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THE IMPACT OF SOCIAL TRANSFERS ON THE TENDENCY OF WOMEN TO TAKE UP EMPLOYMENT IN THE GRAY ECONOMY

WPŁYW TRANSFERÓW SOCJALNYCH NA SKŁONNOŚĆ KOBIET DO PODEJMOWANIA PRACY NIEFORMALNEJ

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Summary: Objective: The main objective of the article is the attempt to assess the influence of social transfers on the female inclination to undertake informal (casual) employment in Poland. The elaboration on the one hand provides an evaluation of the relation between the level of social expenses and the share of informal employment as referred to GDP, and, on the other hand, based on the performed survey – to elaborate on whether the aforementioned framework encourages women to withdraw from the legal labour market and join an informal one. Methodology: In order to achieve the objective descriptive and statistical methods were used, in particular the method of linear regression. A direct method – questionnaire-based was also applied. Outcome: The elaboration presents the essence of informal employment, the level of social expenditure in Poland and selected states of the EU, as well as some estimates of unregistered employment during the period 1994-2017. Based on statistical data an attempt to evaluate the influence of social expenses on informal female employment was made with the linear regression as the research method. Selected outcomes of the author's own survey on the grey economy, including informal employment, were also incorporated in this article as referring to the period 2007-2019.

Keywords: labour market, unregistered employment, grey economy.

Streszczenie: Celem artykułu jest próba oceny wpływu programu 500+ na skłonność do podejmowania przez kobiety zatrudnienia nieformalnego. W opracowaniu starano się ocenić zależność pomiędzy poziomem wydatków socjalnych a udziałem pracy nieformalnej w PKB, z drugiej zaś strony, opierając się na przeprowadzonych badaniach ankietowych, wskazać, czy wspomniany program skłania kobiety do wycofania się z formalnego rynku pracy i zachęca do podejmowania pracy nieformalnej w opisywanej kategorii. Osiągnięcie celu wymagało wykorzystania metod opisowo-statystycznych, a szczególnie metody regresji liniowej. Wykorzystano także metodę bezpośrednią – kwestionariuszową. W publikacji została opisana

istota nieformalnego zatrudnienia, poziom wydatków socjalnych w Polsce i wybranych krajach Unii Europejskiej, a także szacunki zatrudnienia nierejestrowanego w latach 1994-2017. Na podstawie danych statystycznych, opierając się na metodzie regresji liniowej, dokonano próby oceny wpływu wydatków socjalnych na zakres pracy nieformalnej kobiet. Zaprezentowano także fragmenty własnych badań ankietowych z lat 2007-2019 dotyczących szarej strefy, w tym pracy nieformalnej.

Słowa kluczowe: rynek pracy, praca nierejestrowana, szara strefa.

1. Introduction

Unregistered employment occurs in every country, although its scale can differ quite significantly. In the case of less developed countries it serves as a predominant and extremely significant part of general employment. However, in more developed states it plays a more marginal role.

Unregistered employment is a competitive phenomenon in reference to the registered one. Even though in Poland quite common, over time it has gained a more temporal and short-term character. It affects generations of all ages and qualifications. Women occupy a significant share in this group. At the same time, one of the most common factors leading to taking up the unregistered employment is insufficient income. In April 2016 the "Family 500+" Programme was introduced in Poland, aimed to significantly support household budgets of families raising children.

The objective of the article is the attempt to assess the influence of the social transfers on the female inclination to integrate into informal employment in Poland. The paper presents the relation between the level of social expenses and the share of informal employment in reference to GDP. What is more, it indicates whether the programme encourages the female workforce to withdraw from the formal labour market and integrate into informal employment, based on the author's own research. In order to gain that objective, descriptive and statistical methods were used, a linear regression method in particular. Additionally, a direct method was applied, namely a questionnaire-based method.

The introductory part of the publication encompasses the essence of informal employment in Poland and in the European Union, based on the estimations made by F. Schneider and the Main Statistical Office in Poland (GUS) during the period 1994-2017 in Poland and in the member states of the EU. The following part describes the "Family 500+" Programme in light of the family allowances in the EU. The analysis of empirical data led to the evaluation of how occupational activity affects the scale of informal employment based on the linear regression method. Finally, the article delivers some outcomes of the author's own research, the survey of 2007-2018 on the so-called grey economy, including informal employment. Due to editorial constraints, the article concentrates solely on the relation between the family-friendly support and unregistered employment, while disregarding other

conditions that may have an influence on the activity in the labour market's grey economy.

2. Notion and scale of unregistered employment

Unregistered employment accounts for an important and, at the same time, a difficult to assess part of Polish labour market. The latter is characterised by official and unofficial employment phenomena, closely-linked to each other and both transforming under the influence of social and economic factors [Hussmanns 2004, p. 14]. Despite the worldwide popularity of the phenomenon of unregistered employment, still there is no uniform definition of it. According to the European Commission, unregistered employment is understood as any paid activities that are compliant with the law by their nature but not declared to public authorities [Communication... 2013].

In Poland the term of illegal employment was first introduced and defined with the Act of 14 December 1994 on Employment and Counteracting Unemployment. Illegal employment (informal, undeclared) occurs when the work is performed without a proper employment relationship, i.e. an employment contract, contract of mandate, contract of specific work or any other written agreement between an employer and their employee. Being hired without a contract results in the lack of social insurance. Unregistered employment also refers to one's own business, when financial obligations towards the state are not discharged [Kostrubiec 1999, p. 16; Praca... 2005, p. 8].

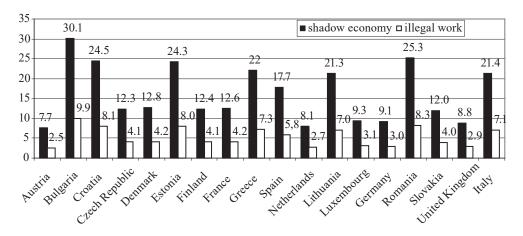


Fig. 1. The grey economy and the level of unregistered employment according to F. Schneider in selected countries of the EU in 2017 (in %)

Source: own elaboration based on: [Medina, Schneider 2018, pp. 18, 66 and the following].

Unregistered employment is most likely referred to violating administrative regulations, with unlawful activities not included. The exemption of the criminal sphere is made here by Friedrich Schneider, who calculates the share of informal economy in GDP based on the MIMIC (*Multiple Indicators Multiple Causes*) method [Schneider 2007; Torgler 2007, pp. 9-10; Medina 2018]. Figure 1 provides the estimates in selected states of the EU in 2017. The least share is noted in Austria, the Netherlands and Great Britain, where unregistered employment reached the level of 3% of GDP; the biggest share is noted in Bulgaria with the index running at 10% of GDP. According to Schneider's results, the grey economy in Poland exceeds the estimates of the Polish Main Statistical Office (GUS) almost twice (Table 1). Schneider claims that in 2000 the grey economy in Poland accounted for 27.6% and in 2017 – 22.2% of GDP. Assuming unregistered employment forms one-third of the Polish grey economy, in 2000 it ran at 9.2% and in 2017 – 7.4% of GDP.

Table 1. The grey economy according to F. Schneider in Poland during the period 2000-2017 (in %)

Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Grey economy	27.6	28.2	28.9	27.7	27.4	27.1	26.8	26.0	25.3	25.9	25.4	25.0	24.4	23.8	23.5	23.3	22.7	22.2
Unregistered																		
employment	9.2	9.4	9.6	9.2	9.1	9.0	8.9	8.7	8.4	8.6	8.5	8.3	8.1	7.9	7.8	7.8	7.6	7.4

Source: own elaboration based on: [Schneider 2004; 2015; Medina, Schneider 2018, pp. 18, 66 and the following].

Table 2. The grey economy in Poland according to the Main Statistical Office in Poland (GUS) during the period 1994-2017 (in %)

Years	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Grey economy	17.2	16.6	15.9	15.2	15.3	14.5	17.0	16.3	15.3	15.4	14.4	13.7
- including unregistered employment years	5.1	4.7	4.6	4.2	4.3	4.1	5.3	5.2	2014	5.1	4.9	4.2
Grey economy	13.7	12.8	11.8	13.1	12.8	12.6	13.0	13.8	13.3	13.5	13.2	12.4
- including unregistered employment	4.0	3.6	3.5	3.5	3.3	2.4	2.6	2.4	2.3	2.2	2.1	1.9

Source: own elaboration based on: [Rachunki narodowe...2019].

According to the Polish Main Statistical Office (GUS), informal employment constitutes an inherent part of the Polish labour market. Table 2 presents the share of the Polish grey economy, including unregistered employment, in GDP over the period 1994-2015. In 1994 the share was 5.1%, and further systematically decreasing

until a sudden increase in 2000 to 5.3%. In 2008 the share dropped to 3.5% of GDP. More recently, a decreasing tendency can be observed as far as the phenomenon of unregistered employment is concerned, namely in 2017 it reached the level of 1.9% of GDP [Rachunki narodowe... 2019, p. 279].

What is more, there is also the regularly held Labour Force Survey (LFS), i.e. in the following years: 1995, 1998, 2004, 2009, 2010, 2014 and 2018. The survey of the 1st quarter of 2018 confirmed the still unquestionably significant scale of this phenomenon in Poland in 2017. There were 880 thousand employees working in the grey economy, which accounted for 5.4% of the total number of the workforce in Poland at the time [*Praca nierejestrowana...* 2019, p. 13].

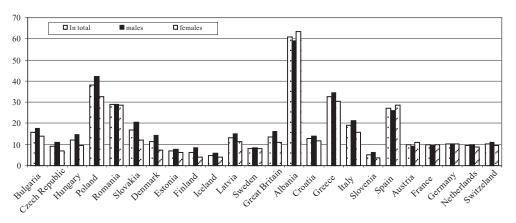


Fig. 2. Share of informal employment in total employment according to sex criterion (% of the employed)

Source: [Women and men... 2018, pp. 89-90].

Figure 2 presents the share of informal employment in total employment according to the sex criterion in selected countries. The most significant number of individuals operating in the grey economy was noted in Albania, where the phenomenon's scale was the biggest and amounted to 61%, with the share of women in the grey economy even higher (63.5%). In Poland the scale of unregistered employment is also one of the highest from the European perspective (38%). However, it is worth noting that there are more males (42.2%) working in the grey economy than females (32.7%). Similarly, in Greece nearly every third working individual operates in the grey economy (males -34.4%, females -30.4%). The least of the unregistered work is noted in Slovenia (males -6.3%, females -3.5%), Iceland (males -5.9%, females -3.9%) and Finland (males -8.3%, females -4.2%).

Table 3 presents the phenomenon of Polish unregistered employment according to the criteria of worked days, sex and age of the workers. The research carried out by GUS clearly shows that there are more male employees in the grey economy than

	Total e	employed	Average days worked per person			
Details	(individuals	s in thousands)	Average days wo	orked per person		
	2014	2017	2014	2017		
In total	711	880	35.8	29.8		
Males	510	539	32.7	26.9		
15-24 years	110	116	38.9	33.8		
25-34	119	110	30.5	42.9		
35-44	112	89	34.3	20.7		
45-59	135	159	32.8	19.7		
60 and more	34	65	22.9	30.4		
Females	202	341	41.4	32.6		
15-24 years	36	69	38.6	20.6		
25-34	44	60	67.8	26.6		
35-44	45	55	27.3	39.4		
45-59	58	83	42.8	37.6		
60 and more	18	74	30.9	31.2		

Table 3. Individuals pursuing unregistered employment in Poland according to the criteria of worked days, sex and age

Source: [Praca nierejestrowana... 2019, p. 43].

females in Poland. However, the discrepancy was reduced in 2017 - 61.3% of the total number of informal employees were men (in 2014 the share was 71.6%) and 38.7% were women (in 2014 - 28.4%). Considering the age criterion, in 2017 the most active in the grey economy were women aged 15-24 and 45-59, whereas in 2014 – women aged 25-44 and 45-59.

The LFS survey of the 1st quarter of 2018 indicated that informally employed males performed refurbishment, construction, installation and repair services. Apart from renovations, construction or installation services female informal workers also took care of the elderly or children [*Praca nierejestrowana...* 2019, p. 11].

3. Family benefits in Poland and selected countries

Family benefits serve as a vital instrument of family policy of each state, by means of which the state authorities support financially families raising children. According to the government officials' assumptions, the benefits are intended to compensate child-related expenses to families with many children. Each EU member state provides in its national legislation support for a family facing a state of crisis. Many European countries launched systematic measures encouraging young citizens to have children. In 20 out of 28 member states, child benefits are granted irrespectively of income level. On the other hand, in Cyprus, Bulgaria, Croatia, Czech Republic, Poland, Romania, Slovenia and Italy a threshold is established to obtain the benefits. The most complex family-support systems and the highest benefits of raising

children can be found in Denmark, Luxembourg, Germany and France, whereas the least child-friendly solutions are applied in Greece, Lithuania and Bulgaria.

In Poland the family benefits are financed by the state budget, and whether a family qualifies or not depends on its financial condition. Family benefits in Poland include: family allowance and supplements to the allowance, single-payment birth grant, care benefits (attendance allowance, attendance benefit, special care allowance), carer's allowance and parental allowance. The family allowance is the most common family benefit in Poland; its aim is to compensate child-related family expenditure. It is transferred to beneficiaries monthly from 1st November to 31st October the following year. The allowance sum is dependent on the child's age and is currently:

- 95 PLN per child 5 years old and younger,
- 124 PLN per child older than 5 years and younger than 18,
- 135 PLN per child older than 18 and younger than 24.

Parents, legal guardians or primary carers are entitled to the allowance, as well as adult learners not supported by parents due to their death.

In Poland the family allowance is granted to all citizens and residents based on the income criterion. In order to qualify the average monthly income per household member cannot exceed 674 PLN; in the case of a family with a disabled child the monthly limit rises to 764 PLN.

The allowance may be accompanied with various supplements, including the single-parent monthly supplement of 193 PLN (approximately 40 EUR) with the maximum support of 386 PLN for all children in the family; the large-family monthly supplement of 95 PLN (approximately 19 EUR) for the third and each following child in the family; the beginning school-year supplement of 100 PLN.

A new solution for families was introduced by the Polish government on 1st April 2016called the "Family 500+" Programme, which further on is referred to as the care benefit, whose form differs from the other family allowances. Firstly, basically allowances address solely poor families – in the case of the 500+ benefit the income criterion is in use only if there is one child in a family. Secondly, the allowance amount normally differs depending on the child's age, which does not apply to the 500+ benefit. Finally, family benefits can be accompanied with certain supplements depending on specific situations or can also be granted to adult children (18 years and older), which in turns does not apply to the 500+ benefit.

Until July 2019, care benefit as high as 500 PLN was granted irrespectively of the income level for the second and each following child until they turned 18. For families generating an income per person lower than 800 PLN (or a net income of 1200 PLN in the case of a family with a disabled child) the benefit was also granted for the first or only child. Since July 2019 the law is no longer in power and the income criterion was withdrawn also for the first child.

The underlying aim of the "Family 500+" Programme is a financial support addressed to families raising children, as well as general economic support for

families, in particular those endangered by poverty [Sejm 2016]. The government's "Family 500+" Programme has benefited over 3.62 million children aged 18 and younger (52% of all Polish children) until the end of February 2019. 2.38 million Polish families are included in the programme [*The "Family 500+"* 2019]. The framework helping families and encouraging the birthrate in Poland enjoys strong public support – the vast majority of respondents participating in the CBOS poll were in favour of the launch of the care benefit in question [*Program "Rodzina 500 plus"* 2016, pp. 5-6].

Table 4. Total support for a family* in particular member states of the EU (in EUR) in 2017

EU state	Tax relief	Family benefits	Total state support (in EUR)	Total state support in reference to average salary (in %)
France	5,228	1,558	6,786	13.7
Hungary	1,187	1,052	2,239	9.8
Austria	420	4,538	4,958	9.5
Poland	521	1,405	1,926	7.9
Croatia	1,950	0	1,950	7.4
Luxembourg	938	6,600	7,538	6.5
Latvia	966	410	1,376	6.5
Netherlands	2,778	1,777	4,555	6.2
Estonia	370	1,200	1,570	5.7
Slovenia	1,228	822	2,050	5.3
Belgium	1,031	3,213	4,244	5.2
Germany	1,956	2,304	4,260	5.0
Slovakia	514	564	1,078	5.0
Czech Republic	1,253	0	1,253	4.9
Sweden	0	2,832	2,832	4.7
Ireland	0	3,360	3,360	4.5
Portugal	1,200	0	1,200	4.3
Lithuania	720	0	720	3.7
Great Britain	0	2,080	2,080	3.0
Finland	100	2,397	2,497	2.9
Denmark	0	3,416	3,416	2.9
Romania	0	444	444	2.7
Malta	0	900	900	2.6
Italy	1,430	0	1,430	2.4
Spain	970	0	970	2.1
Greece	0	320	320	2.0
Cyprus	0	760	760	1.7
Bulgaria	21	0	21	0.2

^{*} It refers to a family consisting of employed parents earning the state's average salary and raising two healthy children aged 4 and 8.

Source: [Ulgi podatkowe... 2017, p. 28].

Launching the "Family 500+" Programme contributed to Poland becoming one of the leading countries in terms of the amount of family financial support, as related to the average domestic salary. The average EU financial support in terms of family bonuses and benefits was approximately 10,178 PLN per annum (2,383 EUR), whereas in Poland for the same period it amounted to 8,225 PLN (1,926 EUR). Table 4 illustrates the total financial support for a four-member family in selected EU states in 2017.

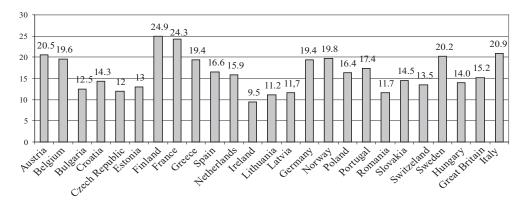


Fig. 3. Social expenditure in selected countries as the GDP percentage in 2017

Source: Eurostat.

Figure 3 depicts social expenses as percentage of GDP in selected countries. The EU states generate a GDP worth several billion dollars. In 2017 it amounted to over 17 billion dollars, whilst the social support, family benefits and labour market support cost the EU member states almost 19% of GDP. The biggest share of social benefits was noted in Finland (24.9%) and France (24.3%), followed by Italy, Austria and Sweden. The lowest share of social benefits in relation to GDP was noted in Ireland, Lithuania and Latvia.

4. Relation between unregistered employment and social expenditure

A method of linear regression is used in this article to identify whether there exists any statistical relation between the level of unregistered employment and family-friendly expenses. Figure 4 shows a scatter plot serving as a graphical representation of the correlation between the level of unregistered employment and social expenditure in selected countries. The diagram shows an inverse correlation, in other words the higher social expenditure, the lower the informal employment.

¹ The simulation concerned a model, average family consisting of two working parents earning the national average salary and raising two healthy children aged 4 and 8 years.

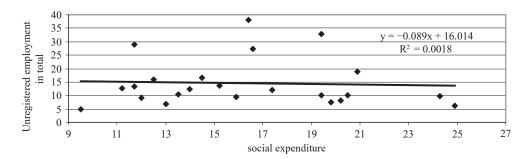


Fig. 4. Scatter plot presenting the relation between social expenditure and the total number of individuals employed in the grey economy in 2017 in selected countries

Source: own elaboration based on Figure 2 and Figure 3.

The analysis leads to the conclusion that in this case there is no statistical relation between the variables. This may result from different methodologies regarding estimations or other factors, such as tax mentality, control system and the specificity of particular state's labour market.

Figure 5 shows the dependency between the level of social expenditure and number of females pursuing unregistered employment. The value of determination coefficient reached 0.0015, which proves the poor match of the two variables.

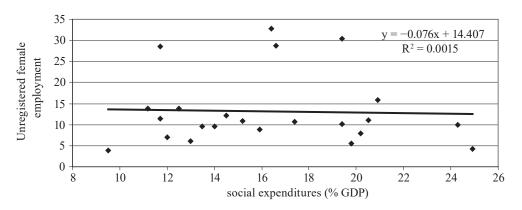


Fig. 5. Scatter plot presenting the relation between social expenditure and the number of women employed in the grey economy in 2017 in selected countries

Source: own elaboration based on Figure 2 and Figure 3.

Figure 6 results from Schneider's estimates on unregistered employment, as referred to social expenditure in selected states of the EU. Employing the linear regression method, a trend-line was drawn whose equation is situated in the upper right corner of the diagram, underneath, which there is located R²,

the so-called coefficient of determination. Its value is 0.2576, which identifies the poor significance of the relationship between the variables. The diagram also shows the inverse correlation according to which growing social expenditure contributes to the decreasing number of people working in the grey economy.

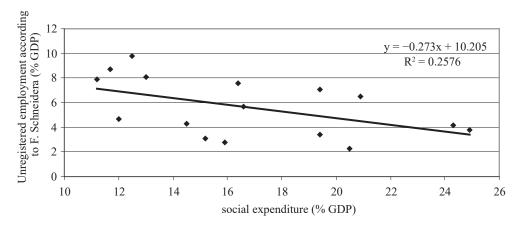


Fig. 6. Scatter plot presenting the relation between social expenditure and the level of informal employment according to estimates by F. Schneider in selected countries

Source: own elaboration based on Figure 1 and Figure 3.

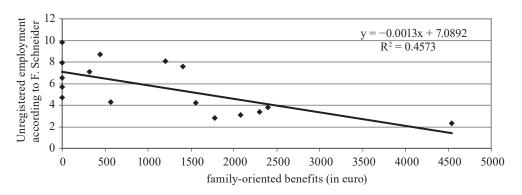


Fig. 7. Scatter plot presenting relation between family-oriented benefits and the level of informal employment according to estimates by F. Schneider in selected countries

Source: own elaboration based on Figure 1 and Table 4.

One may observe a stronger, although still statistically of little significance, relation in Figure 7. The coefficient of determination has the value of 0.4573, which explains the poor matching of the variables. In this case the inverse correlation means that higher family-oriented benefits are accompanied with lower unregistered employment.

5. "Family 500+" Programme in survey

The author of the article held her own research (research sample 2009-2019),² in which the respondents were asked to identify the reasons for pursuing employment in the grey economy (Table 5). According to the study every, third respondent admitted that insufficient income led people to undeclared employment. What is more, they also mentioned trouble with finding registered employment as one of the major reasons. For 35.4% of respondents in 2019 that was the key reason for their activity in the unregistered economy. It is also interesting to note that nowadays the respondents increasingly acknowledge the risk of losing some benefits as a result of formal employment. For example, until July 2019 a family could lose a monthly benefit of 500 PLN for the first or only child, when the household threshold exceeded 800 PLN per family member.

There are no significant differences in the respondents' answers on the reasons for pursuing unregistered employment, as long as the sex criterion is considered. Every second woman (51.3%) pointed at the lack of formal employment opportunities. Male respondents were more likely to pay attention to low detection rate and low fines imposed on those illegally working, and high insurance premiums. On the other hand, female respondents highlighted the risk of losing some benefits as the factor motivating working in the shadow economy.

Table 6 presents the research outcomes regarding the effects of the "Family 500+" Programme. According to the survey, the most significant effect could be the aversion to work presented by parents in large families – this answer was indicated by every third respondent in 2019. There were also positive aspects of the programme mentioned, such as improving the living conditions of children (23.3% in 2019) or growing consumption spend (12.8% in 2019). One out of ten respondents claimed that the considered family benefits may contribute to increasing an individual's inclination for unregistered employment.

² The author's own research was performed on the selected research sample consisting of 686 households (May 2009), 1,084 households (April and May 2010), 1,201 households (May 2011), 1,230 households (January 2012), 1,128 households (January 2013), 857 households (January 2014), 852 households (January 2015), 1,103 households (January 2016), 1,038 households (January 2017) and 883 households (January 2018). The research was initiated in May 2007 and is repeated every year. The research from the period 2009-2019 were carried out in the Podkarpackie province and was targeted at the respondents aged 20 and older with various income level and living conditions.

Table 5. Answers to a question: What are the main reasons of pursuing employment in the grey economy, in your opinion? (in %)

To see the second secon					Perce	Percentage share	nare				
reasons of pursuing employment in grey economy	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Insufficient income	51.3	30.5	35.3	38.1	35.4	37.6	31.8	27.7	27.4	27.3	35.4
Higher income without a contract	1	1	20.8	30.3	27.7	28.7	32.6	32.3	31.8	33.5	39.1
High income taxes	27.4	12.8	12.2	10.8	13.5	14.7	14.0	15.6	13.2	13.5	13.8
High insurance premium	15.1	12.4	7.4	8.6	10.7	10.0	9.5	15.1	14.5	12.3	10.2
Family situation or life circumstances	33.0	19.0	13.8	28.1	26.5	22.4	29.7	16.6	24.3	22.9	23.8
Lack of opportunities to find formal employment	29.5	31.6	6.9	33.3	35.5	42.2	38.4	30.1	32.5	32.3	24.0
Low detection rate and low fines	ı	1	2.1	4.5	4.6	2.8	1.7	4.1	4.9	4.2	3.3
Risk of loosing some benefits	9.0	5.3	0.33	7.4	5.6	4.2	5.6	4.3	8.8	7.2	12.9
Other reasons	0.2	0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.1	0.5
In total	168.2*	116.8* 1	100.0	100.0	160.2*	162.8*	164.0*	146.3*	157.5*	153.3*	162.6*
No answer	2.7	5.1	6.0	0.2	0.7	0	0.7	0.5	0.1		0

^{*} The total number exceeds 100% since the respondents were allowed to indicate more than one answer.

Source: calculations are based on the author's own research performed in the period 2009-2019.

Table 6. Percentage share of answers to a question addressing the effects of the "Family 500+" Programme

)					
wojajan)	Numbe	Number of individuals	viduals	Per	Percentage share	hare
Opinion	2017	2018	2019	2017	2018	2019
Discourages multiple-children families from employment	300	252	311	28.9	28.5	31.9
Increasing interest in informal employment	107	111	115	10.3	12.6	11.8
Increasing consumption spending – favourable for the economy	154	113	125	14.8	12.8	12.8
Increasing birth-rate in dysfunctional families, e.g. with alcohol-related problems	182	132	134	17.5	14.9	13.7
Improves living conditions of children	229	219	227	22.1	24.8	23.3
Women withdrawing from labour market	90	43	47	4.8	4.9	4.8
Other	6	8	6	6.0	6.0	6.0
In total	1,038	883	975	100	100.0	100.0
No answer	7	5	9	0.7	9.0	9.0

Source: calculations are based on the author's own research performed in households.

6. Summary

Unregistered employment in the EU is most popular in Bulgaria, Estonia and Croatia. It is also a very common phenomenon in Poland, even though a decreasing trend-line has been noted in recent years. Comparing the latest statistics to those of 1994, one may admit the phenomenon's scale has been reduced. In 2004 the number of individuals employed in the so-called shadow economy accounted for 1.3 million. According to the latest study held in 2018, the number dropped to the level of 880 thousand employees [*Praca...* 2019, p. 14]. This formed approximately 5.4% of the total number of the employed. In general, men were more likely to work informally even though the share of women has increased over time by 10%. In 2014 there were 28.4% of women working in the shadow economy and their share increased to 38.7%.

At the same time many observers of social processes argue that the decreasing ratio of female occupational activity in the age group 25-34 in Poland results directly from the effects of the "Family 500+" Programme. They can be potentially interested in finding jobs in the grey economy [Fundowicz et al. 2019, p. 19]. Statistical data analysis seem to confirm this tendency both in percentage (increase by 10% in the female share as compared with 2014, when the 500+ Programme was not yet in power) and in the 25-34 age group (increase from 44 thousand in 2014 to 60 thousand individuals in 2017).

This theoretical observation is reflected in the performed survey. Women tend to worry more about losing some benefits which stimulates them to enter the shadow economy. What is more, one out of ten respondents admitted that in their opinion the inclination to pursue unregistered employment is one of the most vital effects of the "Family 500+" Programme. The analysis of statistical data held with the use of linear progression method, however, did not confirm the influence of family-oriented benefits in Poland on the level of female informal employment. It only confirmed an inverse correlation – the increase in social expenditure will be accompanied by the decrease in informal employment. The conducted considerations may lead to the conclusion that the "Family 500+" Programme influences the female inclination to integrate into informal employment to a lesser extent. More, it seems this is not the only determinant of the phenomenon considered in the article.

Bibliography

Communication of the Commission on Undeclared Work, 1998, European Commission, COM (98)-219, Brussels. Undeclared work: Commission launches consultation with trade unions and employers' representatives, 2013, European Commission, 4 July.

Fundowicz J., Łapiński K., Wyżnikiewicz B., Wyżnikiewicz D., 2019, *Szara strefa 2019*, Instytut Prognoz i Analiz Gospodarczych, Warszawa.

Hussmanns R., 2004, Measuring the informal economy: from employment in the informal sector to informal employment, Working Paper no. 53, International Labour Office, December.

Kostrubiec S., 1999, Praca nierejestrowana w Polsce w 1998 roku, Gospodarka Narodowa, no. 5-6.

Medina L., Schneider F., 2018, Shadow Economies Around the World: What Did We Learn Over the Last 20 Years?, WP/18/17, International Monetary Fund, January.

Praca nierejestrowana w Polsce w 2004 roku, 2005, GUS, Warszawa.

Praca nierejestrowana w Polsce w 2017 r., 2019, GUS, Warszawa.

Program "Rodzina 500 plus" jako element wspierania rodzin i dzietności, 2016, Komunikat z badań nr 25/2016, Centrum Badania Opinii Społecznej, Warszawa, February, pp. 5-6.

Rachunki narodowe według sektorów i podsektorów instytucjonalnych w latach 2014-2017, 2019, GUS, Warszawa.

The "Family 500+" Programme, 2019, Ministry of Family, Labour and Social Policy, retrieved on 30 March from https://www.mpips.gov.pl/wsparcie-dla-rodzin-z-dziecmi/rodzina-500-plus/dokumenty-i-opracowania/.

Schneider F., 2015, Size and Development of the Shadow Economy of 31 European and 5 other OECD Countries from 2003 to 2015, www. Econ.jku.at/Schneider/foles/publications, January 20.

Schneider F., 2007, Shadow Economies and Corruption All Over the World: New Estimates for 145 Countries; Jahannes Kepler University of Linz, Austria, 24 July.

Sejm 2016, Druk sejmowy nr 216, Rządowy projekt ustawy o pomocy państwa w wychowaniu dzieci, retrieved from http://www.sejm.gov.pl/Sejm8.nsf/druk.xsp?nr=216.

Torgler B., Schneider F., 2007, Shadow Economy, Tax Morale, Governance and Institutional Quality: A panel Analysis, IZA Discussion Paper Series, pp. 9-10.

Ulgi podatkowe i świadczenia rodzinne w UE – 2017, 2017, Raport PwC, November.

Women and men in the informal economy: A statistical picture, 2018, International Labour Office, Geneva.