

UNDECLARED WORK IN POLAND – CHARACTERISTICS AND PREVALENCE

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Abstract. *This article aims to present the significance and prevalence of the phenomenon of undeclared work. First, we discuss the definitional issues of this phenomenon. Then, we present previous estimates on shadow economy and undeclared work in Poland, based on statistics provided by Central Statistical Office and other research entities. Our analysis covers the years 2000–2014. In the last part of the article, we use data from the Labour Force Survey in Poland to measure the number of unemployed who work informally. We show a decrease in number of this specific type of informal workers. In the next step, we compare our estimates with the total number of informal employees, provided by the Central Statistical Office. On the basis of our comparisons, we argue that the growing prevalence of undeclared work has not resulted from unregistered activities of the unemployed. Therefore, we show that a significant part of informal activity occurs within registered entities, what may provide an important lead in further studies on undeclared work in Poland.*

Key words: *undeclared work, shadow economy, informal employment, grey economy*

Introduction

Undeclared work plays a significant role in the whole economy, both on the macro and micro scales. As an example, in the labour market, the informal sector has an impact on government revenues, thus on the feasibility of providing public services and also on Labour Fund revenues. Moreover, workers and employers who are active in shadow economy create unfair competition for legal entrepreneurs. In addition, undeclared work is associated with the lack of pension security, health, sickness and accident insurance.

The problem of grey economy and undeclared work, despite the obvious difficulties, is a frequent subject of research. The main difficulty is connected with the definition and measurement of informal activities. The literature review has shown a significant definitional chaos as well as different approaches in measuring informal employment¹. Therefore, the first aim of this article is to systematise the definitive approach of undeclared work. Then, to present the results of previous studies on grey economy and informal employment in Poland. In the last part of the article, we show our own calculation

¹ We use the terms of undeclared work, shadow employment and informal employment interchangeably.

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of specific type of the shadow employment in Poland in the years 2000-2014. We use the data from Labour Force Survey to estimate the size and growth of individuals who are declared as unemployed and at the same time undertake any type of work. In some sense this group of people can be classified as shadow employment.

The structure of the article is as follows: in the first section, we systemise the definitions of informal employment according to the methodologies of the European Commission, the Organization for Economic Co-operation and Development (OECD) and the International Labor Organization (ILO). In the second section of our article, we present previous estimates of shadow economy and shadow employment in Poland. In section 3, we propose our own estimations of informal employment in Poland. The conclusions is presented in Section 4.

1. Definition of undeclared work

Among the main reasons for undeclared work, we can distinguish the following (European Commission, 1998):

- Tax and social contribution levels;
- Burden of general costs and administrative procedures;
- Inappropriateness of legislation with regard to new forms of work;
- Local industrial structures based on a large number of small firms;
- Low competitiveness of firms in declining sectors which need a lot of low-qualified labour;
- Cultural acceptance of the informal economy;
- Existence of easy opportunities.

The factors listed above create a situation in which formal employment is less profitable in comparison to activity in the informal economy. In this case, voluntary work in an informal market maximises the income. However, according to the theory of labour market segmentation (i.e. the dual labour market hypothesis), there are barriers which hinder finding work in the formal sector (Cichocki & Tyrowicz, 2011). In the second case, the informal work is rather a necessity than a choice.

Before defining the informal employment, it is necessary to describe the broader aspect of all economic activities outside the official register. In general, we can distinguish a narrow and a broad approach in defining informal economy. Table 1 summarises the informal activities in accordance with the broad definition.

For the purpose of the current article, we limit our analysis only to the aspects of undeclared work, thus we consider only the legal part of informal activities. It is worth noting that relevant literature brings a variety of terms describing informal work, such as: black employment, undeclared work, employment in either the informal economy, or in the grey zone, or in the hidden economy (Drabek, 2012, p. 74). Moreover, we can observe a significant increase in different forms of informal employment, which causes additional difficulties in their definition. In result, the notion of informal work is defined



and measured in many different ways. Meanwhile, in global labour literature, the definitions of informal employment are based often on the methodology proposed by statistical offices or other international organisations, such as the International Labour Organization (ILO), the Organization for Economic Cooperation and Development (OECD) and the European Commission (EC). An important advantage of the above definitions is their versatility, which allows international comparisons². Hereafter, we will discuss three definitions of undeclared work proposed by ILO, OECD and EC.

TABLE 1. A Taxonomy of Types of Underground Economic Activities

	Monetary transactions		Non-monetary transactions	
Illegal Activities	Trade in stolen goods, drugs; manufacture of drugs; prostitution, gambling, fraud		Barter, drugs, stolen goods, etc.	Produce or grow of drugs for own use. Theft for own use
Legal Activities	Tax Evasion	Tax Avoidance	Tax Evasion	Tax Avoidance
	Unreported income from self-employment, wages, salaries, and assets	Employee discounts, fringe, benefits (cars, subsidized food, etc.)	Barter of legal services and goods	Do-it-yourself work

Source: (Mirus & Smith, 1997).

The European Commission proposes the usage of the term *undeclared work*, which is defined as “any paid activities that are lawful as regards their nature but not declared to the public authorities, taking into account differences in the regulatory systems of Member States” (European Commission, 1998). If we follow this point of view, we may distinguish four main groups of undeclared workers (European Commission, 1998):

- Individuals with two or more jobs;
- “Economically inactive” individuals (students, housewives, early retired individuals);
- The unemployed;
- Illegal immigrants.

According to the OECD international statistical definition, informal employment can be described as “employment engaged in the production of legal goods and services but where one or more of the legal requirements usually associated with employment are not met” (Venn, 2008). In particular, this group of workers includes employees not registered for mandatory social security, paid less than the legal minimum wage or employed without a written contract (if it is required), employees and the self-employed who do not declare some or all of their income, unregistered firms and their employees; and the so-called “false self-employed” (Venn, 2008).

Since 1993, the International Labour Organization (ILO) attempts to systematise concepts related to informal economy. In 2003, at the 17th International Conference of

² This approach, according to the author, should be considered as reasonable, due to the availability of statistical data offered by the above mentioned institutions.

Labour Statisticians, a common definition of informal employment was suggested as “total number of informal jobs, whether carried out in formal sector enterprises, informal sector enterprises, or households, during a given reference period” (Husmanns, 2004). Following the above definition, among informal workers we can identify the following (Husmanns, 2004):

- Own-account workers and employers, employed in their own informal sector enterprises;
- Contributing family workers, both in the formal and informal sector;
- Employees holding informal jobs, whether employed by formal sector enterprises, informal sector enterprises, or as paid domestic workers by households;
- Members of informal producers’ cooperatives;
- Own-account workers who produce goods for their own final use.

The above presented definitions of undeclared work demonstrate significant differences. Therefore, it should be noted that the use of a specific definition of undeclared work is usually motivated by the aim of the research and the availability of statistical data. The above presented overview of definitions aims to draw attention to the difficulties in research on informal employment. Moreover, the interpretations of results of research should be made very carefully because of different methodological approaches.

2. Estimates of the informal sector in Poland

Estimates of the informal sector in Polish economy, made since 1995, include only its legal part. At the same time, since September 2014, the European Union imposed the obligation of including the illegal activity in the national accounts. Estimates on the underground economy, provided by the Central Statistical Office in Poland, include data on the undervaluation of production and income, tax evasion and estimates on individuals engaged in undeclared work, mostly in service activities.³ The data contained in Table 2 present the prevalence of shadow economy in Poland.

As can be seen from Table 2, the share of grey economy, as the percentage of GDP, is maintained at constant level. It is worth noting that the significant part of hidden production is created in registered entities (approx. 10% of GDP), while informal work, performed in unregistered entities, constitutes approx. 3% of GDP. This ratio should be an important clue in formalising hidden economic activities. Moreover, it is important to note that the significant share of underground production takes place in the sector of trade and repair of motor vehicles, accommodation and catering (approx. 5-6% of GDP), construction (approx. 2-2.5%), industry (approx. 1%), real estate market (1-2%) and transportation and storage (0.4-1%).

³ To estimate the size of shadow economy, direct methods, studies of undeclared work (Extended Labour Force Survey) and consumer surveys have been used. More information about the methodology of the mentioned methods can be found in (GUS, 2014).



TABLE 2. The share of the shadow economy in GDP in Poland

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Shadow economy as % GDP	13,7	13,7	12,8	11,8	13,1	11,9	11,4	13,2	13,7
In registered entities	9,5	9,7	9,2	8,3	9,6	8,6	7,9	9,5	9,8
In respect of undeclared work	4,2	4,0	3,6	3,5	3,5	3,3	3,5	3,7	3,9
Trade and repair of motor vehicles, accommodation and catering	5,5	5,4	5,1	5,3	5,7	5,8	5,6	6,1	6,1
Construction	2,1	2,1	2,3	2,0	2,2	2,4	2,4	2,5	2,6
Industry	1,3	1,4	1,3	1,1	1,3	1,3	1,1	1,4	1,5
Real estate services	1,8	1,9	1,9	1,4	1,3	1,0	1,1	1,6	1,4
Transportation and storage	0,7	0,7	0,4	0,4	1,0	0,6	0,4	0,6	1,0
Other sections	2,3	2,2	1,8	1,6	1,6	1,5	1,5	1,8	1,9

Note: since 2010, the CSO has provided the estimates on illegal unobserved economy, which includes procuring, drugs and cigarettes smuggling. Illegal activities amounted to 0,7% of GDP in 2010 and 2011 and 0,8% of GDP in 2012 and 2013.

Source: (GUS, 2010), (CSO, 2015a)

Besides the estimates from Central Statistical Office, another calculation of informal economy is provided by the Research Institute for Market Economy (IBnGR) and Austrian researcher Friedrich Schneider. Results of estimates of the shadow economy by these sources are shown in Figure 1.

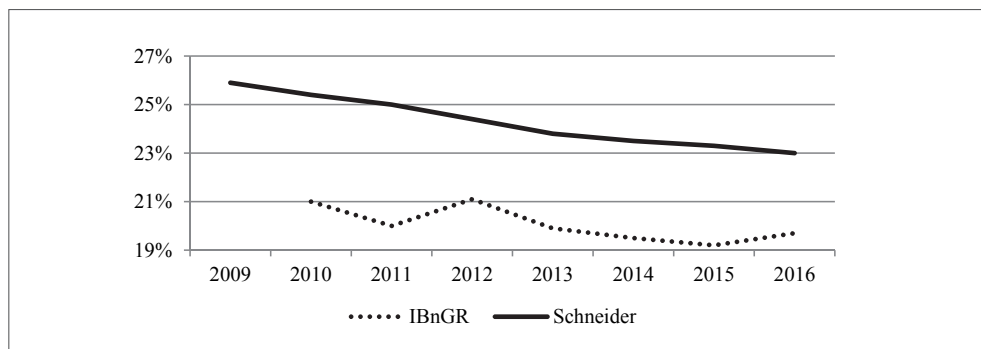


Figure 1. The shadow economy as % of GDP in Poland. Estimates of the Research Institute for Market Economy (IBnGR) and F. Schneider.

Source: own elaboration based on several studies (Łapiński et al., 2015; Fundowicz, Łapiński, Peterlik, & Wyżnikiewicz, 2016; Schneider, 2016).

The estimates of shadow economy, presented in Figure 1, far outweigh the calculations made by the Central Statistical Office. The occurring discrepancies stem from a different methodological approach in evaluating shadow economy. It should be noted that the estimates made by the Research Institute for Market Economy also include illegal activities and a part of informal activities, which are not listed by the Central Statistical



Office (the precise list of additional components is to be found in Łapiński et al., 2015, p. 25-26). Estimates provided by Schneider (Schneider, 2016) are based on the MIMIC (Multiple Indicator Multiple Causes) method, which uses structural equations with latent variables⁴. According to the results presented in Figure 1, the share of informal economy in GDP ranges from 20% (IBnGR estimates) to 25% (estimates of Schneider). At the same time, the incidence of informal activities, according to two mentioned sources, remains on a stable level over the analysed period.

3. The scope of undeclared work in Poland

Among the main sources of undeclared work in Poland, we can distinguish the following:

- The Extended Labour Force Survey (ELFS) “Unregistered work in Poland”, conducted by the Central Statistical Office as the most comprehensive source on undeclared work in Poland. To date, six surveys were carried out (in 1995, 1998, 2004, 2009, 2010, 2014), parallel with the Labour Force Survey (LFS). The study describes the scale of undeclared work, which includes employment without an employment relationship, social insurance and the period of counted contribution with the lack of income taxes and the case of self-employment (CSO, 2011);
- Yearly estimates of workers in shadow economy made by the Central Statistical Office, which are published in the Statistical Yearbooks of the Republic of Poland. Following the information gained from the Central Statistical Office, the estimates are based on studies of work in officially registered enterprises and public budget entities, studies on registered unemployment (number of people registered as unemployed in labour offices), on the Labour Force Survey – LFS, the results of which provide information about all types of work, including those in the informal sector, and the Extended Labour Force Survey (mentioned above). It should also be noted that the first estimate on the number of people at work in the informal economy was put together by using the above mentioned sources. While for the next years, the estimates have been based on current trend observation, which constitutes a basis to increase or decrease the level from the previous period;
- In 2007, the Institute of Labour and Social Affairs (IPiSS) and the Centre for Social and Economic Research (CASE) conducted an independent study of undeclared work in Poland.

According to the Extended Labour Force Survey, carried out by the Central Statistical Office, the number of workers in shadow economy has been declining. Table 3 presents the number of employees in shadow economy in the years 1995, 1998, 2004, 2009, 2010 and 2014.

⁴ Specification of the variables used for the estimated equations are provided in (Schneider, 2005).

TABLE 3. Work in the shadow economy according to the Extended Labour Force Survey “Unregistered work in Poland” (CSO)

	1995	1998	2004	2009	2010	2014
people involved in undeclared work (thous.)	2199	1431	1317	785	732	711
% of the total number of employed (approx.)	14,9	9,3	9,6	4,9	4,6	4,5

Source: (CSO, 2015b)

In 2014, compared to 1995, the number of people involved in undeclared work declined by almost 1.5 million, which indicates a double drop. It should be emphasised that the survey covers the first eight months of the year (studies from 1995 and 1998) and the first 9 months (survey from 2004, 2009, 2010, 2014). Thus, the share of informal sector workers in total employment was calculated as the ratio of the informal workers (for 8 or 9 months) and the average employment in the first three quarters of the year (CSO, 2011). Taking these differences into account with due caution, we can indicate that the percentage of people working in the informal economy showed a downward trend in the years 1995–2010.

Next, we present the results of yearly estimates of workers in shadow economy made by the Central Statistical Office. Figure 2 shows the number of people working in the grey economy in the years 2000–2014.

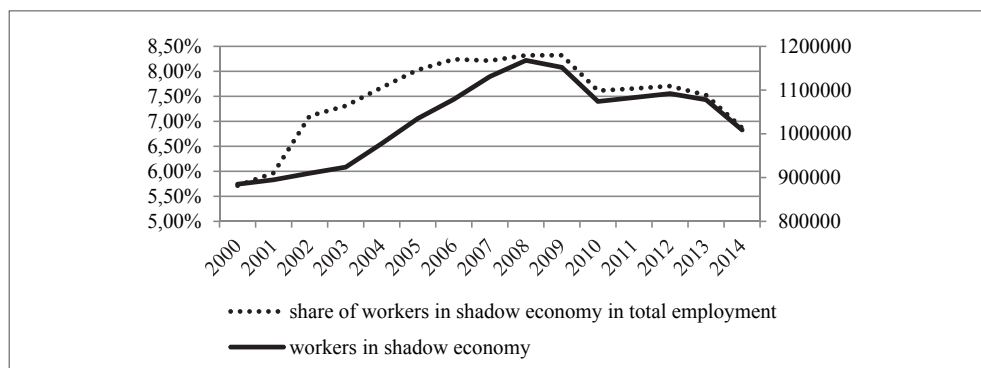


FIGURE 2. Work in the shadow economy. Central Statistical Office's estimates

Source: own elaboration based on Statistical Yearbooks from the years 2001-2015 (CSO).

The yearly Central Statistical Office's estimates (Figure 2) indicate that the share of people working in the informal economy showed an upward trend in the years 2000-2008 (an increase by 2.61 pp) and a slight downward trend in 2009–2014 (down by 1.45 pp). A significant difference can be noticed by comparing these estimates of undeclared work with the results obtained in the Extended Labour Force Survey. Interesting is the fact that indirect estimates show a strongly increasing number of people working informally, while the results derived from the direct method (labour survey) indicate a



decreasing scale of the phenomenon. These results confirm the fact that accurate estimation of shadow economy is a difficult task, what is often discussed in other works (Ciccarone, Marchetti, & Pavlovaite, 2009; Hussmanns, 2004; Jütting, Parlevliet, & Xenogiani, 2008; Williams & Windebank, 1998).

The results of a study, once carried out in 2007 by IPiSS and CASE, indicate that the share of undeclared work was 5.7% in the working age population; the study sample consisted of 9038 respondents. Whereas, according to the second study conducted by CASE, workers in shadow economy constitute 9.3% all of workers; this time, the study sample consisted of 18121 respondents (Bednarski, Kryńska, Pater, & Walewski, 2008).

4. Own estimates

In this section, we analyse a specific type of informal workers. Because of the data limitations, we use particular information from the Labour Force Survey to indicate unemployed people who undertake any kind of work⁵. This method, used in other studies (Cichocki & Tyrowicz, 2011; Tyrowicz & Cichocki, 2011), relies on comparing two answers in the LFS questionnaire: firstly, about current occupational activity (meaning, if a respondent performed any work in last week); secondly, about being registered in a local labour office. A double positive answer is considered as identification of informal work (Cichocki & Tyrowicz, 2011). Obviously, by using this method we analyse only a single type of informal workers, namely those who declare their unemployment. Other types of informal employment, such as employees in formal entities with second unregistered jobs, bogus self-employed individuals or workers who receive enveloped wages cannot be analysed using this kind of data. Results of our estimations are presented in Figure 3.



FIGURE 3. Work “in the shadow economy” as a percentage of total employment.

Source: own elaboration based on LFS data.

⁵ The microdata from LFS is available on request. We obtained this data in accordance with research proposal no. 168/2015-LFS.

As we can see from the Figure 3, the share of the employed-unemployed occurrence in total employment⁶ is declining over the years 2000-2014. In 2000, people who were registered as unemployed, yet simultaneously worked, constituted 2.7% of total employment, while in 2014, the ratio amounted to 0.99%. The number of people who work informally because they are lacking jobs is steadily declining, a fact which provides important information about the structure of the informal work force.

5. Conclusions

Based on our analysis, we can recap that the number of informal workers among the unemployed has decreased. Whereas, according to the estimates of the Central Statistical Office (Figure 2), the same period of time saw an increasing the number of people working “shadow” (2000–2014). It follows that the growing part of informal employment constitutes people who are at the same time employed formally. Thus, the main problem of informal employment in Poland is not associated with unemployment. A common statement, one that informal work is undertaken primarily by people deprived of the possibility of working in the formal sector, was not supported by our analysis. Moreover, it could partially lead to the rejection of the dual labour market hypothesis⁷. Our analysis demonstrates another aspect of informal work: a growing number of informal employees results from the informal employment in formal sector. A significant part of informal employment appears to occur in registered entities, what may provide an important clue in formalising the hidden activities. Our initial findings are in line with the statistics⁸ on the share of shadow economy in registered entities, presented in Table 2. We can state that in the years 2005–2013, the major part of shadow activity took place within registered entities. People who decided to work informal because of their unemployment were not the main body of informally employed individuals. However, a further analysis of the structure of the employed-unemployed occurrence is necessary in order to achieve a better understanding of this phenomenon.

REFERENCES

- Bednarski, M., Kryńska, E., Pater, K., & Walewski, M. (2008). Przyczyny pracy nierejestrowanej w Polsce. *Ministerstwo Pracy i Polityki Społecznej*.
- Ciccarone, G., Marchetti, E., & Pavlovaite, I. (2009). Study on indirect measurement methods for undeclared work in the EU. *European Commission, Unit EMPL/DI - Employment Analysis*, 1–107.
- Cichocki, S., & Tyrowicz, J. (2011). Determinanty zatrudnienia nierejestrowanego w Polsce w okresach wysokiej i niskiej koniunktury gospodarczej. *Gospodarka Narodowa*, 3(235).
- CSO. (2011). *Unregistered employment in Poland in 2010*.

⁶ Note that the data on total employment is also derived from the Labour Force Survey.

⁷ According to this hypothesis, the informal labour market is the secondary market and workers who are active in this sector have no possibility to work formal.

⁸ Provided by the Central Statistical Office



- CSO. (2015a). *National Accounts by institutional sectors and sub-sectors 2010-2013*.
- CSO. (2015b). *Unregistered Employment in Poland in 2014*. Central Statistical Office, Demographic and Labour Market Surveys Department.
- Drabek, A. (2012). *Nielegalne zatrudnienie w prawie polskim*. Wolters Kluwer Polska.
- European Commission. (1998). *Communication from the Commission of 7 April 1998 on undeclared work*.
- Fundowicz, J., Łapiński, K., Peterlik, M., & Wyżnikiewicz, B. (2016). *Szara strefa w polskiej gospodarce w 2015 roku*. Warszawa.
- GUS. (2010). Rachunki narodowe według sektorów i podsektorów instytucjonalnych 2005-2008, (August), 1–38.
- GUS. (2014). *Rachunki Narodowe według sektorów i podsektorów instytucjonalnych w latach 2009-2012*.
- Husmanns, R. (2004). *Measuring the informal economy: From employment in the informal sector to informal employment*. Working Paper ILO.
- Jütting, J., Parlevliet, J., & Xenogiani, T. (2008). Informal Employment Re-loaded. *OECD Development Centre Working Paper No. 266*.
- Łapiński, K., Peterlik, M., & Wyżnikiewicz, B. (2015). Szara strefa w polskiej gospodarce w 2015 roku.
- Mirus, R., & Smith, R. S. (1997). Canada's Underground Economy: Measurement and Implications. In O. Lippert & M. Walker (Eds.), *The Underground Economy: Global Evidence of its Size and Impact* (pp. 3–10). Vancouver: The Fraser Institute.
- Schneider, F. (2005). Shadow economies around the world: What do we really know? *European Journal of Political Economy*, 21(3), 598–642. <http://doi.org/10.1016/j.ejpoleco.2004.10.002>
- Schneider, F. (2016). *Trotz gegenläufiger Tendenzen (Anstieg der Arbeitslosigkeit und der Flüchtlinge) ein Rückgang der Schattenwirtschaft (des Pfusch) in Österreich in 2016*.
- Tyrowicz, J., & Cichoński, S. (2011). Employed unemployed? On shadow employment in transition. *Empirica*, 38(2), 259–281. <http://doi.org/10.1007/s10663-010-9135-2>
- Venn, D. (2008). *Measuring Informal Employment in OECD Countries*. WIEGO.
- Williams, C. C., & Windebank, J. (1998). *Informal Employment on The Advanced Economies. Implications for work and welfare*. Routledge.