709–10.

38. *See* Blonigen et al., *supra* note 23, at 17.

39. Baker, *supra* note 21, at 362; Blonigen et al., *supra* note 23, at 17; Coupé et al., *supra* note 22, at 709.

a 35% rate withholding tax on transactions with non-contractual jurisdictions.⁴⁰ This tax should have the dissuasive effect to transfer funds into tax havens. According to Braun and Weichenrieder's 2015 research,⁴¹ Krejčí's 2016 research,⁴² and our previous research, approximately 44% of MNCs, whose owners are from preferential tax jurisdictions, are seated in tax havens for anonymity protection reasons.⁴³ The rest of MNCs stay there for other reasons, for example, tax planning. We do not agree with Addison's 2009 study, which claims that TIEAs are "symbolic" and provide insufficient additional measures.⁴⁴ Our research and Braun and Weichenrieder's 2015 results show the opposite.⁴⁵ However, we agree with Addison and Kerzner that countries should focus on their domestic law.⁴⁶ Countries have several options for improving their national tax law. Many countries have inclined to the implementation of particular BEPS (Base Erosion and Profit Shifting) action plans, developed by the OECD, as the best way to combat tax havens.

CONCLUSION

This Paper identifies the significant effect of tax information exchange on foreign direct investments allocated to the Czech MNCs whose owners are from preferential tax jurisdictions. The research proves that Czech MNCs, remaining in tax havens after conclusion of DTAs/TIEAs, increased their foreign direct investments. Foreign direct investments have increased approximately by 61.2% after TIEAs'/DTAs' conclusion. This situation can be explained as a benefit in light of better tax conditions that DTAs offer for Czech MNCs, whose owners are from contractual jurisdictions. On the other hand, there is a decrease of 55.6% in foreign direct investments at control group. It could be caused by the 35% withholding tax, which is applied by the Czech Republic on transactions directly transferred to non-contracted jurisdictions⁴⁷ (i.e., jurisdictions that have

40. Income Tax Act, Act No. 586/1992, § 36(1)(c) (Czech); *see also* PRICEWATERHOUSECOOPERS, *supra* note 33.

41. BRAUN & WEICHENRIEDER, *supra* note 12, at 26.

42. Petr Krejčí, Senior Consultant, Bisnode, Presentation at the International Structures – Adaption to Current Legislative Changes Conference (Apr. 24, 2016) (printed materials distributed at Conference on file with author). For information about the Conference, please visit https://www.akont.cz/nase-znalosti/seminare-prednasky-a-konference.html/84_2025-mezinarodni-struktury-%E2%80%93-adaptace-na-aktualni-legislativni-zmeny [<https://perma.cc/779T-87FD>].

43. Rohan & Moravec, *supra* note 1, at 724.

44. Addison, *supra* note 9, at 704.

45. BRAUN & WEICHENRIEDER, *supra* note 12, at 26.

46. KERZNER & CHODIKOFF, *supra* note 9, at 66–67 (suggesting that jurisdictions with bank secrecy laws need legislation permitting greater access to bank information in order combat tax evasion); Addison, *supra* note 9, at 720.

47. Income Tax Act, Act No. 586/1992, § 36(1)(c) (Czech); *see also* PRICEWATERHOUSECOOPERS, *supra* note 31.

not signed the instruments on exchange of information yet). These transactions flow to non-contractual jurisdictions indirectly (i.e., through jurisdictions that do not withhold tax). The offshore non-contractual jurisdictions are mainly used for anonymity and financial secrecy. At a general level, taxpayers, who want to keep their anonymity after DTAs'/TIEAs' conclusion, are relocated to another non-contractual jurisdiction. Those who do not prefer anonymity remain in contractual jurisdictions and benefit from better tax conditions.

There is an opportunity for further case study focused on MNCs' anonymity. Thanks to an increased number of jurisdictions participating in the Convention on Mutual Administrative Assistance in Tax Matters and strengthening automatic exchange of information, it will be more difficult to stay anonymous. These instruments give the tax authorities new ways to obtain information like beneficiary ownership, tax planning schemes, bank account information, etc. The future research will be targeted on new measures used by MNCs to keep their anonymity.