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FINANCIAL REPORTING ON INCOME TAX IN SERBIA AND CROATIA: AN EMPIRICAL ANALYSIS*

Finansijsko izveštavanje o porezu na dobitak u Srbiji i Hrvatskoj – empirijska analiza

Abstract

The paper examines the quality of financial reporting on income tax in Serbia and Croatia in order to determine the extent to which disclosed information on income tax in these countries is useful for economic decision making. The research based on financial statements of listed and non-listed companies for 2016 reveals that disclosed information on the income tax is not entirely in accordance with the relevant regulation. Therefore, there is a significant room for improvement of income tax financial reporting practices in both countries. The quality of disclosed income tax information is not related to the presence of companies in the stock market, as capital markets in Serbia and Croatia do not provide strong incentives for disclosing adequate information on income tax. The research also reveals significant differences in the prevailing sources of deferred tax assets and deferred tax liabilities between Serbia and Croatia, which indicates that the income tax financial reporting is conditioned by the specifics of the national environment.

Keywords: *income taxes, financial reporting, deferred tax assets, deferred tax liabilities, disclosure, IAS 12.*

Sažetak

U radu se ispituje kvalitet finansijskog izveštavanja o porezu na dobitak u Srbiji i Hrvatskoj u cilju utvrđivanja stepena u kojem su obelodanjene informacije o porezu na dobitak u ovim zemljama korisne za donošenje ekonomskih odluka. Istraživanje, bazirano na finansijskim izveštajima listiranih i nelistiranih kompanija za 2016. godinu, pokazalo je da obelodanjene informacije o porezu na dobitak nisu u potpunosti u skladu sa relevantnom regulativom. Stoga, prisutan je značajan prostor za napredak praksi finansijskog izveštavanja o porezu na dobitak u obe zemlje. Kvalitet obelodanjenih informacija o porezu na dobitak nije povezan sa prisustvom kompanija na tržištu akcija, jer tržišta kapitala u Srbiji i Hrvatskoj ne pružaju dovoljne podsticaje za obelodanjivanje adekvatnih informacija o porezu na dobitak. Takođe, istraživanjem su otkrivene značajne razlike u preovlađujućim izvorima odloženih poreskih sredstava i odloženih poreskih obaveza između Srbije i Hrvatske, što ukazuje na to da je finansijsko izveštavanje o porezu na dobitak uslovljeno specifičnostima nacionalnog okruženja.

Ključne reči: *porez na dobitak, finansijsko izveštavanje, odložena poreska sredstva, odložene poreske obaveze, obelodanjivanja, MRS 12.*

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Introduction

Taxes paid on income, along with value-added tax and payroll taxes, are the key company taxes. The importance of income tax led to the emergence of a new accounting discipline – income tax accounting. Financial reporting on income taxes is an important and complex area of this discipline. Its complexity is primarily caused by differences in accounting and taxable income calculation, as well as by the cross-national differences in tax systems [11].

The income tax financial reporting is focused on two main problems: (1) reporting of current income tax, as a tax payable to the state for an accounting period, which is determined by applying the statutory tax rate to taxable income followed by deductions of any tax incentives, and (2) reporting of deferred income tax, arising from a difference between accounting and taxable income. Both problems have two aspects as they simultaneously affect the balance sheet and income statement positions. In addition to the problem of recognition and measurement of assets, liabilities, income and expenses related to income taxes, the problem of income tax disclosures (primarily in the notes to the financial statements) is very important.

The present research examines financial reporting practices on income tax under International Financial Reporting Standards (IFRS). The research is based on a comparative analysis of the financial reporting practices in Serbia, as a candidate for European Union (EU) membership, and Croatia, as a full EU member. The research is based on the financial statements of listed (public) stock companies and limited liability companies in these countries, and is conducted on a sample of 108 companies – 54 per country.

The aim of the paper is to critically examine the quality of financial reporting on income tax in Serbia and Croatia. The quality is perceived from the users' point of view (the aspect of financial statements users), i.e., from the extent to which the information on the income tax disclosed in annual financial statements helps financial statements' users to understand the relationship between accounting and taxable income and sources of deferred tax assets, liabilities, income and expenses. The importance of research on the quality of income tax disclosures stems from the relevance of these disclosures for economic decisions. For instance, Samara [34, p. 138] points out that "deferred tax items possess information content that investors deem relevant".

The paper contributes to the prior research on financial reporting on income tax and research on general quality of financial reporting in Serbia and neighboring countries. The research results can be of interest for managers and owners of companies as well as for investors.

The structure of the paper is as follows. The first section provides an overview of the literature related to the relationship between (a) accounting pre-tax income and taxable income, and (b) current and deferred income tax, as well as the regulation for income tax financial reporting. The research hypotheses are defined in this section. The sample and research methodology are described in the second section. The research results are presented and discussed in the third section.

Literature review and hypotheses development

A relation between accounting and taxes has been studied widely in previous decades [18], [35]. Since financial reporting and tax reporting may exhibit a strong relationship [12], income tax represents an important part of company financial reporting. A radical change in accounting treatment of income tax has been brought by International Accounting Standard (IAS) 12 – Income Taxes, which prescribes accounting treatment of income tax. Prior to the IAS 12 implementation, accounting treatment of income tax was quite heterogeneous [18]. However, there is still abundant academic discussion about accounting treatment of income tax, particularly regarding deferred income tax [5].

IAS 12 is especially important when tax regulation differs from financial reporting regulation [2] and, therefore, taxable income deviates from accounting pre-tax income. Such deviation appears if tax regulation differs from the accounting one in respect of (a) the moment of recognition of certain expenses and revenues, resulting in temporary book-tax differences, and (b) the justification of recognition of certain expenses and revenues, resulting in permanent book-tax differences

[32]. A temporary book-tax difference is the difference that will be reversed in certain future period through the difference of the same amount but the opposite direction, while the permanent one cannot be reversed in the future. Temporary differences cause the deferred tax assets, deferred tax liabilities, deferred tax expenses and deferred tax income recognition and measurement problems, as well as the problems of their disclosure. Furtherly, the problem of deferred tax accounting appears in countries with separate financial and tax reporting systems [27, p. 33], such as Serbia and Croatia.

If there are temporary and/or permanent differences, the current effective tax rate as a ratio between current tax expense and accounting pre-tax income [17], deviates from the statutory tax rate. Deviations between accounting pre-tax income and taxable income, and therefore between effective tax rate and the statutory one, can be highly significant. It is also possible that a company with accounting pre-tax income does not pay any income tax, and that a company with an accounting pre-tax loss pays an income tax. Different tax incentives can lower effective tax rate well below the statutory tax rate. The empirical research conducted by Yin [40] shows that the effective tax rate of the largest U.S. public companies is continuously below the statutory tax rate. The potential outcome of accounting pre-tax and taxable income inequality is a management tendency to maximize the accounting pre-tax income and minimize the taxable income [24].

Obradović, Čupić and Dimitrijević [26] find that deferred income tax accounting is one of the financial reporting areas bringing the greatest difficulties to the financial statements preparers in Serbia. Deferred tax items can be calculated using different methods [13], which can be reduced to two broader approaches. The first approach is based on recognition and measurement of deferred tax in income statement, whereby deferred tax items in balance sheet are the results of the previous calculation. The essence of the second approach is to first determine the deferred tax items in balance sheet and then to determine the deferred tax items in income statement. IAS 12 supports the second approach [36], which is in line with the orientation of IFRS to the problems of recognition and measurement of assets and liabilities [27, p. 141].

Deferred tax assets are the income tax recoverable in future periods, while deferred tax liabilities represent the income tax payable in future periods [6]. Deferred tax liabilities are recognized for taxable temporary differences in the amount of income tax that is expected to be paid in future periods. On the other hand, deferred tax assets are recognized for deductible temporary differences, but only if it is probable that taxable income will be available for utilizing temporary difference. In accordance with IAS 12 (paragraph 72), an entity shall offset deferred tax assets and liabilities (1) if it has a legal right to offset current tax assets and liabilities, and (2) if deferred tax assets and liabilities are related to the same tax authority. IAS 1 (paragraph 56) prescribes the presentation of deferred tax in balance sheet as non-current item. It is worth noting that the US GAAP prescribed the separation of deferred tax assets and deferred tax liabilities on their current and non-current components until 2015, when they imposed the same classification as IAS 1 [20]. However, Bauman and Shaw [4] indicate that presentation of all deferred tax assets and liabilities as non-current items could threaten the usefulness of financial statements for investors.

Information on income taxes presented in financial statements is not much useful unless it is followed by adequate disclosures [16]. IAS 12 (paragraphs 80 and 81) contains an extensive list of income tax information to be disclosed. Key requirements relate to (a) separate disclosure of current tax expense and deferred tax expense or income, (b) an explanation of the relationship between the accounting pre-tax and the taxable income, and (c) disclosing the structure (sources) of deferred tax assets and liabilities [39].

The application of IFRS (including IAS 12) for companies in Serbia started in 2004, on the basis of the Accounting and Auditing Law of 2002 [8]. On the other hand, the implementation of IFRS (only IAS at that time) in Croatia began in 1993 on the basis of the Accounting Law of 1992 [23]. It is important to note that, in accordance with the Accounting Law of 2013 (article 20), IFRS are mandatory, among other companies, for large companies and all listed companies in Serbia. The same applies in Croatia, according to the Accounting Law of 2015 (article 17).

Assuming transparency as a desirable feature of financial statements [3], it is rational to assume that companies disclose adequate income tax information. However, the research by Tumpach and Stankova [38] reveals that disclosures regarding the relations between accounting income determined in accordance with IFRS and taxable income of the companies in Slovakia are quite unsatisfactory, because the majority of the companies in the sample do not disclose the information on those relations or present the information in inadequate manner. Vučković-Milutinović and Lukić [39] find that income tax disclosures in Serbia are not entirely in line with the IAS 12, as companies do not disclose all the information required by the standard. The research on disclosures on related parties [19], segments [29] and biological assets [25] also reveal that companies in Serbia do not strictly comply with the provisions of relevant standards (IAS 24, IFRS 8 and IAS 41, respectively). Mamić Sačer and Ramač Posavec [23] find that accountants in Croatia cope with numerous problems in the application of IFRS, conditioned by insufficient understanding and complexity of IFRS and inadequate translations of professional terms in IFRS. Pivac, Vuko and Cular [31] show that quality of disclosures in the financial statements of listed companies in Serbia and Croatia is at a medium level, while the average quality in Serbia is slightly higher than in Croatia. The first mentioned research [39] directly relates to the income tax disclosures, but only in Serbia and in earlier periods, while the results of other research speak more about the general financial reporting environment.

Gorgan et al. [14] argue that financial markets rely on confidence, pointing out to the importance of accurate financial statements that represent the economic reality. Pagano and Roel [30] argue that listed companies in many countries are subject to tougher disclosure requirements than non-listed companies. Regardless of official requirements, the need for detailed financial statements disclosures is primarily related to listed companies. Street and Bryant [37] find that listed companies in the United States generally have a higher level of disclosures than other companies. Furtherly, many theoretical [1, p. 242], [10, p. 383] and empirical research [33], [39] shows that depreciation is the most frequent source of deferred taxes. Therefore, research hypotheses are formulated as follows:

H_1: Companies in Serbia and Croatia do not disclose adequate information on income taxes.

H_2: The listed companies in Serbia and Croatia disclose more adequate information on income taxes in relation to non-listed companies.

H_3: Depreciation is the most common source of deferred tax assets and deferred tax liabilities in companies in Serbia and Croatia.

Sample and research methodology

The research methodology is primarily based on an inductive approach, i.e., on making the conclusions on the financial reporting quality according to IAS 12 on the basis of the empirical research of the sample composed of 108 non-financial companies in Serbia (54 companies) and Croatia (54 companies) which apply full IFRS. The research is based on the statutory financial statements of the sampled companies for 2016. In this year, both in Serbia and in Croatia, a proportional taxation systems were imposed, with a statutory income tax rate of 15% and 20%, respectively.

Since all the companies submit tax balance and tax return, the impact of current income tax on the sample development is minor. On the other hand, the sample consists only of companies which disclosed materially significant net deferred tax assets or net deferred tax liabilities in balance sheet. There are no quantitative criteria for determining the materiality neither in IFRS nor in the International Standards of Auditing [14], but we accept the level of 0.5% of total assets, which represents the materiality threshold often used by auditing firms [9].

Given the restrictiveness of the sampling conditions, it can be concluded that the sample is of appropriate size. For example, Pivac et al. [31] sampled 30 companies per country. Sampling of public stock companies (PSC) was made on the basis of data from the Belgrade Stock Exchange [41] and the Zagreb Stock Exchange [44], while limited liability companies (LLC) were sampled on the basis of the list of 100 largest companies in 2016 ranked by several criteria, published by the Business Registers Agency of the Republic of Serbia, and the list of 400 largest companies in Croatia according to total revenues in 2016 published in the journal "Privredni vjesnik" in 2017. The financial statements of the sampled companies have been retrieved from the websites of the national company registers of Serbia and Croatia [43; 42]. The sampling procedure has been conducted as follows. Due to the limited number of companies, we have first sampled PSCs in Croatia. We have sampled 27 non-financial companies meeting the mentioned criteria. Then, we have randomly sampled the same number of LLCs in Croatia, and PSCs and LLCs in Serbia that meet mentioned criteria. Sample structure according to residence and legal form of companies is presented in Table 1.

Table 1: Sample structure

	Serbia		Croatia		Total
	PSC	LLC	PSC	LLC	
Number of companies	27	27	27	27	108

The research hypotheses have been tested using the following methodology:

- the first hypothesis – by the analysis of adequacy of basic disclosures on income taxes: (1) the amounts of current and deferred tax expense/income, regardless of whether these amounts are explicitly stated or can be identified from other published information (disclosure 1), (2) the most important reasons for the deviation of taxable income from accounting pre-tax income or effective tax rate from the statutory one and the amount of deviation related to those reasons (disclosure 2), and (3) the sources of deferred tax assets and liabilities and amounts related to those sources (disclosure 3);
- the second hypothesis – by comparing the data for stock companies and limited liability companies;
- the third hypothesis – by reviewing the notes to the financial statements.

The provisions of IAS 12, as the official basis for the income tax financial reporting of the analyzed companies in Serbia and Croatia, are the starting point for examining the quality of income tax disclosures. The conclusions on the disclosure adequacy are based on the comparison of companies' disclosures with the requirements of this standard.

Results and discussion

Before testing the research hypotheses, the analysis of effective tax rate and share of net deferred tax assets or liabilities in the total assets is conducted. According to the descriptive statistics, presented in Table 2, both the mean (12.47%) and median (10.77%) effective tax rate in Serbia in 2016 are lower than the statutory tax rate. In contrary, both the mean (28.39%) and median (20.36%) effective tax rate in Croatia are higher than statutory tax rate. In Serbia, the mean effective tax rate is higher in stock companies, while the median effective tax rate is higher in limited liability companies. In Croatia, both the mean and median effective tax rates are higher in the limited liability companies. Since the sample is small, the mean values are under a strong influence of extreme values, so median results might be more appropriate than mean results.

Table 2: Descriptive statistics of current effective tax rates

Element	Legal form		Total
	PSC	LLC	
Serbia			
Number of companies*	14	25	39
Mean	17.32%	9.76%	12.47%
Median	8.36%	11.27%	10.77%
Standard deviation	24.73%	7.70%	16.13%
Minimum	0.00%	0.00%	0.00%
Maximum	79.55%	26.19%	79.55%
Croatia			
Number of companies*	14	23	37
Mean	15.39%	36.32%	28.39%
Median	18.09%	21.06%	20.36%
Standard deviation	14.19%	83.85%	66.89%
Minimum	0.00%	0.00%	0.00%
Maximum	44.24%	414.17%	414.17%

Note: *companies with accounting pre-tax income

Table 3 shows that most of the companies in Serbia present net deferred tax liabilities, while the most of companies in Croatia present net deferred tax assets. The results of descriptive statistics of the materiality of net deferred tax assets or liabilities, i.e., their share in total assets or total sources of assets, presented in Table 4, show that the items of net deferred tax assets and liabilities are generally more significant in companies in Croatia than in Serbia. Furtherly, these items are more significant in listed than in non-listed companies in both countries.

Table 3: Character of deferred tax items

Element	Legal form		Total
	PSC	LLC	
Serbia			
Number of companies	27	27	54
Deferred tax assets	5	12	17
Deferred tax liabilities	22	15	37
Croatia			
Number of companies	27	27	54
Deferred tax assets	9	23	32
Deferred tax liabilities	18	4	22
Total			
Number of companies	54	54	108
Deferred tax assets	14	35	49
Deferred tax liabilities	40	19	59

Table 4: Descriptive statistics on the significance of net deferred tax assets/liabilities

Element	Legal form		Total
	PSC	LLC	
Serbia			
Number of companies	27	27	54
Mean	2.74%	1.98%	2.36%
Median	1.90%	1.28%	1.63%
Standard deviation	2.10%	1.65%	1.91%
Minimum	0.63%	0.51%	0.51%
Maximum	8.66%	8.21%	8.66%
Croatia			
Number of companies	27	27	54
Mean	4.03%	1.99%	3.01%
Median	3.43%	1.52%	1.91%
Standard deviation	3.09%	1.59%	2.64%
Minimum	0.73%	0.53%	0.53%
Maximum	12.20%	7.53%	12.20%
Total			
Number of companies	54	54	108
Mean	3.39%	1.98%	2.69%
Median	2.24%	1.47%	1.77%
Standard deviation	2.70%	1.60%	2.32%
Minimum	0.63%	0.51%	0.51%
Maximum	12.20%	8.21%	12.20%

Table 5: Individual income tax disclosures

Country	Legal form	*n**	Disclosure 1		Disclosure 2		Disclosure 3	
Serbia	PSC	27	27	(100.00%)	12	(44.44%)	11	(40.74%)
	LLC	27	27	(100.00%)	18	(66.67%)	9	(33.33%)
	Total	54	54	(100.00%)	30	(55.56%)	20	(37.04%)
Croatia	PSC	27	24	(88.89%)	16	(59.26%)	17	(62.96%)
	LLC	27	25	(92.59%)	19	(70.37%)	18	(66.67%)
	Total	54	49	(90.74%)	35	(64.81%)	35	(64.81%)
Total		108	103	(95.37%)	65	(60.19%)	55	(50.93%)

Note: *n – number of sampled companies

Table 6: Complete income tax disclosures

Country	Legal form	*n**	Number of companies	
Serbia	PSC	27	5	(18.52%)
	LLC	27	5	(18.52%)
	Total	54	10	(18.52%)
Croatia	PSC	27	8	(29.63%)
	LLC	27	11	(40.74%)
	Total	54	19	(35.19%)
Total		108	29	(26.85%)

Note: *n – number of sampled companies

Data necessary for testing the first research hypothesis is presented in Tables 5 and 6. Table 5 shows the number and share of companies that disclose certain income tax information specified earlier (disclosures 1, 2 and 3), while Table 6 shows the number and percentage share of companies with all three adequate disclosures.

The highest level of adequacy is related to disclosure 1 (separate presentation of the current and deferred tax). In Serbia, adequacy rate is 100%, since the separate reporting of current tax expense and deferred tax expense/income is prescribed by the official income statement scheme. On the other hand, in the scheme of the profit and loss account (GFI-POD form) in Croatia, the current and deferred tax expense/income are aggregated into one item, which means that the separate disclosures should be provided in the notes to the financial statements.

A lower adequacy appears for disclosure 2 (the reasons and amounts regarding deviation of taxable income from accounting pre-tax income). Most companies in both countries (60.19%) disclose adequate information, with a higher adequacy in Croatia than in Serbia. The most common shortcomings are:

- disclosure of the effects of non-deductible expenses and non-taxable income combined without specifying the amount for each category, i.e., disclosure of the net effect of adjusting the accounting pre-tax income to tax regulation;
- disclosure of the amount of decrease or increase in pre-tax income adjustment to taxable income, without specifying the reasons; and
- disclosure of the effects of temporary and permanent differences between accounting and tax regulations, without specifying the reasons.

The lowest adequacy is recorded for disclosure 3 (sources of deferred tax assets and liabilities and the amounts related to these sources). Furtherly, there is the highest difference in the adequacy between companies in Serbia and Croatia, as companies in Croatia disclose more adequate information. In fact, most of the companies specify the sources of deferred tax in their notes to the financial statements, but they do it imprecisely. The most common shortcomings are:

- specifying the balance sheet items underlying deferred tax (e.g., property, plant and equipment) without specifying the reason,
- indicating temporary differences between accounting and tax value of assets, without specifying the reason;
- disclosing the sources of deferred tax assets and liabilities change during the reporting period, without explaining the source of the opening balance;
- specifying all of the deferred tax assets and liabilities sources without corresponding amounts; and
- disclosing the most significant sources of deferred taxes, without mentioning the other sources.

Many of the observed companies, primarily in Serbia, disclose only balance sheet items underlying deferred tax. This practice has been accepted even by some audit firms. Since the same balance sheet item may be a source of deferred tax due to variety of reasons (for example, deferred tax related to property, plant and equipment may arise due to depreciation, revaluation or impairment), such disclosures should be considered incomplete from the aspect of the financial statements users.

Data presented in Table 6 show that a share of sampled companies with all three adequate disclosures is quite low in both countries – every fifth company in Serbia and every third company in Croatia discloses full information on income taxes.

In order to determine whether the differences in income taxes disclosures between companies in Serbia and Croatia are statistically significant, hi-square tests of independence are conducted. In the case of disclosure 1, the assumption of the test regarding the least expected cell frequency is not met, so the Fischer's exact probability indicator is used. According to this indicator, the difference is not statistically significant ($p > 0.05$). In the case of disclosure 2, the mentioned assumption is met. Since each variable has two categories, the Yates' correction is applicable, and we find that the difference is not statistically significant ($p > 0.05$). The Yates' correction is applicable for the same reason in the case of disclosure 3, and we find that the difference is statistically significant ($p < 0.05$) with a medium effect size according to the generally accepted criteria [21], since phi coefficient is 0.278.

A general conclusion is that companies in Serbia and Croatia do not disclose all income tax information prescribed by IAS 12. Therefore, the first research hypothesis cannot be rejected. This conclusion is in line with Pivac et al. [31], which show that the disclosure quality in the financial statements in Serbia and Croatia is not at a high level. However, contrary to Pivac et al. [31], research shows that disclosure quality is slightly higher in Croatia than in Serbia, though they have monitored a wider range of disclosures.

The low disclosure quality is largely related to the imprecise disclosure of the deferred tax sources, which means that users of financial statements are left to judge solely on the specific deferred tax sources. Since many companies with an inadequate disclosure of materially significant deferred tax sources received a positive audit opinion, it is clear that incentives by the auditing profession are quite weak. However, the findings in this paper regarding disclosure adequacy also point to possible shortcomings of IAS 12. In that regard, Kvaal and Nobes [22, p. 242] raise the question as to whether the IAS 12 disclosure requirements are sufficiently explicit and concise to ensure understandable tax disclosures.

Table 5 shows that, in general, stock companies are not more dominant than limited liability companies regarding adequacy of income tax disclosures. On the contrary, in Serbia, adequacy of disclosure 2 is considerably higher in limited liability companies, while adequacy of disclosure 3 is slightly higher in stock companies. In Croatia, adequacy of each disclosure is higher in limited liability companies. Table 6 shows that there is no difference between public stock companies and limited liability companies regarding the disclosure adequacy in Serbia, while in Croatia limited liability companies disclose more adequate information. The hi-square test of independence reveals that the legal form of companies, at the whole sample level, has no statistically significant impact on the adequacy of income tax disclosure. Namely, no statistical significance ($p > 0.05$ in all three cases) is found for any of the examined disclosures (1, 2 and 3). Furtherly, hi-square tests at the country level show that differences between public stock and limited liability companies are not statistically significant. Accordingly, it cannot be concluded that the disclosures of stock companies are more adequate than the disclosures of limited liability companies or vice versa, both at the whole sample level and the country level. Therefore, the second research hypothesis is rejected.

Reasons for the second research hypothesis rejection can be partially found in low incentives by the capital markets in Serbia and Croatia, since these capital markets cannot be considered as liquid and attractive to an extent that would encourage companies to provide adequate disclosures. Listed companies in Serbia and Croatia are primarily financed by private bank loans rather than public issues of shares or bonds. In addition, the level of detail of financial reporting, imposed by the capital market regulators in Serbia and Croatia, does not differ substantially from the requirements imposed to limited liability companies.

In Serbian companies that report net deferred tax assets, the most frequent source of deferred taxes (in 7 of 17 companies) relates to unused tax credits. This finding is expected since (according to IAS 12) only deferred tax assets may arise from unused tax credits. In companies with net deferred tax liabilities, the most frequent source of deferred tax (in 11 of 37 companies) is non-current assets depreciation. In Croatian companies that present net deferred tax assets, the most frequent source of deferred tax (in 15 of 32 companies) refers to expenses related to long-term provisions, which are recognized in the tax report in the period of payment rather than in the period of their recognition in financial statements. In companies with net deferred tax liabilities, the most frequent source (in 15 of 22 companies) is the revaluation of non-current assets. This finding is consistent with the fact that an increase in the revaluation reserve is subject of income tax, but not at the moment of assets revaluation. We note that some companies in Serbia do not calculate and report long-term provisions and related deferred tax as they claim that such provisions are not of material significance. In addition, some companies do not report unused tax credits as they do not expect to record taxable income in the foreseeable future, which suggests that the preference of the financial statements preparers for prudence or optimism can affect the predominant source of deferred tax at the company and country level.

Table 7 shows the most frequent sources of deferred tax of companies that adequately disclose deferred tax sources. The depreciation of non-current assets, mentioned in the third hypothesis, is the most frequent source of deferred tax in Serbia, while in Croatia it is not among the three most frequent sources (depreciation is the source of deferred tax only in three cases). This finding can be partly explained by the method of depreciation applied. In Serbia, the linear depreciation method is dominantly used for financial reporting purposes [28], while the diminishing balance method is used for tax purposes in accordance with the Corporate Income Tax Law, so that temporary differences appear. In Croatia, on the other hand, the linear method is dominantly used both for financial reporting [7] and tax purposes (Income Tax Law), so temporary differences do not appear.

Table 7: The most frequent sources of deferred tax assets and deferred tax liabilities

	Deferred tax sources	Number of companies		
		PSC	LLC	Total
	Serbia			
1.	Depreciation of non-current assets	9	7	16
2.	Long-term provisions	3	5	8
3.	Unused tax credits	3	4	7
	Croatia			
1.	Long-term provisions	2	14	16
2.	Non-current assets revaluation	12	4	16
3.	Impairment of assets	2	9	11

According to Table 7, there are significant differences in the sources of deferred tax between Serbia and Croatia. Long-term provisions are the only source that is among the three most frequent sources in both countries appearing in 24 out of 55 companies disclosing information on deferred tax sources properly. Hence, long-term provisions are the most frequent source of deferred tax assets and liabilities at the sample level. Therefore, the third research hypothesis is rejected. The same conclusion applies to the companies in Croatia. However, for companies in Serbia, the third hypothesis cannot be rejected, since depreciation is the most common source of deferred tax.

Conclusion

The paper captured 108 companies from Serbia and Croatia in order to examine quality of financial reporting on income tax prescribed by IAS 12. The research in the paper reveals that disclosures on income tax in Serbia and Croatia are only partially adequate. The key reason for such a finding is imprecise disclosure of deferred tax sources by companies. The largest number of companies discloses only the balance sheet items underlying deferred tax, leaving financial statements users to judge (often randomly) the specific reasons. Random judgment on the basis of experience or intuition might be extremely delicate.

Since the capital markets in Serbia and Croatia are not developed enough, public stock companies are not highly motivated to properly disclose information on income tax. Income tax disclosures in Serbia and Croatia are not more adequate in public stock companies compared to limited liability companies. Regarding companies in Croatia, information disclosed by limited liability companies is even more adequate than those disclosed by the stock companies, but the statistical significance of the differences in the disclosure quality is not found.

Due to diversity of national tax systems in Serbia and Croatia, there is a significant difference in deferred tax sources. In Serbia, the dominant source is the non-current assets depreciation, while in Croatia the dominant sources are long-term provisions and non-current assets revaluation. It means that the income tax financial reporting is significantly influenced by national specificities. The research suggests that external auditors, state institutions responsible for financial reporting regulation and professional accountancy associations in Serbia and Croatia should pay more attention to the income tax information disclosed in the notes to financial statements. In this regard, the research results are consistent with plenty of prior research [19], [25], [29], [31], [39], showing a significant room for improving the disclosure practices in the financial statements in Serbia and neighboring countries.

The paper raises a number of issues in the field of income tax financial reporting. The future research in this area should focus on the impact of other factors (such as the origin of equity – domestic or foreign, size and profitability of companies and external auditors' appointment) on the adequacy of income tax financial reporting.

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