*Stefan VRŽINA, Ph.D.*
Teaching Assistant, University of Kragujevac, Faculty of Economics

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# Tax Evasion through Unreported Employment: Empirical Evidence from the Republic of Serbia

***Abstract:*** *Unreported employment represents a significant mechanism of tax evasion in transition and post-transition economies, hindering the economic security of a country. Unreported workers are not declared to the national tax authorities and are paid on the cash-in-hand basis, thus evading both labour tax and social security contributions. In this way, labour rights and labour security are violated. The main objective of the paper is to examine the extent of unreported employment in Serbia and to analyse the sectoral and geographical structure of it. The empirical research is conducted on the basis of data from the Ministry of Labour, Employment, Veteran and Social Affairs. The results indicate that almost 8,000 cases of unreported employment were detected during the four-years period, involving more than 14,000 unreported workers. In nearly 70% of all cases, only one unreported worker was detected, though in some cases the number of detected unreported workers was higher than fifty. Although most companies in Serbia are registered in manufacturing and trade industries, accommodation and food service activities and construction are leading industries in terms of unreported employment. In addition, the largest ratio of unreported workers per case is calculated for the construction industry. Regarding the geographical structure, the region of Šumadija and Western Serbia has the largest number of both cases of unreported employment and detected unreported workers.*

***Keywords:*** *labour, labour tax, tax evasion, unreported employment.*

## Introduction

A store closed during its usual working time, a white poster on the door, and red tapes across it are not a rare phenomenon in Serbian economy. They are a result of the inspection which detected tax evasion in the business – primarily through not issuing the fiscal invoice (thus evading both the value-added tax and corporate income tax) and unreported employment (evading the labour tax).

Unreported employment may be costly for many interest groups – governments would lack the much-needed tax revenue, the employer would have the unfair competitive cost advantage to their competitors, while unreported employees would have their pension reduced (Benkovskis & Fadejeva, 2022). Therefore, governments strive to mitigate (if not completely eliminate) this problem, though it is difficult to observe and measure. The additional problem lies in the fact that unreported employees are often not willing to reveal the situation in order to keep (unreported) job and increase the current living standard.

Only about 60% of total expenses on a certain employee in Serbia is paid to him as a net salary. Other 40% is paid as labour tax and social security contributions. Further, a tax morale in transition and post-transition countries is relatively low (Ranđelović, 2017) and national tax authorities do not have enough money and information resources to inspect the employers. These arguments may explain why unreported employment is widely represented throughout transition and post-transition countries (Lehmann, 2015; Horodnic et al., 2020; Gavoille & Zasova, 2021), including Serbia (Šutaković & Simović, 2021).

The subject matter of the paper is unreported employment in Serbia. This informal way of employment is studied because unreported employees are not declared to the tax authorities, so that labour tax and social security contributions remain unpaid. The only labour expense that the employer pays is the net salary of the unreported employee. In fact, the employees are paid on the cash-in-hand or envelope wage basis (Williams, 2004; Merikull & Staehr, 2010).

The paper has two main objectives. The first objective of the paper is to estimate the extent of unreported employment in Serbia. The second objective of the paper is to determine the sectors of activity and geographical regions in which the unreported employment is particularly prominent.

Research in this paper adds to some, primarily foreign, modern research on informal employment (Merikull & Staehr, 2010; Mitrus, 2014; Lehmann, 2015; Horodnic et al., 2020). Although ever-present problem, the unreported employment is not sufficiently studied in transition and post-transition countries (Lehmann, 2015). To the best of author's knowledge, this is the first research that uses data from governmental bodies to analyse the problem of unreported employment in Serbia. The author believes that research results may be of interest to many interest groups, primarily to the governmental bodies.

Besides the introduction and conclusion, the paper consists of three parts. In the first part, the theoretical background on the unreported employment is given. The second part presents the labour tax system in Serbia. Research methodology, results and discussion are presented in the third part of the paper.

## Theoretical Background

It is rational to assume that labour tax evasion is as old as the labour tax. Both employers and employees may strive to underestimate the declared salary in order to legally avoid or illegally evade labour tax. Although an ever-present economic and law phenomenon, the labour tax evasion is yet to be both perfectly theoretically modelled and eliminated in the practice – partly, due to the continuous and significant changes in the labour market. For instance, recent years brought the issue of the possible impact of e-commerce on the labour tax avoidance and evasion (Argiles-Bosch et al., 2021).

Usually, the expenses for the labour consist of net salary, labour tax and social security contributions (both at the expense of the employee and employer). It is often argued that, in transition and post-transition countries, the share of social security contributions in the total labour expense is significantly higher than the share of labour tax (Mojsoska-Blaževski, 2012). Therefore, changes in them may more effectively impact the employment that the changes of labour tax.

Although labour tax evasion mechanisms are evident in each European country, they are significantly more prevalent in Central and Eastern European countries (Williams, 2008a). This may be explained by the lower tax morale in this part of Europe, but also by the lack of resources available to the national tax authorities in these countries. In this regard,

various types of labour tax evasion in Eastern Europe were analysed in the past (Williams, 2008b).

Labour tax evasion violates not only the employees' rights and labour law, but also the economic security of the country, through the development of the grey economy (Čudan et al., 2022). In this way, unreported employment leaves the country without the labour tax revenue that is necessary to finance the public sector. Bearing in mind that tax revenue is the most important type of public revenue for the countries worldwide, abundant tax evasion may endanger the liquidity and solvency of the country.

National tax authorities emphasize that unreported employment is a kind of exploitation of workers. Further, they argue that unreported employees do not have health insurance either for themselves or their family members, social insurance, any legal security and protection; they could not contract a housing loan and would not have a pension. Unreported employment also results in unfair competition among companies (Mitrus, 2014).

The Meta-analysis showed that most of the labour tax and social security contributions is borne by the employees (Melguizo & Gonzalez-Paramo (2013). Unreported employment may have the positive impact on the current employee welfare if surplus from not paying the taxes and social security contributions is paid to them. However, in transition and post-transition countries such a situation is rare, as employers keep the money from tax evasion (Merikull & Staehr, 2010).

Unreported workers represent only the basic method of labour tax evasion. In addition, there are several sophisticated methods to (at least partially) evade labour tax. First, companies may acquire services from the individuals that are not registered as workers, but as individual entrepreneurs. They usually work for only one company and are usually registered as a lump-sum taxed entrepreneurs. For their services, they issue an invoice to the company. Lump-sum tax is, in general, significantly lower than labour tax and social security contributions that should have been paid, so part of the tax is evaded. Several national governments tried to mitigate it with the implementation of Independent Contractor Test (Barron, 1999; Harned et al., 2010). Such tax evasion mechanism is particularly noticeable in the information technology industry.

Second, an important share of labour tax may be evaded through cash-in-hand payments or envelope wages (Putnins & Sauka, 2015). In

this regard, employees are registered, but only minimum salaries are declared in their labour tax returns, while the rest of it is paid in cash to the employee. Such mechanism may be particularly noted in the family and small and medium companies.

Third, a part of the labour tax may be evaded through the reclassification of the employee salary. For instance, part of it may be classified as a business trip fee. The fees for business trips are usually tax exempt up to the prescribed amount, so this amount may be calculated several times during a month and paid to the employee instead of the standard salary. Such mechanism is particularly noted in the transportation companies for salaries of the professional drivers.

## Tax Wedge in the Republic of Serbia

Along with value-added tax, labour tax has the largest share in public revenue of Serbia (Kalaš et al., 2017). Although it is argued that the tax wedge (difference between salary before and after taxes and contributions) in Serbia is relatively high (Žarković-Rakić, 2015), it is still lower than in many OECD and EU countries (Đurović Todorović et al., 2018). Despite frequent changes in the last two decades, the labour tax system still has a significant room for improvement. For instance, a significant cut in labour taxes and moderate increase in progressivity of the personal income tax is proposed (Ranđelović, 2022).

In the Serbian accounting practice, labour costs are usually considered as gross salary 1 or gross salary 2. In this regard, gross salary 1 includes net salary, labour tax and social security contributions at the expense of the employee, while gross salary 2 includes gross salary 1 and social security contributions at the expense of the employer.

Labour tax in Serbia is prescribed by Personal Income Tax Law and is paid at the 10% rate on the taxable salary. This rate has not changed since 2013, when it was reduced from 12%. Taxable salary is calculated after the gross salary 1 is deducted for tax relief, which equals 21,712 Serbian dinars for 2023. The level of social security contributions has been often changed over the previous decade. It is prescribed by Law on Mandatory Social Insurance Contributions and the rates for 2023 are presented in Table 1.

***Table 1:*** *Social security contribution rates in Serbia for 2023*

| Type of contribution | At the expense of employee | At the expense of employer |
|---|---|---|
| For mandatory pension and disability insurance | 14% | 10% |
| For mandatory health insurance | 5.15% | 5.15% |
| For unemployment insurance | 0.75% | 0.00% |
| Total | 19.90% | 15.15% |

***Source:*** *Author*

Due to the tax relief, the effective labour tax burden is lower than the statutory rate of 10%. Since the tax relief is prescribed as fixed monetary amount (not as a percentage), the share of net salary in gross salary slightly decreases as the salary increases, while the share of labour tax increases. Table 2 presents the structure of gross salary 2 in Serbia with the example of gross salary 1 of 100,000 Serbian dinars.

Inspection teams frequently make field inspections in order to detect unreported employment in Serbia. The businesses in which the unreported employment is detected are usually closed, crossed with the red tape and a poster is glued on the door. This poster is a pre-designed form (Form PL-2) which states that the facility is closed due to unreported employment.

***Table 2:*** *The structure of the gross salary in Serbia*

| **Panel A. Calculation of the salary (in Serbian dinars)** | |
|---|---|
| Gross salary 1 | 100,000.00 |
| Tax relief | 21,712.00 |
| Taxable salary | 78,288.00 |
| Labour tax (10%) | 7,828.80 |
| Social security contributions at the expense of employee (19.90%) | 19,900.00 |
| Net salary | 72,271.20 |
| Social security contributions at the expense of employer (15.15%) | 15,150.00 |
| **Panel B. Structure of the gross salary 2** | |
| Net salary | 62.76% |
| Labour tax | 6.80% |
| Social security contributions at the expense of employee | 17.28% |
| Social security contributions at the expense of employer | 13.16% |

***Source:*** *Author*

## Empirical Research

### *Materials and methods*

Data on unreported employment has been retrieved from the Ministry of Labour, Employment, Veteran and Social Affairs (2022). This ministry publishes several registers on its official website (www.minrzs.gov.rs), with one section dedicated to the activity of Labour Inspection. This inspection, *inter alia*, deals with unreported employment, non-registered entrepreneurship and violation of the rights of employed pregnant women. For each mentioned activity, there is an available register of employers that broke the law. Such registers are a socially responsible activity of the Ministry, since published lists may be considered as blacklisting of companies.

Available register of the employers with detected unreported employment starts in 2019 and ends in 2022. Officially, the Labour Inspection notes that the register captures the period from 03 January 2019 to 21 December 2022. In this regard, this research captures the four-years period. The register has been retrieved on 31 December 2022 and contains 7,783 cases with a total of 14,345 unreported workers detected. For two cases, the number of detected unreported workers is not presented, so they are removed from the sample. Therefore, this research deals with 7,781 cases.

Besides the basic information on the employers with detected unreported employment (name, identification number, tax identification number), the register contains some additional data, such as the industry of the employer, number of detected unreported workers and the department (in terms of location – city) of Labour Inspection that detected it. Such data also enables the geographical and sectoral analysis of unreported employment.

### *Results and discussion*
### *Number of cases and unreported workers*

Table 3 presents the descriptive statistics for the number of detected workers per one case. As we have sampled 14,345 unreported workers through 7,781 cases, the arithmetic mean equals to 1.84. It means that the Labour Inspection detected 1.84 unreported workers in the average

case. However, the number of unreported workers in certain cases vary considerably. For instance, the maximum number of unreported workers is 68 and refers to the manufacturing company (limited liability company, primarily engaged in the footwear production), headquartered in the municipality of Trgovište (the region of Southern and Eastern Serbia). This case has been conducted by the department of Labour Inspection from the City of Vranje.

***Table 3:*** *Descriptive statistics for the number of unreported workers detected per case*

| | |
|---|---|
| Arithmetic mean | 1.84 |
| Median | 1.00 |
| Minimum | 1.00 |
| Maximum | 68.00 |
| Standard deviation | 2.50 |
| Number of cases | 7,781 |

***Source:*** Author, based on Ministry of Labour, Employment, Veteran and Social Affairs (2022)

Further, there were two additional cases with more than 50 detected unreported workers and both are also conducted by the department of Labour Inspection from the City of Vranje. The first such case refers to the limited liability company from Vranjska Banja (part of the City of Vranje), primarily engaged in the processing and preserving of poultry meat, where 59 unreported workers were detected. The second case refers to the branch of the Turkish company, headquartered in Belgrade, and primarily engaged in the construction of roads and motorways, where 53 unreported workers were detected.

Median value from the Table 3 shows that, in most cases, the number of detected unreported workers was only one. In fact, in about 67% (5,234 out of the 7,781) of cases only one unreported worker was detected. Table 4 shows the distribution of the number of detected unreported workers. It may be concluded that in nearly 85% of cases, the number of detected unreported workers is two or less. On the other hand, the share of cases with more than ten detected unreported workers is only one percent.

The register of unreported employment also contains some additional notes for certain cases. They explain that detected unreported workers sometimes refer to the family members of entrepreneurs (father, mother,

son, daughter, husband or wife of an entrepreneur). In addition, there are notes for certain cases to explain that some workers were immediately registered after the inspection, while some unreported workers gave the written statement that they do not want to be registered – for instance, due to illness or the intention to register their own entrepreneurship activity.

***Table 4:*** *Distribution of the number of detected unreported workers*

| Number of unreported workers detected | Cases | Percentage |
|---|---|---|
| 1 | 5,234 | 67.27% |
| 2 | 1,330 | 17.09% |
| 3 | 517 | 6.64% |
| 4 | 247 | 3.17% |
| 5 | 156 | 2.00% |
| 6 | 81 | 1.04% |
| 7 | 54 | 0.69% |
| 8 | 43 | 0.55% |
| 9 | 25 | 0.32% |
| 10 | 16 | 0.21% |
| 11-20 | 55 | 0.71% |
| 21-30 | 11 | 0.14% |
| 31-40 | 8 | 0.10% |
| 41-50 | 1 | 0.01% |
| 51-60 | 2 | 0.03% |
| 61 and more | 1 | 0.01% |
| Total | 7,781 | 100.00% |

***Source:*** *Author, based on Ministry of Labour, Employment, Veteran and Social Affairs (2022)*

## *Sectoral structure of unreported employment*

Table 5 and Table 6 present the sectoral structure of unreported employment in Serbia. The NACE statistical classification of economic activities is used. However, for about two percent of the cases it was not possible to find the information on the employer industry, since the industry is not given, imprecisely given or given according to the classification different than NACE. For most cases, the four-digit code of the industry is given, while for other cases only the name of industry is given.

Most companies in Serbia are registered in Sector C (Manufacturing) and Sector G (Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles). On the other hand, most employers with detected unreported employment are primarily engaged in Sector I (Accommodation and Food Service Activities) and Sector F (Construction).

Regarding employers from Sector I, they mostly engage in restaurants and mobile food service activities. For instance, cooks, barmen and waiters are among professions that are mostly unreported in this sector. On the other hand, employers from Sector F are mostly engaged in the construction of residential and non-residential buildings, and building completion and finishing. In addition, a significant share of employers engages in construction of roads and motorways. Sector F also has the largest number of workers that are found unreported.

***Table 5:*** *Labour tax evasion by sectors of industry (in absolute numbers)*

| Sector of industry | Cases | Workers | Workers per case |
|---|---|---|---|
| A – Agriculture, Forestry and Fishing | 27 | 65 | 2.41 |
| C – Manufacturing | 1,242 | 2,625 | 2.11 |
| D – Electricity, Gas, Steam and Air Conditioning Supply | 1 | 1 | 1.00 |
| E – Water Supply; Sewerage, Waste Management and Remediation Activities | 19 | 51 | 2.68 |
| F – Construction | 1,497 | 4,189 | 2.80 |
| G – Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles | 1,457 | 1,879 | 1.29 |
| H – Transportation and Storage | 370 | 454 | 1.23 |
| I – Accommodation and Food Service Activities | 2,301 | 3,501 | 1.52 |
| J – Information and Communication | 24 | 41 | 1.71 |
| K – Financial and Insurance Activities | 36 | 42 | 1.17 |
| L – Real Estate Activities | 14 | 23 | 1.64 |
| M – Professional, Scientific and Technical Activities | 104 | 254 | 2.44 |
| N – Administrative and Support Service Activities | 157 | 353 | 2.25 |
| P – Education | 15 | 27 | 1.80 |
| Q – Human Health and Social Work Activities | 26 | 51 | 1.96 |
| R – Arts, Entertainment and Recreation | 66 | 92 | 1.39 |
| S – Other Service Activities | 261 | 321 | 1.23 |
| Not available | 164 | 376 | 2.29 |
| **Total** | **7,781** | **14,345** | **1.84** |

***Source:*** *Author, based on Ministry of Labour, Employment, Veteran and Social Affairs (2022)*

Data from the tables indicate that construction employers are among the leaders in labour tax evasion. This finding is even more intriguing if another valuable tax incentives offered to construction companies are considered. Namely, under certain circumstances, the construction companies are exempt from the value-added tax for their sales (the tax is calculated by the buyer in line with reverse-charge mechanism). In addition, corporate income tax incentives are available to the large construction companies on behalf of their investments in fixed assets. Further, bearing in mind the danger and riskiness of the construction activities, it is clear that the heavy labour tax evasion in this sector may have catastrophic consequences.

The construction sector (particularly construction of roads and motorways) appears to be critical in one additional way. Namely, there are many cases in which employers are engaged in private security services (Sector N), while the unreported workers are detected in securing the road and motorway construction. For instance, several employers engaged in private security services are detected to have unreported workers that were securing the Corridor 10 construction.

***Table 6:*** *Labour tax evasion by sectors of industry (in relative numbers)*

| Sector of industry | Cases | Workers |
|---|---|---|
| A – Agriculture, Forestry and Fishing | 0.35% | 0.45% |
| C – Manufacturing | 15.96% | 18.30% |
| D – Electricity, Gas, Steam and Air Conditioning Supply | 0.01% | 0.01% |
| E – Water Supply; Sewerage, Waste Management and Remediation Activities | 0.24% | 0.36% |
| F – Construction | 19.24% | 29.20% |
| G – Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles | 18.73% | 13.10% |
| H – Transportation and Storage | 4.76% | 3.16% |
| I – Accommodation and Food Service Activities | 29.57% | 24.41% |
| J – Information and Communication | 0.31% | 0.29% |
| K – Financial and Insurance Activities | 0.46% | 0.29% |
| L – Real Estate Activities | 0.18% | 0.16% |
| M – Professional, Scientific and Technical Activities | 1.34% | 1.77% |
| N – Administrative and Support Service Activities | 2.02% | 2.46% |
| P – Education | 0.19% | 0.19% |
| Q – Human Health and Social Work Activities | 0.33% | 0.36% |
| R – Arts, Entertainment and Recreation | 0.85% | 0.64% |

| Sector of industry | Cases | Workers |
|---|---|---|
| S – Other Service Activities | 3.35% | 2.24% |
| Not available | 2.11% | 2.62% |
| **Total** | **100.00%** | **100.00%** |

***Source:*** *Author, based on Ministry of Labour, Employment, Veteran and Social Affairs (2022)*

Data from Table 6 show that the construction sector also has the largest ratio of unreported workers per case, followed by Sector E (though the sample size for this sector is relatively small) and Sector M. Although Sector I and Sector G are among the top-three ranked according to the number of cases, they have the mentioned ratio that is below the average.

Employers with detected unreported employment from Sector G primarily engage in retail trade activities as a salesman appears to be a profession with significant unreported employment. It is also worth noting that there are many warehousemen that are unreported. In addition, a significant share of employers from this sector operates in the maintenance and repair of motor vehicles.

Regarding Sector C, most detected manufacturing companies operate in the baking industry as many bakers and salesmen in bakeries work unreported. However, there is a wide spectrum of other activities within this sector (such as production of meat products, clothing, footwear, furniture, etc.) that have a significant share in the overall unreported employment.

Sector H also has a significant share in the total unreported employment. Vast majority of unreported workers from this sector are engaged as taxi drivers. However, there is the important number of workers that are engaged in freight transport by road.

Unreported workers from Sector S primarily work in the activities of hairdressing and other beauty treatments, followed by the activities of washing and cleaning of textile and fur products. It is also interesting to note that there are many membership organizations that were detected to have unreported workers.

Employers from Sector N primarily acquire unreported workers in private security activities and security systems service activities. In addition, a significant number of unreported workers are engaged in cleaning of buildings and industrial cleaning activities. Sector M is primarily represented with accounting, bookkeeping and auditing ac-

tivities, business and other management consultancy activities, architectural and engineering activities, and specialized design and photographic activities.

Although it does not appear to have a significant share in the total unreported employment, the situation in Sector K is worth noting. This sector is dominated by banks and insurance companies, but vast majority of unreported employment in this sector refers to the workers in exchange offices.

## *Geographical structure of unreported employment*

Table 7 and Table 8 present the geographical structure of unreported employment in Serbia, segmented by cities and regions, respectively. The research used NUTS 2 classification of Serbian regions. In addition, for two cases, the information on city is not available in the register.

Most cases of unreported employment, as well as the most detected unreported workers, are recorded in two largest (in terms of population) cities in Serbia – Belgrade and Novi Sad. The third largest city in Serbia, Niš, ranks fourth according to both the number of cases of unreported employment and number of detected unreported workers. It is also worth noting that the fourth largest city, Kragujevac, ranks only eighth in the list of cases of unreported employment and sixth in the list of detected unreported workers.

On the other hand, some cities are ranked surprisingly high in the mentioned lists. For instance, Šabac ranks fourth according to both the number of cases of unreported employment and number of detected unreported workers. Požarevac ranks fifth according to the number of cases, while Vranje ranks fifth according to the number of unreported workers. Relatively high position of Vranje is not surprising, given the fact that three cases with the most detected unreported workers are conducted by the department of Labour Inspection from Vranje.

***Table 7:*** *Labour tax evasion by cities*

| Department of labour inspection (city) | Cases | | Workers | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Belgrade | 1,008 | 12.95% | 1,961 | 13.67% |
| Bor | 95 | 1.22% | 137 | 0.96% |

| Department of labour inspection (city) | Cases | | Workers | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Čačak | 202 | 2.60% | 383 | 2.67% |
| Jagodina | 193 | 2.48% | 491 | 3.42% |
| Kikinda | 112 | 1.44% | 289 | 2.01% |
| Kosovska Mitrovica | 42 | 0.54% | 46 | 0.32% |
| Kragujevac | 323 | 4.15% | 805 | 5.61% |
| Kraljevo | 394 | 5.06% | 789 | 5.50% |
| Kruševac | 284 | 3.65% | 657 | 4.58% |
| Leskovac | 309 | 3.97% | 438 | 3.05% |
| Niš | 527 | 6.77% | 828 | 5.77% |
| Novi Sad | 647 | 8.32% | 1,115 | 7.77% |
| Pančevo | 263 | 3.38% | 422 | 2.94% |
| Pirot | 214 | 2.75% | 340 | 2.37% |
| Požarevac | 484 | 6.22% | 794 | 5.54% |
| Prokuplje | 165 | 2.12% | 258 | 1.80% |
| Šabac | 625 | 8.03% | 962 | 6.71% |
| Smederevo | 373 | 4.79% | 666 | 4.64% |
| Sombor | 202 | 2.60% | 326 | 2.27% |
| Sremska Mitrovica | 65 | 0.84% | 126 | 0.88% |
| Subotica | 86 | 1.11% | 210 | 1.46% |
| Užice | 288 | 3.70% | 542 | 3.78% |
| Valjevo | 306 | 3.93% | 463 | 3.23% |
| Vranje | 282 | 3.62% | 814 | 5.67% |
| Zaječar | 113 | 1.45% | 178 | 1.24% |
| Zrenjanin | 177 | 2.27% | 303 | 2.11% |
| Not available | 2 | 0.03% | 2 | 0.01% |
| **Total** | **7,781** | **100.00%** | **14,345** | **100.00%** |

***Source:*** *Author, based on Ministry of Labour, Employment, Veteran and Social Affairs (2022)*

Regarding the regional structure, the most cases of unreported employment, as well as the most detected unreported workers, are noted in the region of Šumadija and Western Serbia, primarily as a result of work of departments in Šabac, Kragujevac and Kraljevo. This region is closely followed by the region of Southern and Eastern Serbia, primarily as a result of work of the departments in Niš, Požarevac and Smederevo. Significantly lower levels of the unreported employment have been noted in the regions of Vojvodina and Belgrade. Due to the well-known geopolitical situation, the fewest tax inspections are conducted in the region of Kosovo and Metohija.

***Table 8:*** *Labour tax evasion by regions*

| Department of labour inspection (NUTS 2 region) | Cases | | Workers | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Belgrade | 1,008 | 12.95% | 1,961 | 13.67% |
| Kosovo and Metohija | 42 | 0.54% | 46 | 0.32% |
| Southern and Eastern Serbia | 2,562 | 32.92% | 4,453 | 31.04% |
| Šumadija and Western Serbia | 2,615 | 33.61% | 5,092 | 35.50% |
| Vojvodina | 1,552 | 19.95% | 2,791 | 19.46% |
| Not available | 2 | 0.03% | 2 | 0.01% |
| **Total** | **7,781** | **100.00%** | **14,345** | **100.00%** |

***Source:*** *Author, based on Ministry of Labour, Employment, Veteran and Social Affairs (2022)*

## Conclusion

Labour tax evasion is an ever-present phenomenon, particularly in transition and post-transition countries. A significant portion of labour activity in Serbia is realized through illegal employment forms, such as unreported employment, with labour tax and social security contributions being unpaid. In this regard, the paper has studied the extent of unreported employment in Serbia as well as its sectoral and geographical structure.

Data from the Labour Inspectorate of the Ministry of Labour, Employment, Veteran and Social Affairs is used in this research, thus covering the period between 2019 and 2022. The data showed that almost 8,000 cases of unreported employment were detected during the four-year period. In these cases, more than 14,000 workers appeared to be unreported.

Analysis in the paper showed that in most cases (nearly 70%) there was only one unreported worker detected. However, there were some cases in which more than fifty unreported workers were detected. Maximum number of unreported workers, as much as 68, was detected in a footwear production company located in Southern Serbia.

Sectoral structure analysis of the unreported employment showed that the most cases of unreported employment were detected in Sector I – Accommodation and Food Service Activities, with restaurants being the leaders of unreported employment. However, the most unreported workers were detected in Sector F – Construction. The number

of detected unreported workers per case was also the highest in this sector.

Geographical structure analysis of the unreported employment in Serbia showed that both the most cases of unreported employment and most unreported workers were detected in the Šumadija and Western Serbia region. However, at the level of the cities, most cases and most workers were detected in Belgrade and Novi Sad as the largest cities in Serbia. However, in some cities, such as Šabac, Požarevac or Vranje, a surprisingly high level of unreported employment was detected.

Author believes that research results may be of interest to many interest groups. Primarily, the results may be useful for the governmental bodies as they may benefit from the information on industrial sectors that mostly evade labour tax through unreported employment. In addition, they should pay the particular attention to the sectors with the highest ratio of detected unreported workers per case, such as the construction sector.

Research results may also be of interest to the wide society and to potential employees, in particular. In other words, people looking for a job may find the information on blacklisted employers, i.e., employers who do not pay labour tax and social security contributions for their workers, interesting.

Presented research results should be considered in the light of certain limitations. First, research captures the limited time period. Second, the tax wedge varied across the observed period as rates of social security contributions were changed several times. Third, to some extent, data used in the research is inaccurate – for instance, data on primary sector of activity is for some cases inaccurately stated, leaving data users to judge on the meaning of the information.

Future research should capture a longer time period as well as the activity of labour inspectorates of neighbouring countries in order to compare results. It would also be interesting to study the possible impact of the tax wedge on unreported employment to test whether unreported employment is less prominent when the tax wedge is smaller.

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# Пореска евазија путем непријављеног рада: Емпиријска евиденција из Републике Србије

***Апстракт:*** *Непријављени рад представља значајан механизам пореске евазије у транзиционим и посттранзиционим државама, који угрожава економску безбедност државе. Непријављени радници нису евидентирани код националних пореских власти и плаћени су у готовини, чиме се врши евазија пореза на зараде и доприноса за социјално осигурање. На тај начин су нарушени права и заштита радника (али и чланова њихових породица). Главни циљ рада јесте да утврди степен непријављеног рада у Србији и да анализира његову секторску и географску структуру. Емпиријско истраживање је спроведено на бази података Инспектората рада у оквиру Министарства за рад, запошљавање, борачка и социјална питања. Резултати указују на то да је детектовано скоро 8.000 случајева непријављеног рада током четворогодишњег периода, којима је обухваћено више од 14.000 непријављених радника. У скоро 70% случајева детектован је само један непријављени радник, мада је њихов број у неким случајевима већи од педесет. Највише непријављених радника у појединачном случају евидентирано је у предузећу за производњу обуће у Трговишту, са чак 68 непријављених радника. Интересантно је да су два наредна случаја са највише непријављених радника такође детектована у Јужној Србији.*

*Иако је највише компанија у Србији регистровано у области прерађивачке индустрије и трговине, услуге смештаја и исхране (конобари, шанкери и кувари) и грађевинарство јесу водеће делатности по питању непријављеног рада. Додатно, највећи рацио броја непријављених радника по случају забележен је у сектору грађевинарства. У раду је посебно указано на то да грађевински сектор користи бројне повољности по питању пореза на додату вредност и пореза на добит правних лица, чиме представљени налаз постаје додатно интригантан. Такође, значајан број непријављених радника детектован је у трговинском сектору (примарно продавци и мајационери) и производном сектору (примарно у пекарској индустрији). Када је реч о географској структури, регион Шумадије и Западне Србије има највећи број и случајева непријављеног рада и детектованих непријављених радника. Када је реч о градовима, највећи проблеми са непријављеним радом су пронађени у два највећа*

*српска града – Београду и Новом Саду, а изненађујуће високо котирају се Врање, Пожаревац и Шабац.*

*Представљени резултати истраживања могу бити од посебне користи националним пореским властима приликом анализирања пореске евазије у Србији. Такође, резултати могу бити од користи широј друштвеној заједници, у смислу јавног обележавања послодаваца и сектора привреде у којима је непријављени рад најзаступљенији. У раду је указано и на одређена ограничења истраживања, попут ограниченог времена посматрања и ограничене поузданости коришћених података.*

***Кључне речи:*** *рад, порез на зараде, пореска евазија, непријављени рад.*