

## **Book review**

### **LABOR MARKET BETWEEN FORMAL AND INFORMAL\***



The present paper represents a new approach to the issue of informal employment. Knowledge of this segment and its measurement is of particular importance in terms of economic science. Output in the informal sector of the economy is not recorded and is not usually included in the indicators that measure the level of development and welfare of the population. There are estimates according to which the segment of the economy is, in some countries, about half of the GDP equivalent. It is therefore vital to know - by governments and policy makers, but also by economists and academics - if and how large are the actual economic resources of a country as compared with data known and recorded in the statistics and official documents.

The informal sector is omnipresent, occurring in the market economies and centrally planned economies, in the developing countries as well as in the developed countries. In this sector the results obtained run the economy and distribute and attract workers who work, receive income and consume. Informal employment affects budget revenues and reduces governments' capacity to provide social services, and generates distortions in the tax system, also weakening governmental authority in implementing the legal framework and efficient policies. But informal employment also is a source of income and social security in the absence of formal social protection; it is also a source of economic growth in a context where bureaucracy, cumbersome regulations and corruption hinder private entrepreneurship in the formal sector of the economy.

Informality cannot be measured without a thorough knowledge of it from its origins and identification of the causes of its emergence, continuing with the

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\* Silvia PISICĂ, Valentina VASILE, Vergil VOINEAGU – *Piața muncii între formal și informal*, Editura Expert, 470 p., 2012.

description of the conceptual framework through a historical and theoretical approach to the informal economy and employment, and highlighting the latest concepts designed to capture the "informality" of the economy. Knowledge of the evolution of the concept is necessary, as well as the phenomenon itself, which brought it into the attention of specialists the way it manifests and looks today.

Literature is replete with a variety of terms that refer to an important segment of labour and economic activity, known today under the generic name "informal". Among the most common terms for this segment the following are met: unobserved, unreported, undeclared, unregistered, underground, hidden, moonlight, gray, shadow, parallel, black, illegal, unofficial, not-measured, untaxed, and unorganized. The existence of this multitude of terms demonstrates the diversity of tests made by economists and researchers around the world to explore this relatively little known area of employment and economic activity.

The last three decades have been rich in debates on the origin, composition and role of informality and its contribution to national economic development. The English economist Keith Hart is the "father" of the ***informal sector*** term, the one who ***first used it*** in an article entitled "Urban Informal Employment and Income Opportunities in Ghana". Hart described the informal sector as consisting of economic activities undertaken by segments of low-income work force in Accra, which formed the sub-urban proletariat mostly represented by illiterate and unskilled migrants.

According to Portes and Centeno (2003), the *informal sector* concept was institutionalized by the International Labour Office, which linked informality to low levels of productivity and storage capacity, as well as to poverty. Other specialists who leaned on the informal sector in developing countries, especially in Latin America, have seen things in a different light. For example, the Peruvian economist Hernando de Soto reformulated Hart's original theme according to the idea that informal activities are seen as a sign of popular entrepreneurial dynamism and gave new impetus to study this issue. Feige (1990) identified four specific types of "underground" economic activities: illegal, unreported, unrecorded and informal, which are differentiated for various relevant economic issues.

The term **undeclared work** was introduced in the late '90s by the European Commission<sup>1</sup> and defined as "*paid activities that are lawful as regards their nature, but are hidden from the state in the sense that they are not declared to*

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<sup>1</sup> COM (98) – 219 final, Communication of the Commission on Undeclared Work, 7 April 1998.

*public authorities even if their declaration is required by a regulatory system of a certain state".* OECD<sup>1</sup> proposed a similar definition using the term of **hidden employment** to refer to the work/activity "which although not illegal in itself, it had not to be declared to one or more administrative authorities". The International Labour Office, at two International Conferences of Labour Statisticians - the 15th in 1993 and the 17th in 2003, adopted two concepts that complement each other: **employment in the informal sector** and **informal employment**. According to first concept the definition was achieved in terms of characterization of the production units in which the economic activity was performed (production or business approach or perspective), and according to the second concept, in terms of characterization of the employed people and their jobs (approach to or perspective of the workplace).

A new interest in the problem of informal employment was reflected in and promoted by the Resolution<sup>2</sup> and conclusions of the International Labour Conference concerning decent work and the informal economy in 2002. The resolution includes conclusions on the definition and diagnosis on the informal economy, on the main characteristics of informal workers and economic units and decent work deficits, on a range of actions addressed to these decent work deficits in order to facilitate their integration into the formal economy. The term "**informal economy**" was considered preferable to the traditional "**informal sector**" because informal workers and informal activities do not belong to one sector of economic activity, but crosses many sectors. The informal economy refers to "*all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements.*" **Informal employment is an expanded concept that includes informal employment in formal enterprises as well as the employees and the self-employed workers from informal enterprises and households.**

For many years, economists worldwide have argued that the informal economy has a low potential for development and disappear with economic growth. Reality has rejected the theory. Two important factors<sup>3</sup> have questioned these theories:

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<sup>1</sup> OECD Employment Outlook, 2004.

<sup>2</sup> *Resolution and conclusions concerning decent work and the informal economy*, adopted on 19 June 2002, ILC, 90<sup>th</sup> Session, Geneva, 2002, <http://www.ilo.org/public/english/standards/relm/ilc/ilc90/pdf/pr-25res.pdf>.

<sup>3</sup> OECD (2009), Promoting pro-poor growth employment, Informality and informal employment, p. 97, <http://www.oecd.org/dataoecd/63/11/43514554.pdf>.

the *persistence and expansion of informal employment* and *informal employment diversity*.

*Persistence and expansion of informal employment:* In many regions informality is growing or, in the best cases, remains at a constant level. Even in environments that have benefited from sustained economic growth, the expansion of informal employment exceeds frequently the formal one. For example, the self-employment as a share of total employment increased in India (Ghosh et al., 2007) and almost 50% of urban workers in China often have no formal working contract and they work in precarious conditions. Thus, the practice of focusing the policy interventions only on the formal economy is questionable. Instead, the main challenge would be to increase productivity and earnings and reduce the risk of working in the informal economy, in order to create more decent jobs and gradually formalize the informal employment.

*Diversity of informal employment:* General economic outlook on informal employment occurs in the context of labour market segmentation, where *good formal jobs are few* and workers outside the formal labour market are queuing in hope of keeping such a job, being obliged, meanwhile, to work in *informal jobs with low productivity*. However, given the size and diversity of informal employment, we must analyze in detail the dynamics and segmentation *within* informal employment.

The cause of the expansion of informal employment observed in developing countries in recent decades is an important issue of debate in economic literature. It is important to understand the factors that stimulate informality to be able to develop appropriate policy responses. Literature<sup>1</sup> suggests a set of alternative explanations.

- a. First, informality can be seen largely as a result of a development model that does not produce enough good/decent jobs. This phenomenon was exacerbated by the weak capacity of private and public sectors to accommodate to rapid population growth and labour force and it was aggravated by labour market discrimination and segregation between men and women, different social groups and occupations.
- b. Second, subcontracting expansion, driven by globalization and economic liberalization, has led to greater diversification of forms of informal employment. Consequently, there was greater heterogeneity among workers

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<sup>1</sup> OECD (2009), Promoting pro-poor growth employment, Informality and informal employment, p. 100, <http://www.oecd.org/dataoecd/63/11/43514554.pdf>.

in the informal and an increase in the number of skilled/highly qualified persons and in the number of people with high production capacity.

- c. Third, acts that regulate the formal sector have been developed especially for large enterprises, often being inadequate for the needs and conditions of the growing sector of micro-enterprises. Changes in labor regulations and/or on implementing labor regulations might have had an additional impact on the change of the informality share in the economy.
- d. Finally, employers switched to informal type the jobs once formal as a strategy to reduce labour costs and to resist competition.

In recent years, non-typical forms of employment occurred: part-time jobs, with flexible hours, annualized banking hours, tele-working, fixed-term contract work, etc. These situations are difficult to distinguish between employment and unemployment. Beyond all these situations, "black" work moves and makes more flexible the boundaries between employment, unemployment and inactivity. For various reasons, ranging from one country to another and from one period to another, people who work on the "black" market belong to any of the three population groups: employed, unemployed or inactive. Parallel labour market (gray, black) has a significant size and tends to expand causing economic and financial blockages and also altering the social protection systems of labour force covered by this market.

In literature, it was observed that when studying the informal sector, we need to consider three types of boundaries and borders which occur in reality:

- within enterprises: where are some activities carried out in formal conditions and other ones performed under conditions of informality; this means an under-reporting of activities performed, and consequently of the revenues and profits;
- between enterprises: i.e. between formal businesses where all activities and employment are completely formal and informal enterprises;
- between formal and informal workers, regardless of the type or sector where the company operates; distinction between formal and informal is based on job type and characteristics, including mode of employment (in a legal form, or not declared or not to the administrative authority or labour inspectorate).

The authors consider that it is essential to have profound knowledge on the forms of informal employment, modes of manifestation and causes and effects of the development of this phenomenon because they allow a better understanding

of the relationships that are established in the labour market and the impact generated in the form of economic, financial and social bottlenecks, but also the precariousness and alteration of the labour social protection system in this market.

The main objective in this book was to clarify the concepts and definitions to be used for measuring informal employment and to set a specific development for our country, including the list of indicators (with methods and formulas) and potential data sources depending on the type of proposed method and the actual implementation in practice of a case study for Romania by applying the theories proposed. Another objective was to outline the strategies to be followed to transform undeclared work into declared and recorded work.

The book comprises six chapters.

**The first chapter** contributes to better understanding the concept of "informal sector" in the labour market. It presents causes and factors that generate or modify it, the types of economies - developed, developing and shifting from planned to market economy – as well as the forms it takes on and the main features.

Studies and research performed in the last three decades since the term "informal sector" was recorded for the first time in the literature have been able to identify the causes and conditions that allow and lead to the occurrence and spread of this phenomenon. Basically, they can be grouped into three main types: (i) institutional system, (ii) individuals and (iii) labor market.

(i) Factors depending on the institutional system:

- first is the *fiscal tax burden*; the tax and social contributions are very high, especially for small businesses, which they perceive as a real burden;
- *red tape* for recording documents;
- *ineffective control mechanism* - which if built on a "thicket" of legislative acts intricate and insufficiently clear regulations, doubled by an excessive bureaucracy and not negligible situations when those who must apply the law themselves are involved in collateral activities that are part of informal undeclared work, lead to constant conditions and maintenance of unregistered work;
- *flow of information, transparency* - often informal employment occurs not because of voluntary tax evasion but it is caused by pure ignorance or insufficient knowledge of the national legislation.

(ii) Characteristics of individuals:

- *owners/shareholders mentality* - aimed at maximizing profits by any possible means without plans and longer-term perspective;
- *employees' mentality* – persons who seek to supplement their income, often at a subsistence level, or are hardly aware of future consequences (a common situation among young people) or who have no other choice because of labour market inflexibility (not only, but especially in Romania, trying to get a job after the age of 40 years is extremely difficult and daunting);
- *level of education* - has a particularly important role, most of those engaged in informal employment representing people with low or no education and unskilled or low-skilled people;
- *gender* - employment in the informal sector presents significant gender disparities;
- *age* - which may be rather a factor of labour market than of individuals.

(iii) Characteristics of labour market:

- *labor market imbalances* - the two major components - supply and demand - cannot find the equilibrium point, the conditions for the emergence and development of informal employment are a mediated effect, as far as social protection systems (unemployment) are not performing at the expected value, leading to informality supply; the more often they are caused by high levels of labour costs, by deficiencies and deficit in quantity and quality of labour force;
- *inflexible labor market* – in a rigid labour market, based on obsolete working programs which do not allow for solutions and stimulating, attractive working arrangements, and constitute obstacles to the reconciliation of career and family lives, the individuals will find solutions other than the activities in "sight" of the formal segment;
- *shortage* of suitably qualified labour - structural unemployment (understood as the gap or mismatch between the type and level of qualification required and those held by job seekers), labour immobility (in Romania, this immobility is very high compared to other EU member states and the U.S.) are just two of the factors causing imbalances on the labour market; those with low education face a greater risk to penetrate the labour market in

sectors with informal activities , lack of education and skills, being severe obstacles to finding a formal job;

- *poor/inadequate legislation* - in particular concerning the way of employing specific categories (in Romania, regulations on apprenticeship at the workplace came quite late and, even if they were present to some extent in the Labour Code, came into force in 2003, and experience has shown their inapplicability<sup>1</sup>; the trainees and daily workers, mainly used in seasonal agricultural activities - some rules being introduced by Law no. 40 of May 1, 2011); "bad habits" of employers related to "probationary period" are still present;
- *lack of jobs*, employees being exposed to abuse from the employers existing only in small numbers at local/regional level, and surpluses accumulated locally fueling imbalances manifested nationally;
- *lack of services or goods* in the formal segment causes informality to grow;
- *inadequate trade union movement* - the unequal bargaining, partially legitimated by the economic conditions, with fruitless discussions at the negotiating table, with failures in the determination of employers to abandon the abusive practices of "pay-in-envelope", compared to that recorded in the labour books/records.

The authors also find parallels between the informal sector and formal sector, comparing the features and the boundaries of the two and clarifying other adjacent concepts that are used to describe the informal sector. Thus, the formal sector is a closed, protected type - "markets" are "split / awarded" between the major manufacturers - producing high quality products and services, at defined standards, sales on markets being protected by licenses, system of tariffs, etc. In the informal sector, on the contrary, there are especially small producers who are in constant competition in order to be able to sell their goods, products and services often of quite poor quality, and not governed by certain standards.

In the formal sector, access to market is restricted, labour law is respected, companies have access - sometimes preferential - to credit and other financial facilities, transactions are typically conducted through bank transfers, cash is

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<sup>1</sup> According to the annual labour cost survey carried out by the National Institute of Statistics Romania, the share of employees with on-the-job apprenticeship working contracts is only 0.001%.

rarely present. Market access in the informal sector is easy, unrestricted, with frequent or total breach of labour laws, access to bank loans is very low or even absent, and transactions are carried out mainly in cash.

While in the formal sector innovation and advanced technologies are a priority in the informal sector there are no means, and technologies used being, in particular, of traditional type. Advanced technologies in the formal sector require and attract highly skilled and specialized workforce; rudimentary technologies in the informal sector require much lower skills, a common practice being the learning at workplace.

The earnings in the formal sector are standardized, at levels high enough to ensure decent living conditions. In the informal, earnings usually provide only a minimum survival from one day to another.

However, despite the opposite characteristic features, the formal and the informal economies cannot be described as completely independent of each other. Systematic links and dependent relationships occur between them.

The book presents the transition from the concept of informal sector to the one of informal economy with emphasis on theories and features of old and new vision. Basically, 2002 (International Labour Conference on Decent Work and the Informal Economy<sup>3</sup>) was the point of inflection between the old and the new vision, between the informality defined only in terms of production units and informality defined comprehensively - in terms of units and production of jobs.

**The next chapter entitled “Concepts and definitions of the informal sector on the labour market”** contextualizes the approach to the informal sector on the labour market, meaning that it is in an unbreakable relationship with the "informal economy". It clarifies the meaning of various concepts used in the literature and presents the way to the consensus agreed by Member States of the United Nations on the term of informal economy proposed by the ILO, defined as all "economic activities - *in law or in practice - not covered or insufficiently covered by formal agreements*" (ILC, 2002).

The chapter deals with the diversity and the model of economic behaviors in the informal sector from a *macroeconomic* perspective - output in the informal sector is not usually included in the indicators that measure the level of development and welfare of the population - and from a *microeconomic* perspective – when the income and the social situation are known only for households where at least one person is employed in the formal sector.

It presents the way of the informal sector, in terms of conceptual meaning and coverage from the beginnigs and its evolution until now, i.e. from the early

1970s, and the first use of the term of *informal sector* by Keith Hart<sup>1</sup> until 2000 when the concept of informal economy was agreed. In the thesis, the current concepts regarding informality were underlined and popularized by three major international organizations. We refer to (i) **undeclared work** introduced by the European Commission<sup>2</sup> as "paid activities that are lawful as regards their nature, but are hidden from the state in the sense that they are not declared to public authorities even if their declaration is required by a regulatory system of a certain state", (ii) **hidden employment** as defined by OECD<sup>3</sup> as work "which although not illegal in itself, it had not to be declared to one or more administrative authorities" and (iii) **work in the context of the informal economy**, ILO<sup>4</sup> approach that includes "all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements".

Also this chapter presents the main theories and schools of thinking that have emerged over the years: dualist school, structuralist school, legalist school and illegalist school. The current discussion about rethinking the informal economy suggests the need for an integrated approach that takes into account those elements of the dualistic, structuralistic, legalistic and illegalistic theories that are best suited to those segments of informal employment in each context. Shaping the thinking about employment and the informal economy is closely linked to the identification, based on observations and empirical research, of the main causes of the existence and evolution of this phenomenon in different spatial-temporal contexts.

The literature on the field has identified three types of informal employment based on the causes of its apparition: as an *option* (for those who choose for the informal sector in order to achieve higher revenues and profits through tax evasion), as a *necessity* (for those who do not find a job in the formal sector for various reasons - low level of qualification, age, etc. - which are usually the poor who work in precarious conditions) and as *tradition* (usually those who continue hereditary occupations from the family or their social group, from one generation

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<sup>1</sup> In the article entitled "Urban Informal Employment and Income Opportunities in Ghana" where he described the informal sector as consisting of economic activities undertaken by segments of low-income work force in Accra, which formed the sub-urban proletariat, mostly represented by illiterate and unskilled migrants.

<sup>2</sup> COM (98) – 219 final, Communication of the Commission on Undeclared Work, 7 April 1998.

<sup>3</sup> OECD Employment Outlook, 2004.

<sup>4</sup> ILC 2002, Decent work and the informal economy, <http://www.ilo.org/public/english/standards/relm/ilc/ilc90/pdf/rep-vi.pdf>.

to another). Concerning Romania, the authors concluded that the informal exploded in the early post-revolutionary period of *necessity*, segments of the population entering this area being forced to do so to ensure their subsistence, and on the other hand it lasted and continues to last as significant segments of the population which *choose* to work in the informal sector (to obtain higher income and/or profits through tax evasion). We believe that informality in Romania was *not due to tradition*, since the socialist era was not allowing some degrees of freedom, each activity being strictly controlled.

The paper also deals with the links established between economic growth and the informal sector, highlighting the strong, bi-univocal relation: the informal sector affects the real economy and vice versa, the real economy has an effect on the informal sector - the two meanings of this relationship are supported by the two SWOT analyses. Another subject addressed is the relationship between the informal sector and the poverty dynamics, the main conclusion being that, on short term, the informal sector can be considered as a "safety net" for the poor, generally low skilled and uncompetitive on the labour market, while on medium and long term, the relationship between informality and poverty becomes a "vicious circle".

The last part focuses on the methodological framework for the operationalization of the definitions currently used in official statistics to assess the size, composition and characteristics of the informal sector, in general, of the labour market, in particular, and data sources needed for this purpose.

In the preamble of **the chapter dedicated to "Methods for measuring informal employment on labour market"**, the subject of parametric and non-parametric tools to be used to measure informal employment is treated. An important part of this chapter deals with the distinction and explanation regarding *employment in the informal sector* and *informal employment*. The first was agreed in 1993 (the 15th ICLS), the definition of employment in the informal sector being made in terms of characterization of the production units in which an economic activity is carried out (business perspective).

The second was adopted 10 years later, in 2003 (the 17th ICLS), the definition of informal employment being made in terms of jobs (employment perspective) as all informal jobs, regardless of their location – in enterprises in the formal sector, in enterprises belonging to the informal sector, in population households. The documents of the 17th ICLS also proposed a scheme which shows the relationship between the type of production unit and the professional status of employment in order to highlight the coverage of informal employment as well as an algorithm of

allocating each component for defining the employment in the informal sector, informal employment and informal employment outside the informal sector.

In addition to the above, the authors proposed to supplement and amend the definition of informal employment by identifying and adding elements to the category of unpaid family workers employed in the household sector - as shown by cell 11 in the diagram below.

#### **Revised coverage of informal employment by type of production units and professional status**

			Type of production units		
			Enterprise belonging to the formal sector	Enterprise belonging to the informal sector	Households
Jobs by professional status	Self-employed	Informal		3	9
		Formal			
	Employers	Informal		4	
		Formal			
	Contributing family workers				
		Informal	1	5	11
	Employees	Informal	2	6	10
		Formal		7	
	Members of co-operatives	Informal		8	
		Formal			

Source: Own contributions to Ralf Hussmanns, *Measuring the informal economy: from employment in the informal sector to informal employment*, Working paper no 53, ILO, Geneva, December 2004.

Another suggestion of the authors is the establishment of the distinct category and the allocation algorithm for *employment in the household sector*; the benefits of creating and implementing this category is the flexibility in sizing the informal employment (and employment in the informal economy) which allows for separate estimates of the phenomenon in two versions: with and without segments of the population engaged in the household sector, a system necessary for countries like Romania, where the share of employment in agriculture is very high. This delineation is extremely useful for better understanding the structure and composition of informal employment in order to develop appropriate policies and strategies for combating informal work. The proposal of the 17th ICLS in 2003 limited to the algorithm of the determination of employment in the informal sector and informal employment, none of them fully comprehensive: the *category of employees with formal jobs in informal enterprises* is included in employment in the informal sector, but excluded from informal employment. Therefore, considering it as of major utility we have introduced a **comprehensive dimension** - *employment in the informal economy* – also describing the allocation algorithm. Employment in the informal economy is a merger of all components of employment in the informal sector (principle of production units) and informal employment (labour principle), that is, practically, an extension of the scope of informal employment with the element retrievable only in the informal sector, i.e. the *category of employees with formal jobs in informal enterprises*.

Given the above arguments, the algorithm proposed rewrites as follows:

- ✓ Employment in the informal economy: cells 1 to 11;
- ✓ Informal employment: cells 1 to 6 and 8 to 11;
- ✓ Employment in the informal sector: cells 3-8;
- ✓ Informal employment in the household sector: cells 9, 10 and 11;
- ✓ Informal employment outside the informal sector: Cells 1, 2 and 9 to 11.

The chapter includes the list of proposed key indicators to measure employment in the field of informality, for each category: employment in the informal sector, total informal employment, informal employment in the household, employment in the informal economy. For each indicator - primary and/or derived - definitions and corresponding formulas have been developed. Derived indicators allow expressing informality in terms of employment size in relation to total employment and knowing its structure by different components and categories. One of the indicators which deviates from these characteristics refers to the determination - *appropriate, in our opinion* – of the gap between the size of informality expressed in economic terms (the share of informal economy in GDP)

and expressed in terms of employment (the share of employment in informal economy in total employment).

It also presents an overview of the most used methods for measuring informal employment - indirect methods and direct methods. We presented six of the *indirect methods* used in the literature in the field, with descriptions, advantages and disadvantages, namely: the discrepancy method, labour input method, degree of participation method, monetary method (Tanzi method), Global Indicators method (electricity consumption), and latent variable method. Also, for the last three of these methods, we presented the main types of econometric models: Monetary methods, Global Indicators methods, latent variable methods (MIMIC<sup>1</sup> / DYMIMIC<sup>2</sup>). For *direct methods* - which means to perform a survey in the field, by interview – the authors described the main categories of researches that can be developed: surveys on households, surveys on enterprises (sub-units, local units) and mixed surveys on households and on enterprises. The presentation was enriched by describing the types of surveys that can be organized and carried out: independent surveys on the informal sector (specially designed to capture information on informal employment), modules for the informal sector attached to household surveys (for example, attached to household labour survey) and integrated surveys (designed to achieve several objectives, measurement of the informal sector as an additional objective appearing in a section or in a special module).

**The following chapter** states who are the participants in informal employment (people with low education, unskilled or low skilled, unemployed and retired who work on 'black' market, young and elderly who face obstacles in finding a job in the formal sector, people with no income or low income who choose informality for survival, etc.) and their characteristics. It also describes the most common forms of informal work and presents methods of measurement and the size estimated according to these methods. It shows features of the informal economy and employment for groups of countries:

- In developed countries: between 7% and 16% of GDP in the European Union<sup>3</sup> (EU-15) or between 7% and 19% of total employment declared;

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<sup>1</sup> MIMIC - multiple indicators and multiple causes.

<sup>2</sup> DYMIMIC - dynamic multiple indicators and multiple causes.

<sup>3</sup> Council Decision of 22 July 2003 on guidelines for employment policies of Member States (2003/578/EC).

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- In transition countries: the share in GDP undeclared (Glovackas, 2005) range from 8-9% in Estonia (2001), 18% in Hungary (1998), **21% in Romania (2001)**, 22-23% in Bulgaria (2002/03);
  - In developing countries: an overwhelming share of hidden economy in GDP (Schneider, 2006) exceeding half of its value - Bolivia (68.3%), Georgia (68.0%), Ukraine (54.7%).

Most of this part of the book is dedicated to the information on estimates of informal employment by **indirect methods** and **direct methods**. Indirect methods described and used are: the *labour input method* and the *discrepancy method*.

The **labour input method** was developed since the early '80s by experts of the Italian National Statistics Institute (ISTAT), which identifies the economy in order to achieve a comprehensive approach for estimating the GDP according to SNA 93 and ESA 95 accounts systems. It is based on identifying problems of the shadow economy and problems associated to statistical measurement. Estimates of labour units are designed to achieve exhaustiveness in the national accounts by ensuring full coverage of all productive workforce that contributes to the creation of GDP. In summary, the method involves estimating the number of jobs and then converting them into full-time equivalent (FTE). The estimation of the number of jobs is done through a complex algorithm on several stages, consisting in reconciliation of data from multiple sources - statistical (household surveys, surveys on enterprises, population census, census of enterprises, the agricultural census a.s.o.) and administrative (mainly data managed by the Ministry of Finance on VAT, the trade register, etc.). Data reconciliation is achieved, where possible, at the unit of observation level (based on a common identifier), but also at aggregated level broken down by various demographic and economic characteristics and by regions (territorial profile). For the definition of employment the domestic concept was applied, which differs from the national employment definition: the former does not include residents who work in non-resident production units, but includes non-residents working in resident production units, the latter includes all persons residing, employed in resident production units and non-resident workers and exclude non-residents. In the thesis we have presented and analyzed some estimates we have determined according to the labour unit method based on a range of information available from the Italian partners (unregistered labour that produced 6.4% of GDP accounted for 12% of the total labour force, expressed in full-time equivalents (FTEs), or 2 969 thou. in 2006).

In **Romania**, the labour input method is applied practically and conceptually similarly to the Italian model, but reconciliation is achieved only at the data

aggregated level (macro level). Estimates based on data available in national accounts of the INS and own calculations lead to a result of 2284 thou labour units (i.e. transformed in full-time equivalents) for the volume of informal employment in 2010 (representing 28.8% of total employment, also expressed in labour units), 2.2 times higher than in 2008 (1050 thou. labour units, representing 12.9%), this dramatic increase being a result of the recent financial crises.

According to the estimates of national accounts of INS and own adjustments, the volume of informal employment expressed in labour units (converted into full-time equivalent) increased overwhelmingly over the last six years, in 2010 being 2.5 times higher than in year 2005.

**Informal employment (labour units) and its structure  
by main economic activities**

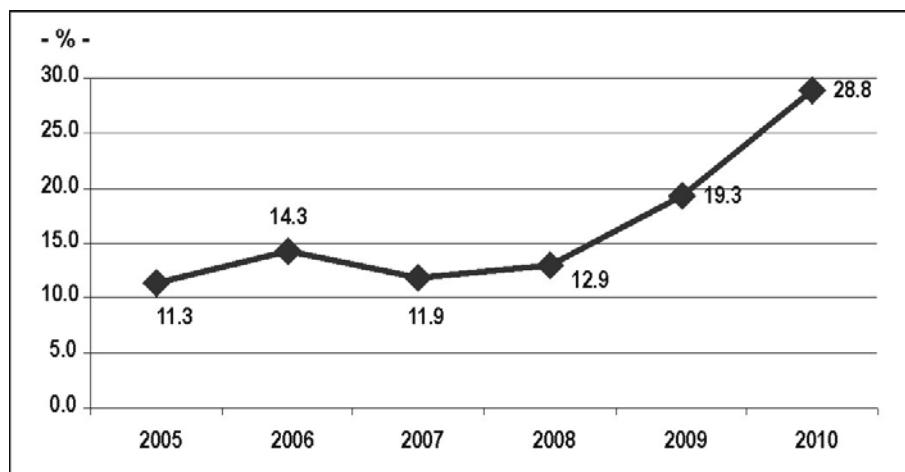
Economic activities	2005	2006	2007	2008	2009	2010
<b>TOTAL – labour units</b>	<b>912</b>	<b>1156</b>	<b>970</b>	<b>1050</b>	<b>1533</b>	<b>2284</b>
<i>of which, in percentage:</i>						
Industry (total)	42	47	57	60	45	34
Constructions	11	8	11	10	15	20
Trade	17	12	12	12	21	28
Hotels and restaurants	5	3	4	4	3	3
Transport and communications	13	11	11	9	9	9
Other services*	13	19	5	5	6	7

\* Excluding the government sector and the banking sector.

Source: INS national accounts estimates and own adjustments.

The financial crisis had major effects on the evolution of this phenomenon, doubling (or even more) the total volume in 2010 as compared to 2008, showing dramatic increases in trade activities (about 5 times) and constructions (4.1 times). And the sector of other services (excluding government sector and the banking sector) experienced a large increase (3.3 times). In the transport and communication activities as well as the hotels and restaurants the volume of informal employment, expressed in labour units, increased 2.3 times and 1.8 times, respectively. The smallest increase was reported in the branches of industry (1.2 times).

### Informal employment as share in total employment, labour units



\* Excluding the government sector and the banking sector.

Source: INS national accounts estimates and own adjustments.

The share of informal employment in total employment - expressed in labour units - was determined on a sharp upward slope, representing 28.8% in 2010 (compared to 11.3% in 2005 and 12.9% in 2008).

The **discrepancy method presented for Romania** was specially developed within the scope of this paper. The size of population included in the informal employment was estimated by using an algorithm in four steps of adjustment based on data reconciliation from two primary sources: the Labour Force Survey (AMIGO) and the labour cost survey. Household Labour Force Survey provides information on labour supply and takes place in population households on a quarterly basis using a sample of about 112,320 dwellings over one year. Labour Cost Survey provides information on labour demand and is performed in units with legal personality, on an annual basis, using a sample of about 30,000 businesses and social units.

**Step 1.** Public administration (full name according to NACE Rev. 2: "Public administration and defense; social security insurance") is a special case. According to NACE, this activity has to cover also the employees who are part of the armed forces and other similar military personnel (Romanian Intelligence Service, Foreign Intelligence Service, Guard and Protection Service, Special Telecommunications Service, the "interior" part of the Ministry of Administration

and Interior, etc.). The Labour Force Survey deals with individual households and captures information about this population. The Labour Cost Survey excludes from the scope these special units because they refuse to answer. Therefore, reconciling data from the two statistical sources was done after extracting the data corresponding to public administration from both rows of data. Moreover, the working hypothesis applied was that in this field there is no informal work, since there is no private sector, and it contains only units in the central administration (ministries, agencies, institutions and national authorities, government bodies) and local administration.

- *Category of employees*

**Step 2.** Because the Labour Force Survey is a statistical survey (conducted on a sample) addressed to the households of the population, collecting the data by direct interview (face-to-face), the degree of bias and error in the response (due to ignorance or misunderstanding, the result of their perception) and in the information provided according to the respondents' free statements must be taken into account. To correct this error, the distribution of economic activities was re-derived in accordance with the distribution given by the Labour Cost Survey because the surveys conducted among businesses provide more rigorous and accurate information.

**Step 3.** In this case study, estimates of informal employment for those working as employees according to their professional status were achieved by comparing and reconciling supply and demand for labour at the level of each economic activity. According to the work hypothesis, it was considered that the difference between the number of people who declared to work in an enterprise (as employees) and the number of persons reported as employees by the enterprises is "work unregistered" or "informal employment".

- *Category of non-employees*

**Step 4.** The estimated number of people working in the informal sector with other professional status than employee (self-employed with - employer - and without employees, contributing family workers, or member of a non-agricultural cooperative or agricultural association) was based on data available from the household labor force survey (LFS) and by making certain assumptions concerning the household behavior, "borrowed" from the practices of national accounts statistics to estimate the unobserved economy (see Box below).

### Exemples of adjustment

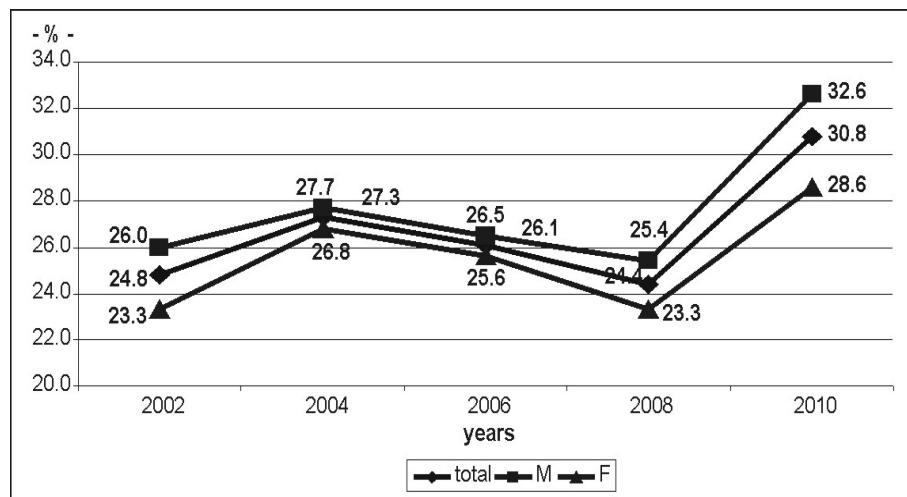
*Constructions:* It is considered that 50% of the self-employed persons reported to be in this activity also perform unregistered activities.

*Education:* It is considered that half of the students attending any form of secondary education take private lessons. The number of teachers who give private lessons is estimated according to this assumption, and taking into account the ratio of the number of students to a teacher with a particular specialization (mathematics, Romanian language, foreign languages, etc.).

Source: *Internal working documents of national accounts, INS.*

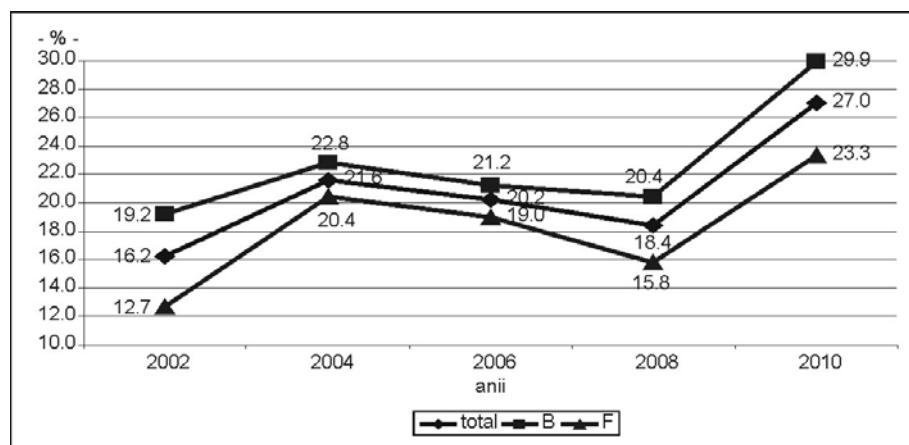
Total informal employment resulted from summing up the estimates for the two categories: employees and non-employees.

**Evolution of the share of persons employed  
in the informal sector in total population  
(including the agricultural sector)**



Source: Own calculations using discrepancies method.

**Evolution of the share of persons employed in the informal sector in total population (excluding the agricultural sector)**



Source: Own calculations using the discrepancies method.

The main results of the estimations based on this method show that the extent of informal employment in Romania in 2010, in the version including the agricultural sector, has come to represent 30.8% of total employment (compared to 24.4% in 2008), and in the version excluding this sector, 27.0% (versus 18.4% in 2008).

A first conclusion that emerges is that the phenomenon is widely spread and, if in 2002 there was less than one quarter of total employment (24.8%), in 2004 it rose to 27.3%, and the next period was characterized by a downward trend, to 24.4% in 2008. However, following the financial crisis starting from the second half of 2008, the phenomenon has regressed significantly, reaching 30.8% in 2010, the highest level if compared to any previous years.

The second conclusion is that - without exception, for the entire period 2002-2010 - the phenomenon is more obvious among men than among women (26.0% vs. 23.3% in 2002, and 32.6% vs. 28.6% in 2010).

Informal employment is particularly prevalent in:

- agricultural activities (with values between 38.3% and 38.5% during 2002-2008, but reaching 39.0% in 2010) where there are mostly elderly, with low education, working especially in their own households to produce for own consumption and less for sale as destination; the phenomenon is acute at almost similar levels among women and men; 2010 captures the effect of

migration to the agricultural sector of the population which remained unemployed, of the lay-offs made in non-agricultural activities caused by the recent financial crisis;

- the collective, social and personal services<sup>1</sup> (growing from 46.0% in 2002 to 50.4% in 2010), where there are two main types of persons - those who provide services that require a certain qualification (such as hairdressers, tailors, shoemakers, etc.) and those who have no or low qualification and practically fulfill household chores (cleaning, washing, ironing, cooking, care / baby or the elderly, gardening, painting, etc.);
- real estate - difficult to identify as such for the period 2002-2006 because, according to Rev.1 version of NACE, the coverage was much larger, including rental activities and services provided to enterprises, activities excluded in Rev.2 version - where, in 2002-2006, more than one quarter of the employed population performed informal activities; those weights are significantly higher in 2008 and 2010 (42.3% and 50.3%), but they capture only the real estate sector and have significant gender disparities, the weights of the male population reaching 51.2% in 2008 and 62.5% in 2010 compared with the corresponding ones for female population, of 34.3% and 38.1%;
- constructions (data are comparable for entire time series because the differences in scope between the NACE versions are insignificant) showing a steady increase, from 20.8% in 2002 to 36.6% in 2010.

The informal sector is present in all the other economic activities, with significant values in trade (18.2% in 2002, but 27.2% in 2010), hotels and restaurants (13.2% in 2002 and just over one fifth in 2010), mining (15.4% in 2002 increasing significantly in 2010 to 23.5%), manufacturing (13.0% in 2002 and 12.8% in 2008, rising to 20.3% in 2010), etc. It is interesting to note the increase of informal employment where the formal sector has clearly created a niche, leaving population demand uncovered for inter-urban transport service. Following the reduction or cessation of county transportation networks and the spectacular growth in prices on rail transport, numerous private transport networks have developed rapidly in recent years. Therefore, the male employment share in the informal sector in the transport sector was significant throughout the period (16.2% in 2002, 19.2% in 2004, 14.7% in 2008 and the highest in 2010 - 22.8%).

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<sup>1</sup> Taking into account the differences between the two NACE versions (Rev. 1 and Rev.2) the coverage for collective, social and personal services is not perfectly comparable for period 2008 - 2010 with previous years.

Although, until 2008, the proportions corresponding to education and health were constantly decreasing (from 22.3% in 2004 to 17.0% in 2008 and from 20.6% to 17.1%), the year 2010 saw an increase by about 10 percentage points as against 2008, accounting for 27.8% in education and 26.5% in health. The existence and maintenance - in the period analyzed - of the shares of employment in the informal sector show deficiencies in the systems of education and healthcare in Romania.

2010 saw a substantial decline; the estimates show a major deterioration in many economic activities. To those already mentioned above, the situation of "water supply, sanitation, waste management and remediation activities", where the share of informal employment rose to 42.6% (compared with 25.0% in 2008), of "administrative services and support services", where the decline was 14.6 percentage points compared with 2008 (40.3% vs. 25.7%), and of "Arts, entertainment and recreation", where the distance to the year 2008 was 18.6 percentage points (36.5% in 2010 compared to 17.9%) have to be commented.

The evaluation of informal employment in Romania was also made by a **direct method**, i.e. designed and carried out in the field a **statistical survey on population households**, in March 2011. The authors were involved in survey designing, as well as in analysis of results within a project co-financed by the European Social Fund POS DRU 2007-2013, whose beneficiary is the National Trade Union Bloc. The survey results were used for preparing the *Report<sup>1</sup> on informal economy and its impact on the labour market*, presented at the Seminar organized by National Trade Union Bloc in early July, 2011. The methodology used is described in chapter three of the thesis which was based on the recommendations of 17th ICLS, with additions and changes proposed by myself. This means that the 11 categories resulted by crossing the type of production unit with the professional status of employment have been defined and explained, as well as the derived indicators of employment in the informal sector, informal employment, employment in the household sector and employment in the informal economy, for the algorithm of allocation and selection being described for each of them.

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<sup>1</sup> Voinea, L. (coord.); Voineagu, V.; Pisică, S. ş.a. (2011), *Economia informală și impactul ei asupra pieței muncii*, project co-financed by the European Social Fund POS DRU 2007-2013 European Social Fund INVESTEŞTE ÎN OAMENI, Bucharest 2011, [http://www.bns.ro/fisiere.portal/economia\\_informala.pdf](http://www.bns.ro/fisiere.portal/economia_informala.pdf).

**Employment by type of job  
and type of sector**

	Total employment	Formal employment (FE)	Informal employment (IE)	Employment in informal economy (EIE)
- thou persons -				
<b>TOTAL</b>	<b>9239</b>	<b>6335</b>	<b>2904</b>	<b>3417</b>
Formal sector (FS)	5840	5819	21	21
Informal sector (IS)	1209	514	696	1209
Household sector (HS)	2190	2	2188	2188
<b>MALE</b>	<b>5136</b>	<b>3510</b>	<b>1626</b>	<b>1903</b>
Formal sector (FS)	3246	3233	13	13
Informal sector (IS)	749	277	472	749
Household sector (HS)	1141	0	1141	1141
<b>FEMALE</b>	<b>4103</b>	<b>2825</b>	<b>1278</b>	<b>1514</b>
Formal sector (FS)	2594	2586	8	8
Informal sector (IS)	460	236	224	460
Household sector (HS)	1049	2	1046	1046
<b>URBAN</b>	<b>5122</b>	<b>4786</b>	<b>336</b>	<b>740</b>
Formal sector (FS)	4398	4381	18	18
Informal sector (IS)	644	404	239	644
Household sector (HS)	80	1	79	79
<b>RURAL</b>	<b>4117</b>	<b>1549</b>	<b>2568</b>	<b>2677</b>
Formal sector (FS)	1441	1438	3	3
Informal sector (IS)	565	109	456	565
Household sector (HS)	2110	2	2109	2109

Source: Voinea, L. (coord.); Voineagu, V.; Pisică, S. ş.a. (2011), Economia informală și impactul ei asupra pieței muncii, proiect POS DRU 2007-2013 [http://www.bns.ro/fisiere.portal/economia\\_informala.pdf](http://www.bns.ro/fisiere.portal/economia_informala.pdf).

According to the statistical survey, **employment in the informal economy** in Romania was estimated to be 3.4 million persons, representing 37.0% of total employment estimated in March 2011. **Informal employment** comprised 2.9 million people (or 31.4% of total employment), **employment in the informal sector** 1.2 million (13.1% of total employment) and **employment in the households sector** nearly 2.2 million (representing 75.2% of total informal employment).

In terms of working place, the gender structure of population included in informal employment does not differ from the one in formal employment, the majority being male population (55-56%). In terms of production units, however, it can be

noted that in the informal sector, men account for nearly 62%, while in the household sector, the distance between the two sexes is smaller (52% share of men).

In informal employment we found less than one third of all employed men and women. Of the total employed urban population, only 6.6% belong to informal employment; for the rural working population, however, this ratio is overwhelmingly higher - 62.4%.

The employment structure by type of employment sector differs substantially in the two areas of residence. In urban areas, most of the employed population works in the formal sector (nearly 86%), while in the countryside just over one third (35.0%). The share of employment in the informal sector has quite similar values in both areas of residence (12.6% in urban areas and 13.7% in rural areas). Instead, the household sector is negligible in urban area (1.6%), but mostly in rural area (51.3%).

Between the employed working in formal conditions and the employed working in informal conditions there are significant discrepancies in terms of structure by age. In the formal sector, young barely exceed 5% and elderly (65 years and over) are extremely rare (0.1%). However, in informal employment (and the household sector – a significant segment within informal employment), people at the extremes of working life – young (15-24 years) and older (65 and over) – account for about one quarter, which means that these categories have a high risk of working in conditions of informality.

In the informal sector as well, the youth are present more frequently (compared with the formal sector), representing 13.4% (as against 5.3% in the formal sector).

Most (59.2%) of the employed population in Romania has medium level of education, and almost one quarter (23.9%) low level of education; university graduates make the difference (only 16.9% compared with 29.0% EU27 average).

As in informal employment, most common are the inhabitants of villages who work their land and care for animals, usually older people, it is not surprising that more than half (59.1%) have low education. Two-fifths have medium level education, the percentage of those with university education being negligible (1.4%). In the informal sector one third is represented by people with low education, the proportion of those with tertiary education exceeding one fifth (10.7%).

The risk of working in conditions that are not fully covered by labour legislation and uncertainty or lack of social protection increase as educational level

decreases. If the graduates of higher education are only 2.7% of informal employment and 21.0% of those with secondary education, in the low skilled or unskilled ratio it is reversed (77.6%).

Out of 2.9 million people who make up the informal employment, 87.3% work in agriculture, forestry and fishing. For the female population this proportion rises to 92.2%. As expected, 95% of rural informal employment is engaged in agricultural activities; for those in urban areas, this proportion is much lower but still represents 28.2%.

Given the large influence of the agricultural sector, the information given below was analyzed only for employment in non-agricultural activities.

Informal employment in non-agricultural activities comprises about 368,000 people, mostly men (72.9%) and residing in urban area (65.5%). In the informal sector of non-agricultural activities work 832,000 persons, again mostly men (61.8%) and residing in towns and cities (74.1%). Only 15 000 persons from the household sector undertake non-agricultural activities, mostly women (57.8%) and living in urban area (54.2%).

Whether we refer to employment type or sector type the highest percentage of employed people belongs to constructions (37.5% and 23.8%). Informal employment is also common to trade activities (18.0%), to those engaged in private households (12.2%), in manufacturing (7.3%).

#### **Employment (in non-agricultural activities) by type of work place (formal/informal employment) and of sector, and by economic activities**

	Total	of which, by workplace:		of which, by sector type:		
		Formal employ- ment	Informal employ- ment	Formal sector	Informal sector	House- hold- sector
<b>Total, thou. persons</b>	<b>6548</b>	<b>6180</b>	<b>368</b>	<b>5701</b>	<b>832</b>	<b>15</b>
- percentage -						
Mining and quarrying	1.3	1.4	0.2	1.5	0.3	0.0
Manufacturing	25.7	26.8	7.3	27.1	16.8	0.0
Production and supply of electric and thermal energy, gas, hot water and air conditioning	1.5	1.6	0.0	1.5	1.1	0.0
Water distribution; sanitation, water administration, decontamination activities	1.1	1.1	1.3	1.1	1.3	0.0

	Total	of which, by workplace:		of which, by sector type:		
		Formal employment	Informal employment	Formal sector	Informal sector	Household-sector
Construction	10.3	8.7	37.5	8.4	23.8	0.0
Wholesale and retail; repair of motor vehicles and motorcycles	18.1	18.1	18.0	17.6	22.2	0.0
Transport and storage	7.0	7.1	4.4	7.2	5.6	0.0
Hotels and restaurants	2.4	2.4	1.4	2.4	2.1	0.0
Information and communications	2.1	2.1	2.1	1.9	3.2	5.0
Financial intermediation and insurance	2.2	2.2	1.8	2.0	3.0	0.0
Real estate transactions	0.3	0.3	0.2	0.3	0.5	0.0
Professional, scientific and technical activities	3.4	3.4	2.4	3.4	3.3	2.0
Administrative services and support services	2.3	2.4	1.0	2.3	2.4	0.0
Public administration and defence; social insurance of the public system	6.5	6.9	0.0	7.5	0.0	0.0
Education	5.7	6.1	0.4	6.2	2.4	4.7
Health and social assistance	6.2	6.3	3.1	6.7	2.4	0.0
Showbiz, cultural and recreation activities	1.0	1.0	0.8	1.0	1.2	0.0
Other services	2.0	1.8	5.1	1.7	3.9	0.0
Activities of private households	0.7	0.0	12.2	0.0	4.0	88.3

Source: Voinea, L. (coord.); Voineagu, V.; Pisică, S. ş.a. (2011), Economia informală și impactul ei asupra pieței muncii, proiect POS DRU 2007-2013 [http://www.bns.ro/fisiere.portal/economia\\_informala.pdf](http://www.bns.ro/fisiere.portal/economia_informala.pdf).

In the informal sector, among the non-agricultural activities, construction, trade and manufacturing are dominant, which together comprise almost 63% of the total category. Characteristics by sex and area of residence are similar to those of informal employment.

In the household sector, of course, activities in private households are dominant, but there are also people employed in information and communication activities (5.0%) and education (4.7%, probably private lessons).

Of 2.9 million persons comprised in informal employment, only 4.3% work as employees according to their professional status, among men (72.7%) the self-employed (with or without employees from non-agricultural and agricultural activities) prevail, and among women other categories as unpaid family workers (54.4%). The urban share of employees is ten times higher than the rural one (21.8% compared to only 2.1%).

Of total employees belonging to informal employment, 8 of 10 people are males. Men also dominate among the self-employed (68.0% versus 32.0% women). By contrast, two-thirds of unpaid family workers are females. Most employees live in urban areas and only 13.0% and 3.6% of the self-employed and other categories (where unpaid family workers are overwhelming).

#### Employed population working in the informal sector by professional status

- percentage -

	Informal employment IE	Informal sector IS	Household sector HS	Informal employment IE	Informal sector IS	Household sector HS
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Employees	4.3	51.1	0.5	100.0	100.0	100.0
Self-employed	59.9	37.7	58.6	100.0	100.0	100.0
Other categories	35.7	11.2	40.9	100.0	100.0	100.0
<hr/>						
<b>Male</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>56.0</b>	<b>61.9</b>	<b>52.1</b>
Employees	6.2	48.8	0.5	79.5	59.2	47.5
Self-employed	72.7	45.7	73.7	68.0	75.0	65.5
Other categories	21.1	5.5	25.9	33.0	30.4	33.0
<hr/>						
<b>Female</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>44.0</b>	<b>38.1</b>	<b>47.9</b>
Employees	2.0	54.8	0.6	20.5	40.8	52.5
Self-employed	43.6	24.8	42.2	32.0	25.0	34.5
Other categories	54.4	20.4	57.2	67.0	69.6	67.0
<hr/>						
<b>Urban</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>11.6</b>	<b>53.2</b>	<b>3.6</b>
Employees	21.8	71.2	9.0	58.1	74.1	65.4

	Informal employment IE	Informal sector IS	Household sector HS	Informal employment IE	Informal sector IS	Household sector HS
Self-employed	67.2	27.2	63.2	13.0	38.4	3.9
Other categories	11.0	1.6	27.8	3.6	7.7	2.5
Rural	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>88.4</b>	<b>46.8</b>	<b>96.4</b>
Employees	2.1	28.3	0.2	41.9	25.9	34.6
Self-employed	59.0	49.7	58.4	87.0	61.6	96.1
Other categories	39.0	22.1	41.4	96.4	92.3	97.5

Source: Voinea, L. (coord.); Voineagu, V.; Pisică, S. ş.a. (2011), Economia informală și impactul ei asupra pieței muncii, proiect POS DRU 2007-2013 [http://www.bns.ro/fisiere.portal/economia\\_informala.pdf](http://www.bns.ro/fisiere.portal/economia_informala.pdf).

The structure of employment in the informal sector by professional status shows that most are employees (51.1%), the percentage being higher among women (54.8% vs. 48.8% for men) and in urban area (71.2% compared with 28.3% in rural). Most men (45.7%) work as self-employed, but only one quarter of women (24.8%). Only 1 in 4 women is self-employed.

Another instrument used in the paper was a **logistic regression model of logit type** to analyze the relationship between the number of people working in the informal sector and in the households and their social characteristics. The model revealed the dependence of employment and influencing factors (gender, environment, age, nationality, education level, professional status, economic activity, occupation, etc.). The interpretation of the dependence of employment form and factors of influence was mainly based on a ratio of chances (odds ratio), i.e. the ratio of the probability that the person from a particular category of the variable  $x_i$  to work in the informal sector and *not to work in the informal sector*, i.e. *to work or not to work in the household sector*. The main findings concerning the chances to work in the informal sector are given below.

Although more than half of the total employed in the informal sector is males (51.1%), the chances of males working in the informal sector are 29.0% lower than for women.

The informal employment structure shows a concentration of more than three quarters (76.3%) in rural areas, villagers' risk to work in the informal sector is almost 9 times higher than that of urban citizens.

The risk of employment in conditions of informality is 40% lower for the Hungarians versus the Romanians. Instead, all compared with the Romanians, the risk is 7.5 times higher for the Roma citizens.

Most (over 72%) of the total employed population has a life partner, either married or cohabiting. Compared with unmarried people, informal employment is less risky by 16% for persons who have a life partner, respectively by 34% for those divorced or separated, but it is 2.6 times higher for widowers and widows.

Of total employment in Romania, only 12% have tertiary education, most of them (57%) accounting for a medium level of education, and the proportion of people with low education level is, unfortunately, significant (30%). The higher the education level, the lower the exposure to the risk of working informal. Thus, compared with those with secondary education, low skilled risk is nearly 12 times higher (as in 2011) to work in the informal sector, while it is 84% (73% in 2011) less for university graduates.

About 46% of total employment (regardless of the sector) are adults aged 35-54 years; approximately one quarter are over 55 years, while the young people (under 15-24 years) account for less than 9%. The extremes of the age categories of employment risk more to work in the informal sector. The older people (55-64 years) are exposed to risk 2.9 times more than those aged 35-54 years and those over 65 years; practically they can only work in the informal sector (over 99 times higher in 2011). The probability for young people (15-24 years) to work in the informal sector is more than double (2.3 times in 2011) compared with adults of 35-54 years.

Regardless of the type of sector - formal or informal - most of the employed people work as employees (60%). Compared to this category, basically, the risk of working in forms not covered by labour laws and therefore without any guarantee of social security is overwhelmingly large (tends to infinity) for categories of daily workers, black workers, unpaid apprentices, employed for a probation period, and for the category of family workers (unpaid). The extremely high probability of falling within the informal sector occurs with the self-employed in non-agricultural activities, and those who have occasional jobs for which the probability of working in the informal sector is about 3500 times higher than for employees.

In the case of the employees, the risk of informality increases to nearly 18 times higher for those working in very small businesses with less than 4 employees compared with employees who work in establishments with 10 and more employees. The model shows, not surprisingly, that people working in SMEs (with less than 10 employees) are exposed to greater risks to carry out work in conditions of informality (7.5 times higher than those in units with 10 and more employees).

Another mitigating factor of informal employment is the standard working program. The probability of employed persons working part time is over 50 times higher than in case of those who work full-time.

The risk of being absorbed in the informal sector is much lower for people who declared the main job to be permanent (about 75% of total employment). For employed persons who recognized the variability of the activity they perform, the probability of working in the informal sector for those working on a daily basis or when a job is found as well as for those performing seasonal work is about 58 times and 28 times higher than for those having a permanent job. Also those who provide casual work in certain periods of the year were at high risk of working in the informal sector (22.5 times in 2011).

Vulnerable in the labour market are those with low incomes who use additional work to complete their budget. Pensioners - in Romania as in most former socialist countries, the pension after a lifetime of work is ridiculously insufficient, especially in relation to consumer needs (the cost of housing, health care, etc.) – form such a category. The lower the pension level, the higher the chances for a pensioner to be engaged in informal sector are. A pensioner with a pension of less than 400 lei is 40 times more likely to work in the informal sector compared to a person who is not retired. For a pensioner with a pension of more than 400 lei, but less than 600 lei, the probability is 17 times higher, and for the one with the pension of 601-800 lei is 1.6 times higher.

Another vulnerable group consists of persons receiving social protection benefits. The chances for a person receiving a benefit lower than 100 lei to work in the informal sector are 2.5 times higher than the one who needs no such aid.

Whichever method is used, whether direct or indirect, **two main conclusions** can be formulated as regards the results of the estimations made for Romania: the first - employment in informal activities is large; the second - the phenomenon was aggravated by the recent financial crisis. Other **key findings** concern the measuring methods used. *Indirect methods* allow observation of the phenomenon of informality in time and using the same method offer qualitative comparability; its

major advantage is the low financial and human cost (compared to direct methods). The major disadvantage is the limited availability of information on the structure and characteristics of informal employment, estimates having a strong aggregated character. Of the two indirect methods dealt with in more detail in the paper – the **discrepancy method** is easier and faster to implement, given that the results of primary sources are available on a relatively long period of time and surveys are already implemented and carried out regularly by INS. The algorithm of **labour input method** requires a relatively longer process and has the disadvantage that the measurement unit is not the number of persons but a standard: the labour units (i.e. jobs converted into full-time equivalents). *Direct methods* - statistical surveys carried out in the field – have as main advantages the richness of information provided (allowing for detailed analysis by various demographic and socio-economic structures) and the possibility of measuring distinctly the different categories of employment in conditions of informality, including employment in the informal economy. The major disadvantage is the high financial and human cost and the relatively long time needed to complete data processing and obtain the estimates of interest.

The fifth chapter aims to treat the causes of the phenomenon and find its impact characteristics, in parallel, in the European Union and in Romania. Mainly, in EU countries, the major causes are: tax burden, red tape and cumbersome administrative burdens, poor legislation, inadequate in terms of employment. In particular, **in Romania, specific causes has to be added** as resulted from the transition from centrally planned to market economy, such as: economic reforms accompanied by the shut-down of large industrial conglomerates, land reversion, privatization (which led to massive layoffs), application of an inadequate, outdated Labour Code, which maintained a rigid labor market, inappropriate wages, etc. A very strong factor is the social behavior of the Romanians. Unfortunately, this factor is extremely strong and very difficult to overcome, the general mentality accepting unanimously the "legitimacy" of informal employment. In other words, it is considered as "normal" to perform unregistered work and, therefore, it is widespread practice.

In the EU, informal employment is found primarily in three major sectors of activity: the traditional sector (agriculture, constructions, trade, and domestic services), textile and clothing manufacturing, sector with innovative, modern activities based on the latest technology. In Romania, the prevalence of informal work is manifest in activities and services provided within households (cleaning, washing, cooking, gardening, small repairs, supervision and care of children or elderly or sick), agriculture, constructions, manufacturing, trade, etc. that is

excepting public administration and defense activities, informality is practically present in all economic activities but at different intensities.

When referring to impact, the most severe effects occur in: a) social protection and public finance, reduction of cash flows from taxes to the state budget caused by tax evasion, significantly affecting the availability of public finance and, consequently, their redistribution, including for protection and social security funds, b) individuals: the individual as a consumer, cannot benefit from protection guarantees, from quality of goods and services purchased on the informal market, and, on the other hand, as a customer in this market, contributing to maintaining or even developing the informal sector, c) competitiveness, as informal entrepreneurs operate at smaller production costs and therefore the prices of products and services are smaller.

The chapter also gives recommendations and proposes measures for economic policy and labour employment policy, for informal labour control and conversion into legal work. Depending on the type of informality, the appropriate strategies and policies need to prevent and/or punish the undeclared work. In Romania's case, as we emphasized in the paper, a mix of policies need to be addressed and adapted to the main segments of the population working in the informal labour market: **a)** the group of individuals who are in this situation against their will and work in the informal sector because they have no other choice, **b)** the category of those who choose informal employment in order to obtain higher income and profits through tax evasion and circumvention of labour laws.

One of the main ways to reduce and even eliminate informal work is **to reduce the tax burden, especially in sectors where informal work is highly active:** small and medium enterprises (SMEs), those performing economic activities identified as having significant share of informality.

Also in support of SMEs, it should make the bureaucracy flow easier and reduce the time of registration and setting up business on their own, accompanied by favorable conditions for obtaining credit.

Also, it should create better conditions for easy declaration to the financial agencies of the compulsory taxes, for the preparation and registration of work records (contracts).

Special attention should be paid to measures to improve labour laws, to take into account practical realities, to allow for a flexible labour market:

- to encourage the creation of part-time jobs;

- to cover the diversity of work agreements that are put in practice, but recognized, and the non-standard types of employment programs;
- to facilitate access to education and training (for example, for those who want to continue and deepen education, upgrade skills or expertise, etc.);
- to facilitate the reconciliation of family and professional life (for those who care for children who attend preschool or elementary school, elderly or sick relatives who need help, assistance and supervision, etc.).

It is necessary to **create structures** for carrying out "in the light" the services provided in households (home repair, fence repair, garden maintenance, etc., child care/supervision, care / assist the sick and / or old, doing household chores - cooking, cleaning, washing, etc.), along with a benefit in terms of tax reduction for households that use such services (see the Danish model and the French model presented in the paper).

In parallel with the political and economic actions, sustained and continuous efforts (not just occasional) to change the mentality of individuals - both workers and employers - of the public are generally needed. This requires organizing strong campaigns for information and awareness, carefully conceived to avoid the negative impact that could be induced in case of similarities with slogans practiced during ex-communist period. Information campaigns should be oriented to make the workers aware of the risks incurred by avoiding the declaration of work undertaken and income received, to blaming socially the informal work and both parties involved - employer and employee. One key objective of the campaign should be aimed at changing the mentality of individuals by removing deep-rooted mistrust of all Romanians in public institutions. Individuals' perceptions of the use of taxes have to be changed through substantial explanations and demonstrations.

One of the main conclusions on policies to combat undeclared work refers to the most recent changes in the national legislation of interest to this issue. More specifically, we refer to Labour Code amendments by Law no. 40/2011 aimed at reducing labour market rigidities, such as: encouraging fixed-term contracts, the introduction of temporary employment, establishment of individualized work programs with the consent or at the request of the employee concerned, reducing the period of prohibition for employing redundant workers through collective dismissal, the period of internship for graduates of higher education, etc. Other changes are aimed at sanctioning informality market players: employers' punishment (imprisonment of one to two years or criminal fine for receiving at work

more than five people without concluding an individual employment contract) and punishment of workers (who work "in black" with a fine from 500 to 1,000 lei).

**The last chapter** highlights the socio-economic effects of informal employment and presents the main conclusions, ideas and authors' considerations. Conclusions are structured according to the problem.

A set of conclusions refers to theoretical and methodological ones, while highlighting the authors' contributions in this area, such as those relating to the revision of the definition (ILO recommended) of informal employment, rewriting the algorithm of allocation of appropriate categories of persons involved in the informal work market (results of crossing types of production units with job according to professional status), development of indicators for measuring employment in the informal economy and define them, etc.

Another set of conclusions refers to the informal employment measurement methods. Indirect methods are significantly less expensive, but provide mainly aggregate information. Indirect methods provide more detailed information but require considerable human and financial efforts. In choosing the method of measurement the objective and cost-effectiveness should be taken into account. Therefore, we advanced and supported the proposal to implement a system of indirect methods conducted annually to monitor developments on longer periods of time and direct methods, with less frequent periodicity (about every 10 years) to provide information necessary for detailed analysis.

Irrespective of the method used to obtain estimates for Romania, the main conclusion is that employment in informal activities is large. The informal sector is present in all sectors of the national economy. The only exception is public administration and defense. Informal employment takes the highest amplitudes in the agricultural sector, domestic activities (performed in/for population households), constructions, manufacturing, transport, trade. In the following table we have summarized the information on the structure of employment by the two main categories - formal versus informal employment - and composition of informal employment by professional status for each gender - men and women - and area of residence - urban and rural. The last column of the table shows the proportion of employment in the informal economy, i.e. all those working in informal conditions or pertaining to the informal sector or informal employment.

### Formal vs. informal employment and composition of informal employment by professional status

		Total	Male	Female	Urban	Rural	
<b>Total employment</b> (thou persons)		<b>9239</b>	<b>5136</b>	<b>4103</b>	<b>5122</b>	<b>4117</b>	
- of which, in percentages -							
<b>FE</b>		68.6	68.3	68.8	93.4	37.6	
<b>IE</b>		31.4	31.7	31.2	6.6	62.4	
<b>Employee</b>	Total	1.4	2.0	0.6	1.4	1.3	
	of which:	Employees (incl. apprentices)	0.2	0.3	0.2	0.4	0.0
		Daily and seasonal workers	0.8	1.2	0.2	0.7	0.9
		on "black market"	0.3	0.5	0.2	0.3	0.3
<b>Employer</b>		0.1	0.1	0.0	0.1	0.0	
<b>OAW</b>	Total	18.7	22.9	13.6	4.3	36.8	
	of which:	non-agr. activ.	2.9	3.9	1.8	3.1	2.7
		agr. activ.	15.8	19.0	11.8	1.1	34.1
<b>CFW and MPCOO</b>		11.2	6.7	16.9	0.7	24.3	
<b>IEI</b>		37.0	37.0	36.9	14.4	65.0	

Where: FE – formal employment; IE – informal employment; IEI – employment in informal economy; LCP – self-employed worker; LFN - contributing family worker; MCOOP - membre of production co-operatives.

Source: Voinea, L. (coord.); Voineagu, V.; Pisică, S. s.a. (2011), Economia informală și impactul ei asupra pieței muncii, proiect POS DRU 2007-2013 [http://www.bns.ro/fisiere.portal/economia\\_informala.pdf](http://www.bns.ro/fisiere.portal/economia_informala.pdf) and own calculations.

The **paper ends in topics** focused on strategies and policies meant to enable the transition from the informal to the formal sector by highlighting the action directions that we have recommended for the particular case of Romania. Correct directions can be established only if the target and the beneficiaries are well known. In this respect we have tried to build the profile of the person employed in the informal area in Romania.

Compared to developed EU countries, in Romania there still is no immigration as a phenomenon and, therefore, informal employment does not comprise the category of immigrants. This profile can be summarized into the major demo-socio-economic characteristics, as follows:

- gender: both men and women are part of informal employment, in significant proportions; in other words, in the informal there is no gender discrimination, the phenomenon fully involving men and women;
- area of residence: informal activities are present in both areas of residence but each with its specificity; in the cities we find the group of non-agricultural

- activities and the wage payment in hand (or part of wage) is common; in rural area it takes almost exclusively the form of own-account activities in agriculture;
- *age*: informal employment involves mainly old and young;
  - *ethnic group*: as compared to the total population in relation to each ethnic group, much higher frequency is observed for Roma people, but, of course, the Romanian nationals are consistently present in the informal sector as well;
  - *education*: people with low education and qualification are frequently met in informal employment and present the greatest risk of undeclared work;
  - *economic activity*: apart from public administration and defense, informal employment is found in all other activities of the national economy, and discrepancies appear in the intensity, size and form of expression;
  - *professional status*: the informal sector does not avoid any of the categories defined according to professional status - employees, self-employed with (employers) and without employees, family workers (contributing).

The strategies and policies we refer to - the economic, employment and social protection fields - must be linked to and have to take into consideration the causes of undeclared work and types of participants on the informal labour market.

The social partners should be encouraged to be really active and effective in the fight against undeclared work.

Simplifying and reducing administrative costs and procedures, streamlining bureaucracy, especially for SMEs, could lead to beneficial results, in the sense that would stimulate business. These actions could have direct effect on reducing the frequency of cases of undeclared work.

Permanent campaigns to prevent undeclared work have an essential role in the long run and in the difficult process of changing the mentality of individuals and actors that are active on the informal labour market.

Measures oriented to controls, penalties and sanctions should not be neglected, but it should not form the main action strategy. Appropriate policies should act as **incentives to motivate** individuals to work legally.

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The authors consider that the present book is just a reason for a deeply exploring and partially adapting the present and future evolutions in the employment profile at national and local level. It could be considered as an argument for a new approach to the policy makers for better management of informality and for sound policy development on medium and long term for an efficient allocation of human resources in the business environment.