

A European map regarding the strictness of the transfer pricing regulations

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Abstract: In the context in which transfer pricing may represent a mechanism through which multinationals have the possibility to move funds internationally, in order to prevent the base erosion and profit shifting between multinationals, countries over the world have adopted various transfer pricing regulations. Furthermore, some of the countries adopted stricter regulations than others. The objective of our research was to identify the level of strictness for the transfer pricing regulations from the European countries. To achieve this objective, we analyzed the transfer pricing regulations of all European countries and we built a transfer pricing strictness index, based on which we defined 4 categories of countries (where category 1 includes the countries with the least strict transfer pricing regulations and category 4 countries with the strictest regulations). After that, we illustrated how these categories are distributed on the European map. In order to collect the information, we used the transfer pricing guides issued by the Big Four companies for the year 2015. The study's results show that the strictness of the transfer pricing regulations decreases from the west of Europe to east. Moreover, most of the countries were included in category 2, respectively category 3, meaning that the transfer pricing regulations from the European continent are not so flexible, but in the same time are not so strict.

Keywords: transfer pricing, strictness, regulations, map, Europe

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1. Introduction

In the current context in which the number of related party transactions rises, multinationals may try to move their profits from a high-tax jurisdiction into a low-tax one. As a consequence to this situation, countries of the world are trying to combat the base erosion and profit shifting, in this respect introducing and extending their transfer pricing regulations (Lohse *et al.*, 2012). Therefore, some of the countries adopted stricter regulations than others.

Given all the above, we were motivated to analyze how strict are the transfer pricing regulations of the European countries. In order to achieve this objective, we collected information about the transfer pricing regulations of all European countries, using in this respect the transfer pricing guidelines prepared by the Big Four companies for the year 2015. Furthermore, we computed a transfer pricing strictness index and based on this we defined certain categories of countries. In the end, we designed a European map showing how the categories (which reflect the strictness of the transfer pricing regulations) are distributed on the map.

We were also motivated by the fact that until now (as far as we know) no European map was designed in order to illustrate the strictness of the transfer pricing regulations from each country. Therefore, we consider that our study has an important contribution to the transfer pricing literature and in the same time could represent a starting point for future research. Furthermore, we observed that most of the studies performed until now about the strictness of the transfer pricing regulations are concentrated, in terms of transfer pricing documentation, only on the existence of a legal requirement. Therefore, in other train of thoughts, we consider that this study contributes to the existing literature due to the fact that in order to build the transfer pricing strictness index, in addition to the introduction of a legal requirement for the documentation of the transfer prices, we analyzed other aspects related to the transfer pricing documentation subject as they are presented in this paper. In addition, we consider that our study could present importance for all European countries in order to assess how strict are their transfer pricing regulations compared with the regulations of the other countries from the continent.

The paper is organized as follows. Section 1 discusses the background literature on transfer pricing regulations and the strictness of these regulations. Section 2 describes the research methodology. Section 3 presents a European map showing the strictness of the transfer pricing regulations from each country. In the final section, the conclusions are accompanied by a description of tentative avenues of research.

2. Literature review

Matei and Pîrvu (2011) defined transfer pricing as prices charged between related parties for the acquisition/provision of services or for the acquisition/sale of goods. Sansing (2014) pointed out that prices at which services or goods are transferred between related parties influence the profit realized by each company involved in transaction and also the corporate income tax that should be paid by each of these companies. Therefore, it can be said that “transfer pricing is an important financial management mechanism allowing multinational corporations to maneuver funds internationally” (Hung Chan *et al.*, 2015). Due to this situation transfer pricing could deprive governments of their fair share of taxes from multinationals (Neighbour, 2002) and as a solution to this issue, countries have adopted regulations to “assess the appropriateness of the transfer prices quoted by MNEs” (Yao, 2013).

According to Mirijam (2015), a history of transfer pricing may begin, most probably, after the First World War, when US paid a special attention to how the profits are allocated between companies, using for the first time the concept of *arm's length principle*. As a consequence to this situation, US was the first country which implemented a transfer pricing legislation. After this, based on the work performed by US and in order to develop global transfer pricing regulations, the Organisation for Economic Cooperation and Development (OECD) published a report about the allocation of profit and costs between affiliated companies. This report was revised most recently in 2010 and contains, inter alia, details about the transfer pricing key concepts, the analysis that should be performed in order to assess if transfer pricing comply with the arm's length principle and details regarding the transfer pricing documentation (OCDE, 2010).

Moreover, in order to prevent the base erosion and profit shifting between multinationals, OECD lunched in 2013 a package of actions - BEPS Action Plan (Lamers *et al.*, 2014). The final version of the BEPS Action Plan includes some actions which are targeting the transfer pricing subject, namely Actions 8-10 "Aligning Transfer Pricing Outcomes with Value Creation" and Action 13 "Transfer Pricing Documentation and Country-by-Country Reporting". The main aspect analyzed within BEPS Actions 8-10 is represented by the allocation of profits which should be closely aligned with the value created through underlying economic activities (OECD, 2015a). Action 13 of the BEPS provides rules related to the transfer pricing documentation in order to enhance transparency for tax administration - i.e. there is required the preparation of a master file, a local file and a country-by-country report (OECD, 2015b).

2.1 Previous studies performed in relation to the strictness of the transfer pricing regulations

Ito and Komoriya (2015) pointed out that in order to prevent the profit shifting between multinational companies, countries adopted transfer pricing regulations. In this context it can be analyzed how strict are the transfer pricing regulations from these countries.

Lohse and Riedel (2012) studied the transfer pricing regulations of certain European countries and classified these countries in three main categories, reflecting in this way the level of the strictness of the transfer pricing legislation from each country analyzed. In their study, the two authors included in the first category countries without or with limited transfer pricing legislation, where no documentation requirements exist, in the second category countries where the documentation requirement is not introduced in the national tax law, but it is required to exist during a tax audit, and in the third category countries where the documentation requirements are implemented in the national tax law. In addition, the two authors considered that when analyzing the transfer pricing regulations, a number of other characteristics (such as the allowed method for transfer pricing calculation, the penalties for non-compliance with the transfer pricing rules and the opportunity to apply for an advance price agreement) may be taken into account.

In another study, Lohse *et al.* (2012) pointed out the fact that in order to measure the strictness of a transfer pricing legislation, additional factors could be considered: the definition of related parties, the deadline for documentation, the statute of limitations and penalties. According with these researchers, the lower the threshold used in order to determine the affiliation relationship, the shorter the deadlines established for the submission of the documentation, the longer the statute of limitations, and the higher the penalties, the stricter are the transfer pricing regulations. Moreover, in this study the authors examined the transfer pricing regulations from 44 countries over a time period of nine years (2001-2009) and noted that the transfer pricing regulations are less strict in European countries than in countries outside the Europe.

Marques and Pinho (2016) built an index in order to measure the strictness of the transfer pricing framework. The index was built on two fundamental pillars: transfer pricing regulations (statutory rules and documentation requirements) and law enforcement mechanisms (penalty aspects; mechanisms to assist enforcement – e.g. tax authority performing transfer pricing audits, report information regarding transfer pricing in the annual income tax returns etc.). The value 1 was assigned when an attribute was applicable, and the value 0 otherwise. These two authors analyzed the transfer pricing framework of some European countries for the period 2001 - 2009 and observed that the index increased significantly over this period, indicating a scrutiny of related party transactions by the European governments.

Furthermore, the results of their study show that “tightening the transfer pricing framework is capable of dissuading multinational companies from shifting profits from higher- to lower-tax countries”.

Rathke and Rezende (2016) analyzed the characteristics of transfer pricing system across 44 countries. The research was performed based on the information collected from the transfer pricing reports prepared by audit and tax advisory firms, for the year 2014. Based on these reports, the authors defined certain variables and constructed a coefficient which shows the differences on transfer pricing rules between the countries. The results indicated the existence of three groups characterized by relevant distinguishable attributes.

Riedel *et al.* (2015) investigated whether the strictness of the transfer pricing rules is effective in reducing the profit shifting between the multinationals. This study was performed across 26 European countries. The authors concluded that “transfer price documentation provisions have some effectiveness in limiting mispricing behaviour”. However, in terms of transfer pricing rules, the authors analyzed, beside the documentation requirement, other aspects such as the existence of specific transfer pricing penalties, the availability of advance price agreements and methods used in order to analyze the arm’s length principle.

According to Becker (2017), advance pricing agreements (APAs) determine in advance the transfer prices for related party transactions. Therefore, APAs are concluded between taxpayers and tax authorities before a transaction being performed, the main scope of the APAs being to establish the computation of the transfer pricing for that transaction. Moreover, Becker pointed out that “APAs serve as a commitment device for non-excessive future taxation”.

Nicolay *et al.* (2016) measured the strictness of the transfer pricing regulations using as an indicator of strictness the existence of formal or informal transfer pricing documentation requirements. More exactly, the authors considered that a country has strict transfer pricing regulations if that country requires (in practice or as a legal requirement) the transfer pricing documentation to be available either upon the request of the tax authorities or to be presented together with the tax return. If this requirement was met within a country, the transfer pricing strictness indicator was set to 1, otherwise it was set to 0. The authors used the transfer pricing documentation requirement as an indicator for strictness, as they considered it “to be crucial element for increasing transparency of transfer price determination”.

Beer and Loeprick (2013) analyzed the relation between the introduction of transfer pricing documentation requirement and the phenomenon regarding the profit shifting between multinational companies. They noted that during four years after the introduction of a mandatory transfer pricing documentation, the profit shifting among the subsidiaries of a multinational group has decreased with 60%. The authors

concluded that the documentation requirement has a significant compliance impact on multinationals, discouraging in the same time the profit shifting. On the other hand, Ito and Komoriya (2015) noted that the introduction of transfer pricing documentation requirements decreases the value of the foreign direct investments.

Key concepts regarding transfer pricing regulations

According to the literature reviewed and presented above, transfer pricing documentation is one of the most important elements in the context of transfer pricing regulations. With regards to the transfer pricing documentation, we noted that the Big Four companies analyzed within the annual worldwide transfer pricing guides some key concepts such as: the existence of a legal requirement for the preparation of the transfer pricing documentation file, by who and for which transactions should be prepared the documentation, the deadline for the preparation and for the submission, the existence of requirements regarding the preparation of annual documentation and the update of the benchmark study on an annual basis etc.

Other key concepts regarding transfer pricing regulations and analyzed by the Big Four companies are related to transfer pricing methods, disclosure of related party transactions, definition of related parties, statute of limitation, penalties, advance pricing agreements, cost sharing agreements, transfer pricing adjustments, information that should be presented within the transfer pricing file etc.

3. Research methodology

The **main objective** of this research was to identify the level of strictness for the transfer pricing regulations from European countries. In order to achieve this objective, we followed certain steps, as they are presented below:

Step 1

In the first step of the research we tried to identify (based on the literature reviewed) the elements that could be used in order to measure the strictness of the transfer pricing regulations. These elements are presented in section 3.1 below.

Step 2

As our objective was to identify the strictness of the European transfer pricing regulations, our sample was represented by the 47 countries from Europe (this number is recognized by the World Atlas - <http://www.worldatlas.com/cntycont.htm>).

Therefore, in the next step, for each country from the sample we gathered information regarding the elements selected in the previous step. Regarding the

data sources used in order to gather the necessary information, these were represented by the transfer pricing guides prepared by the Big Four companies: *2016 Global Transfer Pricing Country Guide* prepared by Deloitte, *International Transfer Pricing 2015/16* prepared by PwC, *Global Transfer Pricing Review 2016* prepared by KPMG and *Worldwide Transfer Pricing Reference Guide 2015–16* prepared by Ernst & Young. Our analysis was performed based on the reports prepared by these companies in 2016 containing information related to the 2015 year. We did not find any data source containing more recent information.

Moreover, we chose to use the guides prepared by the Big Four companies as these compile essential information regarding the transfer pricing subject. On the other hand, the information presented in these guides was collected from the transfer pricing specialists from the Big Four firms from each country analyzed. Taken into account the knowledge and experience of these specialists we assume that the information included in the guides is representative at each country level.

Step 3

Based on the elements selected and documented in the previous steps we designed a transfer pricing strictness index, as we presented in the section 3.2 below. The index was computed for each country from the sample. After that, we used the values of the index in order to define categories for the strictness of the transfer pricing regulations (for example the first category refers to the least strict transfer pricing regulations, while the last category refers to the strictest regulations). Each country was included in a certain category.

In order to store the information about the elements of the index and to design the transfer pricing strictness index we used the Microsoft Excel application.

Step 4

In the last step of the research, we designed a map presenting how the categories identified are distributed within the European continent. Moreover, we tried to identify if a certain category dominates a specific region (for example a category may be preponderant met in the west of the Europe).

In order to design the map, we used one of the online tools which allow the customization of maps. This tool was available on the website <https://mapchart.net/>.

3.1 Elements considered in order to compute the transfer pricing strictness index

Table 1 below presents the elements analyzed in order to compute the transfer pricing strictness index. These elements were grouped in three main categories.

Table 1. Elements analyzed in order to compute the transfer pricing strictness index

| Category of elements | Elements | Comments |
|---|---|---|
| Category I - elements regarding the transfer pricing documentation | e1: The transfer pricing documentation requirement is introduced in the tax law, and not only required to exist in practice | For the countries where the transfer pricing documentation is required to exist only in practice (there are no legal requirements), we considered that the documentation may be requested, during a tax audit, for all categories of taxpayers and for all the related party transactions. Our consideration is based on the fact that there are no indications related to the fact that the documentation would be requested in practice only for certain category of taxpayers or transactions. |
| | e2: The transfer pricing documentation file is requested to be prepared by all taxpayers, and not only by certain taxpayers | |
| | e3: The transfer pricing documentation file is requested to be prepared for all the related party transactions, and not only for certain transactions (for e.g. transactions which exceed a threshold) | |
| | e4: Annual transfer pricing documentation requirements | We considered that an annual transfer pricing documentation requirement exist, even if it is applicable to all categories of taxpayers or only to certain categories. |
| | e5: There is a fixed deadline to prepare the transfer pricing documentation | We observed that big part of the countries analyzed by us grants a deadline of 30 days for the submission of the transfer pricing documentation file upon the request of the tax authorities. Thus, we considered stricter a deadline of less than 30 days. |
| | e6: The deadline for the submission of the transfer pricing file upon the request of the tax authorities is less than 30 days | |

| Category of elements | Elements | Comments |
|--|---|---|
| | e7: There are penalties for not complying with the transfer pricing documentation requirements | |
| | e8: The benchmark analysis should be updated annually | |
| Category II – elements regarding BEPS | e9: BEPS Action 13 and / or Actions 8-10 are implemented in the local legislation | |
| | e10: There are requirements regarding the disclosure of the related party transactions | In this respect we analyzed if there are requirements regarding the disclosure of the related party transactions within the annual tax return or within a special return or report that should be submitted together with the annual tax return. |
| | e11: The threshold used in order to determine the affiliation relationship is below 25% | According to Lohse and Riedel (2012), the largest group of countries uses a 25% capital contribution in order to determine if two companies are associated enterprises. In addition, we also observed that big part of the companies from our sample uses the threshold of 25% in this respect. Given these aspects, we considered that a threshold below 25% represents a strict regulation. For the countries from our sample without a fixed threshold (i.e. 5 countries), we considered that there is a probability that companies with a participation of less than 25% be considered affiliated. Therefore, for these countries we considered a threshold below 25%. |
| Category III – other elements | e12: The statute of limitation is greater than 5 years | We observed that big part of the countries analyzed by us applies a statute of limitation of 5 years. Thus, we considered stricter a statute of limitation greater than 5 years. |
| | e13: Advance price agreements (APAs) are not available | According to Lohse and Riedel (2012), “such arrangements reduce the risk of double taxation and lead to a greater certainty in international trade”. Given this, we considered that countries |

| Category of elements | Elements | Comments |
|-----------------------------|-----------------|--|
| | | where APAs are not available are stricter because a taxpayer does not have the chance to reduce the risk of double taxation. |

(Source: own processing)

Initially, we analyzed a greater number of elements, but in the end we used in our research only those elements which allowed us to evaluate the strictness of the transfer pricing regulations. For example, initially we included in the list of elements information about the transfer pricing methods, the definition of the related parties and about the application of the transfer pricing rules for permanent establishments. More exactly, we analyzed if countries impose a hierarchy for the transfer pricing methods, take into consideration the exercising of common control (e.g. common management) in order to establish an affiliation relationship and if they apply transfer pricing rules for the permanent establishments. Because these elements do not differ significantly between the countries, we did not consider relevant to include them in the final list of elements.

We chose to include elements related to the transfer pricing documentation, as we noted that within the literature reviewed the researchers used the transfer pricing documentation requirement in order to measure the strictness of the transfer pricing regulations, considering it a crucial element in this respect. Moreover, taking into account that the objective of the BEPS Action Plan developed by OECD is to minimize and discourage the profit shifting between multinationals, we considered that the fact that a country adopted into the national legislation the Actions related to transfer pricing aspects involves stricter transfer pricing regulations in that country. Furthermore, based on the literature reviewed we considered relevant to analyze other elements such as the existence of requirements regarding the disclosure of the related party transactions, the threshold used in order to determine the affiliation relationship, the statute of limitation and the opportunity to apply for advance price agreements (APAs).

3.2 Development of the transfer pricing strictness index

In order to measure the strictness of the transfer pricing regulations we developed an index based on the following formula:

$$TP_{SI} = (\sum_{i=1}^m e_i) * pi, \text{ where:}$$

TP_{SI} = transfer pricing strictness index;

e_i = elements identified and analyzed in the first two steps of the research. We assigned the value 1 if an element was included in the transfer pricing regulations of the country analyzed and 0 otherwise;

m = number of elements;

π_i = the percentage of importance. We grouped the elements in main categories and this percentage reflects how important a category of elements is in order to analyze the strictness of the transfer pricing regulations. The greater the percentage for a category of elements, the greater the measure in which that category contributes to the existence of strict transfer pricing regulations.

The formula mentioned above was used for the computation of the transfer pricing strictness index of each country analyzed. The higher the value of the index is, the stricter the transfer pricing regulations are.

The percentage of importance

For each category of elements, we determined a percentage of importance. In order to do this, in table 2 below, we rated the three categories of elements using a scale from 1 to 3 (where 1 represents the less important category and 3 the most important category). After that, based on the rating process we determined the percentage of importance for each of the three categories of elements.

Table 2. Percentage of importance (π_i)

| Category | Category I - elements regarding the transfer pricing documentation | Category II – elements regarding BEPS | Category III – other elements |
|-------------------------------------|--|---|-------------------------------------|
| Rating/ π_i | 3 | 2 | 1 |
| Rating $\pi_i (=rating/(3+2+1))$ | 50% | 33% | 17% |

(Source: own processing)

We believe that the elements related to the transfer pricing documentation should be considered as the most important elements in order to measure the strictness of the transfer pricing regulations. Our assumption is based on the results obtained by certain researchers according with the transfer pricing documentation increases the transparency of transfer price determination limiting in this way the profit shifting between multinationals. Moreover, some researchers analyzed only the transfer pricing documentation aspects in order to determine how strict the transfer pricing regulations of the countries from their sample are (e.g. Lohse and Riedel, 2012; Lohse *et al.*, 2012; Nicolay *et al.*, 2016 etc.), considering this aspect the most relevant in this respect.

After the elements related to transfer pricing documentation, the next important element is represented by the implementation within the national legislation of the BEPS Action 13 and / or Actions 8-10. The fact that we considered this element the second as importance is justified by the current context in which the implementation

of the BEPS Actions related to transfer pricing is considered a big step in order to prevent the base erosion and profit shifting between multinationals. In the end, we assumed that the other factors analyzed are the less important in order to analyze the strictness of the transfer pricing regulations.

Summarizing all the above, the formula applied for each country from the sample in order to measure the strictness of the transfer pricing regulations was the following:

$$TP_{SI} = (e_1 + e_2 + e_3 + e_4 + e_5 + e_6 + e_7 + e_8) * 50\% + e_9 * 33\% + (e_{10} + e_{11} + e_{12} + e_{13}) * 17\%$$

Using the above formula and assuming that all elements have the value 1, the maximum value of the transfer pricing strictness index would be 5.

3.3 Categories of transfer pricing regulations

In the next step of the research, based on the values of the transfer pricing strictness index, we defined certain categories of countries. We mention the fact that for the countries which are considered tax heaven, do not have implemented transfer pricing regulations or do not have transfer pricing documentation requirements (neither in practice) we did not find relevant to compute a transfer pricing index and therefore we included these countries in a special category (i.e. category 0). However, if we had computed a transfer pricing index for those countries, the values obtained would have been less than 1.

The other categories were defined based on the value of the transfer pricing strictness index, as they are presented in the table below.

Table 3. Categories of transfer pricing regulations

| TP _{SI} | Category |
|------------------|------------|
| n.a. | category 0 |
| 1 - 1.9 | category 1 |
| 2 - 2.9 | category 2 |
| 3 - 3.9 | category 3 |
| 4 - 5 | category 4 |

(Source: own processing)

Category 1 represents the least strict category of countries in terms of transfer pricing regulations, while category 4 represents the strictest category.

4. Results and interpretations

The elements regarding the transfer pricing regulations, presented for each country could be found in the Appendix 1. The elements related to BEPS Action Plan and other elements, also presented for each country could be found within Appendix 2. In Appendix 3 we presented the value of the transfer pricing strictness index, computed for each country analyzed. We mention the fact that these annexes do not include countries included in the special category 0.

The table below shows in which category was included each European country.

Table 4. Categories of transfer pricing regulations per countries

| Category 0 | Category 1 | Category 2 | Category 3 | Category 4 |
|---------------|----------------|------------------------|---------------------|------------|
| Andorra | Azerbaijan | Albania | Croatia | Italy |
| Armenia | Belgium | Austria | Denmark | Spain |
| Cyprus | Czech Republic | Belarus | France | |
| Liechtenstein | Finland | Bosnia and Herzegovina | Greece | |
| Macedonia | Germany | Bulgaria | Hungary | |
| Malta | Latvia | Estonia | Iceland | |
| Moldova | Lithuania | Georgia | Ireland | |
| Monaco | Sweden | Luxembourg | Norway | |
| Montenegro | Switzerland | Netherlands | Portugal | |
| San Marino | | Poland | Serbia | |
| Vatican City | | Romania | Slovenia | |
| | | Slovakia | United Kingdom (UK) | |
| | | Ukraine | | |

(Source: own processing)

As we already mentioned, countries included in **category 0** are those which are considered tax heaven, do not have transfer pricing regulations or do not have transfer pricing documentation requirements (neither in practice).

The main characteristics specific for the countries included in **category 1** and which indicate less strict transfer pricing regulations are the following:

- there is not requested an annual transfer pricing documentation file. Only one country has annual transfer pricing documentation requirements (i.e. Sweden);
- there is not a fixed deadline to prepare the transfer pricing documentation;

A European map regarding the strictness of the transfer pricing regulations

- the deadline for the submission of the transfer pricing file upon the request of the tax authorities is greater than 30 days. Only Azerbaijan applies a deadline which is less than 30 days;
- there are no penalties for not complying with the transfer pricing documentation requirements. Only 2 countries apply these kind of penalties (Finland and Germany);
- the benchmark analysis should not be updated annually. Only Latvia requires the annual update of the benchmark analysis;
- BEPS Action 13 and / or Actions 8-10 are not implemented in the local legislation;
- the statute of limitation is lower than 5 years. Only Sweden applies a statute of limitation greater than 5 years;
- APAs are available. Only in Azerbaijan APAs are not available.

Belgium, Czech Republic and Finland obtained the lower value of the transfer pricing strictness index (i.e. 1.17), meaning that these countries have the less strict transfer pricing regulations from Europe.

The main characteristics specific for the countries included in **category 4** and which indicate the strictest transfer pricing regulations are the following:

- the transfer pricing documentation requirement is introduced in the tax law, and not only required to exist in practice;
- the transfer pricing documentation file is requested to be prepared by all taxpayers, and not only by certain taxpayers;
- there is requested an annual transfer pricing documentation file;
- there is a fixed deadline to prepare the transfer pricing documentation;
- the deadline for the submission of the transfer pricing file upon the request of the tax authorities is less than 30 days;
- there are penalties for not complying with the transfer pricing documentation requirements;
- the benchmark analysis should be updated annually;
- BEPS Action 13 and / or Actions 8-10 are implemented in the local legislation;
- there are requirements regarding the disclosure of the related party transactions.

Countries included in category 4 are Spain and Italy, obtaining a value of the transfer pricing strictness index of 4.

The other two categories (i.e. **category 2 and category 3**) represent a mix between the characteristics of category 1 and category 4.

4.1 The European map of transfer pricing regulations

The figure below presents a European map showing how strict are the transfer pricing regulations in each country.

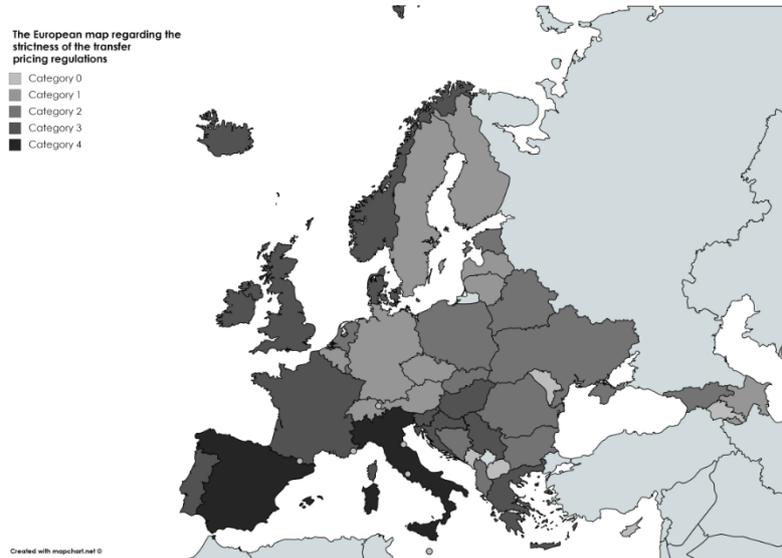


Figure 1. The European map of transfer pricing regulations
(Source: own processing)

As can be observed from the map above, most of the countries are included in category 2, respectively category 3, meaning that that the transfer pricing regulations from the European continent are not so flexible, but in the same time are not so strict. Given this, we consider that this result may sustain the affirmation of Lohse, Riedel and Spengel (2012) according with transfer pricing regulations are less strict in European countries than in countries outside the Europe.

In other train of thoughts, the above map can be split in two main areas, as follows:

- ***the central – eastern part*** (i.e. more exactly the right part of the map), where the transfer pricing regulations are less strict. The majority of the countries from this area are those from category 1 and category 2. The charts below present the transfer pricing elements analyzed in this study, showing the percentage of the countries from categories 1 and 2 whose transfer pricing regulations are characterized by a certain element, respectively the percentage of the countries which do not have that element in the transfer pricing regulations.

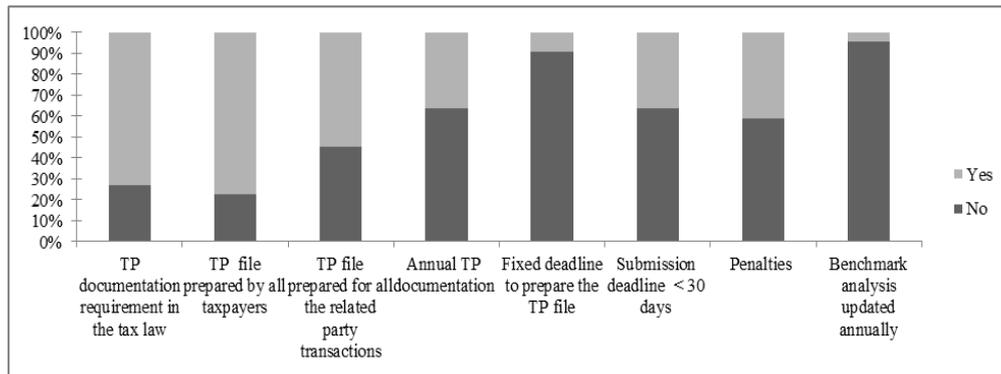


Figure 2. Regulations regarding TP documentation, specific to central – eastern part
(Source: own processing)

According with the above graphic, most of the countries included in category 1 and category 2 *do not* require a transfer pricing documentation file to be prepared for all the related party transactions and an annual transfer pricing documentation file, do not establish fixed deadline to prepare the transfer pricing file or a deadline of less than 30 days to submit the documentation upon the request of the tax authorities, do not impose penalties for not complying with the transfer pricing documentation requirements and do not require an annual update of the benchmark analysis. However, most of these countries introduced a transfer pricing documentation requirement in the national tax law and require a transfer pricing file to be prepared by all the taxpayers.

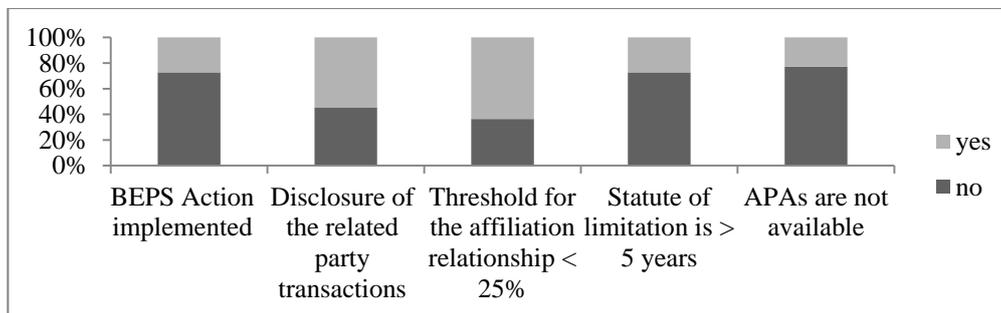


Figure 3. Regulations regarding BEPS and other aspects, specific to central – eastern part
(Source: own processing)

In addition, according to the figure 3 from above, big part of the countries from category 1 and 2 and belonging to the central – eastern part do not implement BEPS Action Plan 13 and / or 8-10 in the national law, do not have a statute of limitation

greater than 5 years and allow the requirement of APAs by the taxpayers. In the same time, most of these countries require a threshold below 25% in order to determine the affiliation relationship and require a disclosure of the related party transactions within or together the annual tax return.

Summarizing all the above, the characteristics of the countries from the central – eastern part indicate the presence of transfer pricing regulation which are not so strict in this area. The central – eastern area has a bigger coverage on the map, compared to the next area.

- **the south – west part** (i.e. the left part of the map), where the transfer pricing regulations are stricter. Most of the countries from this part of the map were included in category 3 and category 4. This area has a lower coverage on the map.
The charts below are similar with those presented above, these being designed for the countries included in category 3 and 4.

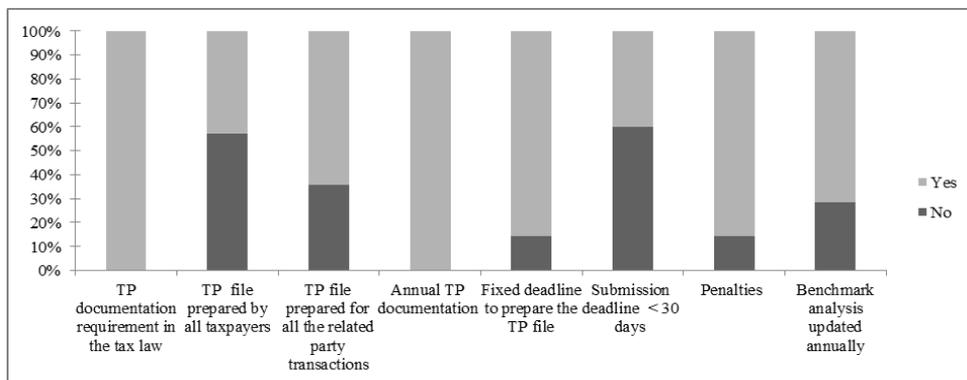


Figure 4. Regulations regarding TP documentation, specific to south - west part

(Source: own processing)

According with the above graphic, most of the countries included in category 3 and category 4, belonging to the south - west part, introduced in the national law the transfer pricing documentation requirement, require a transfer pricing file to be prepared for all the related party transactions and an annual transfer pricing file, impose fixed deadline for the preparation of the documentation, impose penalties for not complying with the transfer pricing documentation requirements and require an annual update of the benchmark analysis. All these characteristics illustrate the strictness specific to the south – west area. It is astonishing that big part of the countries do not require a transfer pricing file that should be prepared by all the taxpayers and do not impose a deadline of less than 30 days for the submission of the transfer pricing file upon the request of the tax authorities.

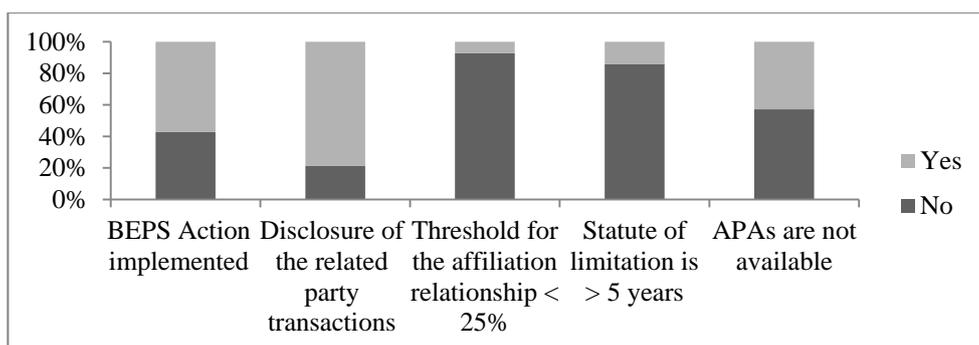


Figure 5. Regulations regarding BEPS and other aspects, specific to south - west part

(Source: own processing)

In addition, according to the figure 5 from above, big part of the countries from category 3 and 4 and belonging to the south - west part implemented BEPS Action Plan 13 and / or 8-10 in the national law and require a disclosure of the related party transactions within or together the annual tax return. Also, these aspects show the strictness of the transfer pricing rules specific to this part of the map. Surprisingly, most of these countries do not have a statute of limitation greater than 5 years and do not require a threshold below 25% in order to determine the affiliation relationship. Moreover, these countries allow the requirement of APAs by the taxpayers.

Given all the above, it can be said that the strictness of the transfer pricing regulations decreases from the west of Europe to the east. Moreover, we noted that countries from a certain category tend to be grouped on the map. This is the most visible for countries belonging to category 2.

5. Conclusions

The results obtained from the analysis performed by us show that the strictness of the transfer pricing regulations decreases from the west of the Europe to the east of this continent. Moreover, the European map may be split in two main areas: the *central – eastern part*, where the transfer pricing regulations are less strict and the *south – west part*, where the transfer pricing regulations are stricter.

A general overview of the European map indicates that most of the countries were included in category 2, respectively category 3, meaning that that the transfer pricing regulations from the European continent are not so flexible, but in the same time are not so strict. We found only 2 countries included in category 4 (i.e. the category

which indicates the existence of the strictest transfer pricing regulations), these countries being Italy and Spain.

However, if some regulations indicate a strict transfer pricing regime, these regulations may not be efficient for the prevention of base erosion of profit shifting and in the same time may affect the foreign investments. Therefore, the following questions should be put: *do stricter transfer pricing regulations impact the foreign investments? If so, countries are willing to pay this price in order to gain a better prevention of the base erosion and profit shifting?*

Given the situation presented above, a future research direction could be represented by the analysis of the impact of stricter transfer pricing regulations on the foreign investments. Other future research directions may involve the analysis of more elements related to the transfer pricing regulations (for example the cost contribution arrangements, the transfer pricing adjustments etc.) in order to include them in the transfer pricing strictness index.

Regarding the limits of our research, it is represented by the fact that in order to build the transfer pricing strictness index we took into consideration only certain elements of the transfer pricing regulations of the countries analyzed, and not all possible elements. Another limit of our research may be represented by the percentage of importance used in order to design the index. However, with all these limits we consider that our research contributes to the enrichment of the transfer pricing literature.

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Appendix 1. Elements regarding the transfer pricing documentation

Category I - elements regarding the transfer pricing documentation

| Countries | The transfer pricing documentation requirement is introduced in the tax law, and not only required to exist in practice | The transfer pricing documentation file is requested to be prepared by all taxpayers, and not only by certain taxpayers | The transfer pricing documentation file is requested to be prepared for all the related party transactions, and not only for certain transactions | Annual transfer pricing documentation requirements | Fixed deadline to prepare the transfer pricing documentation | The deadline for the submission of the transfer pricing file upon the request of the tax authorities is less than 30 days | There are penalties for not complying with the transfer pricing documentation requirements | The benchmark analysis should be updated annually |
|------------------------|---|---|---|--|--|---|--|---|
| Albania | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| Austria | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| Azerbaijan | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| Belarus | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| Belgium | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Bosnia and Herzegovina | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| Bulgaria | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| Croatia | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| Czech Republic | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Denmark | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| Estonia | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| Finland | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| France | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 |
| Georgia | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Germany | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| Greece | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| Hungary | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| Iceland | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| Ireland | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| Italy | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| Latvia | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Lithuania | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Luxembourg | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| Netherlands | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Norway | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| Poland | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |

Category I – elements regarding the transfer pricing documentation

| Countries | The transfer pricing documentation requirement is introduced in the tax law, and not only required to exist in practice | The transfer pricing documentation file is requested to be prepared by all taxpayers, and not only by certain taxpayers | The transfer pricing documentation file is requested to be prepared for all the related party transactions, and not only for certain transactions | Annual transfer pricing documentation requirements | Fixed deadline to prepare the transfer pricing documentation | The deadline for the submission of the transfer pricing file upon the request of the tax authorities is less than 30 days | There are penalties for not complying with the transfer pricing documentation requirements | The benchmark analysis should be updated annually |
|---------------------|---|---|---|--|--|---|--|---|
| Portugal | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Romania | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| Serbia | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 |
| Slovakia | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| Slovenia | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| Spain | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| Sweden | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Switzerland | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Ukraine | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| United Kingdom (UK) | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |

Appendix 2. Elements regarding BEPS and other elements

| Countries | Category II – elements regarding BEPS | | Category III – other elements | | | |
|------------------------|---|---|--|---|------------------------|--|
| | BEPS Action 13 and / or Actions 8-10 are implemented in the local legislation | There are requirements regarding the disclosure of the related party transactions | The threshold used in order to determine the affiliation relationship is below 25% | The statute of limitation is greater than 5 years | APAs are not available | |
| Albania | 0 | 1 | 0 | 0 | 0 | |
| Austria | 0 | 0 | 0 | 0 | 0 | |
| Azerbaijan | 0 | 0 | 1 | 0 | 1 | |
| Belarus | 0 | 0 | 1 | 1 | 1 | |
| Belgium | 0 | 0 | 1 | 0 | 0 | |
| Bosnia and Herzegovina | 1 | 1 | 1 | 0 | 1 | |
| Bulgaria | 0 | 1 | 1 | 0 | 1 | |
| Croatia | 0 | 1 | 0 | 0 | 1 | |
| Czech Republic | 0 | 1 | 0 | 0 | 0 | |
| Denmark | 1 | 1 | 0 | 1 | 0 | |
| Estonia | 1 | 0 | 1 | 0 | 1 | |
| Finland | 0 | 1 | 0 | 0 | 0 | |
| France | 1 | 1 | 0 | 0 | 0 | |
| Georgia | 0 | 1 | 0 | 1 | 0 | |
| Germany | 0 | 1 | 0 | 0 | 0 | |
| Greece | 0 | 1 | 0 | 0 | 0 | |
| Hungary | 0 | 0 | 0 | 0 | 0 | |
| Iceland | 0 | 1 | 0 | 1 | 1 | |
| Ireland | 1 | 0 | 0 | 0 | 1 | |
| Italy | 1 | 1 | 0 | 0 | 0 | |
| Latvia | 0 | 1 | 1 | 0 | 0 | |
| Lithuania | 0 | 1 | 1 | 0 | 0 | |
| Luxembourg | 1 | 0 | 1 | 0 | 0 | |
| Netherlands | 1 | 1 | 1 | 0 | 0 | |
| Norway | 1 | 1 | 0 | 0 | 1 | |
| Poland | 1 | 1 | 1 | 0 | 0 | |
| Portugal | 1 | 1 | 1 | 0 | 0 | |
| Romania | 1 | 0 | 0 | 0 | 0 | |
| Serbia | 0 | 1 | 0 | 0 | 1 | |
| Slovakia | 0 | 1 | 0 | 1 | 0 | |
| Slovenia | 0 | 1 | 0 | 0 | 1 | |
| Spain | 1 | 1 | 0 | 0 | 0 | |

| Countries | Category II – elements regarding BEPS | | Category III – other elements | | | |
|---------------------|---|---|--|---|------------------------|--|
| | BEPS Action 13 and / or Actions 8-10 are implemented in the local legislation | There are requirements regarding the disclosure of the related party transactions | The threshold used in order to determine the affiliation relationship is below 25% | The statute of limitation is greater than 5 years | APAs are not available | |
| Sweden | 0 | 0 | 1 | 1 | 0 | |
| Switzerland | 0 | 0 | 1 | 0 | 0 | |
| Ukraine | 0 | 1 | 1 | 1 | 0 | |
| United Kingdom (UK) | 1 | 0 | 0 | 0 | 0 | |

A European map regarding the strictness of the transfer pricing regulations

Appendix 3. The value of the transfer pricing strictness index for each country analyzed

| <i>Country</i> | <i>Transfer pricing strictness index</i> | <i>Country</i> | <i>Transfer pricing strictness index</i> |
|------------------------|--|---------------------|--|
| Albania | 2.17 | Ireland | 3 |
| Austria | 2.17 | Italy | 4 |
| Azerbaijan | 1.84 | Latvia | 1.84 |
| Belarus | 2.51 | Lithuania | 1.34 |
| Belgium | 1.5 | Luxembourg | 2.5 |
| Bosnia and Herzegovina | 2.34 | Netherlands | 2.17 |
| Bulgaria | 2.01 | Norway | 3.17 |
| Croatia | 3.34 | Poland | 2.67 |
| Czech Republic | 1.17 | Portugal | 3.67 |
| Denmark | 3.67 | Romania | 2.33 |
| Estonia | 2.67 | Serbia | 3.84 |
| Finland | 1.17 | Slovakia | 2.84 |
| France | 3 | Slovenia | 3.34 |
| Georgia | 2.34 | Spain | 4 |
| Germany | 1.5 | Sweden | 1.84 |
| Greece | 3.17 | Switzerland | 1.67 |
| Hungary | 3 | Ukraine | 2.51 |
| Iceland | 3.01 | United Kingdom (UK) | 3.33 |
