

TACKLING THE 'SHADOW PUZZLE': A CASE STUDY OF MACEDONIA

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Abstract

The empirical evidence from less developed post-transition countries shows that high unemployment is often coupled with a high rate of informal economy, a phenomenon also known as 'shadow puzzle'. According to the 'shadow puzzle' hypothesis, high shares of informal sector accompanied by a high unemployment rate may indicate an overlap between these two categories due to the overestimation of unemployment i.e. false identification as unemployed of those who are de facto informally employed. The aim of this paper is to assess the interplay between unemployment and informal work practices of unemployed workers in Macedonia, which will shed light and to some extent clarify the 'shadow puzzle'. For this purpose we use the results from a survey carried out on a sample of registered unemployed workers in order to identify the profile of unemployed who are informally employed, and we draw some implications for labour market policies.

Keywords: Labour market, unemployment, informality, 'shadow puzzle'.

JEL classification: J46, O17

1. Introduction

In the past two decades Macedonia has gone through the process of transition which is still shaping the social, political and economic ambience in the country. As a part of South-Eastern Europe, Macedonian economic growth is constrained by the general regional predispositions, which, amongst other things, are determined by the political instability of the region. Hence, the economic performance of the South-Eastern European countries (SEECs) has not been strong enough compared to Central-Eastern European countries (CEECs), which are already members of the European Union. In this sense, Macedonia and other SEECs are known as 'lagging reformers' with regard to the completion of the reforms in all spheres of society.

The initial transitional recession has *inter alia* manifested salient effects on the labour market performance (Pechijareski and Rocheska, 1998). Generally, the transitional reforms initially had negative effects on labour markets, which were manifested in declining participation rates and persistent high unemployment. The processes of ownership restructuring and sectoral reallocation assumed a large-scale transformation of state owned firms into privatised ones and a reallocation of a substantial part of the labour force from

the manufacturing and agricultural sectors towards the expanding service sector (Blanchard, 1997). The experience in almost all transition countries, including Macedonia, shows that the creation of new jobs in the emerging private sector was not initially strong enough to absorb the mass of workers laid-off from the restructured state-owned firms. At the same time, the mismatch between the skill requirements of newly created jobs and effective skills owned by the workers has become a substantial problem (Svejnar, 2002). Consequently, the labour markets in early transition became less dynamic with a relatively stagnant unemployment pool leading to increases in unemployment and especially long-term unemployment (Cazes and Nesporova, 2003). The initial 'transitional unemployment' differed in several aspects from other types of unemployment in that it was characterised by pronounced labour market segmentation, long average duration of unemployment and a low probability of exiting unemployment into employment (Nikoloski, 2009).

The transitional recession generated a number of preconditions that subsequently led to an increase in the size of the informal sector (Commander et al., 2013). One of them was the accumulation of long-term unemployment that caused a large fraction of unemployed to become 'discouraged workers'. Assuming that these workers experience depreciation of human capital and decline in morale to search for a job, it is reasonable to expect that they are more inclined toward employment in the informal sector compared to those who are short-term unemployed (Haigner et al., 2013). As a consequence, depressed labour markets with a large proportion of long-term unemployment such those observed in SEECs are more likely to have a sizeable informal sector.

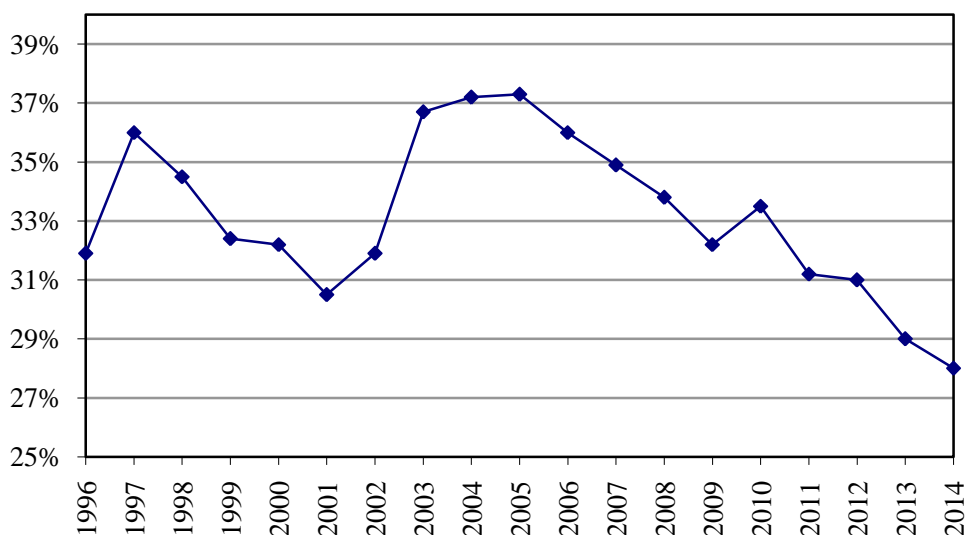
Most of the macroeconomic theories emphasize the counter-cyclical character of both the employment in the informal sector and unemployment which assumes that during the downturns adjustment would predominantly occur through one of these two channels. However, the empirical evidence shows that the high unemployment in SEECs including Macedonia is coupled with a high rate of informal economy, a phenomenon also known as a 'shadow puzzle'. According to the 'shadow puzzle' hypothesis, high shares of informal sector accompanied by a high unemployment rate may indicate an overlap between these two categories due to the overestimation of unemployment *i.e.* false identification as unemployed of those who are *de facto* informally employed. Therefore, the informal employment and unemployment are two sides of the same coin that ultimately require complementary policy measures for their reduction.

The aim of this paper is to assess the interplay between unemployment and informal work practices of unemployed workers as alternative forms of labour market adjustment in Macedonia, which will clarify the related 'shadow puzzle'. For this purpose, we use the empirical results from a survey of registered unemployed workers. To our knowledge, this is the first study addressing this issue in Macedonia that will shed light on the role of the informal sector as an alternative labour market adjustment mechanism in the Macedonian labour market. In this context, in section 2 we first review the general labour market trends in Macedonia. Next, in section 3 we present the theoretical background of the informal sector as a form of a labour market adjustment mechanism. The empirical assessment of the relationship between the unemployment and the informal employment in Macedonia is elaborated in section 4. Finally, in section 5 we conclude and formulate suitable labour market policies that target the unemployed population involved in various forms of informal activities.

2. Macedonian labour market performance

In order to investigate the features of the Macedonian labour market during the transition process, it is appropriate to divide the transitional period into two sub-periods. The first period encompasses the transformational recession from 1990 to 1995, with the second period starting immediately thereafter and lasting until the present. The changes of the unemployment rate in relative terms during the business cycle are rather small, which reflects the depressed characteristics of the Macedonian labour market (Nikoloski, 2009). The dynamics of the unemployment rate in Macedonia during the period 1996-2014 is shown in Figure 1.

Figure 1 The unemployment rate in Macedonia 1996-2014



Source: Macedonian Statistical Office, Labour Force Survey

The first Labour Force Survey (LFS) in Macedonia was conducted in 1996, and since then we have detailed data concerning labour market trends. During the period 1996-2003, the Macedonian LFS was conducted on a yearly basis, whereas since 2004 it is conducted as a continuous survey throughout the year with quarterly data processing. For the period prior to 1996, we can explore labour market trends based on the number of registered unemployed workers. According to both data sources, we can generally distinguish several features of Macedonian labour market presented as follows.

First, during the initial phase of transition, the labour force participation and employment rates fell for most of this period, while the unemployment rate steadily increased. These trends are in line with the normal labour market patterns found in other transition countries *i.e.* declining employment under the initial shock of recession and subsequent persistence of sluggish demand for labour. Although the mature phase of transition is characterised by broad stability in all three rates, we can observe recessions in 2001 primarily caused by the political instability and in 2009 due to the global economic crisis. Namely, Macedonia has not remained apart from the negative global macroeconomic tendencies engendered by the recent economic crisis. Although recession has started one year later, after three consecutive quarters of negative GDP growth, the macroeconomic performance has already demonstrated some signs of recovery by the end

of 2009 and since then the unemployment rate has manifested a continuous declining trend.

The Macedonian labour market is affected by strong segmentation, meaning that certain social groups such as youths, less skilled workers and women face a higher risk of unemployment and inactivity than the rest of the labour force. As a consequence, the high Macedonian unemployment rate has enormous social implications such as rising poverty, income inequality and social exclusion of deprived social segments (Nikoloski, 2012). When considering the marginalised categories, we assume that the same labour market segments are the most inclined toward informal employment arrangements or temporary emigration where jobs are characterised with low security and lower wages compared to jobs in the formal sector. Furthermore, the marginalised segments are affected by the fluctuations in the business cycles more than the rest of the labour force which is evident from the last economic downturn.

In addition, the Macedonian labour market is characterised by a relatively stagnant unemployment pool that has been translated into increasing long-term unemployment. For instance, long-term unemployment accounts for more than 80 percent of total unemployment which represents a high relative share compared to international standards. Long-term unemployment has significantly contributed to an erosion of skills and motivation of unemployed workers, making them less employable over time (Arandarenko and Bartlett, 2012). The deterioration of skills further reduces the attractiveness of the labour force and contributes to a blurring of the difference between the states of unemployment and non-participation. The long-term unemployed are not viewed by employers as attractive fillers of vacancies, meaning that their employability is relatively weak.

After remaining unemployed for a long period of time, a considerable part of unemployed workers stops looking for jobs and quits the labour force. This is known as the phenomenon of 'discouraged workers', a characteristic for depressed labour markets where labour demand is insufficient and unemployed workers face poor employment prospects. Discouraged workers do not fulfil the requirements of job search as a precondition to be counted as unemployed. On the other hand, they can easily re-enter the labour force if conditions on the demand side of the labour market improve (Kingdon and Knight, 2006). For instance, the estimated number of discouraged workers according to the LFS in 2012 was 30322 which represent more than 10 percent of the total number of unemployed.

The sectoral reallocation of labour has been characterised by a significant increase of subsistence agriculture and other non-standard forms of employment at the expense of rapid shrink of employment in industry (European Training Foundation, 2007). These trends in employment by sectors indicate that in Macedonia new jobs are not predominantly created in the more productive industries and service sector, but rather in agriculture and low productivity services (Micevska, 2008). The increase in the share of employment in agriculture suggests that this sector has become a buffer for some people who have lost their jobs in the state-owned industrial enterprises (Nikoloski, 2009). However, the recent changes show that the service sector gradually becomes to play an increasingly important role by absorbing more than half of the employed workforce, whereas the agricultural sector starts to shrink. Given the rigidities in the standard adjustment through employment and wages, less traditional labour market adjustment mechanisms may play a more significant role. Among the alternative labour market

adjustment mechanisms in SEEC we particularly distinguish the non-participation, emigration and employment in the informal sector of the economy.

The size of employment in the informal sector in Macedonia is relatively large compared with the more advanced transition countries. For instance, according to the LFS data, in 2012 the share of employed in the informal sector was estimated at about 22.5 percent. According to the LFS data, the Macedonian informal sector predominantly consists of small-scale agricultural production carried out by workers with low levels of education who are either employees without stable contracts or unpaid contributing family workers. Thus, the workers in the informal sector are usually low skilled or unskilled and consequently they are less competitive in the labour market such as youths, workers at a retirement age and workers with a low level of education or without a specific vocation (Nikoloski et al., 2012). In addition, a majority of these workers experience the so-called 'informal employment trap' *i.e.* they face a low probability of exiting the informal employment (Bernabe, 2002). At the micro level, there is increased human capital erosion experienced by workers who work in the informal sector due to the labour-intensive characteristics of the informal employment and absence of vocational training.

3. Theoretical background

Having in mind the multitude of different approaches, defining the informal economy is not a simple task. There are various terms that are used in order to denote the informal sector such as: informal, hidden, underground, parallel, black, unofficial, unrecorded, shadow, grey, dual, and so forth. Despite the existing nuances in the meaning of the above terms, we will assume that they concern more or less the same issue. In this analysis, for convenience we adopt the term 'informal' as the most appropriate and frequently used in the case of transition economies, because it indicates its specific nature in providing employment and alleviating poverty (Falcetti et al., 2003). Generally, there are two distinct approaches to the formulation of the informal sector. The first is called 'definitional' and considers the informal economy as unrecorded economic activity. The second approach, called 'behavioural', considers the informal economy as an explicit change in the behaviour of economic agents in response to institutional constraints. According to the most commonly used definition, the informal economy encompasses all unregistered economic activities that contribute to officially calculated or observed Gross National Product (Schneider, 2005).

The informal sector of economy is not homogenous and it consists of various different types of activities. By using several criteria, we can distinguish four types of economic activities within the informal sector: illegal, underground, informal and household activities (OECD, 2002). In this context, we should make a distinction between the informal sector which designates all types of informality and informal economic activities as a particular type of activity within the informal sector. Illegal economic activity consists of production and traffic of illegal goods and services or when the latter are not allowed when carried out by unauthorised producers/retailers. In other words, this segment consists of criminal activities, which are often excluded from economic analyses. The underground economy comprises all unrecorded economic activities, such as the production or traffic of legal goods and services, which are deliberately concealed from the public authorities. The informal economy covers all unrecorded economic activities that are legal by the nature of the goods and services that are produced, but they are not deliberately concealed from the public authorities. Finally, household economic activities consist of productive activities

that are carried out by the members of the households and are undertaken for their own final use. Alternatively, the underground, informal and household economic activities have been called ‘coping strategies’ undertaken in order to meet basic needs.

The research on informal economy has identified a number of factors that influence the size and structure of the informal sector. As summarised by Schneider and Enste (2010), the main cause of a flourishing informal economy is the burden of tax and social security contributions, intensity of regulation, and the disincentive effects of social transfers. All these factors create a tax wedge, which consists of the difference between the total cost of labour and after tax earnings. The greater is this difference, the higher will be the incentives to operate in the informal sector (Kucera and Roncolato, 2008). Moreover, in transition countries there exist peculiar factors that can cause a large informal economy such as poverty and social exclusion. In these countries, due to the low level of wages and social welfare, such as unemployment benefits and pensions, the informal and household production can arise as potential survival strategies for the marginalised and socially excluded segments (Bernabe, 2002; Williams and Lansky, 2013). Besides this, the informal sector can be viewed as an opportunity for undertaking various forms of entrepreneurial activities (Williams and Nadin, 2010; Bureau and Fendt, 2011).

The informal employment is often defined as an arrangement where some aspects are lacking or missing relative to formal employment. Depending on what is considered as absent from it or is insufficient about it, the following three different definitions can be used: enterprise-centred, job-centred or activity-based (Williams and Lansky, 2013). The informal employment is widely recognised to include a range of self-employed persons, who mainly work in unregistered enterprises, as well as a range of wage workers who are employed without employer contribution to social protection (Chen and Vanek, 2013). In addition, informal entrepreneurship is defined as involving somebody in starting a business or is the owner/manager of a business who participate in the paid production and sale of goods and services that are legitimate in all respects besides the fact that they are unregistered by, or hidden from the state for tax and/or benefit purposes (Williams and Nadin, 2010).

The employment in the informal sector is considered as an important issue by the policy makers for several reasons. First, from an individual point of view, the people who are informally employed encounter barriers to insurance instruments to manage the impoverishing shocks to their income. Second, the firms that operate according to legal rules face unfair competition from those who operate in the informal sector which, in turn, discourages investment and hinders growth. Third, the large informal sector represents a problem for the society as a whole since it imposes heavy costs to society and deteriorates the provision of public goods and services (Packard et al., 2012).

Regarding the participation of unemployed workers in informal employment arrangements, there are two alternative theoretical explanations (Williams and Nadin, 2014). First, the ‘marginalisation’ perspective assumes that informal employment is mainly concentrated among the marginalised segments such as the unemployed, who disproportionately participate and gain from the informality. In contrast, the ‘reinforcement’ perspective argues that the unemployed benefit less from the informal employment than those who are formally employed and that informal employment reinforces rather than reduces the inequalities produced by the formal economy. Having in mind the counter-cyclical character of both the informal employment and the unemployment, we assume that the negative economic shocks will be mainly adjusted through one of these two alternative channels. However, as we described in the previous section, in Macedonia there might be

observed the ‘shadow puzzle’ phenomenon which arises from the fact that the high unemployment rate is coupled with a high rate of informal economy. Furthermore, this may indicate an overlap between these two categories due to the overestimation of unemployment *i.e.* false identification as unemployed of those who are *de facto* informally employed. Hence, in what follows we attempt to tackle the ‘shadow puzzle’ in Macedonia by empirically assessing the profile of unemployed workers who engage in the informal employment.

4. Empirical assessment

As stated before, the high and sustained unemployment rate in Macedonia has been coupled with various forms of labour market adjustment mechanisms. The conventional (standard) forms of labour market adjustment are characteristic for the employed workers, whereas the non-standard forms are mainly alternatives for the unemployed workers. In this context, among the alternative labour market adjustment mechanisms we pay particular attention to the role of employment in the informal sector.

One possible approach for assessing the employment in the informal sector is by using the LFS data. It is worth mentioning that within the LFS framework, established according to the ILO standards, there is a distinction between employment in the informal sector and informal employment (ILO, 2003; Hussmanns, 2004). The difference between the two above-mentioned notions arises from the different units of observation, employment in the informal sector being an enterprise-based concept, whereas the informal employment is a job-based concept. The assessment of the informal sector by LFS provides a number of advantages, but it also has some limitations. In this context, we can identify two sources that lead to an underestimation of the informal sector. First, because of the self-reporting characteristic of the LFS, it is reasonable to assume that a certain number of respondents who are informally employed declare themselves as unemployed or inactive in order to avoid sanctions for not having complied with the legal regulation. Second, since much of the informal economic activities are undertaken in firms that participate in both the informal and formal sectors, if all the workers of such firms are considered as formally employed this method will seriously underestimate the informal economy. Consequently, the results of the LFS can be misleading, giving inaccurate information on the true size of employment in the informal economy.

To our knowledge, in Macedonia there is a lack of consistent cross-section data about the employment in the informal sector as a form of labour market adjustment mechanism. In order to estimate to what extent the unemployed workers are prone toward the employment in the informal sector, we have designed and carried out a survey based on a representative sample of registered unemployed. The sample size is 2300 unemployed workers selected randomly in each of 30 centres of the Employment Service Agency (ESA) all over the country. Due to the lack of exhaustive lists of registered unemployed that are confidential, the interviewers had freedom to randomly choose eligible respondents. Moreover, the geographical distribution was maintained by selecting a proportional number of respondents from each centre with respect to the total number of registered unemployed workers in that centre. The structure of the sample according to the basic demographic characteristics is given in Table 1.

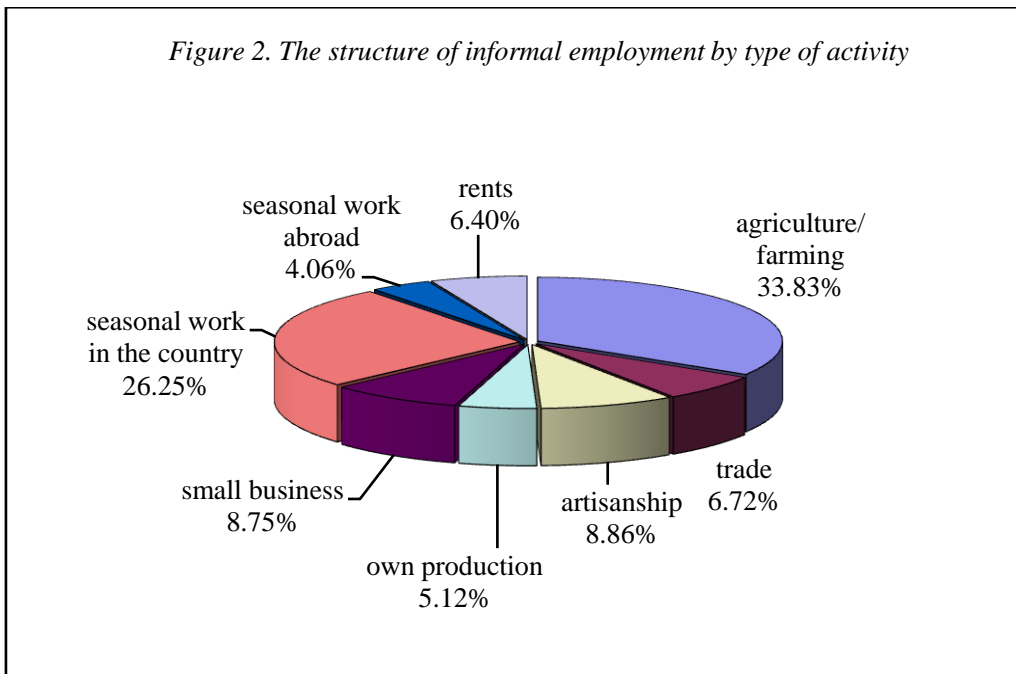
Table 1. The structure of the sample according to various demographic characteristics

Gender		Place of living		Age	
Male	50.30%	Urban	77.89%	15-20	4.09%
Female	49.70%	Rural	22.11%	21-25	23.27%
Education		Ethnicity		26-30	19.23%
Primary or less	15.11%	Macedonian	81.80%	31-35	11.70%
Secondary	50.35%	Albanian	10.21%	36-40	10.61%
Higher	34.54%	Turk	2.26%	41-45	10.61%
Marital status		Roma	2.26%	46-50	8.96%
Single	40.43%	Serbian	1.95%	51-55	6.92%
Married	53.66%	Vlach	1.00%	56-60	3.61%
Divorced	3.74%	Bosnian	0.35%	61-65	0.87%
Widowed	2.18%	Other	0.17%	65 and more	0.13%

Source: Authors' calculations

In our empirical analysis we use the activity-based definition of informal employment as the most appropriate and comprehensive. According to this definition, an activity of unemployed workers is considered as informal employment if it is not declared to, is hidden from or unregistered within the authorities for tax, social security and/or labour law purposes (Williams and Lansky, 2013). In this context, the results show that 38.3% of the surveyed unemployed workers declared that they earn income from various types of additional activities that are informal by nature, while half of them declared that the other household members also perform such types of activities. With respect to this, we argue that in depressed labour markets which lack job creation in the formal sector, informal employment helps people enter the workforce by offering an alternative to unemployment or inactivity and, prevents a further decline in the living standards. The structure of employment by type of informal activity is shown in Figure 2.

Figure 2. The structure of informal employment by type of activity



From Figure 2 it is evident that the majority of unemployed workers are engaged in subsistence activities such as agriculture, farming and seasonal work in the country that together represent about 60%. On the other hand, the entrepreneurial activities such as running own business, artisanship or own production and trade are represented to a lesser extent. Therefore, we can conclude that most of the unemployed workers that operate in the informal sector are usually low skilled or unskilled and perform labour-intensive operations. The above argument is in line with the sectoral reallocation in Macedonia during transition, according to which the share of employment in subsistence agriculture demonstrated a significant rise. Nevertheless, this should not be a general conclusion for the productivity in the informal sector, since in this case we do not include the informal activities performed as a second job by those who are otherwise formally employed.

The income gained from informal activities for these households on average is 34.2% of their total household incomes, which represents significant financial contribution. However, expressed in absolute terms, the average monthly income from informal activities is moderate since one third of the respondents declared to earn less than 100 Euros and another third declared between 100 and 200 Euros. As a consequence, we can argue that unemployed workers are primarily involved in informal businesses that usually operate on a small-scale basis either in the form of self-employment or as micro or small enterprises.

In order to assess the factors that influence the informal activities among the registered unemployed in Macedonia, we apply the Logit model, where the dependent variable takes value zero if the person declared not to earn any income from additional activities in the informal sector. In the opposite case where the unemployed worker declared that he/she works and therefore earn income from such activities, the dependent variable takes value one. We divide the possible determinants in four groups: Personal traits, household characteristics, services from the ESA and the alternative labour market adjustment mechanisms. The results from the estimated Logit model are presented in Table 2.

Table 2. Logistic regression model for the informal activities of the unemployed

Variable	Coefficient	Standard error	t-value
Intercept	- 3.9042	1.0497	- 3.7193***
Personal traits			
Male	0.4478	0.1567	2.8567***
Age	0.1858	0.0553	3.3598***
Age square	- 0.0021	0.0006	- 3.0414***
Married	- 0.3721	0.2101	- 1.7709*
Urban	- 0.5720	0.1837	- 3.1130***
Long-term unemployed	0.2078	0.2150	0.9661
Household characteristics			
Total number of members	0.0740	0.0998	0.7417
Number of members at working age	0.1404	0.0987	1.4222
Number of employed members	- 0.5194	0.1096	- 4.7361***
Another unemployed member	- 0.2467	0.1014	- 2.4328**
Services from the ESA			
Health insurance beneficiary	- 0.0765	0.1732	- 0.4419
Unemployment benefit	- 0.2010	0.3176	- 0.6329
Participation in active programmes	0.0809	0.2472	0.3276
Alternative adjustment mechanisms			
Have retired member(s)	0.0571	0.1841	0.3100
Social assistance beneficiary	0.4986	0.2658	1.8761*
Have emigrated member(s)	0.2540	0.2307	1.1009
Intention to emigrate	0.0676	0.1683	0.4019
Search for job	0.2289	0.2100	1.0902

Note: *, ** and *** represent statistical significance at the 10%, 5% and 1% levels respectively.

According to the obtained results, most of the personal traits of the unemployed worker are statistically significant determinants of employment in the informal sector. In this context, male unemployed are about 56.5% more likely to engage in informal activities than female. Married unemployed are about 31% less likely to perform various forms of informal employment activities, whereas those who live in urban areas are 43.6% less likely to engage in informal employment compared to those who live in rural areas. The coefficient of the age variable is a positive and statistically significant meaning that more experienced workers prevail among the informally employed. However, the negative sign of the age square coefficient shows significantly convex shape with respect to the age, which means that after certain maturity the probability to engage in the informal sector begins to decline.

Considering the household characteristics, the number of employed members and having another unemployed member in the household significantly influence the respondents' decision to undertake informal economic activities. Hence, an unemployed worker on average will be 40.5% less likely to engage in informal employment for any additional employed member in the household. On the other hand, having an additional unemployed member in the household on average will decrease the probability of

undertaking informal economic activities by about 21.9%. These results are somewhat expected since an increase of employed members in the household is often associated with increased incomes, which in turn renders the informal sector employment to be less attractive.

With respect to the labour market policies, we have considered the health insurance, the unemployment benefit and the participation in active labour market programmes. The signs of the estimated coefficients confirm the theoretical assumptions that passive labour market policies create disincentive effects, whereas the participation in active programmes goes hand in hand with the employment in the informal sector. However, we have not found a statistically significant effect of those policies upon the engagement in the informal employment.

Finally, according to our estimated model, we find out that among the alternative adjustment mechanisms only the social assistance beneficiaries are significantly more likely to undertake informal economic activities. In fact, this category of unemployed are the most deprived on the labour market and, consequently they are about 64.7% more likely to engage in the informal employment as an alternative source of income for their households. Having in mind the above results, we further derive concluding remarks and formulate appropriate policy recommendations with respect to the employment in the informal sector.

5. Conclusions and policy recommendations

In this paper we make an attempt to tackle the ‘shadow puzzle’ in Macedonia by assessing the size and nature of employment in the informal sector as a form of a labour market adjustment mechanism. For this purpose we assume that during the past two decades of transition the Macedonian labour market has been characterised by high and persistent unemployment coupled with alternative forms of adjustment among which is the employment in the informal sector. The conventional forms of labour market adjustment are characteristic for the employed workers, whereas the non-standard forms are mainly alternatives for the unemployed workers. Hence, the ‘shadow puzzle’ mainly arises as a consequence of the overlap between the unemployment and employment in the informal sector.

In our analysis we adopt the activity-based definition of informal employment and as informal economic activities we consider only those which are legal by nature but not officially registered. With respect to this, we identify their capacity to absorb a part of the unemployed workforce and cushion the economic and social consequences of persistent unemployment. To our knowledge, in Macedonia there is a lack of consistent cross-section data about the role that the informal sector plays as a form of a labour market adjustment mechanism. In order to estimate to what extent the unemployed workers are prone toward the employment in the informal sector we have designed and carried out a survey based on a representative sample of registered unemployed.

According to the results of our empirical analysis, a considerable number of unemployed workers are engaged in various forms of employment in the informal sector. Furthermore, we found that the income earned from additional informal activities represents more than one third of the total income of their households. Hence, employment in the informal sector alongside other forms of labour market adjustment significantly contributes to the wellbeing of the unemployed workers. However, most of the informal arrangements of the unemployed workers are low-productivity and small-scale

predominantly in the agricultural and farming sector. With respect to possible determinants of employment in the informal sector we revealed that male, mature and those who live in the rural areas are more inclined toward the informal sector. Regarding the labour market policies, we have not found any significant impact on the respondents' decision about participation in the informal sector. On the other hand, those who receive social assistance, who represent the poorest and the most marginalised segment of the population are significantly more involved in the informal arrangements. Hence, the informal economic activities for this category of unemployed workers mostly represent a strategy of last resort rather than opportunities for entrepreneurship.

Having in mind the characteristics of the employment in the informal sector as an adjustment mechanism for the unemployed workers we can draw several policy implications. First, the labour market issues should be tackled on both demand and supply side which means that the increased number of created jobs must be accompanied with wise investments on the side of the quality of the labour force. Second, the passive labour market policies have to be redesigned in order to target the most vulnerable segments of the unemployed population and provide appropriate employment opportunities in the formal sector. In this context, the labour market segmentation might have serious negative implications on the labour market functioning that have to be set off by using appropriate policy measures. Third, a greater accent should be given to the active labour market policies and their complementarities with the passive labour market policies. Fourth, the process of formalisation of jobs in the informal part of the economy has to be done prudently with an accent on the sustainability of the formalised jobs.

We hope that the above stated and other similar policy measures will reach the desired transformation of the labour market performance and will successfully assist the future economic development. However, the measures undertaken in the field of labour market should be supported by complementarily designed measures in other fields such as education and monetary and fiscal policies. In this context, it is worth mentioning that our policy recommendations are not formulated in the form of an 'operational plan', but rather as general directions that should inform the future actions of the policy makers.

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