The Prevalence and Motivation of the Undeclared Employment in Latvia

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Abstract. Until recently a common practice to combat undeclared employment in Latvia was to provide wide inspections in risk economic sections. New knowledge about the motivation of undeclared employment motivation has raised considerable concerns about the quality of the existing practices. The goal of this study is to investigate the prevalence and motivation of the undeclared employment in Latvia in order to accept/confirm or to deny/reject these concerns. This paper delivers the results of qualitative analysis of the survey that authors undertook. The results show that the current definition of undeclared employment in Latvia cannot be considered as fully supported by society, because the perception of the need to declare employment differs significantly depending on the employment regularity and the relationship with the employer. The authors found that the results obtained in the study on the prevalence of undeclared income do not differ significantly from the results obtained in the previous study of Putnins and Sauka (2018) with the leading “hard math” motivation.

Keywords. Undeclared employment, tax evasion, Latvia.
1. Introduction
Undeclared employment is a major problem in Latvia: the activity report of the State Labor Inspectorate of Latvia (2019) showed that 42% out of 2849 inspections performed in 2018 were “successful”. There was/is another quantitative analysis of the prevalence of undeclared employment (Putnins & Sauka, 2018), but the data about the motivation and classification of undeclared employment in Latvia are limited.

Up to now, far too little attention has been paid to the understanding of undeclared work perception and tolerance to establish effective combat programs. Therefore, there were two primary aims of this study: (1) to investigate and analyze the understanding of the concept of undeclared employment by Latvians and their tolerance to this social phenomenon; (2) to investigate main drivers of undeclared employment in Latvia.

The study was conducted in the form of a survey, with data being gathered from a focus group. The results obtained were analyzed using grouping, graphical interpretation and statistical analysis methods and further discussed on the 61st Riga Technical university’s Student Scientific and Technical Conference, which took place on 20 Apr 2020 and where the representatives of the Latvian Association of Tax Consultants and of the State Revenue Service (SRS) participated.

A full discussion of the motivation of undeclared employment lies beyond the scope of this study. However, this work generates fresh insight into motivation of Latvians to declare their work and, therefore, contributes to the research made on EU basis by demonstrating national peculiarities.

This paper, besides this introduction, consists of four parts. The first part summarizes the theoretical aspects related to unregistered employment and states the hypotheses. The second part is concerned with the methodology used for this study. The third part analyses the results of focus group survey undertaken during the field study. Finally, a summary of conclusions and proposals is provided.

2. The existing knowledge and hypothesis statements
The last calculated range of undeclared employment in Latvia’s shadow economy is 17.4% (Putnins & Sauka, 2018). However, the term ‘undeclared employment’ embodies a multitude of concepts which complicates the interpretation of statistics. Pfau-Effinger (2009) found differences in the social construction of the undeclared employment across Europe. For instance, there is tolerance to undeclared employment in household sector in Germany; by contrast, the definition of undeclared employment includes all paid (both in cash and in kind) productive activities in Denmark. In Latvia, there are two official definitions of undeclared employment provided by the State Labour Inspectorate (SRI) and the Ministry of Welfare (MoW) with the same meaning that those are paid activities that on point of facts are legal but are hidden from the state, as they are not declared to the relevant state bodies even if required by the national law. The authors indicated a need to understand the various perceptions of the undeclared employment depending on employer’s status and stated the hypothesis H1: the social construction of the undeclared employment differs for different employment types for company, for household and for “social bubble”. It was less clear from the literature review whether the regularity of employment is also a factor that affects the social construction of undeclared employment. Therefore, the authors stated the complemental hypothesis H2: the social construction of the undeclared employment differs for full-time employment and one-time employment.

The MoW classified undeclared employment on grounds of involvement deepness: employment without contract; envelope salaries; employment where tax is partially undeclared
etc. By contrast, the European Commission (2019) did it on grounds of taxpayer status: employed or self-employed person, but in Eurobarometer surveys (Williams & Renooy, 2014) social employment is additionally distinguished which is work done to close social milieu. Pfau-Effinger (2009) categorised undeclared employment as (a) the ‘poverty escape’ type, (b) the ‘moonlighting’ type, or (c) the ‘solidarity orientated’ type. This system of classification provides a basis for further combating policy as it distinguishes the motivation of avoiding declaring employment. The main feature of type (a) is that undeclared work is the main source of income for employees and arise from overall low wages when incomes are below the poverty line. Type (b) is the most common motivation of pupils and students to do casual work during their education, as well as the ‘second employment’ of permanent and registered staff. The last type arises mostly in unregulated sectors with low productivity and high fluctuations in demand, such as construction and agriculture. The motivation is based on the general belief that competition is failed if you declare employment because others do not.

The causal role of type (c) motivation in undeclared employment in Latvia can be demonstrated by the data of the SLI, that show that 42% of inspections made in 2018 were “successful” with the highest proportion (one in five) in construction. On the other hand, Eurobarometer study (Popescu & Cristescu, 2016) showed that the general belief in 28 EU countries is that undeclared employment is affected by type (a) motivation: low wages and lack of regular jobs. Therefore, in order to develop comprehensive policy to combat undeclared employment, it is necessary to know its nature. These hypotheses therefore set out to assess the effect of supply H3- taxpayers are convinced that other taxpayers in the industry do not declare employment in whole or in part and act in a similar way to ensure their competitiveness; and the effect of demand H4- taxpayers are convinced that the most important condition for their customers is to achieve a better price for the final product, even if it involves illegal activities.

Type (b) motivation were less audited by the SLI in Latvia. The response of taxpayers to the number and utility of audits is not fully understood. Little is known whether it is feasible to make inspections in fields associated with self-employment at home. Therefore, the following hypothesis was stated H5: the prevalence of undeclared employment differs for fields of economics with different frequency and quality of inspections.

3. Methodology
The study was conducted in the form of a survey, with data being gathered from a focus group. Prior to commencing the study, the participants received an explanation of the project ethical clearance. Then, seven closed and mandatory questions were designed. Those were followed by demographical questions to identify the divergence of answers depending on sex, age and employment status. The questionnaire was tested on the pilot group, to ensure that statements are readily understandable for persons without economic knowledge. After improvements the questionnaire was set forward to the focus group. The size of the sample was calculated with a confidence level of 95% and sample error 10%:

\[ n = \frac{t^2s^2}{\Delta_x^2} = 97 (\sim 100) \]

where

- \( t \) – confidence ratio;
- \( s^2 \) – sample deviation;
- \( \Delta_x^2 \) – margin of error.

The respondents were selected with a view to achieving a sample similar to the distribution of gender, age and occupational parameters of the Latvian employed persons. The questionnaire
was conducted electronically within two weeks. The missing data were not found – all respondents have provided all the answers. Statistical significance was analysed using MS EXCEL analysis of variance and t-tests as appropriate.

4. Results and discussions

This section analyzes the results and discussions of survey and consists of two subsections that cover prevalence and motivation of undeclared employment in Latvia.

4.1. The prevalence of undeclared employment in Latvia.

The first set of questions was aimed to analyze the prevalence of undeclared employment in Latvia. For this purpose, the authors primarily analyzed what is socially understandable with undeclared employment, stating the question: "Do you agree that undeclared employment, which is employment without an employment contract or with an employment contract, but with partially unpaid taxes, exists in Latvia?" The majority (96% of respondents) agreed with this statement. 12% of respondents added that even they agree with the statement, they did not agree with the given definition of undeclared employment.

To compare the difference in social perception of undeclared employment depending on taxpayer status and regularity of employment, the second question was asked: "In which case(s) you or your employers must register the employment in the State Revenue Service?" A summary of the obtained answers can be seen in Figure 1.

![Fig.1. The summary of answers to the question: "In which case(s) you or your employers must register the employment in the State Revenue Service?"]

It is clear from Figure 1, that the tolerance for the need to register employment decreases depending on the regularity of work - the perception of the necessity to register a permanent job is marked 2.8 times more often on average than a one-time job. Closer inspection of Figure 1 shows a clear trend of increasing the tolerance to declaration necessity with formalization of employer status. Thus, if 95% of respondents consider it necessary to declare a permanent job in an officially registered company, then only 53% of respondents consider it necessary to declare the same for the nearest social bubble (neighbors, family, friends or acquaintances). Also, the t-test result - 0.0433, with a probability of 95%, showed that the average perception of the need for employment declaration differs significantly depending on the relationship with the employer.
The next question asked the respondents to assess the percentage of their undeclared income during the last 12 months in the six types of employment and allowed the exclusionary answer “I have not earned such income”. The obtained results are presented in Table 1.

Table 1: Summary of answers to the question “In your experience, what percentage of your income could have been undeclared in the last 12 months?”, % of annual income for each type of employment

| Breakdown of undeclared income % | Full-time job for company | Full-time job for household | Full-time work for social bubble | One-time job for company | One-time job for household | One-time work for social bubble |
|---------------------------------|---------------------------|-----------------------------|---------------------------------|-------------------------|---------------------------|-----------------------------|
| not earned                      | 29                        | 72                          | 74                              | 56                      | 67                        | 62                          |
| <10%                            | 42                        | 9                           | 10                              | 25                      | 18                        | 18                          |
| 11–30%                          | 5                         | 6                           | 3                               | 8                       | 4                         | 5                           |
| 31–50%                          | 7                         | 9                           | 8                               | 4                       | 3                         | 5                           |
| 51–70%                          | 5                         | 1                           | 1                               | 2                       | 2                         | 2                           |
| >71%                            | 12                        | 3                           | 4                               | 5                       | 6                         | 8                           |

Table 1 illustrates that more than 2/3 of the respondents have earned less or more undeclared income when working full-time for companies. It can be noted that most of those who receive such income responded it in the minimum amount - up to 10%. Among other types of employment, the table could not be interpreted unambiguously and therefore two-factor analysis of variance was used to test the hypotheses that both selected factors (employment regularity and taxpayers’ relationship) are statistically significant for undeclared income. The breakdown of the ANOVA test is presented in Table 2.

Table 2: The results of two-factor ANOVA test for answers to the question “In your experience, what percentage of your income could have been undeclared in the last 12 months?”

| Source of variation | SS        | df | MS      | F         | P-value | F crit |
|---------------------|-----------|----|---------|-----------|---------|--------|
| Taxpayer type       | 109,2025  | 1  | 109,2025| 0,235487  | 0,627753| 3,865048|
| Regularity          | 138,0625  | 1  | 138,0625| 0,297722  | 0,585621| 3,865048|
| Between groups      | 726,3025  | 1  | 726,3025| 1,56622   | 0,211496| 3,865048|
| Within groups       | 183636,91 | 396| 463,7296|           |         |        |
| Total               | 184610,4775 | 399|         |           |         |        |

The p-values in Table 2 indicate that both employers’ type and regularity variations as well as their interaction are not significant (p = 0.628, 0.586, 0.211).

Table 3: Prevalence of undeclared income for each type of employment

| Breakdown of undeclared income % | Full-time job for company | Full-time job for household | Full-time work for social bubble | One-time job for company | One-time job for household | One-time work for social bubble |
|---------------------------------|---------------------------|-----------------------------|---------------------------------|-------------------------|---------------------------|-----------------------------|
| <10%                            | 2,10%                     | 0,45%                       | 0,50%                           | 1,25%                   | 0,90%                     | 0,90%                       |
| 11–30%                          | 1,05%                     | 1,26%                       | 0,63%                           | 1,68%                   | 0,84%                     | 1,05%                       |
Table 3 demonstrates that only 16% of employed respondents have declared all income (8% were not employed and thus did not receive any income). Most undeclared income comes from full-time employment for a company (19.4%). The least undeclared income comes from full-time employment for a social bubble (8.46%), but it should be noted that only a quarter of the respondents received such income. These results are very similar to those obtained Putnins & Sauka (2018).

4.2. The motivation of undeclared employment in Latvia

To test hypothesis H3, the following question: "If an employer knew that all employers in the sector paid all taxes in full, would it also encourage its willingness to pay taxes in full?" was asked. Figure 2 provides a summary of the answers.

![Fig.2. The summary of answers to the question "If an employer knew that all employers in the sector paid all taxes in full, would it also encourage its willingness to pay taxes in full?"](image)

Based on the graphical interpretation of Figure 2, the greater confidence in the effectiveness of strengthening motivation is for full-time employment for a company, where 39% of respondents rated it with the highest rating of 5 points. In turn, in one-time employment for a social bubble, where 42% of respondents indicated the lowest assessment. Also, the quantitative evaluation of the data indicated generally positive assurance (above 50 points) that social responsibility from supply side point of view could work for full-time work, in contrast with rather negative assessment by 50 and less points for one-time employment. A similar dispersion of respondents' answers can be observed for the demand part (hypothesis H4), where respondents were asked to answer to the question: “If it were socially unacceptable to buy a product / service where undeclared employment is known to be used, would it encourage a willingness of the producer/provider to pay full tax of its employees?" A summary of the answers to the question is shown in Figure 3. Therefore, both of the hypotheses that social
comprehension that everyone pays taxes or anticipation that a buyer does not buy its product would encourage a willingness to pay all taxes could not be fully confirmed or denied.

![Diagram](image)

**Fig. 3.** The summary of answers to the question "If it were socially unacceptable to purchase a product / service where undeclared employment is known to be used, would it encourage the producer / service provider to pay full taxes on the wages of its employees??"

Likert 5-point scale: 1 - I definitely do not agree, taxes will not be paid either; and 5 - I completely agree, it may solve the problem of undeclared employment!

To analyze hypothesis H5, the respondents were asked: "How would you describe the risk of being disclosed by the SRS when engaging in undeclared employment??". The answers were asked in in two dimensions: (1) in relation to the employment sector; and (2) in relation to the type of employment.

The summary of answers for the first dimension is shown in Figure 4.
Fig. 4. An average and standard deviation of respondents' responses to the question "How would you describe the risk of being disclosed by the State Revenue Service when engaging in unregistered employment?", Likert scale, where

1 (red) - SRS has no chance to catch unregistered employment in this sector and 5 (dark green) - in the current circumstances unregistered employment will be unambiguously revealed!

The analysis of the data presented in Figure 4 indicates that in general the respondents were not very strict in their answers. On average, only 12% and 9% of respondents gave completely negative and completely affirmative answers, respectively. This may indicate that the risk of being detected in different sectors of the economy is likely to vary under different non-economic circumstances. Therefore, the authors performed a single factor analysis (see Table 4), that showed that the probability of 95% the perception of the risk to be disclosed by the State Revenue Service is significantly different in different employment areas.

Table 4: The single-factor analysis of answers to the question "How would you describe the risk of being disclosed by the State Revenue Service when engaging in unregistered employment?" results

| Source of Variation | SS     | df | MS       | F        | P-value | F crit  |
|---------------------|--------|----|----------|----------|---------|---------|
| Between groups      | 212.36 | 8  | 26.545   | 24.9942882 | 6.3732E-35 | 1.94877781 |
| Within groups       | 946.28 | 891| 1.06204265 |          |         |         |
| Total               | 1158.64| 899|          |          |         |         |

75% of the respondents believe that the least chance of being caught without registering their income is in house-keeping services. To a less extent, the respondents have expressed
skepticism about the possible success of the SRS in “Old and young-aged care” and “Agriculture” areas. The sectors where undeclared employment would be more likely to be disclosed are “Retail”, “Food and lodging” and “Transport”, where 56%, 55% and 40% of respondents gave positive (4 and 5) answers.

The most striking result to emerge from the analysis of the responses to this question is that those respondents who reported that they are less involved in employment (not employed at all or employed only in one-time jobs) perceives a less risk to be disclosed (see Table 5). This may indicate that it would be necessary to raise awareness of the SRS efficiency in these groups to facilitate registration in their future employment. This side hypothesis was tested by single factor analysis. It was concluded that with probability 95% such a hypothesis cannot be denied.

Table 5: Average risk assessment in the question "How would you describe the risk of being disclosed by the State Revenue Service when engaging in unregistered employment?" by type of employment

|                     | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Unemployed          | 2.5 | 1.9 | 2.1 | 2.9 | 2.9 | 3.4 | 2.4 | 3.1 | 2.4 |
| Full-time employed  | 3.1 | 2.2 | 2.5 | 3.2 | 3.6 | 2.6 | 3.7 | 2.6 | 2.6 |
| One-time employed   | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 1.5 | 1.5 |
| Full-time employed  | 3.2 | 2.2 | 2.8 | 3.2 | 2.5 | 3.2 | 3.2 | 2.5 | 2.5 |
| One-time employed   | 3.2 | 2.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 1.5 | 1.5 |
| Full-time employed  | 3.2 | 2.4 | 2.8 | 3.6 | 2.6 | 3.6 | 3.4 | 2.6 | 2.6 |
| One-time employed   | 2.8 | 1.8 | 2.2 | 2.5 | 3.5 | 2.5 | 2.5 | 1.8 | 1.8 |

1 - construction; 2 - household services; 3 - old- or young-aged care; 4 - transport; 5 - beauty care; 6 - retail; 7 - repairs; 8 – food and lodging; 9 - agriculture

The next set of questions was aimed to test the credibility of other popular motivations of disruptive social phenomena. The respondents were asked the following question: "How strong the following motives are in ensuring the phenomenon of undeclared employment?" A summary of the responses is presented in Figure 5 that showed that the main motives for ensuring the phenomenon of undeclared work are that both sides (employer and employee) benefit from failure to declare (62% of positive assessments), employees' lack of interest in declaring employment, when receiving relief or paying alimony (56% of positive evaluations), passing-by to declare seasonal, one-time and irregular works(52% and 49% of positive evaluations, respectively). The following motives have been assessed as having little or no meaning: "Everyone undeclares!" and “Nothing to be afraid of”, thus rejecting that solidarity is the main motivator in Latvia.
Fig. 5. Assessments of the question "How strong the following motives are in ensuring the phenomenon of undeclared employment?", the percentage distribution of respondents' answers on a Likert 5-point scale, where 1 - it doesn't matter and 5 - it is definitely one of the main motivations!

5. Conclusions
The following theses were put forward for discussion at the RTU 61st Student Scientific and Technical Conference section "Taxes and Customs", which took place on April 20 in a remote mode, in which the representatives of the Latvian Association of Tax Consultants and the SRS participated:

- there is understanding of undeclared employment in Latvia, but the tolerance to declaration necessity decreases with the informalization of employer status.
- despite the strong belief that income earned in a permanent job for an officially registered company should be declared, more than 2/3 of the respondents have earned undeclared income from such employer. The main motivation has clear practical ground: both the employer and the employee receive the benefits from not declaring employment especially when the employee avoids paying alimony and/or receives reliefs.
- for one-time and seasonal work, as well as work performed for households or for social bubble groups, there is no social consensus on how such work should be declared.
However, the survey showed that such income does not form a large part of undeclared income.

The SRS welcomed the study project, inviting to discuss its results in detail, as well as to include the findings of the research in the SRS action plan for the fight against "envelope" wages.

As a result of the discussions, the authors recommended to broaden the definition and explanation of employment in terms of regularity and employer status. At the same time, it was concluded that the definition and its explanations cannot be a decisive tool in combating undeclared employment for a company, as 68% of respondents who consider it unfair had nevertheless received undeclared income. However, combating policy for undeclared employment for households and a social bubble can be performed under specific motivating conditions.

It must be considered that the perception of the risk of unregistered employment being disclosed by the State Revenue Service differs in different sectors of the economy, moreover, this perception differs depending on the current employment regularity. Thus, it can be recommended that social campaigns must be concentrated among currently unemployed persons and especially persons which receive reliefs or are paying alimonies.

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