

# FORMALNE I NIEFORMALNE WYMIARY RYNKU PRACY

## Informal work in a post-transition country: some evidence for Poland

**Stanisław Cichocki<sup>1</sup>**

Uniwersytet Warszawski  
Wydział Nauk Ekonomicznych  
scichocki@wne.uw.edu.pl

Informal (or unregistered) work is common around the world. However research concerning this topic mostly focuses on developing countries and rarely on developed or post-transition economies. This can be explained by much higher estimates of informal work in developing countries. Nevertheless, in developed or post-transition countries the problem of informal work cannot be ignored. Unfortunately, the literature for post-transition countries mostly focuses on estimating the size of informal work. However, a few studies are

available which concern the problem of determinants of undertaking informal work and the reasons behind it. This article aims to: a) present some interesting examples of research on informal work in Poland which focus on the determinant of informal employment; b) underline the challenges for further research.

**Keywords:** informal work, shadow economy, post-transition, tax evasion, market segmentation

<sup>1</sup> Autor pragnie podziękować anonimowym recenzentom za cenne uwagi do artykułu.

## Introduction

Informal work is a common phenomenon around the world present in developing as well in developed countries (OECD 2009; ILO 2012). However due to its “hidden” nature our knowledge about it is far from perfect and complete. Issues such as definitions of informal work, its size, causes and consequences pose strong challenges for economic policy and research. Reducing the size of informal work is an aim for many governments but without the necessary knowledge regarding this phenomenon their efforts can achieve an adverse effect. Also research on informal work without proper foundations is doomed to lead to false results and conclusions. Therefore, the need for valid knowledge about informal work seems to be obvious.

The challenges connected to informal work start with defining it. A single, universal definition does not exist and as informal work is rich in forms the number of definitions is also significant. The problem of defining has strong implications for measurement as comparison of various estimates of informal work is only possible if the same definition was used, which is rarely the case. Another challenge is measurement as several methods exist. The most popular are based on micro data collected via questionnaires but also macromethods (using macroeconomic data) allow for the estimation of the size of informal work. A further challenge is connected to causes and consequences of informal work and methods of reducing it.

Nevertheless, a rather significant amount of research on informal work exists. Most of it focuses on developing countries i.e. Brazil (Bosch, Maloney 2010), Mexico (Bosch, Esteban-Pretel 2015), Argentina (Pratap, Quintin 2006), Latin America (Lehmann, Muravyev 2012). In comparison research for developed countries is rarer and seems to have been conducted already some time ago i.e. UK (Williams, Windebank 2002), Denmark (Frederiksen et al. 2005), OECD (Schneider 2014). In case of transition and post-transition countries much focus is on Former Soviet Union countries, espe-

cially Russia (Slonimczyk 2012; Lehmann, Zaiceva 2015), with Ukraine (Lehmann, Pignatti 2007) and Baltic states (Merikuell, Staehr 2010) being other examples. Less attention is given to Central and Eastern European countries (e.g. Williams, Horodnic 2015).

In case of Poland, the biggest post-transition economy, most research on informal work was conducted in the 1990s and early 2000s. The earliest examples are studies by Grabowski (1995) and Kalaska and Witkowski (1996). Other studies were conducted by Bednarski et al. (2008), Cichocki and Tyrowicz (2010, 2011) and Tyrowicz and Cichocki (2011). One should also mention the work of the Central Statistical Office (GUS) (1996, 1999, 2005, 2011a, 2011b, 2015), which every few years gathers data on informal work using a special module in the Labour Force Survey.

Taking into consideration the above mentioned problems this article aims at presenting some evidence on informal work for Poland as an example of a post-transition country stressing the most important facts and also underlining the challenges for further research.

The structure of the article is as follows. The next section briefly discusses the problem associated with definitions of informal work. Subsequently, the causes of informal work, its links with shadow economy and its various forms are explored. Next, some facts regarding informal work in Central and Eastern European (CEE) countries, including Poland are presented. After that some examples of research on informal work in Poland are discussed. In the last section we conclude.

## **Definitions of informal work**

As already mentioned a single, universal definition of informal work does not exist. Instead, a rather significant number of definitions, which differ by scope, can be distinguished. Due to this fact it is rather hard to establish if these definitions differ in meaning or consider exactly the same phenomenon. The lack of one common

definition has implications for research as comparison of various studies on informal work is only possible if the same definition was used, which is rarely the case.

However, one can distinguish several attempts to create one common definition. The first of such attempts was the first international agreed definition adopted in the 15th International Conference of Labour Statisticians in 1993 (Husmanns 2005). According to this definition informal employment includes “all jobs in informal sector enterprises, or all persons who, during a given reference period, were employed in at least one informal sector enterprise” (Husmanns 2005, p. 2). In this definition emphasis during the identification of informality is put on the characteristics of the production unit and not so much on the characteristics of the worker. Therefore, this definition is also called the enterprise definition. However, it was criticised for not capturing persons engaged in small-scale activities or self-employment and for not capturing all the aspects of informal work (Husmanns 2004). As a result, the 17th International Conference of Labour Statisticians in 2003 introduced a new definition which put more emphasis on the job-based concept of informal employment (Husmanns 2004). According to this definition various types of jobs by status of employment can be distinguished: a) own-account workers; b) employers; c) employees; d) contributing family workers; e) members of producers’ cooperatives which can either be formal or informal. These jobs can be carried out in: a) formal sector enterprises; b) informal sector enterprises; c) households. As a result, informal employment “is the total number of informal jobs, whether carried out in formal sector enterprises, informal sector enterprises, or households, during a given reference period” (Husmanns 2004, p. 26).

In case of Poland several definitions can also be distinguished. One is the definition of informal work used by the Central Statistical Office. It states that informal work should be understood as a “relationship, that is without a contract, without order-agreement, contract for particular task/work or any other written agree-

ment between the employer and employee, regardless of the ownership sector (also in private households and in private farms); work cannot be also performed on the basis of call, appointment, or election; performing unregistered work does not entitle the employee to social security, therefore the rights to social benefits; the duration of that work is not counted as a contribution from the viewpoint of Social Insurance Institution; the employer does not allot contribution from the employee's wages and salaries to Social Insurance Institution and Labour Fund; income taxes are not deducted from income generated through unregistered employment; self-employment if the concluded economic activity does not meet financial obligations to the state (e.g. taxes)" (GUS 2015, p.9).

Another example of a definition of informal work used in Poland can be found in Bednarski et al. (2008). According to this definition informal work is divided in wholly unregistered activities and partially unregistered activities. A second distinction is made between wage employed and self-employed. This allows to distinguish four types of informal work (Table 1):

**Table 1.** Types of informal work

	Wholly unregistered	Partially unregistered
Wage employed	Oral contract (without a written contract); Written contract but without paying any taxes and contributions	Written contract to a lower amount than indeed paid
Self-employed	Activity wholly unregistered	Registered activity but without reporting a part of income to tax authorities

Source: Bednarski et al. (2008, p. 21).

Tyrowicz and Cichocki (2011) present an enumerative definition of informal work for Poland. According to it informal work comprises: a) individuals for whom only part of the compensation is declared to the tax authorities; b) individuals who are officially inac-

tive (not registered as unemployed) and obtain earned income; c) individuals who are officially registered as unemployed and obtain earned income; d) individuals who dispose of an official job and have an additional, informal source of earned income; e) individuals who run their own/family company, either without registration or not reporting the corporate revenues.

The examples of definitions used in Poland clearly show that rather than one single, universal definition a variety of definitions of informal work exists. This makes comparisons of studies, most of which uses different definitions, difficult if not impossible. Therefore, the need for one single definition seems to be obvious - the establishment of it is one of the challenges for further research on informal work.

### **Causes of informal work, its link to shadow economy and heterogeneity of forms**

Looking on the determinants of undeclared employment we can distinguish two main hypotheses: “exit” and “exclusion”. The first, also called the comparative advantage hypothesis (Huber, Rahimov 2014), states that people voluntary exit the official economy and undertake informal employment (Maloney 2004; Perry et al. 2007; Williams 2010a). The reasons for such behavior lie in more flexibility and independence, higher wages, avoidance of taxes, less regulation, smaller costs and time savings offered by undeclared work as compared to operating in formal economy. Instead of “doing their business” in the official economy individuals move into the shadow economy where they do not have to interact with state institutions and do not have to comply with burdensome regulations (Hirschmann 1970; Djankov et al. 2002; Loyaza et al. 2005). Some assume this as an evidence of a “resurgence of free market against state regulation” (Williams 2010a). The main problem therefore is not informal employment but rather operating in the official economy which drives people into shadow economy where they can

maximise their utility. This hypothesis is mostly identified with self-employed and micro entrepreneurship as these are the agents who “exit” the official economy to run their business informally due to the reason mentioned before (de Soto 1989; Bosch, Maloney 2010).

The “exclusion” hypothesis views undeclared work as a kind of inferior employment characterised by low wages, insecurity and poor working conditions (Harris, Todaro 1970; Loyaza 1994; Perry et al. 2007). It is sought by those who cannot find any other possibility of employment – may it be because of their education, qualifications, experience etc. They either have the possibility of being inactive or unemployed or, to survive, have an informal job – formal employment is unattainable for them (Williams 2010a). They are being marginalised from the official economy and often do not know any other kind of employment than the undeclared one – they are being pushed into unofficial employment. This kind of employment becomes their survival tactic and substitute of work. The “exclusion” hypothesis can be connected to the market segmentation hypothesis, which divides the labour market into a “primary” and a “secondary” sector. Jobs in the “primary” sector are “good” jobs with high wages and benefits, security and the possibility of career advancement. Jobs in the “secondary” sector are “bad” with low wages, insecurity, low skills and few career possibilities (Leontaridi 1998).

However, some recent studies point out that neither of these theories can sufficiently explain informal work (Fields 2005; Bargain, Kwenda 2009; Gunther, Launov 2012; Tansel, Kan, 2012) and that the informal sector is not, as these theories assume homogeneous, but heterogeneous. This leads to the idea that in fact a combination of both theories may apply: informal work is for some people an attractive employment opportunity whereas for others it is the only possibility of employment. Indeed empirical studies show informal labour markets to be divided into two parts: a) an upper tier which represents the competitive part of the informal sector and where either wages are equal to those in the formal sector or

a wage premium exists; b) a lower tier which consist of persons for which formal employment is unattainable and where a significant wage penalty is present (Bargain, Kwenda 2009; Gunther, Launov 2012; Tansel, Kan, 2012).

One should also mention an alternative explanation for “exit” from official into informal employment. As Williams and Windelbank (2002, 2005) point out people undertake undeclared work not only for financial gain. Surprisingly, this is especially true for those with low income who often undertake informal work for social reasons and motives similar for unpaid mutual aid. In this case issues like helping family members, neighbours, friends, mutual aid, building networks, community etc. and not economic motives are the main reason of informal work.

Also important to underline is the fact that informal work is an integral part of shadow economy. As Schneider states “every activity in the shadow economy involves a “shadow labour market to some extent” (Schneider 2014, p.35). Therefore many of the causes, consequences, trends in development over time etc. which are true for the shadow economy apply also to informal work. Such causes of the shadow economy as high tax rates and social security contributions, a non-transparent tax system with a complicated structure, low tax morality, burdensome regulations, inefficient institutions of poor quality are also valid causes of informal work (Friedman et al. 2000; Slemrod, Yitzhaki 2000; Luttmer, Singhal 2014; Schneider 2014). Also the size of shadow economy and its development over time is strongly correlated with the size and development of informal work. Countries with a high (low) share of shadow economy in GDP have also a significant (small) share of the population working informally (OECD 2009b; Schneider 2014) and those with a increasing (decreasing) shadow economy experience also a rise (decrease) in the size of informal work. In general, the different size of shadow economy/informal work in different countries allows for the distinction of the following groups of countries (from those with the biggest size of shadow economy/informal

work to those with the smallest): a) Latin America and sub-Saharan Africa; b) South Asia; c) East Asia and South-East Asia d) Middle East and North Africa; e) Central Asia; f) Central and Eastern European countries; g) highly developed countries (OECD 2009b; ILO 2013; Schneider 2014).

The different size of informal work in different groups of countries is also linked to different types of informal work – there is considerable heterogeneity regarding these forms. As Williams and Lansky (2013, p.361) point out informal work can be conducted in one of three types: “waged”, own-account and household based but each of these types can be divided into different varieties. For example wage employment can be purely informal or partially formal and informal (Woolfson 2007). Self-employment can also be viewed as a continuum of types with false (bogus) self-employment on one end through partially informal self-employment to informal entrepreneurship on the other end (Williams, Lansky 2013). It also worth noting that these different types of informal work overlap each other leading to the existence of many hybrid varieties (Williams et al. 2012). In addition, one should take into account the fact that a dual approach to informal and formal economy which separates both of these economies is insufficient nowadays – rather a “mingling” of these economies takes place: the inclusion of formal work, besides the above mentioned forms of informal work, leads to the emergence of different types of hybrid work (Williams et al. 2012). This in turn leads to a “blurring” of borderlines between formal and informal employment (Williams 2009; Williams 2010b; Williams et al. 2012) posing another challenge for research on informal work.

### **Some facts on informal work in Central and Eastern European countries**

Post-transition countries are characterised by a much bigger size of shadow economy than developed economies (Friedman et al. 2000; Herwartz, Tafenau and Schneider 2015; Schneider 2015). The size of

the shadow economy for UE-15 countries is on average 18-19 per cent of GDP whereas for CEE countries it is about 30 per cent (Schneider 2015, p.4). However this group of countries are not homogenous regarding the size of shadow economy. In case of UE-15, a clear division between Austria, Germany, France, Netherlands and Scandinavian countries, on one hand, and southern European countries (Greece, Italy, Spain and Portugal) on the other hand, can be observed. For the first group the size of shadow economy is on average in the range of 8 per cent – 13 per cent of GDP, for the second group on average in the range of 18 per cent – 22 per cent. In case of CEE countries the size of shadow economy ranges from about 15 per cent of GDP in Czech Republic and Slovakia to about 28 per cent – 31 per cent in Romania and Bulgaria (Schneider 2015, p.4).

In case of informal work in Europe, Renooy et al. (2004) conducted a study confirming the division of European countries into three distinct groups regarding the size of shadow economy/informal work: the European core countries (Austria, Germany, France, Netherlands) and Scandinavian countries, southern European countries and CEE countries. For the latter group Renooy et al. (2004) estimated the size of informal work from 9 per cent of GDP in Estonia and Czech Republic to 30 per cent of GDP in Bulgaria.

Studies on informal work in CEE countries have one shortcoming: they focus on the size of informal employment and rarely provide insights into the verification of determinants of this phenomenon. Some exceptions are Gerxhani (2003), who analyses institutions as a determinant of informal work in Albania. Kriz et al. (2008) discuss determinants of employment in shadow economy for Estonia. Merikuell and Staehr (2010) try to analyse envelope wages and factors explaining informal work in Baltic States. Williams and Horodnic (2015) use data from the newest Eurobarometer on undeclared work conducted in 2013 to analyse reasons for undertaking informal work.

Research on shadow economy and informal work for Poland is no different. Poland was typically comprised in cross-country stud-

ies and data usually came from the Central Statistical Office. Currently estimates of informal work are carried out by the Central Statistical Office which every few years gathers data on informal work using a special module in the Labour Force Survey. Those estimates show that in 2004 9,6 per cent, in 2009 4,6 per cent, in 2010 4,6 per cent and in 2014 4,5 per cent of the working labor force were performing informal work (GUS 2005, p.15; 2011a, p.19; 2011b, p.19; 2015, p.15). Recently a new “wave” of interest in shadow economy and informal work for Poland appeared resulting in new research. However this research does not cover the whole country as it is limited to two of the voivodeships: mazowieckie and łódzkie (Kryńska et al. 2015a; Kryńska et al. 2015b).

Data from the Central Statistical Office can be the main source for further research on informal work in Poland. However the major limitation is the confidentiality of this data making it impossible for researchers to access it. This fact combined with the lack of other data sources covering the whole country (and not some regions) poses a major challenge for research on informal work. The latest studies for Poland were performed by Cichocki and Tyrowicz (2010) and Tyrowicz and Cichocki (2011), who looked on the causes of informal employment. These studies will be briefly described in the next section.

### **Examples of research on informal work in Poland**

Cichocki and Tyrowicz (2010) investigate two different causes of informal work. One is the tax evasion reason: people undertake informal employment to evade taxes (and social security contributions) and so to obtain higher income. This reason can be identified with the “exit” hypothesis described in the previous sections. The second reason states that for some groups of workers formal employment may be unattainable due to same barriers which constrain access to the formal labour market i.e. experience, education, age (market segmentation). In this case the only option to obtain

wages is to work informally. This reason can be identified with the “exclusion” hypothesis. If the first cause is true the earnings of those working informally should be higher than their formally employed counterparts, *ceteris paribus*. If the second cause is true, wages of those working informally should fall short of those working formally, *ceteris paribus*.

To test which of these causes is dominant in Poland Cichocki and Tyrowicz (2010) use data from a survey conducted by the Centre for Social and Economic Research for the Polish Ministry of Labour and Social Affairs in the period May-June 2007. The total number of observations was about 18 000 with around 1000 individuals declaring employment in the informal sector. The data covered socio-economic variables including: gender, age, education, self-reported net earnings, family status, labour market status, region and industry. Descriptive statistics for the data set showed on average significantly higher earnings for formally employed (1316 PLN) as compared to informally employed (992 PLN) with considerable heterogeneity in both cases (the standard deviation was equal to 770 PLN and 763 PLN respectively). The group of those who worked informally was dominated by men (64 per cent of those working informally) and people with lower educational levels (59 per cent of those working informally). The average age for this group was almost 40 years and a quite high percentage of singles was present (41 per cent of those working informally). In the group of those working formally the percentage of men and women was almost equal (48 per cent vs. 52 per cent). 62 per cent of this group had secondary or tertiary education and only 25 per cent were singles. Those working formally were, with an average age of 38 years, also a bit younger than those working informally.

Using this data Cichocki and Tyrowicz (2010) apply propensity score matching, a technique which allows to compare the wages of informal employees with their “statistical” twins in the formal sector (Caliendo, Kopeinig 2008). The “statistical” twins have the same characteristics (age, gender, education, marital status) as the

employees working informally but a different wage. According to the obtained results formally employed declare higher net earnings than informally employed by approx. 30 per cent: 1364 PLN vs. 1058 PLN. This difference is reduced to about approx. 24 per cent when only matched individuals are considered as reference group. Both results are statistically significant. However, the standard errors point to a large heterogeneity in the sample, after matching. Therefore, Cichocki and Tyrowicz (2010) conduct some robustness checks by dividing the sample with reference to above and below median income and into a group of skilled workers (those with at least secondary education) and a group of lower skilled workers (those with primary and vocational education). Cichocki and Tyrowicz (2010) repeat the comparison of wages between informally employed and their formally employed “statistical” twins for these subsamples. In both cases formally employed earn more than those working informally and these differences are statistically significant. Cichocki and Tyrowicz (2010) conclude that the obtained results suggest informal employment being undertaken not because of tax evasion reasons but because of limited access to formal employment.

In a second study Tyrowicz and Cichocki (2011) investigate the same two causes of informal work using a different data set consisting of quarterly Labour Force Surveys for Poland for the period 1995q1-2007q4. Due to data limitations they focus on a specific group of informal workers namely those who officially declare being registered as unemployed but at the same time declare wage employment and compensation. The data covered socio-economic variables including: gender, age, education, self-reported net earnings, family status, labour market status, region and industry. Analysing basic characteristics of informally working like age and education, Tyrowicz and Cichocki (2011) find that those characteristics are quite similar to those of the unemployed: informally working like unemployed are younger (the average age for these two groups is around 33-35 years vs. 38-39 years for those working formally)

and have lower educational levels (around 60 per cent in the groups of informally working and unemployed have elementary or vocational education compared to 40 per cent - 45 per cent in the group of working formally). Next, Tyrowicz and Cichocki (2011) apply propensity score matching to the data to compare the wages of informally working with those working formally.

The obtained result for the pooled sample show higher earnings for those performing informal work by about 300 PLN before matching procedure is applied and 140 PLN after its application. In case of estimates for each quarter informally working are earning less than those working formally before matching whereas after matching the estimates points to consistently higher wages for informally employed as compared to the statistical “twins” in the formal economy. Due to potential heterogeneity in the sample Tyrowicz and Cichocki (2011) conduct some robustness checks by dividing the sample with reference to above and below median income and into a group of individuals living in large cities (above 100 thousand inhabitants) and small towns and rural areas (below 10 thousand inhabitants). In both cases those working informally earn more than those performing an official job. Tyrowicz and Cichocki (2011) conclude that although informal workers earn more than formal ones, the tax evasion reason may only apply to the “top” half of the informal employees. For the “bottom” half lack of alternative employment may be the reason behind working informally.

## **Conclusions**

The aim of this article was to give a brief overview on the problem of informal work in a post-transition country using Poland as an example. Research on informal work is rather abundant. However, it mostly focuses on developing countries. For transition and post-transition countries most attention is paid to Russia where informal employment is strongly present (Lehmann, Zaiceva 2015) with

less attention being devoted to Central and Eastern European (CEE) countries although informal work is also significant in the latter group (Renooy et al., 2004). Also, most research for CEE countries focuses on estimating the size of informal work with only a limited number of studies analysing the determinants of this phenomenon.

Regarding the determinants of undeclared employment, two main hypotheses can be distinguished: “exit” and “exclusion”. The first states that people voluntarily exit the official economy and undertake informal employment in the shadow economy where they do not have to interact with state institutions and do not have to comply with burdensome regulations (Hirschmann 1970; Djankov et al. 2002; Loyaza et al. 2005). According to the “exclusion” hypothesis informal work is sought by those who cannot find any other possibility of employment – may it be because of their education, qualifications, experience etc. (Williams 2010a). However some recent studies point out that that the informal sector is not, as these theories assume homogenous, but heterogeneous (Fields 2005; Bargain and Kwenda 2009; Gunther and Launov 2012; Tansel and Kan, 2012). This heterogeneity can be observed in the forms of informal work – different types overlap each other leading to the existence of many hybrid varieties (Williams et al. 2012). In addition a “mingling” of the formal and informal economies takes place with the dual approach to these economies being insufficient nowadays.

The two discussed studies for Poland focus on causes of informal work and show that although tax evasion is a reason for undertaking informal work, labour market segmentation, which makes formal employment for a group of individuals unattainable, is a more important factor. Being left with the alternative of not having a job at all and therefore no income or working unofficially individuals choose the latter option (Cichocki and Tyrowicz 2010; Tyrowicz and Cichocki 2011). The results can have some important policy implications as tax incentives will only address the “top” part of those working informally leaving the “bottom” part still informal

due to the lack of alternative jobs in the formal economy. Therefore, attention should be also paid to measures tackling informal work which stems from labour market segmentation.

The main challenges regarding research on informal work concern definitions, data and heterogeneity. A single, universal definition of informal work does not exist and a significant number of definitions, which differ by scope and meaning, can be distinguished. As shown even in the case of a single country like Poland various, different definitions are used. This does not make research on informal work easier as comparisons of studies, most of which use different definitions, is difficult if not impossible. Therefore the need for one single definition seems to be obvious. Another problem for post-transition countries is the lack of available data on informal employment. This case is especially true for Poland where all the data available on country level has already been used in studies and the lack of further such data (or its unavailability due to confidentiality issues) poses a major obstacle for further research. Additionally the considerable heterogeneity of informal work and the "blurring" of borderlines between formal and informal work are another challenge for research.

## REFERENCES

- Bargain O., Kwenda P. 2009. *The Informal Sector Wage Gap: New Evidence Using Quantile Estimations on Panel Data*, IZA Discussion Paper No.4286. IZA.
- Bednarski M., Kryńska E., Pater K., Walewski M. 2008. *Przyczyny pracy nierejestrowanej, jej skala, charakter i skutki społeczne*, Warszawa: Ministerstwo Pracy i Spraw Socjalnych.
- Bosch M., Maloney W. 2010. *Comparative analysis of labor market dynamics using Markov processes: An application to informality*, "Labour Economics", no. 17(4): 621–631.
- Bosch M., Esteban-Pretel J. 2015. *Labor Market Effects of Introducing Unemployment Benefits in an Economy with High Informality*, "European Economic Review", no. 75(C): 1–17.
- Caliendo M., Kopeinig S. 2008. *Some practical guidance for the implementation of propensity score matching*, "Journal of Economic Surveys", no. 22 (1): 31–72.
- Cichocki S., Tyrowicz J. 2010. *Shadow employment in post-transition - Is informal employment a matter of choice or no choice in Poland?*, "Journal of Socio-Economics", no. 39: 527–535.

- Cichocki S., Tyrowicz J. 2011. *Determinanty zatrudnienia nierejestrowanego w Polsce w okresach wysokiej i niskiej koniunktury gospodarczej*, "Gospodarka Narodowa", no. 3/2011: 1–27.
- deSoto H. 1989. *The Other Path*. New York: Harper&Row Publisher.
- Djankov S., La Porta R., Lopez-de-Silanes F., Shleifer A. 2002. *The regulation of entry*, "The Quarterly Journal of Economics", no. 117 (1): 1–37.
- Fields G. 2005. *A guide to multisector labor market models*, World Bank Social Protection Discussion Paper No. 0505. The World Bank.
- Frederiksen A., Graversen E.K., Smith N. 2005. *Tax evasion and work in the underground sector*, "Labour Economics", no. 12(5): 613–628.
- Friedman E., Johnson S., Kaufmann D., Zoido-Lobaton P. 2000. *Dodging the grabbing hand: the determinants of unofficial activity in 69 countries*, "Journal of Public Economics", no. 76 (3): 459–493.
- Grabowski M. 1995. *Szara strefa w transformacji gospodarki*, Gdańsk: Instytut Badań nad Gospodarką Rynkową.
- Gunther I., Launov A. 2012. *Informal employment in developing countries: Opportunity or last resort?*, "Journal of Development Economics", no. 97(1): 82–98.
- GUS. 1996. *Praca nierejestrowana w Polsce w 1995 roku*, Warszawa: GUS.
- GUS. 1999. *Praca nierejestrowana w Polsce w 1998 roku*, Warszawa: GUS.
- GUS. 2005. *Praca nierejestrowana w Polsce w 2004 r.*, Warszawa: GUS.
- GUS. 2011. *Praca nierejestrowana w Polsce w 2009 r.*, Warszawa: GUS.
- GUS. 2011. *Praca nierejestrowana w Polsce w 2010 r.*, Warszawa: GUS.
- GUS. 2015. *Praca nierejestrowana w Polsce w 2014 r.*, Warszawa: GUS.
- Harris J., Todaro M. 1970. *Migration, Unemployment and Development: A Two-Sector Analysis*, "American Economic Review", no. 60 (1): 126–142.
- Herwartz H., Tafenu E., Schneider F. 2015. *One share fits all? Regional variations in the extent of the shadow economy in Europe*, "Regional Studies", no. 49(9): 1575–1587.
- Hirschman A.O. 1978. *Exit, Voice and the State*, "World Politics", no. 31 (1): 90–107.
- Huber P., Rahimov U. 2014. *Formal and Informal Sector Wage Differences in Transition Economies: Evidence from Tajikistan*, MENDELU Working Papers in Business and Economics 48/2014. Mendel University in Brno.
- Husmanns R. 2004. *Measuring the informal economy: From employment in the informal sector to informal employment*, ILO Working Paper No.53. ILO.
- Husmanns R. 2005. *Defining and measuring informal employment*, <http://www.ilo.org/public/english/bureau/stat/download/papers/meas.pdf> [accessed 29.01.2016].
- ILO. 2012. *Statistical update on employment in the informal economy*, [http://laborsta.ilo.org/applv8/data/INFORMAL\\_ECONOMY/2012-06-Statistical%20update%20-%20v2.pdf](http://laborsta.ilo.org/applv8/data/INFORMAL_ECONOMY/2012-06-Statistical%20update%20-%20v2.pdf) [accessed 29.01.2016].
- ILO. 2013. *Transitioning from the informal to the formal economy*, Geneva: ILO.
- Kalaska M., Witkowski J. 1996. *Praca nierejestrowana w Polsce w 1995 roku (wyniki badania ankietowego)*, In: GUS, *Szara Gospodarka w Polsce*, Warszawa: GUS-ZBSE: 167-188.
- Kriz K., Merikull J., Paulus A., Staehr K. 2008. *Why do individuals avoid payroll and income taxation in Estonia?*, [in:] Pickhardt M., Shinnick E. (ed), *The Shadow Economy, Corruption and Governance. INFER Advances in Economic Research*, Cheltenham: Edward Elgar.
- Kryńska E., Kukulak-Dolata I., Poliwczak I., Pierzchała M., Grabias S. 2015a. *Praca nierejestrowana na Mazowszu. Synteza raportu z badania jakościowego i ilościowego*, Warszawa: Wojewódzki Urząd Pracy w Warszawie.

**Stanisław Cichocki**, Informal work in a post-transition country: some evidence for Poland

- Kryńska E., Arendt L., Kukulak-Dolata I., Poliwczak I. 2015b. *Praca nierejestrowana – charakterystyka zjawiska w województwie łódzkim*, Łódź: Wojewódzki Urząd Pracy w Łodzi.
- Lehman H., Pignatti N. 2007. *Informal Employment Relationships and Labor Market Segmentation in Transition Economies: Evidence from Ukraine*, IZA Discussion Paper No.3269. IZA.
- Lehman H., Muravyev A. 2012. *Labor Market Institutions and Informality in Transition and Latin American Countries*, IZA Discussion Paper No.7035. IZA.
- Lehman H., Zaiceva A. 2015. *Re-defining Informal Employment and Measuring its Determinants: Evidence from Russia*, "Journal of International Development", no 27(4): 464–488.
- Leontaridi M.R. 1998. *Segmented labour markets: theory and evidence*, "Journal of Economic Surveys", no. 12 (1): 63–101.
- Loyaza N., 1994. *Labor Regulations and the Informal Economy*, Policy Research Working Paper 1335. World Bank.
- Luttmer E. F. P., Singhal M. 2014. *Tax Morale*, "Journal of Economic Perspectives", no. 28(4): 149–168.
- Maloney W. 2004, *Informality revisited*, "World Development", no. 32(7): 1159–1178.
- Merikuell J., Staehr K. 2010. *Unreported Employment and Envelope Wages in Mid-Transition: Comparing Developments and Causes in the Baltic Countries*, "Comparative Economic Studies", no. 52: 637–670.
- OECD. 2009a. *Promoting Pro-Poor Growth Employment*, Paris: OECD Publishing.
- OECD. 2009b. *Is Informal Normal? Towards More and Better Jobs in Developing Countries*, Paris: OECD Publishing.
- Perry G., Maloney W., Arias O., Fajnzylber P., Mason A., Saavedra-Chanduvi J. 2007. *Informality – Exit and Exclusion*, Washington: The World Bank.
- Pratap S., Quintin E. 2006. *Are labor markets segmented in developing countries? A semiparametric approach*, "European Economic Review", no. 50(7): 1817–1841.
- Renooy P., Ivarsson S., van der Wusten-Gritsai O., Meijer R. 2004. *Undeclared work in an enlarged union: an in-depth study of specific items*, Final report. Brussels: European Commission, Directorate-General for Employment and Social Affairs.
- Schneider F. 2014. *The Shadow Economy and Shadow Labor Force: A Survey of Recent Developments*, IZA Discussion Paper No.8278. IZA.
- Schneider F. 2015. *Size and Development of the Shadow Economy of 31 European and 5 other OECD Countries from 2003 to 2015: Different Developments*, <http://www.econ.jku.at/members/Schneider/files/publications/2015/ShadEcEurope31.pdf> [accessed 10.02.2016].
- Slemrod J., Yitzhaki S. 2000. *Tax avoidance, tax evasion, and administration*, NBER Working Paper No. 7473. NBER.
- Slonimczyk F. 2012. *The Effect of Taxation on Informal Employment: Evidence from the Russian Flat Tax Reform*, "Research in Labour Economics", no. 34: 55–99.
- Tansel A., Kan E.O. 2012. *The Formal/Informal Employment Earnings Gap: Evidence from Turkey*, IZA Discussion Paper No.6556. IZA.
- Tyrowicz J., Cichocki S. 2011. *Employed unemployed? On shadow employment in transition*, "Empirica", no. 38(2): 259–281.
- Williams C.C. 2009. *Formal and Informal Employment in Europe: Beyond Dualistic Representations*, "European Urban and Regional Studies", no. 16(2): 147–159.
- Williams C.C. 2010a. *Explaining participation in undeclared work*, "European Societies", no. 12(3): 391–418.

- Williams C.C. 2010b. *Beyond the formal/informal jobs divide: evaluating the prevalence of hybrid 'under-declared' employment in south-eastern Europe*, "The International Journal of Human Resource Management", no. 21(14): 2529–2546.
- Williams C.C., Horodnic I. 2015. *Marginalisation and participation in the informal economy in Central and Eastern European nations*, "Post-Communist Economies", no. 27(2): 153–169.
- Williams C.C., Kedir A., Fethi M., Nadin S. 2012. *Evaluating 'Varieties of Capitalism' by the Extent and Nature of the Informal Economy: the Case of South-Eastern Europe*, "South-Eastern Europe Journal of Economics", no. 10(2): 113–130.
- Williams C.C., Lansky M.A. 2013. *Informal employment in developed and developing economies: Perspectives and policy responses*, "International Labour Review", no. 152(3–4): 355–380.
- Williams C.C., Windebank J. 2002. *Why do people engage in paid informal work? A comparison of higher- and lower-income urban neighbourhoods in Britain*, "Community, Work & Family", no. 5(1): 67–83.
- Williams C.C., Windebank J. 2005. *Refiguring the nature of undeclared work. Some evidence from England*, "European Societies", no. 7 (1), 81–102.
- Woolfson C. 2007. *Pushing the envelope: the 'informalization' of labour in post-communist new EU member states*, "Work, employment and society", no. 21(3): 551–564.

## Streszczenie

### Praca nierejestrowana w kraju potransformacyjnym: wybrane fakty dla Polski

Praca nierejestrowana jest zjawiskiem powszechnym na świecie. Jednak badania nad nią skupiają się głównie na krajach rozwijających się, rzadko zaś na gospodarkach rozwiniętych albo potransformacyjnych. Fakt ten można wytłumaczyć zdecydowanie większymi rozmiarami pracy nierejestrowanej w krajach rozwijających się. Problem ten nie może jednak zostać zignorowany zarówno w krajach rozwiniętych, jak i krajach potransformacyjnych. Niestety literatura dotycząca pracy nierejestrowanej dla tej ostatniej grupy krajów skupia się głównie na szacowaniu jej rozmiarów. Istnieje jednak kilka badań, które zajmują się determinantami podejmowania pracy nieformalnej i jej przyczynami. Celem tego artykułu jest: a) przedstawienie przykładów badań skupiających się na tych determinantach w przypadku Polski; b) podkreślenie wyzwań dla badań nad pracą nieformalną w przyszłości.

**Słowa kluczowe:** praca nierejestrowana, szara strefa, okres potransformacyjny, unikanie opodatkowania, segmentacja rynku