

TAX INFORMATION EXCHANGE INFLUENCE ON CZECH BASED COMPANIES' BEHAVIOR IN RELATION TO TAX HAVENS

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Abstract

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In recent years, borders between countries have been opened gradually thanks to globalization, which is reflected in minimal barriers to the movement of persons and capital. This situation could be potentially abused by taxpayers willing to shift the capital to preferential tax jurisdictions. Due to facts aforementioned, several instruments for tax administrators have been introduced. Bilateral and multilateral instruments are concluded with particular countries for the purpose of obtaining information about foreign residents staying abroad but also to avoid double taxation or double non-taxation. In recent years there has been an increased number of companies in the Czech Republic whose owners come from preferential tax jurisdiction from 12,676 up to 13,167. This paper is focused on the Czech taxpayers' reaction on concluding agreements concerning exchange of information in tax matters with preferential tax jurisdictions, the so-called "Tax havens". The Difference-in-Differences Method was carried out to predict the taxpayers' behavior. The model shows that the agreements work well as a preventive tool. If the Czech Republic concludes the agreement with the tax haven, the taxpayers lose their anonymity. This results in their relocation into tax havens that are not covered by the agreement in order to keep their anonymity.

Keywords: taxpayer, tax, tax haven, tax information exchange agreement, tax administrator, jurisdiction

INTRODUCTION

There is no general definition of tax haven but Harmful Tax Competition issued by OECD in 1998 defines key aspects for identifying tax havens. These are the following criteria: no or only nominal taxes, lack of effective exchange of information, lack of transparency and no substantial activities OECD (1998). Two years later the Global Forum on Transparency and Exchange of information for Tax Purposes issued a list of uncooperative jurisdictions. The uncooperative jurisdictions had only one alternative how to delist from the black list of tax havens. They were required to conclude at least twelve Agreements on Exchange of Information in Tax Matters (TIEAs) or Double Taxation Agreements (DTAs) with a clause on

the exchange of information in tax matters OECD (2013). OECD is not the only institution which has issued internationally recognized list of tax havens. There are many authors or institutions that have published other lists of tax havens for example International Monetary Fund (2000), Hampton and Christensen (2005), Levin (2007), Lowtax.Net (2008), etc.

Addison (2009) mentions in his study that TIEAs are symbolic and provides insufficient additional measures to combat tax havens. According to Addison (2009) and Kerzner (2014) countries should also focus on their domestic law. The pending problem of most studies remain the identification of the group of tax havens as for most of the studies it is the starting point. Indeed it makes different results based on the author's approach.

Braun and Weichenrieder (2014) deal with the issue whether the conclusion of TIEAs is associated with a lower activity of Germans multinational companies (MNCs) in signature countries compared to activities in tax havens countries that have not signed such an agreement with Germany. Braun and Weichenrieder (2014) mention in their research the hypothesis that firms invest in tax havens not only for low tax rates but also for the secrecy that these jurisdictions offer.

Cobham, Janský and Meinzer (2015) have been focusing on alternative concept of a secrecy jurisdiction and present Financial Secrecy Index (FSI). The FSI ranks jurisdiction according to their contribution to opacity in global financial flows. The FSI update is issued every two years by Tax Justice Network.

Ligthart and Voget (2008) investigate the empirical determinants concerning sharing of information for income taxation between the Netherlands and other countries. Johannesen and Zucman (2012) analyze the effect of TIEAs on banks deposits in tax havens. There are many ways how to measure the impact of tax information exchange.

Elaboration of this paper is generally based on hypothesis of Braun and Weichenrieder (2014).

The aim of this article is to identify the impact of the tax anonymity breakage, in the offshore centers due to their declared acceptance of tax information exchange followed by the TIEA or DTA signing, on the offshore companies shifting.

This paper is focused on reflections of the Czech multinational companies (MNCs) owned by the offshore companies. It means such a group of Czech companies, whose owners are located in the preferential tax jurisdiction.

The main research question of the paper is whether the moment of conclusion of TIEAs

and Double Taxation Agreements (DTAs) with the offshore jurisdiction is associated with numbers of relocated companies to another jurisdiction in order to keep anonymity of their owners and beneficial owners.

MATERIALS AND METHODS

At the very beginning of the topic processing is used a classification analysis for purpose to divide countries into preferential and non-preferential tax jurisdiction. The tax havens' selection is carried out on the basis of concluded and non-concluded TIEAs (and DTAs). Within the description analysis it is found out that the Czech Republic has concluded approximately 85 DTAs and 8 TIEAs as of the end of 2014.

In order to determine the TIEAs' and DTAs' effect on MNCs' behavior, the Difference-in-Differences Method (dif-in-dif) is applied. The analyzed data have been obtained from Bisnode Česká republika a. s. and the Ministry of Finance of the Czech Republic. After the dif-in-dif method the synthesis of findings is carried out in order to quantify and explain the TIEAs' and DTAs' effect.

The Tab. I shows particular jurisdictions, which concluded TIEAs with the Czech Republic and their entry into force.

Followed by the Fig. 1 describing the trend of the Czech companies numbers, whose owners come from preferential tax jurisdictions.

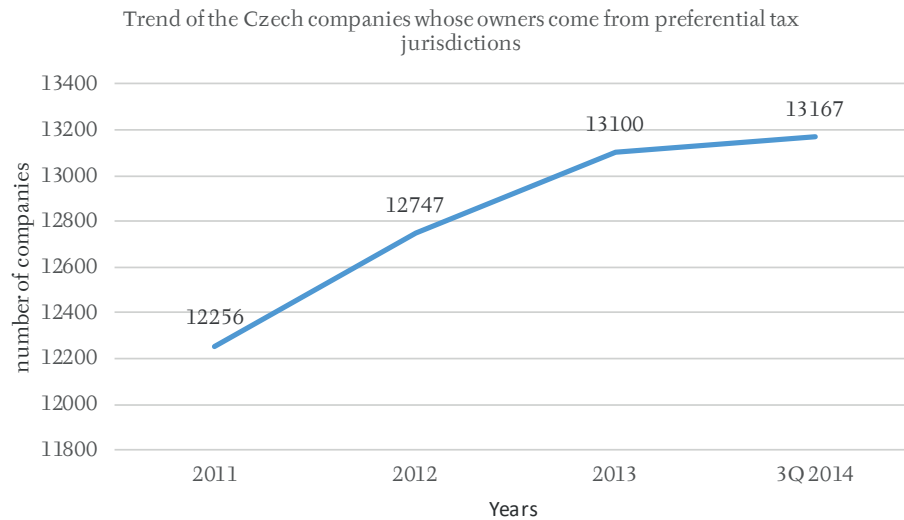
As it can be seen in the Fig. 1 there is an increase in companies' numbers in the Czech Republic whose owners come from preferential tax jurisdiction from 12 676 up to 13 167.

Data obtained from Bisnode was applied for further analysis by dif-in-dif. The categorical periods consist of 2012 (the period marked as "before"

I: Tab. I: The list of concluded TIEAs with the Czech Republic as of the end of 2014

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

Source: Ministry of Finance of the Czech Republic



1: Graph 1: Trend of the Czech companies whose owners come from preferential tax jurisdictions
Source: data based on Bisnode

concluding an agreement) and 3Q 2014 (the period marked as “after” concluding an agreement).

Jurisdictions are divided in two groups. In the first group, called “Control”, there are included Czech taxpayers with owners from jurisdictions without any DTA or TIEA concluded with the Czech Republic (in the monitored periods).

In the second group called “Treated” there are taxpayers whose owners are from jurisdictions the Czech Republic has not concluded any agreements for exchange of information in the period “before” but in the period “after” the agreement has been concluded with these jurisdictions by the Czech Republic.

Model Specification

The posed analysis of the TIEAs’ and DTAs’ effect uses the following equation and variables:

$$Y_{st} = \alpha * x_{0t} + \beta * T + \gamma * S + \delta * T * S + u_{it} \quad (1)$$

Y_{st}is outcome of interest (number of companies)

α is the constant

x_{0t}is the unit vector

β is the parameter of exogenous variable T

T.....is the time period dummy variable

γis the parameter of exogenous variable S

S.....is the dummy variable captures possible differences between the treatment and control groups (conclusion or not conclusion of the agreement)

δis 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 residue

The treatment variable (S) is binary, i.e. $S \in \{0,1\}$ as well as the time variable T.

Period zero indicates a pre-treatment period, i.e. the period before conclusion, and period one indicates a post-treatment period, i.e. the period

after conclusion. The study is focused on discovering the mean effect of switching S from zero to one. Variable Y_{st} denotes the outcome that would be realized for a specific value of S in period T, i.e. number of the Czech companies whose owners are from preferential tax jurisdictions. (Michael Lechner, 2011)

RESULTS

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

α takes the value of 146.8

β takes the value of 78.6

γ takes the value of -31.2

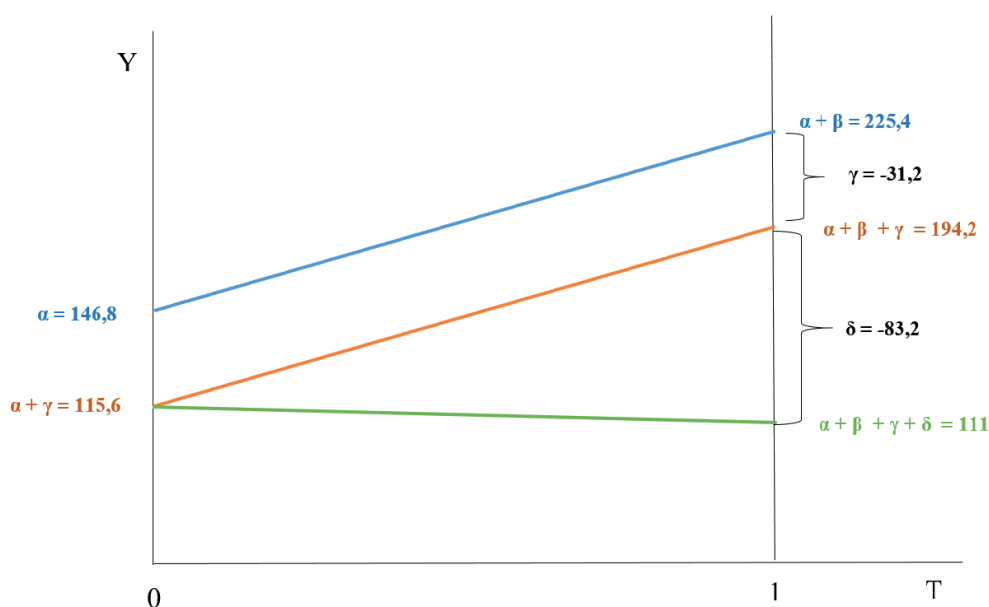
δ takes the value of -83.2

After putting parameters into the model the differences are calculated. For a better overview of the results, see the Fig. 2.

The blue line represents the Control group, there are taxpayers whose owners are from jurisdictions that has no agreement for exchange of information with the Czech Republic in period “T0” and “T1”. Due to this fact there is an increase of taxpayers’ number by 53.5 %, i.e. from 146.8 to 225.4. On the Fig. 2 there are also two other lines showed.

Both other lines (green and orange) represent the Treated group but each one in different situation. The both lines of period “T0” start at the same point 115.6, because of zero concluded TIEAs nor DTAs. The orange line at the period “T1” represents a hypothetical situation without any change of taxpayers’ behaving despite the concluded DTAs/TIEAs.

This explains an ongoing increase from 115.6 taxpayers up to 194.2 taxpayers potentially. As it can be seen from the Fig. 2, the orange and the blue line are parallel, because they represent the same situation and there is the same increase by β (78.6) between the period “T0” and “T1”.



2: Graph 2: Model Difference-in-Differences in graphical view

Source: Authors' own elaboration using the Czech Ministry of Finance data.

On the other hand the green line represents the real situation and the real development. This line shows number of taxpayers whose owners are from jurisdictions that had no agreement in the period "T0" but in period "T1" the agreements have been concluded. Due to the conclusion of any agreement there is a decrease of taxpayers from 115.6 to 111. This identified decrease is not the final effect of concluded agreements.

The final effect is quantified by green line trend comparison with the orange line. The result is given by δ . The final effect shows that if there were not any concluded TIEAs and DTAs either the number of taxpayers would be 194.2. As the TIEAs or the DTAs have been concluded, the number of taxpayers lowered to 111. The result of conclusion TIEAs/DTAs is a drop of taxpayers by 42.8 %.

This model shows that instruments for exchange of tax information work well as preventive tools. Moreover the model indicates the number of taxpayers' shifts to countries keeping anonymity from countries applied the information exchange standards. This relocation can be explained as an anonymity importance for taxpayers as some taxpayers prefer anonymity to other advantages including lower taxes resulting from concluded DTAs and TIEAs.

DISCUSSION

Our findings support the results of Braun and Weichenrieder's (2014) research and the stress should be put on the importance of tax information exchange. Addison (2009) tried to find out the exchange of information effect through

the USA's tax gap caused by tax havens. One of his arguments was that TIEAs and similar agreements are only a reaction on the tax haven situation but it does not solve the problem. Addison (2009) mentioned that it is necessary to focus on domestic solution. As can be seen from our results or from Braun and Weichenrieder (2014) research, there is a measurable effect of instruments for exchange of information, so TIEAs and other instruments used for exchange of information should not be considered as tools with a minor effect.

The results are in line with the Bisnode estimation (Krejčí, 2016) that 44 % of offshore companies are established for the anonymity protection reasons.

Nevertheless we agree with the opinion that states should focus on their domestic law too. In order to increase efficiency in combating with tax havens, the Base Erosion and Profit Shifting (BEPS) has been introduced by OECD and EU. Moreover in recent years, many states have been implementing particular action of BEPS in order to fill in tax gaps and mismatches in tax rules. On the other side there should be a space for tax competition that has positive impact on economics in the light of our results.

There should be some improvement in the methodology of this research because the dummy variables have been used, which are not specific figures. Furthermore the estimated model is based on average values, but on the other hand it gives general overview.

CONCLUSION

The analysis identified the tax information exchange significant impact on Czech MNEs' behavior in relation to tax havens. The study confirms the relocation of companies is associated with retaining in anonymity based on the dif-in-dif model results.

The model indicates an economically sizable effect. The number of Czech companies, whose owners are established in tax havens, have decreased by 42.8 % after conclusion of instruments for exchange of tax information with these jurisdiction. On the other hand the results show an increase of taxpayers amount allocated in countries keeping the tax secrecy and anonymity by 53.5 %. This may indicate that Czech MNEs are interested in tax havens not only for the low tax rates but for the anonymity reasons too.

The results complement and develop previous findings and particularly quantify the influence of tax information exchange on related MNEs related to the Czech Republic staying anonymity elimination makes significant changes in MNEs behaving and is one of the statistically significant reasons for offshore companies shifting to locations still keeping the privacy protection.

The results support the theory of shifting the offshore industry character from tax purposes usage to the anonymity purpose utilization. It is necessary to differ between the tax anonymity and other anonymity purposes from the point of view of the tax administration. This might be an issue for next research.

Moreover there is a huge potential for further research relating the worldwide trend of the multilateral agreements on mutual administrative assistance signing. This fact results in a small group of few non-cooperative jurisdictions that do not have any measures for exchange of information. That means it will be more difficult to reach anonymity for taxpayers. The future research can be targeted to the practical approach of the offshore companies in order to keep anonymity and which countries might profit from the situation for a short term and which ones in the long run.

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REFERENCES

- ADDISON, T. V. 2009. Shooting Blanks: The War on Tax Havens. *Indiana Journal of Global Legal Studies*, 16(2): 702–727.
- BRAUN, J. and WEICHENRIEDER, A. 2014. *Does Exchange of Information Between Tax Authorities Influence Multinationals' Use of Tax Havens?* ZEW Discussion Papers 15–015, 39. [Online]. Zentrum für Europäische Wirtschaftsforschung. Available at: <http://www.econstor.eu/handle/10419/107595> [Accessed: 2016, December 1].
- COBHAM, A., JÁNSKÝ, P., and MEINZER, M. 2015. The Financial Secrecy Index: Shedding New Light on the Geography of Secrecy. *Economic Geography*, 91(3): 281–303.
- HAMPTON, M., and CHRISTENSEN, J. 2005. Tax Havens of the World. In: *Tax us if you can*. [Online]. London: A Tax Justice Network Briefing paper. 36–37. Available at: http://www.taxjustice.net/cms/upload/pdf/tuiyc_-_eng_-_web_file.pdf [Accessed: 2016, December 1].
- OECD. 1998. *Harmful Tax Competition: An Emerging Global Issue*. Paris: OECD.
- INTERNATIONAL MONETARY FUND. 2000. *Offshore Financial Centers (IMF Background Paper)*. [Online]. Washington, DC: International Monetary Fund. Available at: <http://www.imf.org/external/np/mac/offshore/2000/eng/back.htm> [Accessed: 2016, December 1].
- KERZNER, D. 2014. *Tax Information Exchange Agreements and the War Against Tax Evasion*. Ph. D. Thesis. Ontario: Queen's University.
- KREJČÍ, P. 2016. *Owners' structures and Compliance*. Reported on the Conference on the International Structures – Adaptation on Actual Law Changes. Prague, the 24th April 2016.
- LEVIN, C. 2007. *A bill to Restrict the Use of Offshore Tax Havens and Abusive Tax Shelters to Inappropriately Avoid Federal Taxation, and for Other Purposes*. Law Proposal, US Senate, 1st Session, 110th Congress, 17. 2. 2007, S. 681. [Online]. Washington, DC: US Senate. Available at: <http://www.gpo.gov/fdsys/browse/collection.action?collectionCode=BILLS> [Accessed: 2016, December 1].
- LIGHTHART, J. and VOGET, J. 2009. *The Determinants of Cross-Border Tax Information Sharing: A Panel Data Analysis*. Mimeo, Tilburg University.

- WOLTERS KLUWER. c 2017. LOWTAX Global Tax & Business Portal. [Online]. Available at: <http://www.lowtax.net/> [Accessed: 2016, December 1].
- LECHNER, M. 2011. The Estimation of Causal Effects by Difference-in-Difference Methods. *Foundations and Trends® in Econometrics*, 4(3): 165–224.
- GLOBAL FORUM ON TRANSPARENCY AND EXCHANGE OF INFORMATION FOR TAX PURPOSES. 2013. *Progress Report to the G20 Leaders: Global Forum Update on Effectiveness and On-going Monitoring*. Report. [Online]. Paris: OECD. Available at: http://www.oecd.org/tax/progress_report__G20.pdf [Accessed: 2016, December 1].
- ZUCMAN, G. 2014. Taxing Across Borders: Tracking Personal Wealth and Corporate Profits. *Journal of Economic Perspectives*, 28(4): 121–48.

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