

Shadow Economy: Definitions, terms & theoretical considerations

Paraskevi Koufopoulou¹, Colin C. Williams², Athanassios Vozikis³
and Kyriakos Souliotis⁴

Abstract

The last decades, many scholars highlighted the shadow economic activities, regarding their disadvantages (unemployment, impoverishment etc) and advantages (intensifies competition, flexibility in employment etc). During the financial crisis, informal activities rose in noisy way, which triggered the development of special definitions to describe a wide range of actions which in turn have gradually configured and updated the content of the shadow economy term. In this paper we present the theoretical background of the shadow economy term, by selecting the main worldwide literature published from 1973 to 2018. Many studies have tried to definite the shadow economy term but none has ever presented explicitly the adjectives and nouns that are related to shadow economy. Taking into account this analysis it would be useful for the scholars to mention extensively the theoretical background about shadow economy, the critiques towards the school of thoughts, in order to choose the appropriate term in each case and to design and implement the indicative method to estimate the size of the shadow economy.

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1 Introduction

The landmark of the shadow economic activities, was during the World War two, and occurred especially in the United States (Tanzi, 12/3/2002). Sociologists and anthropologists were the only who seemed to consider the existences of such activities

¹ Deputy CEO, KAT General Hospital of Attica, PhD (c), Department of Economics, Laboratory of Health Economics & Management, University of Piraeus, Piraeus, Athens, Greece

Corresponding Author: Paraskevi Koufopoulou, 6, Veller Street, P.O. Box 112 55, Athens, Greece.

² Professor of Public Policy, School of Management, University of Sheffield, Sheffield, U.K.

³ Associate Professor, Department of Economics, Director at Laboratory of Health Economics & Management, University of Piraeus, Piraeus, Greece

⁴ Associate Professor, Department of Social & Educational Policy, University of Peloponnese, Greece

(Gerxhani, 2002). A few years later, in the 1950s, four studies conducted by Boeke (1953), Lewis (1954)⁵, Kaldor (1956) and Cagan (1958) respectively, marked the early beginnings of research into informal economic activities (Georgiou, 2007), as well as Geertz (1963). All of these, paved the way of dualistic approaches which, before being disputed, offered an extraordinary space for expansion to the new theories of economic development (Charmes, 2012a, 2012b).

An accurate academic meaning was not given to this neglected phenomenon until it was analyzed by the Social Anthropologist Keith Hart (1971, 1973), who conducted a study in a Third World context (Losby et. al., 2002) about Ghana. He was the first to introduce the expression of *informal sector* into the academic literature, as a fragment of the urban labor force outside of the formal labor market (Sabra, 2015). Comprehensively, he covered self – employment in developing countries (Hieu et. al., 2014). Hart, actually, coined the term informal economy, and he noted that the two economies (formal and informal) has a number of bidirectional flows and interactions as individuals moved between sectors, but that the proximity of the low – productivity subsistence sector did not fuel investment and productivity in the formal sector. Instead, he found an informal sector that helped many buffer the ups and downs of employment in the formal economy (Godfrey, 2011).

In an attempt to address the issues of equity, economic opportunity and social development, the term informal economy came into widespread use as a mean of describing a dualistic economic structure found in developing countries. Such an economy involves formal and informal economy, which economic transactions occur outside traditional channels and deliver explicit economic and social benefits (Losby et. al., 2002).

Undoubtedly, it is commonly acceptable, that the growing interest in the phenomenon of the shadow economy has multiple components. In some cases it is defined in terms of the activities of the enterprises while in others in terms of the kind of work done by individuals as employees or as self – employed people. Between these two aspects great heterogeneity in terms of the informality exists. Especially, there is the intra – firm margin where firms may be partly formal and partly informal, the inter – sectoral margin between formal and informal firms, and the inter – sector margin of formal and informal workers operating through the labour market (Shonchoy, Junankar, 2014).

In this paper we present the theoretical background of the shadow economy concept, for four decades. The first part of the paper focuses on its origin over the years, the second part verge our methodological approach through the study of the main literature. In the third part we analyse the meaning of the main definitions and relevant terms which enrich its content. Furthermore, in the fourth part we quote a discussion regarding the main points of our paper. Finally, the last section suggests guidelines for further research.

2 Theories about shadow economy

As there is no a common acceptable definition of the undeclared economic activities, it is very important in order to understand the use of a specific term ad doc, to study the expressed theories, which explain extensively the range of the shadow economic activity. So, at this point, it is very important to make an extent reference to the six

⁵ W. Arthur Lewis's theoretical model (see Ray, 1998) of economic development (1954/1958), in order to explain economic growth in the third world (Godfrey, 2011). He insisted that there was an unlimited supply of labour in most developing countries and that, as the modern industrial sector in these countries grew, this vast pool of surplus labour would be absorbed (see Chen et. al., 2002).

major theories that constitute the content of the shadow economy term and the critiques that have been made about them: the classical/Marxian approach, the dualistic approach, the structuralist, the legalist (Maiti, Sen (2010), Khadiullina et. al. (2013), Chen (2012), Onwe (2013)), the illegalist/voluntarist theory (I.L.O., 2012) and the management theory (Barnard, 1938).

Firstly, the **classical/Marxian approach** argues that in the center of the informal economy is the “surplus” labour force, as a product of the process by which the capitalist economy secures its resources minus the people who traditionally survived on it (Sanyal, Bhattacharya, 2009), a process which Sanyal (2007) refers to as ‘exclusion’. In other words, the formal economy is dependent upon the informal economy through an unequal exchange of labour (VanderBerg, 2014).

The informal sector, according to the **dualistic/modernization theory**, is comprised of marginal activities – distinct from and not related to the formal sector – that provide income for the poor and a safety net in times of crisis. This theory expresses the function of the Dual Labor Market (Doeringer, Piore, 1971, Saint – Paul, 1997) which divides the labor market into four categories: primary, secondary, informal, illegal. The primary sector is regular, wage jobs that are taxed and regulated. The secondary sector is composed of jobs that have less security than primary work and are not as well regulated, e.g. lower wage jobs in the service sector. Informal work includes people who operate their own small business in a cash – only or unregulated arrangement or people who work for employers but off – the – books. The fourth category is illegal work and this includes all criminal activity that is revenue generating. One problem with this typology is that it assumes discrete categories based on class, race, or gender. Other research has found that many people who have easy access to the primary sector make the choice to engage in the informal economy, either as their primary source of income or, as a means to generate supplemental income (Losby et. al., 2002). In essence, dualistic school failed (Routh, 2011) to note the inherent linkages between ‘formality’ and ‘informality’. For them, more often than not, the ‘informal sector’ is an exclusive characteristic of the rural economy. The problem is that they are unable to account for the linkages between the sectors and the consistent growth of the informal sector.

Additionally, according to the **structuralist/globalization) theory**, the informal sector should be studied using subordinated economic units (micro firms), workers that serve to reduce input and labor costs and, thereby, increase, the competitiveness of the large capitalist firms. In contrast to the other schools, the structuralist perspective imprints the informal sector as a feature of a capitalistic development. One of the defining characters of the informal economy, is its inherent connection to the formal economy (Routh, 2011). This theory is based on Wallerstein’s (1974/2007) world systems model, and pictures the duality existing between a formal core – of a national economy or among nations – of high wage, high productivity economic activity, and an informal *periphery* – again within or among nations – of low wage, low productivity economic activity (Godfrey, 2011). Maloney (1999) argues that workers in, the so – called ‘informal sector’, in small firms or self – employment, engaged in labor – intensive activities, without job security benefits’. The rich formal sector extracts value from the poor informal sector in ways that lock in the persistence of an inequitable world system. This exploitative relationship between, metaphorically, labor and capital explains the persistence of the informal economy (Godfrey, 2011).

Considering, the **neoliberal/legalist theory**, the informal sector is comprised of micro – entrepreneurs who choose to operate informally in order to avoid the costs, time and effort of formal registration. Significant element of this theory is the delay of growth

due to lower level of productivity, limited investments, inadequate and inefficient tax system, low level of implementation of technological progress and complications in macroeconomic policy. As De Soto indicates, micro – entrepreneurs will continue to produce informally as long as the governmental procedures are cumbersome and costly (Aldersdale et. al., 2006). As Godfrey (2011) argues, legalists differ from dualists in that dualists see informality in the deep structure of economic roots (i.e. the marginal value of supplies labor), while legalists post informality arising primarily from institutional preferences and arrangements. Also, legalists differ from structuralists, as the latter see informality as an imposed constraint with the former model participation in the informal economy as a free choice. The way out of the informal economy, then, lies in creating institutions and incentives and removing relevant barriers, that encourage (discourage) formality.

The *poststructuralist/illegalist/voluntarist/utilitarian theory*, is closely linked to neoliberalism and neo - classical economics, according to which informality, is a choice for the entrepreneurs to avoid taxes and labour market regulation. They remain skeptical of the role that the UIE can play a broader development. First, the minimal benefits of informality might appear desirable only for the segment of the population with the lowest level of skills and who thus may have low expectations of income and social benefits from formal work (Maloney, 2004, Chen, 2012). In addition, because of their combination of low – skilled workers and undercapitalisation, most small informal enterprises fail victim to low productivity and high rates of failure, thus perpetuating the poverty cycle. Second, the popularity of informality is itself a symptom of underdevelopment. The inefficiency of the public sector in developing countries makes public services expensive to run and of low quality, and given the lack of law enforcement, some workers choose to move into informality. In doing so, they can choose to join only some social protection programmes, for example a specific health or pension scheme, reducing their total payments (Maloney, 2004, Chen, 2012).

Finally, in *the management theory*, scholars build, not surprisingly, on the work of both sociologists and economists; thus management scholars tend to look at both the dualistic nature of informal economic activities and their fundamental interconnectedness (Barnard (1938). Godfrey (2011)). Hart (2007) and London, Hart (2004) take the informal economy as a starting point in considering the role of strategy for capitalism at the cross roads of social sustainability.

Obviously, the development (according to the schools of thought) of the meaning of the informal economic activities reflects the structure of the global economy, from the survival to the capitalist economy, with some exceptions. All these approaches (VanderBerg, 2014) oversimplify the informal economy as either negative or positive. On the negative side, the informal economy is viewed as a site of exploitation and oppression. On the positive side, the informal economy is said to be a site of freedom and agency.

3 Methodology

3.1. Research Protocol.

In the present paper a comprehensive literature review was conducted in order to retrieve all publications which emphasize on the theoretical background of the unregistered economic activities, and to present the terms used that determine their components ad hoc. In order to capture the key conceptual terms of reported determinations in the literature, we designed a research protocol. We have used several databases such as Google Scholar, EBSCO, IDEAS, NBER, IOS Press, SCOPUS and Elsevier, as well as books and scientific journals. International published.

3.2. Inclusion and exclusion criteria.

The studies included in the analysis focused on the origin and the theoretical background of the shadow economy, and attempted to estimate/measure this phenomenon worldwide. After an extensive search in the aforementioned databases, we found a total of 2,612 references, including scientific articles, and reports⁶.

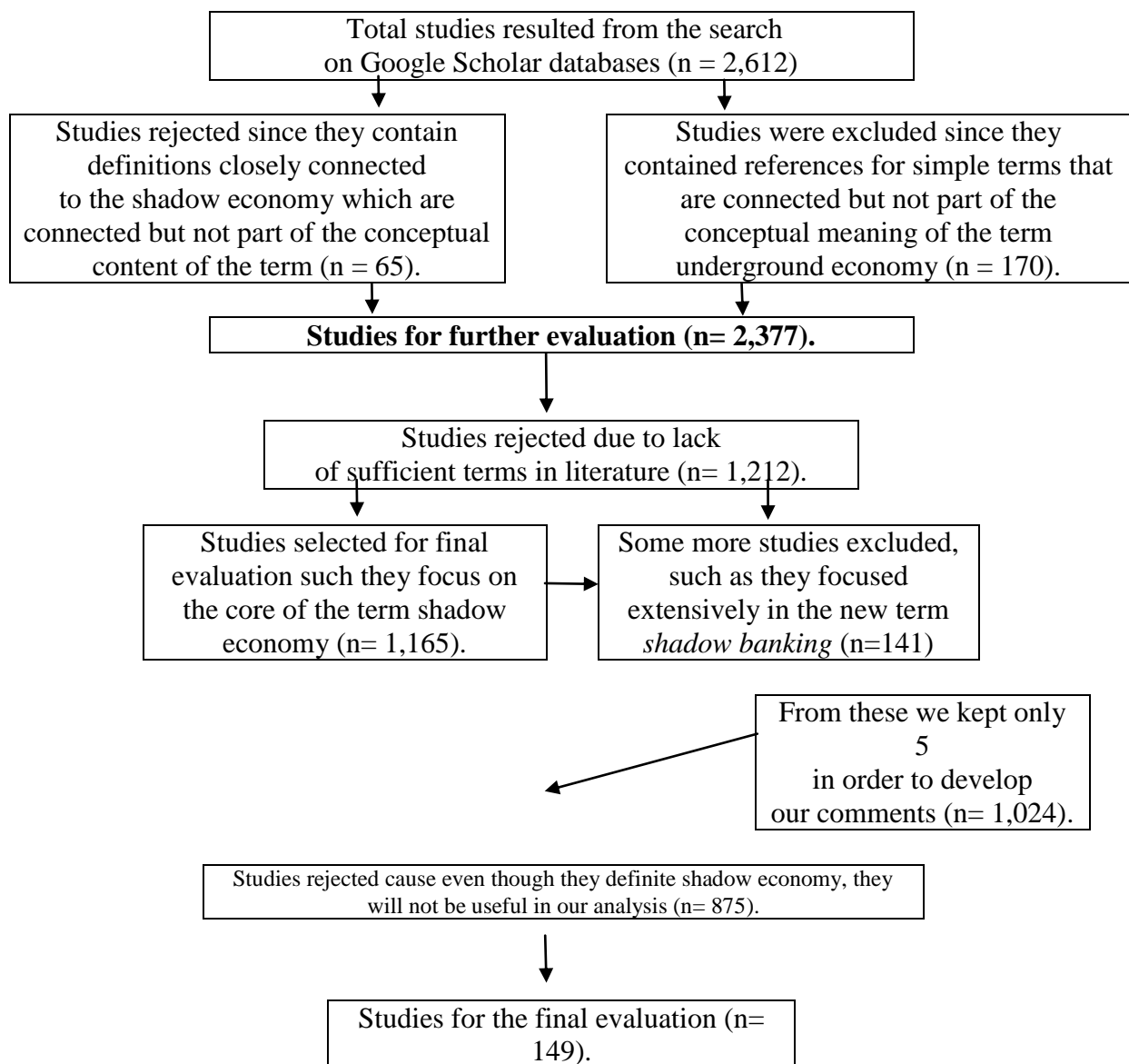


Figure 1: Methodology flowchart focused on final choice on shadow economy definition literature

⁶ We choose the specific period as since then shadow/informal economy literature interest spreads rapidly worldwide.

From the first screening, 65 studies were rejected as they discussed 23 conditions⁷ widely linked to undeclared economic activities (but not with the narrow scope of the term) and addressed specific cases. Moreover, 170 references were excluded because they used 117 terms⁸ with minimum/zero reference in scientific texts. From the remaining publications 2,612 were further excluded since they described conditions extensively with little reference to the literature. Furthermore, 141 references were rejected as highly develop new term shadow banking, and we decide to keep only 5 of them for our analysis. Finally, 875 were excluded as they provided very specific interpretation of the shadow economy. This yielded a total of 149 references (0,057% of the initial references) that were included in our analysis.

4 Results and definitions

4.1. Main terms

Many scholars around the world have used various terms in order to describe, analyze the estimate the phenomenon of the shadow economy. One of the most reliable studies was conducted by Williams and Schneider (2016), who argue that there are 44 adjectives⁹ and 10 nouns¹⁰ to describe undeclared economic activities, covering any possible activity from an individual to an enterprise. By analyzing these terms, what came into focus was that the main idea refers to a transaction (financial or non – financial) that is missing from the measures of the official authorities. Shadow economy's wide range of activities is an indisputable fact, which explains the lack of a universally accepted definition. Additionally, taking into account Williams and Schneider's (2016) remarks and formalities we have found different results for the specific terms (Table 1).

⁷Terms with connection but not with the core of shadow economy meaning: barter economy, on line black market, bubble economy, communal economy, domestic economy, exhaustiveness, embattled economy, false economy, free economy, grassroot economy, hacker economy, in kind circuit economy, insurrection economy, residual economy, service economy, skimming economy, slaving economy, slum economy, sluggish economy, social economy, tax – exempt economy, verbal economy, wrangling economy.

⁸Terms with few references: against, alegal, alternate, alternative, annex, anormal, another, anti – economy, atypical, autonomous, back door, bazaar, backyard, blanked out, cash, colored, community, contrary, coping, covert, counter, creeping, criminal, crude, curb, dangerous, dark, disguised, dissimulated, diverse, diversified, economy of the poor, elusive, extralegal, firm – centered, footloose, forbidden, fourth, fragmented, fraudulent, ghetto, ghost, gray – zone, helicopter money, illegible, illegitimate, infinite, lower circuit, marginal, murky, nether, non – accounted, non – documentary, non – institutionalized, non – market, non – monetary, non – official, non – standard, non – structured, not taxes share of the whole economy, over the counter, off – the books, ordinary, other, patchwork, peasant, petty, phantom, quasi – formal, queering, reproductive, secret, sector of micro – enterprises, shade, shortage, shuttle, siege, silent, sinker, speed money, stop – to – go, shade, shadow circuits, stealth, struggling, submarine, subsistence, suffering, system D, tax – distorted, third, transitional, trauma, unauthorized, unbalanced, uncertain, undergirding, underlying, under – reporting, unincorporated, unlocated, unorganized, unexposed, unremunerated, untapped, untaxed, under – the – table, underwater, underworld, unmeasured, unplanned, unreal, unsanctioned, untied, veiled, wangling, world underneath.

⁹ Bazaar, black, cash – in – hand, clandestine, concealed, diverse, dual everyday, ghetto, grey, hidden, illegal, illegitimate, illicit, informal, invisible, irregular, marginal, moonlight, non – observed, non – official, occult, off – the – books, other, parallel, peripheral, precarious, second, shadow submerged, subterranean, System D, twilight, undeclared, underground, under – the – table, unexposed, unlawful, unobserved, unofficial, unorganized, unrecorded, unreported, unregulated, untaxed.

¹⁰ Activity, economic activity, economy, employment, endeavor, enterprise, entrepreneurship, sector, sphere, work.

Table 1: Revised adjectives and nouns used describe shadow economy

Adjectives			
Bazaar	Black	Cash – in – hand	Clandestine
Dual	Envelope	Falsely – declared	Grey
Hard – to tax	Hidden ¹¹	Illegal ¹²	Illicit
Informal	Invisible	Irregular	Moonlight
Non – Observed	Occult	Off – the – books	Parallel
Peripheral	Precarious	Second	Secret
Shadow	Submerged	Subterranean	Twilight
Undeclared	Underground	Unlawful	Unlicensed
Unobserved	Unofficial	Unorganized	Under – reporting
Under – taxed	Unrecorded	Unregulated	Unreported
Nouns			
Activity	Banking	Cash	Economic activity
Economy	Employment	Enterprise	Entrepreneurship
Exchange	Firm	Income	Labour
Market	Salaries	Sphere	Sector
Trade	Wage	Work	

Source: Own remarks

In contrast to other studies (Williams, Schneider, 2016, Williams, 2006) which reported - 44 adjectives, from our review 40¹³ adjectives were identified (88,63%), which shows that 19 terms were not detected in the literature. Two additional adjectives, including envelope and hard – to – tax, were identified (Table 1). Furthermore, even though the initial nouns related to shadow economy were 10, according to our research we came up to 19, eight of which were also identified by Williams's and Schneider (2016) and 3 which were retrieved from literature (banking, labour, wage).

O.E.C.D. (2002) argues that non – observed economy refers to those economic activities – informal, illegal and other activities omitted due to data deficiencies – which should be included in GDP but which, for one reason or another, are not covered in the statistical surveys or administrative records from which the national accounts are constructed. The term NOE, introduced by the United Nations System of National Accounts (SNA) in 1993 and widely used by the OECD (2002) and other international institutions, is used to include: illegal, underground, informal economies, and the production of goods or services to be consumed by those who produce them (Afonso, 2012). These activities may be initially excluded from estimates of GDP because they are carried out in a clandestine fashion in order to avoid paying taxes or to avoid the costs associated with legislation on safe working conditions or protection of consumers' rights. The non - observed economy covers five major areas:

¹¹ According to Marinov (2008), hidden economy are the combination of three directions: informal, grey and black economy.

¹² Illegal (along with informal, unrecorded and unreported) economy are the four activities of the underground economy. Furthermore, Viksne, Mazure (2011) argued black economy, grey economy and parallel economy as types of underground economy.

¹³ The adjectives that we haven't found are: concealed, diverse, everyday, ghetto, illegitimate, marginal, non – official, other, System D, under – the – table, unexposed, untaxed.

1. Underground production: activities that are productive and legal but are deliberately concealed from public authorities to avoid payment of taxes or compliance with regulations.
2. Illegal production: productive activities that generate goods and services forbidden by law or that are unlawful when carried out by unauthorised procedures.
3. Informal sector production: productive activities conducted by unincorporated enterprises in the household sector or other units that are unregistered and/or less than a specified size in terms of employment, and that have some market production.
4. Production of households for own-final use: productive activities that result in goods or services consumed or capitalised by the households that produced them.
5. Statistical underground: defined as all productive activities that should be accounted for in basic data collection programmes but are missed due to deficiencies in the statistical system.

Besides, of the non – observed economy, one of the adjectives (i.e. envelope) and three of the new coming nouns describing shadow economy (banking, labour, wage) were cumulatively referred in literature the last ten years. An indicative example (closely related to the financial crisis) is the term *shadow banking*, which although is not referred by Williams and Schneider (2016), is extensively used the last eleven years, and it was firstly mentioned by Peter McCulley in 2007.

Additionally, in order to have credible results for the use of the *shadow economy* term we tried to examine the search trends for 5 main terms focused on unregistered economic activities, using Google Trends for the period between 1st January 2004 and 20th November 2018. As it is indicated in Figure 2 the scholars' interest is rapidly increasing. In the top of the search is *black economy*, followed by *underground economy*, *informal economy*, *non – observed economy* and *shadow economy*. For year January – December 2015 the term, black economy (58.18) was sufficiently discussed. Furthermore, underground economy came to the top of the search interest from January to December 2004 (36.83). At the same time, the term informal economy rise up rapidly (18.91). Furthermore, the interest for non – observed economy rise up from January to November 2018 (19.27). Finally, even though the *shadow economy* term is used over 30 years in literature, it does not appear in the top of the search results, except of the year 2005 (9). Nevertheless, a stable presence trend of the term has been observed since the beginning of 2014.

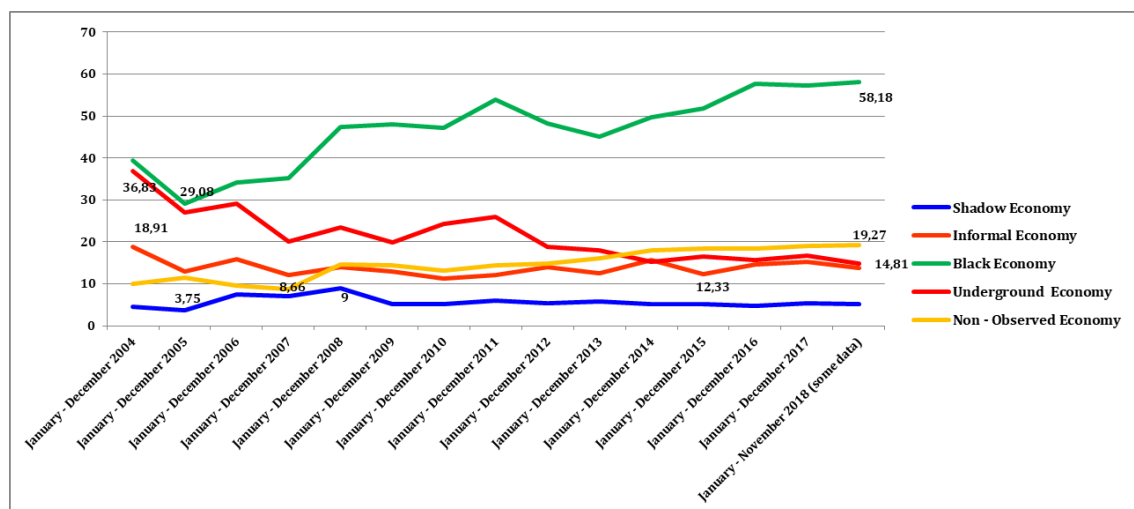


Figure 2: Average of searching trends for the main 5 shadow economy terms worldwide according to Google Trends, 1st January 2004 – 20th November 2018

Source: Own calculations, Google Trends (Access: 20th November 2018).

Attempting an initial assessment of the terms used to study the phenomenon of the shadow economy, we feel like (after all) and other scholars that there is a commonly accepted term reflecting thereby in which study and analyze scholars whenever and where appropriate the scope and extent of the phenomenon.

4.2. Components

The presence of many definitions relevant to *shadow economy*, reflects the complexity of the term, not only because no one who takes part (active or passive bribery) would not admit his action, but because it comprises all currently unregistered economic activities that would contribute to the officially calculated Gross National Product if these activities were recorded (Schneider, Williams, 2013).

Smith (1994) argues, that *shadow economy* is a 'market – based production of goods and services, whether legal or illegal, that escapes detection in the official estimates of GDP (Smith, 1994). Furthermore, according to Kuznetsova, Kuznetsova (2015), shadow economy 'describes unregistered economic activity only and in no way covers economic activity that is illegal, i.e. activity that cannot be registered even in theory (illegal sale of weapons, trade in humans etc). Additionally, Ottervik (2013) describes *shadow economy* as 'the aggregate of the legal economic activities that should be included in the National Income Accounts, but in the absence of evasive strategies, these market economies are connected with the evasion of taxes and social security contributions, as well as the avoidance of regulations (official working times, safety regulations and social security fraud) (see Table 2).

Table 2: “Revised content of shadow economy term”

Type of activity	Monetary transactions					Non – monetary transactions	
Illegal activities	Trade with stolen goods; drug dealing and manufacturing; prostitution; gambling; smuggling; fraud; corruption; money laundering; organized crime; cybercrime; shadow banking; refugees; immigration, education, health etc.					Barter of drugs; stolen goods, smuggling etc. Produce or growing drugs for own use. Theft for own use.	
	Tax evasion			Tax Avoidance		Tax evasion	Tax avoidance
	General	Capital flight	Offshore Financial Centers	General	Tax Flight		
Legal activities	Unreported income from self – employment; Wages, salaries and assets from unreported work related to	Unrecorded capital flows	Jurisdictions with high level of non – resident activity	Employee discounts, fringe benefits	Companies in tax oases	Barter illegal services and goods	All do – it – yourself work and neighbor help.

	legal services and goods						
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Source: Own remarks (based on Schneider, Buehn, 2018).

In simple terms shadow economy refers to an unreported income from the production of legal goods and services and productive economic activities that would generally be taxable if they were reported to the tax authorities (Schneider, Williams, 2013). In addition, other terms and incidents such as i.e. money laundering, fraud, corruption, tax evasion¹⁴, tax avoidance¹⁵.are remarkable and in many cases are crucial causes of the evolution of the shadow economy: However, considering the importance for the shadow economy to have an extensive content, due to financial crisis and the rise up of new types of crime related to hidden (economic) activities, we recommend a revised form of the term. We argue that this could include (based on Schneider) more extensive and criminal forms of financial transactions like organized crime, cybercrime, shadow banking, refugees and immigrants (Table 2). Additionally, we indicate that in the legal aspect of *shadow economy* an active part has taken by three new types of monetary transactions including capital flight, offshore financial centers and tax flight.

4.3. Definition and content

As Andrews argues, shadow (informal) economy might include three main actors: informal workers employed by firms, informal self – employed and informal production by firms (Andrews, 2011). The most commonly used definition focused on shadow economy (which originally formulated by O.E.C.D.) that includes all market – based legal production of goods and services that are deliberately concealed from public authorities for the following reasons¹⁶:

1. To avoid payment of taxes, e.g. income taxes or value added taxes.
2. To avoid payment of social security contributions.
3. To avoid certain legal labor market standards, such as minimum wages, maximum working hours, safety standards, etc., and\
4. To avoid complying with certain administrative procedures, such as completing statistical questionnaires or other administrative forms.

The above definition we argue that is the best of its kind such it covers a wide range of economic activities. Similarly to the study by Schneider and Williams (2013), we excluded burglary, robbery, drug dealing along with informal household economy (household services and production).

5 Discussion

The shadow economic activities, have a unique meaning in Economic Science, since not only they are declared by the public authorities in order to avoid taxes and social security contributions etc. but also due to the fact that they reflect newborn financial transactions with a growing tense. Therefore, the estimation of the real size of the shadow economy, is achieved through the use of peripheral terms such fraud, money

¹⁴ It refers (Seeley, 2015) as illegal activity, where registered individuals or businesses deliberately omit, conceal or misrepresent information to they can reduce their tax liabilities.

¹⁵ Tax avoidance, consists (Fisher, 2014) practices see to accomplish one of three things: payment of '*less tax than might be required interpretation of a country's law*', payment of a tax on '*payments declared in a country other than where really earned*', or tax payment that occurs '*somewhat later than the profits were earned*'.

¹⁶ The main causes determining the shadow economy are the following (Schneider, Buehn, 2018): tax and social contribution burdens, quality of institutions and corruption, regulations, public sector services, tax morale, deterrence, development of the official economy, self – employment, unemployment and the size of the agricultural sector.

laundering, shadow banking, offshore financial centers, tax havens (highly increased the last decade).

According to the World Bank (2009), *fraud* is any act or omission, including a misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation. Money laundering, refers to transferring process of illegally (I.M.F., 2001) obtained money or investments through an outside party to conceal the true source.

Furthermore, *shadow banking* can broadly be described as a “credit intermediation involving entities and activities outside the regular banking system” (F.S.B., 2014), European Commission (2012)). If we try to extend the function of shadow banking we will come in front of a new illicit financial flow closely related to shadow economy (e.g. Panama Papers scandal) with *offshore financial centers (OFCs)* and *tax havens*. The OFCs, are broadly defined (Palan, Nesvetailova, 2013) markets in which financial operators are permitted to raise funds from non - residents and invest or lend the money to other non - residents free from most regulations and taxes. Most commonly, the designation ‘offshore’ financial market is used to describe the wholesale international financial market, previously known as the Eurodollar market. Outside of the state of law are *tax havens* around the world. It is about places or countries (not all being sovereign states) which have sufficient autonomy to write their own tax, finance and other laws and regulations. They all take advantage of this autonomy to create legislation designed to assist non-resident persons or corporations to avoid the regulatory obligations imposed on them in the places where the non-resident people undertake the substance of their economic transactions (Otusanya, 2011).

Based on previous research, initially we thought that the worldwide literature would present an integrated significance of the term of undeclared economic activities, namely *shadow economy*. In this paper we confirm this assumption as we found that the majority of the credible literature focused in the economic activities that are not visible, starting from the definition of the term (regarding the ad hoc study area), the unit of analysis (individuals, households, enterprises), and new terms of research field. The most significant terms included *shadow banking* (European Commission (2012), F.S.B. (2014), Moe (2012))¹⁷, *tax havens* (European Parliament (2012), O.E.C.D. (1998), Sweeney (2015)), *off – shore financial centers* (I.M.F. (2000), F.S.F. (2000), Palan, Nesvetailova (2013)), *money laundering* (F.A.T.F. (2008), Natarajan (1998)) and *fraud* (The World Bank Group, 2009).

We argue that shadow economy is a *multifunctional term* that reflects the components of the modern society, especially during periods of financial crisis. Some of the researchers, quote not only the advantages (safety valve for public dissatisfaction and social tensions, a way to promote political patronage, lower prices for goods and services, low cost of labor, cover basic needs of a family etc) but also the disadvantages¹⁸ (increase corruption and political lobbying, losses in state revenues – e.g. Greece¹⁹, further increase of tax rates, low productivity and low income for the workers, no taxes and social security benefits for the participants etc). A landmark of the previous is that (according to Professor F. Schneider) about two – thirds of shadow -

¹⁷ The term of *shadow banking* was first mentioned by Peter McCulley, in his speech to the Federal Reserve Committee in Jackson Hole. He observed that the financial crisis could be attributed to the growth of unregulated shadow banks that (unlike regulated banks), fund themselves with uninsured short – term funding, which may or may not be backstopped by liquidity lines from real banks (McCulley, 2009).

¹⁸ More precise and extensive reference about the advantages and disadvantages of the shadow economy is developed with accuracy by Gërxhani (2002).

¹⁹ According to estimations of Friedrich Schneider (2015) the size of shadow economy in Greece will be for 2003 – 2015, at 25.19% (20.17% in E.U. – 28/Own calculation).

economy income is spent in the official economy, which boosts national economic growth and amasses value – added tax, which makes up for at least part of the lost revenues (AT Kearney, Schneider, 2008).

6 Conclusion

In this paper we focused on the theoretical background of the terms and definitions of the shadow economy, from its origin until the recent year using the most cited terms across literature. Taking into consideration that the last 47 years, shadow economy is a rapidly growing phenomenon (with different meaning per case), we expected the literature to unveil the tense in global economy. Our findings confirm this expectation, which consists innovation.

Summarizing, the conceptual clarification of shadow economy is hard enough (let alone to estimate the size, per case). This explains why we found several definitions in the literature that covered an entire range of activities (individuals, households, enterprises etc). In countries, like Greece the rise of budget deficits during the last three decades reflects in addition to outright corruption, the increasing inability of the public sector to deliver on the public goods and services that the higher - taxed citizens have every right to expect in return. This has created a further legitimization of tax evasion (Moutos, Tsitsikas, 2010).

Additionally, the correlation of shadow economy, corruption, tax evasion, tax avoidance, fraud etc. has a strong presence and relevance. Comprehensively, it could be a basis for a further study of informal economic transactions in all sectors of the economy (health, public services, tax revenue etc) and a path for tackling and combat such illegal activities. Since, the phenomenon of the shadow economy has been well defined, further research should examine the utilization of appropriate tools in order to estimate its size.

Appendix

Table 1: A taxonomy of types of underground economic activities.

Type of activity	Monetary transactions		Non – monetary transactions	
Illegal activities	Trade with stolen goods; drug dealing and manufacturing; prostitution; gambling; smuggling; fraud; corruption; money laundering; etc.		Barter of drugs; stolen goods, smuggling etc. Produce or growing drugs for own use. Theft for own use.	
	Tax evasion	Tax avoidance	Tax evasion	Tax avoidance
Legal activities	Unreported income from self – employment; Wages, salaries and assets from unreported work related to legal services and goods	Employee discounts, fringe benefits	Barter services and illegal goods	All do – it – yourself work and neighbor help.

Source: Schneider, Buehn (2018)

Table 2: Definitions and content of main terms of shadow economy terminology

Term	Definition	References
Hidden Economy	<p>The hidden economy usually takes three directions:</p> <ol style="list-style-type: none"> 1. Informal economy: informal legitimate activity, which is being observed by statistics; the legislative regulations are not met; the transactions are monetary or barter; completely unregistered; and unaccounted before the fiscal bodies. These are enterprises working for meeting their own needs and with informal employment (domestic farms, barter services). 2. Gray economy: unofficial legitimate activity, which is being observed by statistics; the legislative regulations are not met; the transactions are monetary or barter; completely unregistered; and unaccounted before the fiscal bodies. We can observe underestimation and/or not measuring the results of the economic activity with two basic indicators: not registering the employment and hiding income with the purpose of avoiding the payment of taxes for insurance or the performance of other defined by the law obligations, that is, illegal activity of legal economic enterprises. 3. Black economy: illegitimate (illegal) activity, which is being observed by statistics; the legislative regulations are not met; the transactions are monetary or barter; completely unregistered; and unaccounted before the fiscal bodies. This is the production and distribution of goods, not allowed by the law, or illegal activity directed against the person or the property. Very often it functions as systematically organized activity (organized crime). 	Marinov (2008)
Informal Economy	The new definition broadens the focus from just looking at the characteristics of unregulated enterprises (e.g. income, sector analysis) to include unregulated, employment relationships (e.g. home workers, day laborers). While some may think this definition too broad, it does increase the breadth of activity normally associated with the informal economy and emphasizes the multi-lateral and complex nature of the linkages between informal and formal economies.	Aldersdale et. al. (2006)
	Typically refers to economic activities and transactions that are sufficiently hidden so that they are unmeasured or untaxed, and it is presumed that economic agents are at least passively aware that bringing these activities to the attention of authorities would imply tax or other legal consequences	Andrews et. al. (2011).
	Informal economy refers to ‘all remunerative work – both self – employment and wage employment – that is not recognized, regulated or protected by existing legal or regulatory frameworks and non – remunerative work undertaken in an income – producing enterprise	Bacchetta et. al. (2009)
	The term “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.	Dell’ Anno (2010).
	For the needs of quantitative estimation, informal economy represents all existing economic activities which are not properly registered by the government due to different reasons from simple mistakes to tax evasion or other prohibited activities. Among factors which force economic activities to informal sector are taxes, government regulation, corruption, etc.	Vorobyev (2015).
Shadow Economy	Shadow economy is the part of an economy which is not declared for tax and that typically involves exchange of goods and services which are paid for in cash.	Arezzo (2014)
	The shadow, informal, or underground economy consists of economic activities that are frequently in violation of the legal requirements and regulations of the more visible formal, or official, sector of the economy.	Bose, Echazu (2007)
	<p>We will measure the shadow economy insofar as it includes all market-based production of legal goods and services that are deliberately concealed from public authorities for the following reasons:</p> <ul style="list-style-type: none"> • to avoid payment of income, value added or other taxes; • to avoid payment of social security contributions; • to avoid having to meet certain legal labour market standards, such as minimum wages, maximum working hours, safety standards, etc.; and • to avoid complying with certain administrative obligations 	Schneider, Williams C.C. (2013)
	Shadow economy, or shadow is described as an economic activity (i.e. producing goods and services), which is carried out without complying with the legal environment and to avoid taxes and/or regulations.	Zukauskas (2013).
	We distinguish four specific underground economies and name them:	
	<ol style="list-style-type: none"> 1. The Illegal Economy: consists of the income produced by those economic activities pursued in violation of legal statutes defining the scope of legitimate forms of commerce. 	Feige (1997)

	<p>2. The Unreported Economy: consists of those economic activities that circumvent or evade the institutionally established fiscal rules as codified in the tax code. A summary measure of the unreported economy is the amount of income that should be reported to the tax authority but is not so reported.</p> <p>3. The Unrecorded Economy: consists of those economic activities that circumvent the institutional rules that define the reporting requirements of government statistical agencies. A summary measure of the unrecorded economy is the amount of unrecorded income, namely the amount of income that should (under existing rules and conventions) be recorded in national accounting systems (e.g National Income and Product Accounts) but is not recorded.</p> <p>4. The Informal Economy: comprises those economic activities that circumvent the costs and are excluded from the benefits and rights incorporated in the laws and administrative rules covering property relationships, commercial licensing, labor contracts, torts, financial credit and social security systems.</p>	
	Narrow underground economy may be described as legal, marketed transactions that are not included in measured gross domestic product (GDP), while fairly broader definition would include both legal and illegal marketed transactions that are not incorporated in GDP. The most comprehensive definition of underground economy would possibly be the one that integrated all transactions, legal or illegal, marketed or non-marketed that are either intentionally or unintentionally excluded from GDP.	Kiani et. al. (2015)
	It concerns lawful economic activities that are not reported for the sake of avoidance tax payment, by which the tax defaulters increase their own personal benefit.	Madžarević – Šujster (2002)
Undeclared Economy	The undeclared economy involves transactions that are not declared to the authorities for tax, social security and/or labour law, purposes when they should be declared but are licit in every other sense	Williams, Windebank (1998, 1999), O.E.C.D. (2002), Renooy et. al. (2004), Commission of the European Communities (24/10/2007), Williams, Nadin (2012)
Underground Economy	The underground economy consists of unmeasured economic activity that has contributed to value added according to the national accounting convention but is not recorded because of the failure to report income in whole or in part. Activities that are not usually measured by the national accounting convention (e.g. criminal activity) will not form part of the measure of the underground economy	Bajada (2007)
	Therefore, underground activities can be defined either as economic underground, indicating those activities characterized by the deliberate will not to respect administrative standards, with the purpose of cutting production costs, or as statistical underground indicating those activities that are not surveyed because of inefficiencies in the statistical information system or the lack of statistical sensitivity on the part of the institutional units (private bodies, corporations etc) that are requested to compile statistical questionnaires.	Calzaroni, Ronconi (1999)
	<p>The underground economy category is further classified into three types:</p> <p>α. Dependent Informal Activity – which takes place as part of formal activities but are not included in official records ie illegal work ‘off the books’ carried out by officially recognised enterprises.</p> <p>β. Independent Informal Activity – activity carried out on an individual basis and the products are sold on without any intermediaries.</p> <p>γ. Semi Independent Informal Activity – activities carried on outside formal enterprises, but whose output is directed to those enterprises (ie in the form of subcontracting, non-licensed or illegal work).</p>	Evans et. al. (2006)
	The underground economy includes all output that goes unreported and therefore is “concealed” or “hidden” from taxation, mainly from income tax and VAT. A part of it pertains to legal activities, such as transactions between firms and retailers which are paid “off the counter”, an agreement that enables both parties to avoid paying taxes. The remaining part is the product of illegal activities, such as prostitution, drug trafficking and so on.	Manolas et. al. (2013)
	Is defined as the set of the activities which are unrecorded by the national accounts.	Soldatos (1996)

References

- [1] AT Kearney, Schneider F. (2008): The Shadow Economy in Europe. Using payment systems to combat the shadow economy, A.T. Kearney.
- [2] Adom K. (2016): Tackling informal entrepreneurship in Ghana: A critical analysis of the dualist/modernist policy approach, some evidence from Accra (p. 216 - 233), *International Journal & Small Business*, 28 (2 – 3).
- [3] Afonso O. (2012): The impact of public goods & services & public R & D on the non – observed economy size, wages inequality & growth (p. 1996 - 2004), *Economic Modelling*, 29 (5).
- [4] Aldersdale J., Talmage J., Freeman Y. (2006): Measuring the Informal Economy – One neighborhood at a time, D.P., The Brookings Institution Metropolitan Policy Program, U.S.A.
- [5] Alm J., Martinez – Vazquez J., Schneider F. (2004): 'Sizing' the problem of the hard – to – tax, AYSPS Conference “The Hard – to – Tax, An International Perspective”, USAID/Georgetown University, U.S.A.
- [6] Altug O. (1994): Unregistered Economy, Cem Offset Printing, Istanbul, Turkey.
- [7] Andrews D., Sanchez A.C., Johansson A. (2011): Towards a Better Understanding of the Informal Economy, Economics Department Working Paper No. 873, O.E.C.D., Paris.
- [8] Arezzo M.F. (2014): Social Capital & Undeclared Work: An Empirical Analysis in Italy from 1998 to 2008 (p. 695 – 709), *Social Indicators Research*, 118 (2).
- [9] Bacchetta M. Ernst E., Bustamente J. (2009): Globalization & informal jobs in developing countries, W.T.O. & I.L.O., Geneva.
- [10] Bajada C. (2007): How reliable are the estimates of the Underground Economy? (p. 1 – 11), *Economics Bulletin*, 3 (14).
- [11] Barnard C. (1938): The Functions of the Executive, Harvard University Press, U.S.A.
- [12] Bekkers H., Stoffers W. (1995): Measuring informal sector employment in Pakistan: Testing a new methodology (p. 17 – 36), *International Labour Review*, 134 (1).
- [13] Bernabe S. (April 2002): Informal Employment in countries in Transition: A conceptual framework, CASEpaper 56, Centre for Analysis of Social Exclusion, L.S.E., London, U.K.
- [14] Bird R.M., Wallace S. (2003): Is it really so hard to tax the Hard – to – Tax? The Context & Role of Presumptive Taxes, IT Paper 0307, Institute for International Business, Joseph L. Rotman School of Management, University of Toronto, Canada.
- [15] Bittker B.I. (1974): Taxing income from unlawful activities (p. 130 - 148), *Case Western Reserve Law Review* (25).
- [16] Blunch N.H., Canagarajah S., Raju D. (2001): The Informal Sector Revisited: A Synthesis across space & time, Social Protection Discussion Paper No. 0119, Social Protection Unit, Human Development Network, The World Bank, Washington D.C., U.S.A.
- [17] Boeke J.H. (1953): Economics & Economic Policy of Dual Societies, as exemplified by Indonesia, International Secretariat, Institute of Pacific Relations, New York.
- [18] Boels R. (2016): The Informal Economy. Seasonal Work, Street Selling & Sex Work, Palgrave MacMillan Ltd.
- [19] Bose P., Echazu L. (2007): Corruption with heterogenous enforcement agents in the Shadow Economy (p. 285 – 296), *Journal of Institutional & Theoretical Economics*, 163 (2).

- [20] Boyce J.K. (2015): Capital flight from Africa: What is to be done? (p. 1 - 6), Statement to the Joint Meeting of the United Nations General Assembly & Economic & Social Council on Illicit Financial Flows & Development Financing in Africa, U.N. Headquarters, U.N., New York, U.S.A.
- [21] Cagan P. (1958): The demand for currency relative to total money supply, Occasional Paper No. 62, National Bureau of Economic Research, Washington D.C., U.S.A.
- [22] Charmes J. (2012): The informal economy worldwide: Trends & Characteristics (p. 103 - 132), MARGIN – The Journal of Applied Economic Research, 6 (2).
- [23] Chen M.A. (2012): The Informal Economy: Definitions, Theories & Policies, Working Paper No. 1, WIEGO.
- [24] Clement C. (2015): The Formal - Informal Economy Dualism in a Retrospective of Economic Thought since the 1940s, Working Paper No. 43,
- [25] Commission of the European Communities (24/10/2007): Stepping up the fight against undeclared work, COM (2007) 628 final, Brussels.
- [26] Breman J. (1996): Footloose Labour: Working in India, Cambridge University Press, U.K.
- [27] Buiter W.H. (2014): The Simple Analytics of Helicopter Money: Why it works – Always, Economics: The Open - Access, Open - Assessment E-Journal, No. 8-28.
- [28] Caballe J., Panades J. (2007): Tax Rates, Tax Evasion & Growth in a Multi - period Economy (p. 67 – 80), Hacienda Publica Espanola/Revista de Economia Publica, 183 (4).
- [29] Calzaroni M., Ronconi S. (1999): Issues & Activities to Ensure the Coverage of the Non – Observed Economy in National Accounts: Implications for National Statistical Offices, 47th Plenary Session, Conference of European Statisticians, 14 – 16 June 1999, Neuchatel.
- [30] Charmes J. (2012a): The Informal Economy Worldwide: Trends & Characteristics (p. 103 – 132), Margin – The Journal of Applied Economic Research, 6 (2).
- [31] Charmes J. (2012b): The Informal Economy: Definitions, Size, Contribution, Characteristics & Trends, Research, Network & Support Facility (RNSF).
- [32] Chaudhuri T.D. (March 1989): A Theoretical analysis of the Informal Sector (p. 351 – 355), World Development, 17 (3).
- [33] Chen M. (May 2008): Informality & social protection: Theories & realities (p. 18 - 27), IDS Bulletin, 39 (2).
- [34] Chen M.A. (2012): Informal Economy: Definitions, Theories & Policies, Working Paper No. 1, WIEGO.
- [35] Chen M.A., Jhabvala R., Lund F. (2002): Supporting Workers in the Informal Economy: A Policy Framework, Working Paper No. 2, Employment Sector, I.L.O., Geneva.
- [36] Clement C. (2015): The formal - informal economy dualism in a retrospective of economic thought since the 1940s, Schriftenreihe des Promotionsschwerpunkts, Globalisierung und Beschäftigung, No. 43, Universität Hohenheim, Stuttgart, Germany.
- [37] De Soto H. (2000): The Mystery of Capital. Why capitalism triumphs in the West & fails everywhere else, Black Swan.
- [38] Debrah Y.A. (2007): Promoting the informal sector as a source of gainful employment in developing countries: Insights from Ghana (p. 1063 - 1084), The International Journal of Human Resource Management, 18 (6).
- [39] Dell’ Anno R. (2010): Institutions and Human Development in the Latin American Informal Economy (p. 207 – 230), Constitutional of Political Economy, 21 (3).

- [40] Dellot B. (2012): UNTAPPED ENTERPRISE. Learning to live with the informal economy, Action & Research Centre, U.K.
- [41] Derdiyok T. (1993): Prediction of unregistered economy in Turkey (p. 554 – 63), Turkey Economic Review.
- [42] Doeringer P., Piore M. (1971): Internal Labor Markets & Manpower Analysis, Heath/Lexington Books, Lexington, MA.
- [43] European Commission (2012): Green Paper on Shadow Banking, COM (2012) 102 final, Brussels.
- [44] European Parliament (2012): Call for concrete ways to combat Tax Fraud & Tax Evasion, European Parliament.
- [45] Evans M., Syrett S., Williams C. (2006): Informal Economic Activities & deprived neighbourhoods, Project Report, Department of Communities & Local Government, London, U.K.
- [46] F.A.T.F. (2008): Guidance on Capacity Building for Mutual Evaluations & Implementation of the FATF Standards within Low Capacity countries, FATF/O.E.C.D., Paris.
- [47] F.S.B. (2014): Global Shadow Banking Monitoring Report 2014, F.S.B.
- [48] F.S.B. (2000): Report of the Working Group on Offshore Centres, F.S.B.
- [49] Feige E.L. (1997): Revisited Estimates of the Underground Economy: Implications of U.S. Currency Held Abroad, MPRA Paper No. 13805.
- [50] Fisher J.M. (2014): Fairer Shores: Tax Havens, Tax Avoidance & Corporate Social Responsibility (p. 337 – 365), Boston University Law Review, 94 (1).
- [51] Garcia – Bolivar O.E. (2006): Informal Economy: Is it a problem, a solution or both? The perspective of the informal business, Law & Economics Papers, Northwestern University School of Law.
- [52] Geertz C. (1963): Old Societies & New States: The Quest for Modernity in Asia & Africa, Free Press, Glencoe, Illinois, U.S.A.
- [53] Georgiou G.M. (2007): Measuring the Size of the Informal Economy: A Critical Review, Working Paper No. 2007 – 1, Central Bank of Cyprus, Cyprus.
- [54] Gerxhani K. (2002): The Informal Sector in transition: Tax evasion in an institutional vacuum, PhD Thesis, Faculty FEB: Amsterdam School of Economics Research Institute (ASE – RI), The Netherlands.
- [55] Gibson B., Kelley B. (1994): A classical theory of the informal sector (p. 81 - 96), The Manchester School, LXII (1).
- [56] Godfrey P.C. (2011): Toward a theory of the informal economy (p. 231 – 277), The Academy of Management Annals, 5 (1).
- [57] Granda – Carvajal C. (December 1990): The Unofficial Economy & the Business Cycle: A test for theories (p. 573 - 586), International Economic Journal, 24 (4).
- [58] Gutmann P.M. (1985): The subterranean economy, redux (p. 2 - 18), Chapter 1 ‘Conceptual Questions’, in Gaertner W., Wenig A. (Eds.): The Economics of the Shadow Economy, Proceedings of the International Conference held at the University of Bielefeld, Studies in Contemporary Economics, 10th – 14th October 1983, West Germany, Springer – Verlag, Berlin/Heidelberg/New York/Tokyo.
- [59] Hart K. (1971): Migration & Tribal Identity among (p. 21 - 36), Asian & African Studies, 6 (1).
- [60] Hart K. (1973): Informal Income Opportunities & Urban Employment in Ghana (p. 61 – 89), Journal of Modern African Studies, 11 (1).
- [61] Hart S.L. (2007): Capitalism at the Crossroads: Aligning Business, Earth & Humanity, Pearson & Prentice Hall, U.S.A.
- [62] Hieu N.T.M., Giang N.T.H., Ngoc V.T.M., Duc N.V., Quan T.T. 2014): Does the Informal Economy mitigate poverty & how does it work? The case of Vietnam, MEKONG Economic Research Network.

- [63] Horodnic I.A. (2016): Cash Wage Payments in Transition Economies: Consequences of envelope wages, I.Z.A. World of Labour.
- [64] Horodnic I.A., Williams C.C. (2018): Do Deterrents Prevent Undeclared Work? An Evaluation of the Rational Economic Actor Approach, Policy Brief No. 1, The University of Sheffield, U.K.
- [65] I.L.O. (2012): The Informal Economy & Decent Work: A Policy Resource Guide, Supporting Transitions to Formality, I.L.O., Geneva, Switzerland.
- [66] I.M.F. (2000): Offshore Financial Centres, Background Paper, Monetary & Exchange Affairs Department, I.M.F., Washington D.C., U.S.A.
- [67] I.M.F. (2001): Financial System Abuse, Financial Crime & Money Laundering – Background Paper, Washington D.C., I.M.F., U.S.A.
- [68] Iacob C., Istrate F. (2016): Excessive Taxation, support of the intensification of Underground Economy (p. 5 – 18), Revista tinerilor Economisti (27).
- [69] Itzigsohn J. (2006): Chapter 3 ‘Neoliberalism, markets & informal grassroots economies’ (p. 81 - 96), in Fernandez – Kelly P., Shefner J. (Eds.): Out of the Shadows: Political Action & the Informal Economy in Latin America, The Pennsylvania State University Press, University Park, U.S.A
- [70] Jiyane G., Zawada B. (2013): Sustaining informal sector women entrepreneurs through financial literacy (p. 47 – 56), Libri, 63 (1).
- [71] Joshi A., Ayee J. (2008): Chapter 8 ‘Associational taxation: A pathway into the informal sector?’ (p. 183 – 211), in Brautigam D., Fleldstad O.H., Moore M. (Eds.): Taxation & State – Building in Developing Countries. Capacity & Consent, Cambridge University Press, Cambridge.
- [72] Kaldor N. (1956): Indian Tax Reform: Report of a Survey, Department of Economic Affairs, Ministry of Finance, India.
- [73] Katalin G. (2015): The informal economy: Conceptual background & theoretical framework (p. 57 - 71), Section ‘Sociology, Political Sciences & International Relations’, Conference ‘Discourse as a Form of Multiculturalism in Literature & Communication’, Arhipelag XXXI Press, Tirgu, Mures, Romania.
- [74] Kazemier B. (2005): Chapter 2 ‘Monitoring the Underground Economy. A Survey of Methods & Estimates’ (p. 11 - 548), in Enste D.H., Schneider F. (Eds.): Jahrbuch Schatten - Wirtschaft 2006 – 2007. Zum Spannungsfeld von Politik und Okonomie, Lit Verlag, Vienna/ Berlin.
- [75] Khadiullina G., Shurkina E., Svirina A. (2013): Informal Economy Dynamics as an important factor defining level of social unease (p. 1 - 13), Journal of Economics Studies & Research, Vol. 2013.
- [76] Kiani M., Ahmed A., Zaman K. (2015): Combining qualitative & quantitative approaches for measuring underground economy of Pakistan (p. 295 – 317), Quality & Quantity, 49 (1).
- [77] Koopmans C.C. (1994): Direct measurement of hidden labour (p. 575 – 581), Applied Economics, 26 (6).
- [78] Kuznetsova N.V., Kuznetsova V.E. (2015): Shadow Economy as a Self-Adjustment of Poverty & a Signal from Invisible Hand (p. 1 – 8), Asian Social Science, 11 (5).
- [79] Lewis W.A. (1954): Economic development with unlimited supplies of labour (p. 139 – 191), The Manchester School, 22 (2).
- [80] Lewis W.A. (1958): Unlimited labour: Further notes (p. 1 – 32), The Manchester School, 26 (1).

- [81] London T., Hart S.L. (2004): Reinventing strategies for emerging markets: Beyond the transnational model (p. 350 – 370), *Journal of International Business Studies*, 35 (5).
- [82] Losby J.L., Else J.F., Kingslow M.E., Edgcomb E.L., Malm E.T., Kao V. (2002): *Informal Economy Literature Review*, ISED Consulting & Research/The Aspen Institute, U.S.A.
- [83] Madžarević – Šujster S. (2002): An estimate of tax evasion in Croatia, Occasional Paper No. 13, Institute of Public Finance.
- [84] Maftai L. (2012): An overview of the tobacco black market in Europe (p. 541-553), Working Paper No. 4, Centre for European Studies, Sofia, Bulgaria.
- [85] Maiti D., Sen K. (2010): The informal sector in South Asia: A means of exploitation or accumulation? (p. 1 – 13), *Journal of South Asian Development*, 5 (2).
- [86] Maloney W.F. (1999): Does Informality Imply Segmentation in Urban Labor Markets? Evidence from Sectoral Transitions in Mexico (p. 275 – 302), *The World Bank Economic Review*, 13 (2).
- [87] Maloney W. F. (2004): Informality revisited (p. 1159 – 1178), *World Development*, 32 (7).
- [88] Manolas G., Rontos K., Sfakianakis G., Vavouras I. (2013): The determinants of the shadow economy: The case of Greece (p. 1036 – 1047), *International Journal of Criminology & Sociological Theory*, 6 (1).
- [89] Marinkovic D. (2004): The shadow economy & the grey market in Serbia: The parallel world alongside us (p. 33 - 44), *South – East Europe Review for Labour & Social Affairs*, (03).
- [90] Marinov A. (2008): Hidden economy in the rural regions of Bulgaria (p. 71 – 80), *International Review on Public & Nonprofit Marketing*, 5 (1).
- [91] Marjit S., Kar S. (2012): Informal Sector & the Developing World: Relating Theory & Evidence to India (p. 1 – 30), in Ghate C. (Ed.): *The Oxford Handbook of the Indian Economy*, Oxford Publishing.
- [92] McCulley P. (2009): The Shadow Banking System & Hyman Minsky's Economic Journey, *Global Central Bank Focus*, PIMCO, U.S.A.
- [93] Medina L., Schneider F. (2018): Shadow Economies around the World: What did we learn over the last 20 years?, Working Paper No. 17, IMF, Washington D.C., U.S.A.
- [94] Moe T.G. (2012): Shadow Banking & the limits of Central Bank Liquidity Support: How to achieve a better balance global & official liquidity, Working Paper No. 712, Levy Institute, Bard College, U.K.
- [95] Moutos T., Tsitsikas C. (2010): Whither public interest: The case of Greece's public finances (p. 170 – 206), *finanzArchiv: Public Finance Analysis* (66).
- [96] Najman B. (2000): *Development Economic Policy: How to Integrate Shadow Economy*, Pars 3, Paris, France.
- [97] Natarajan K. (1997): Combatting India's Heroin Trade through anti – money laundering legislation (p. 2014 - 2082), *Fordham International Law Journal*, 21 (5).
- [98] Onwe O.J. (2013): Role of the Informal Sector in development of the Nigerian Economy: Output & employment approach (p. 60 – 74), *Journal of Economics & Development Studies*, 1(1).
- [99] O.E.C.D. (1998): *Harmful Tax Competition: An Emerging Global Issue*, O.E.C.D., Paris, France.
- [100] O.E.C.D. (2002): *Measuring the Non – Observed Economy. A Handbook*, O.E.C.D., Paris.
- [101] O.E.C.D. (2008): *Reforms for Stability & Sustainable Growth: An O.E.C.D. Perspective on Hungary*, O.E.C.D., Paris, France.

- [102] Ostapenko N., Williams C.C. (2016): Determinants of entrepreneurs' views on the acceptability of tax evasion & the informal economy in Slovakia & Ukraine: An institutional asymmetry approach (p. 275 – 289), *International Journal of Entrepreneurship & Small Business*, 28 (2/3).
- [103] Ottervik M. (2013): Conceptualizing & Measuring State Capacity: Testing the Validity of Tax Compliance as a Measure of State Capacity, Working Paper No. 2013: 20, The Quality of Government Institute, Department of Political Science, University of Gothenburg, Gothenburg, Sweden.
- [104] Otusanya O.J. (2011): The role of multinational companies in tax evasion & tax avoidance: The case of Nigeria (p. 316 – 332), *Critical Perspectives on Accounting*, 22 (3).
- [105] Palaga C. (2015): From informal exchanges to dual practices. The shadows of the Romanian Health Care Reform (p. 103 – 122), *Studia Ubb Sociologia*, LX (1).
- [106] Palan R., Nesvetailova A. (2013): The Governance of the Black Holes of the World Economy: Shadow Banking & Offshore Finance (Report No. 2013-03), City Political Economy Research Centre (CITYPERC), Department of International Politics, City University London, London, U.K.
- [107] Pearson Z. (2013): Chapter 3 'An international human rights approach to corruption' (p. 30 – 61), in Larmour P., Wolanin N. (Eds.): *Corruption & Anti – Corruption*, Australian National University, Australia.
- [108] Petersen H.G. (1987): The Laffer Curve & 'Illicit Cash' in Simple Macro Economic Models (p. 1 – 40), 20th General Conference International Association for Research in Income & Wealth, Rome, Italy.
- [109] Philipson S., Philipson J. (2016): From Budapest to Berlin – The role of reputation in the market economy (p. 310 - 322), *International Journal of Entrepreneurship & Small Business*, 28 (2/3).
- [110] Pierre J. (2016): Stealth Economy? Economic theory & the politics of administrative reform (p. 672 – 692), *Administration & Society*, 43 (6).
- [111] Popescu G.H. (2014): Labor market regulation & the shadow economy (p. 110 – 115), *Economics, Management & Financial Markets*, 9 (3).
- [112] Ray D. (1998): *Development Economics*, Princeton University Press, Princeton University, U.S.A.
- [113] Renooy P., Ivarsson S., Van der Wusten – Gritsai O., Meijer R. (2004): Undeclared Work in an enlarged Union. An Analysis of Undeclared Work: An in – depth – study of specific items, Final Report, Directorate-General for Employment & Social Affairs, European Commission.
- [114] Routh S. (2011): Building informal workers agenda: Imaging 'informal employment' in conceptual resolution of 'informality' (p. 208 - 227), *Global Labour Journal*, 2 (3).
- [115] Sabra M.M., Eltalla A.H.A., Alfar A.R. (2015): The Shadow Economy in Palestine: Size & Causes (p. 98 – 108), *International Journal of Economics & Finance*, 7 (3).
- [116] Saint – Paul G. (1997): *Dual Labor Markets: A macroeconomic perspective*, MIT Press, Boston, MA, U.S.A.
- [117] Sanyal K. (2007): *Rethinking Capitalist Development: Primitive Accumulation, Governmentality & Post - Colonial Capitalis*, Routledge, New Delhi, India.
- [118] Sanyal K., Bhattacharya R. (2009): Beyond the Factory: Globalisation, Informalisation of Production & the New Locations of Labour (p. 35 – 39), *Economic & Political Weekly*, 46 (2).

- [119] Schneider F. (2015): Size & development of the Shadow Economy of 31 European & 5 other O.E.C.D. Countries from 2003 to 2015: Different Developments, Working Paper, Department of Economics, Johannes Kepler University of Linz, Austria.
- [120] Schneider F. (2013): The Shadow Economy in Europe. Using Payment systems to combat the Shadow Economy, AT Kearney, Johannes Kepler University, VISA.
- [121] Schneider F. (2014): The Shadow Economy & Shadow Labor Force: A Survey of Recent Developments, IZA Discussion Paper No. 8278.
- [122] Schneider F., Buehn A. (2018): Shadow Economy: Estimation methods, problems, results & open questions (p. 1 – 29), *Open Economics*, 1 (1).
- [123] Schneider F., Williams C.C. (2013): The Shadow Economy, The Institute of Economic Affairs, London, U.K.
- [124] Seeley A. (2015): Tax Avoidance: A General Anti – Abuse Rule, Standard Note No. SN6265, House of Commons Library, U.K.
- [125] Shonchoy A.S., Junankar P.R. (2014): The informal labour market in India: transitory or permanent employment for migrants? (p. 1 - 27), *Journal of Labor & Development*, 3 (9).
- [126] Smith P. (1994): Assessing the Size of the Underground Economy: the Statistics Canada Perspective, Research Paper No. 13-604-MIB No. 28, Ottawa, Canada.
- [127] Soldatos G.T. (1996): Growth & the Interaction between Money & the Underground Economy (p. 73 – 84), *Revue Economique*, 47 (1).
- [128] Sweeney P. (2015): Tackling Tax Evasion, Avoidance & Tax Havens, European Trade Union Institute, Brussels, Belgium.
- [129] Tanzi V. (12/3/2002): The Shadow Economy, its Causes & its Consequences (p. 1 – 16), International Seminar “Shadow Economy Index in Brazil”, Brazilian Institute for Ethics in Competition, Rio de Janeiro, Brazil.
- [130] The World Bank Group (2009): Fraud & Corruption Awareness Handbook, Integrity Presidency, The World Bank Group, Washington D.C., U.S.A.
- [131] Tokman V. (1978): An exploration into the nature of informal – formal sector relationships (p. 1065 – 1075), *World Development*, 6 (9/10).
- [132] VanderBerg N. (2014): The Informal Economy: A Literature Review, Working Paper.
- [133] Viksne D., Mazure G. (2011): Shadow Economy & its Relation to the Tax System of Latvia (p. 219 – 228), 1. Production & Co – Operation in Primary & Secondary Agriculture, International Scientific Conference ‘Production & Taxes’, Jelgava.
- [134] Virta H. (2007): Corruption & Shadow Economy: Differences in the Relationship between countries, Discussion Paper No. 171, Helsinki School of Economics, Helsinki Center of Economic Research, Helsinki, Finland.
- [135] Vorobyev P. (2015): Estimating Informal Economy share in Russian Regions, Working Paper No. E15/02, Economics Education & Research Consortium, Russia.
- [136] Wallerstein I. (1974/2007): *World Systems Analysis* (5th Edition), Duke University Press, Durham, NC.
- [137] Williams C.C. (2006): *The Hidden Enterprise Culture: Entrepreneurship in the Underground Economy*, Edwards Elgar, Cheltenham, U.K.
- [138] Williams C.C. (2013): Exploring employers’ illicit envelope wage payments in the E.U. – 27: A product of over – regulation or under – regulation? (p. 325 - 340), *Business Ethics: A European Review*, 22 (3).
- [139] Williams C.C., Franic J. (2017): Tackling the illegitimate under – reporting of salaries in Southeast Europe: Some lessons from a 2015 Survey in Bulgaria, Croatia & FYR Macedonia (p. 5 – 28), *Eastern Journal of European Studies* (1).
- [140] Williams C.C., Horodnik I.A. (2015): Explaining & tackling envelope wages in the Baltic Sea Region (p. 295 – 312), *Baltic Journal of Management*, 10 (3).

- [141] Williams C.C., Horodnic I.A. (2017): Evaluating the illegal employer practice of under – reporting employees’ salaries (p. 83 - 111), *British Journal of Industrial Relations*, 55 (1).
- [142] Williams C.C., Nadin S. (2012): Tackling the undeclared economy in the European construction industry (p. 193 – 214), *Policy Studies*, 33 (3).
- [143] Williams C.C., Padmore J. (2013): Evaluating the prevalence & distribution of quasi – formal employment in Europe (p. 71 - 95), *Industrial Relations* (68).
- [144] Williams C.C., Schneider F. (2016): *Measuring the Global Shadow Economy. The Prevalence of Informal Work & Labour*, Edward Elgar Publishing Ltd.
- [145] Williams C.C., Windebank J. (1998): *Informal Economy in the Advanced Economies. Implications for Work & Welfare*, Routledge, London & New York.
- [146] Williams C.C., Windebank J. (1999): Reconceptualising paid informal work & its implications for policy: Some lessons from a case study of Southampton (p. 221 – 233), *Policy Studies*, 20 (4).
- [147] Williams C.C., Yang J. (2017): Tackling falsely – declared salaries in Bulgaria: Evidence from a 2015 Survey (p. 333 – 351), *Economic Alternatives* (3).
- [148] Yfantopoulos J. (2013): Dynamic aspects of the Underground Economy in Greece (p. 97 – 112), *Journal of Economic & Social Measurement*, 38 (4).
- [149] Zukauskas V. (2013): *Lithuanian Shadow Economy*, Lithuanian Free Market Institute, Lithuania.