STUDIES OF THE SHADOW ECONOMY IN BULGARIA: A REVIEW ARTICLE

Venelin Boshnakov

University of National and World Economy, Sofia, Bulgaria, <u>venelinb@unwe.bg</u>

Valentin Goev

University of National and World Economy, Sofia, Bulgaria, vgoev@unwe.bg

Abstract: Issues related to shadow economy operation in Bulgaria and its socio-economic effects have been constantly a subject of extensive academic research. This was especially valid for the 1990s – the first decade of the market transition and related social, political, and economic reforms. Various studies aimed in understanding the multifaceted nature of undeclared work and its implications on the country's economic system. Policy-oriented research focused on issues concerning policymakers providing insights into the main drivers of the grey economy, enabling the development of targeted measures to address these underlying causes. This perspective is essential in understanding the shadow economy in Bulgaria as a former transition country not as an isolated phenomenon but as an integral part of the economic fabric that requires sophisticated and multifaceted responses.

Furthermore, the methodological experience of researchers in monitoring the shadow economy in Bulgaria has evolved significantly, with a blend of statistical and sociological approaches being applied. In this respect, questionnaire surveys applying modern sociological standards as well as both micro- and macro-econometric analyses have been utilized. Particularly, various surveys have been instrumental in informing the policymaking in respect of the support to the national strategy for measuring, restricting, and preventing shadow economic activities. Additionally, the academic literature on the hidden economy in Bulgaria reflects on various socio-economic effects, including social legitimacy and economic expediency, viewing the grey economy as a parallel economic reality composed of life strategies that adapt to, neutralize, or completely ignore formal rules.

This review article emphasizes on the complexity of the shadow economy issues in Bulgaria and the need for implementing comprehensive approaches to its study and evaluation. The ongoing academic discourse underscores the importance of continuous research and the adaptation of methodologies to capture the dynamic nature of this phenomenon. Moreover, the hidden economy has implications for tax morale, resulting in lower government revenues and impacting the country's ability to reach the goals of its national development programmes and sustainable growth. Particularly, the focus of the current review is put on a selection of recent studies that provides valuable information beneficial for the justification of different strategies to mitigate the negative impacts of the shadow economy, thereby fostering a more transparent and robust economic environment.

Keywords: shadow economy, policy research, Bulgaria.

1. INTRODUCTION

The shadow economy in Bulgaria, likewise in many former transition countries, represents a notable share of the economic activities where recent academic findings highlight its multifaceted impact on the economic development and the resilience of the state institutions. Even the resent research conducted in the first half of 2020s delved into the primary reasons behind shadow operations, revealing that the grey economy emerges from a breach of the civil contract and serves as an individual's response to the inefficiency of state institutions. This underground economic activity not only affects the state budget by evading taxes but also distorts critical economic indicators e.g. employment, GDP, and growth rates. The interaction between formal and informal institutions appears to play a key role regarding the participation in the shadow economy. On the other hand, a trustworthy relationship with the government units as well as other economic agents has the potential to foster the so much needed compliance. As a particular implication, the shadow economy's influence extends to the socio-political realm in Bulgaria where it can adversely impact the pursuit of a low carbon economy.

Grey economy has permeated various sectors, each affected in unique ways. For example, the wholesale and retail trade sector is particularly susceptible to shadow economic activities due to the ease of underreporting cash transactions and the prevalence of informal marketplaces. Transport is another sector where the shadow economy thrives, often through unregistered services and evasion of regulatory fees. Construction, a sector known for its significant contribution to Bulgarian GDP, also sees a considerable share of its activities going unreported, which includes off-the-books labor, frequent use of unregistered subcontractors, and manipulation of recorded retail prices. The food and beverages production sector, along with the chemicals industry, often deals with the underreporting of production volumes and sales to evade taxes. Textile and clothing production, traditionally labor-intensive, is prone to informal employment practices and undeclared work. Tourism, a vital part of Bulgaria's economy, also faces challenges typically in the form of unregistered accommodations and services that bypass tax obligations.

Agriculture, too, is a sector where informal labor inputs are common and underreporting of production and income is a significant issue, given the difficulty in tracking such transactions.

For over 30 years since the start of market transition reforms in the country, significant parts of the national economy are still affected by the shadow transactions. These impacts are multifaceted, affecting not only tax revenues but also distorting competition and undermining the formal sector's integrity. This paper emphasizes on the complexity of the shadow economy issues in Bulgaria and the need for implementing comprehensive approaches to its study and evaluation. The focus of the current review is put on a selection of recent studies that provides valuable information beneficial for the justification of different strategies to mitigate the negative impacts of the shadow economy, thereby fostering a more transparent and robust economic environment.

2. METHODS FOR STUDYING SHADOW ECONOMY

Research on the issues related to unreported economic activities in Bulgaria has employed a variety of methods, including both direct and indirect approaches to explore and evaluate the concealed segment of the economy. Direct methods typically involve surveys and interviews to gather data from individuals and business representatives that might be engaged in informal activities. Such methods aim to capture the firsthand accounts of economic behavior that bypasses formal channels. Indirect methods, on the other hand, evaluate the size and scope of the grey economy through observable indicators such as electricity consumption or discrepancies in national accounts. For instance, the currency demand method which utilizes monetary indicators' data has been applied to estimate the shadow economy's share in Bulgarian GDP. Another indirect method is based on the microeconomic approach that relies on firm-level survey data to assess the extent of unreported economic activities. Studies using this method have provided insights into the incentives for businesses to operate informally and the impact of the shadow economy on economic growth and competitiveness. The combination of these methods offers a more comprehensive understanding of the shadow economy, allowing for international comparisons and helping to address methodological weaknesses inherent in any single approach. The research conducted by various institutions, including leading NGOs (e.g. Center for the Study of Democracy, Institute for Market Economy, Bulgarian Chamber of Commerce and Industry, etc.), has contributed to the development of strategies aimed at measuring, restricting, and preventing informal economic activities in Bulgaria. These efforts underscore the importance of continuous monitoring and the application of robust research techniques to inform policy decisions and promote economic transparency.

3. RESULTS

Recent studies have provided insightful estimates regarding the shadow economy in Bulgaria, revealing a trend of gradual decline over the years. A major statement here emphasizes on a reduction of the share of shadow economy in Bulgarian GDP by 10%-age points from levels over 30% during the first decade of the XXI-st century for a period of 15-20 years. This reduction is commonly attributed to Bulgaria's accession to the European Union, which brought about legislative harmonization, improved enforcement procedures, and targeted government measures to combat the hidden transactions. Despite this positive trend, the shadow economy size remains relatively large, posing challenges to the nation's economic and social development (Petranov et al, 2022). The OECD 2023 Economic Survey for Bulgaria highlights the country's continued but slowed convergence with the more advanced economies, exacerbated by high inflation rates since 2022 due to rising energy and food prices (OECD, 2023). Estimation of alternative composite indices (e.g. by the Center for the Study of Democracy or Bulgarian Industrial Capital Association) during the last two decades assisted the policies to restrict and prevent the informal economy which underscores the ongoing commitment to counteract tax evasion practices. These findings underscore the need for continued vigilance and innovative policy measures to further reduce the shadow economy's impact and support Bulgaria's economic growth and social cohesion.

Williams (2020) investigates the psychological and societal foundations of tax compliance among Bulgarian entrepreneurs. The paper's insights are crucial for understanding the complex dynamics of tax compliance and the role of institutional effectiveness for its fostering. The traditional view that tax non-compliance is purely a rational economic decision, where individuals weigh the benefits against the potential costs is reconsidered. Alternatively, the concept of tax morale is emphasized as influenced by the [lack of] alignment between a society's formal institutions and regulations, and its informal institutions (e.g. public beliefs and values). The study is based on 456 face-to-face interviews with entrepreneurs across the country that provide a comprehensive look at how sector and firm size influence tax morale. A significant factor is identified that contributes to low tax morale, namely, the perceptions for unfair tax systems, corruption, and political instability. The findings suggest that in order to increase tax compliance policymakers should focus on strengthening institutional integrity and public trust in the tax system (Williams, 2020).

An analysis of the development of the shadow economy in Bulgaria for the period 2006-2019 is provided by Petranov et al (2022) suggesting a comprehensive analysis of the unobserved economic activities in the country. Applying the currency demand approach this study found a notable decline in the shadow economy's share in GDP from 32% to 21% for the period. The shadow economy in Bulgaria, as in many countries, is influenced by a complex interplay of factors like tax and social security burden – if perceived as excessive, it can incentivize individuals and businesses to operate "in the shadow" in order to evade the fiscal burden. Additionally, the compliance with all regulations and formal procedures can be cumbersome, time-consuming, and decreasing the competitiveness. The labor market also plays a significant role: high unemployment rates and low job security can drive individuals to accept payments of "envelope wages". Moreover, the effectiveness of law enforcement and the perceived risks of detection and punishment for shadow operations are critical in determining the extent of the grey economy. The analysis proposes that comprehensive understanding of the dynamics and scale of hidden economic activities is crucial for designing efficient policies aimed at their reduction (Petranov et al, 2022).

The multifaceted and dynamic nature of undeclared labor inputs in the Bulgarian economy are in the focus of Chengelova and Angelova (2022) that present recent empirical results on the topic. The study identifies six key categories of factors influencing this phenomenon: legislative, situational, mistrust and deficit of prestige to the state, national psychology, economic conditions, and personal and family context. The analysis emphasizes on the complexity and adaptability of undeclared work to socio-economic conditions and legislative frameworks, highlighting its inherent heterogeneity and dynamism. The relationship between shadow transactions and undeclared work is explored as a crucial methodological postulate, arguing for a nuanced understanding of the genesis, nature, and spread of the unreported employment – particularly in societies undergoing transition. Commitment policies are identified also as crucial for increasing the tax morale among citizens and fostering a culture of compliance. These policies should work in tandem with existing enforcement measures, creating a balanced strategy that tackles the root causes of undeclared work, such as mistrust and economic necessity, while also providing pathways for legalization and greater engagement with the formal economy. The authors suggest that a deeper knowledge of these determinants can lead to more effective strategies to limit and prevent undeclared work, thereby contributing to the economic and social advance (Chengelova and Angelova, 2022).

Bogdanov et al (2019) present a comprehensive analysis of the public perceptions regarding tax evasion and the hidden economy in Bulgaria based on 1398 valid responses from a questionnaire survey. Individuals aged 18 to 60, primarily from Northeastern and Eastern Bulgaria, indicate a high level of perceived tax fraud and evasion as well as a significant share of the hidden economy at 2017-2018. The findings suggest that these perceptions are consistent across different demographics, including sex, education, and employment status. The study highlights the lack of formal employment opportunities and the high tax burden as primary motivators for these practices. Furthermore, a significant portion of Bulgarians engage by different forms in the undeclared economy, with 17% paying for goods, 22% for services, and 10% of employees indicating to work without a contract; a notable 30% admit paying for illegitimate favors. The pervasive use of personal connections to bypass rules, with 74% of respondents considering such behavior important for achieving personal goals, reflects the challenges in addressing these issues. The study underscores the deep-rooted nature of shadow transactions in Bulgarian economy and their negative implications for the public debt, public services, and future economic growth. This research provides valuable insights into the scale and societal acceptance of the hidden economy and tax evasion in Bulgaria, offering a foundation for policymakers to develop targeted interventions.

A scenario model to analyze the potential for establishing a low-carbon economy in Balkan countries being former transition economies is suggested by Nikolova and Nozharov (2020). The study focuses on risk factors such as the level of the shadow economy and the influence of populism on economic policy development, examining also the prospects and ambiguities of climate change models. A transdisciplinary approach is adopted, incorporating public communications and opinion analysis to understand the perceptions of climate change and the concept of a low-carbon economy. The research highlights the importance of recognizing multicultural divergences as a factor for risk and uncertainty in climate policy implementation. A significant correlation is identified between grey economy size and the challenges faced by the transition to a low-carbon economy, suggesting that the shadow economy spread can hinder the effective implementation of environmental policies and reforms. Moreover, the paper finds that populist political movements can negatively impact the development of a low-carbon economy by promoting short-term economic gains over long-term sustainability goals. Populism may also lead to the politicization of climate change, which can delay or derail necessary policy measures. The analysis concludes that for Balkan countries, particularly Bulgaria, in order to successfully move towards a low-carbon economy, there must be a concerted effort to limit the shadow economy operations, to counteract the influence of populism, and to tailor climate policies to the region's unique cultural context.

A general equilibrium analysis suggested by Vasilev (2022) aims at quantifying and categorizing the grey economy in Bulgaria. Utilizing a micro-founded general-equilibrium framework, this research introduces a revenue-extraction mechanism alongside a government sector when modeling the economy. The study is calibrated to the Bulgarian context after the establishment of the currency board for the period 1999-2018. Its findings suggest that the grey economy constitutes slightly over one-fourth of the total output. The decomposition of evasion types reveals that two-thirds of the evasion is attributed to income and social security evasion, while the remaining one-third is due to VAT evasion. The paper provides a detailed breakdown of tax evasion types and their respective impacts on the economy, offering valuable insights for policymakers aiming to address the challenges of the phenomenon in Bulgaria.

Kalistratov (2024) explores the intricate dynamics of the shadow economy, highlighting the interplay between taxation, governance, and regulatory practices. It posits that the shadow economy - also referred to as the informal or unregistered economic activity - emerges as a response to taxation, corruption, excessive regulations, and ineffective governance. This research is based on empirical fieldwork capturing employer and employee attitudes towards the shadow economy, revealing a tendency among younger individuals to undervalue long-term benefits (like retirement and maternity leave) in favor of immediate financial gains. This attitude is partly attributed to a lack of financial and economic literacy and the influence of previous generations' informal employment practices. The paper argues that once employees accept informal work arrangements, they forfeit the ability to demand better conditions, perpetuating the cycle of "operating in the shadow". The study presents a dichotomy where a positive context characterized by stable institutions, light regulatory burdens, a broad tax base and higher tax revenues correlates with a lower spread of the shadow economy; conversely, a negative context marked by unstable institutions, burdensome regulations, diverse tax bases, and low revenues is linked to a larger shadow economy. The paper emphasizes the role of the tax wedge – the difference between total labor costs and post-taxation income – in expanding the informal economy. Effective countermeasures are discussed towards limiting the shadow economy by improving financial literacy, enforcing contractual employment, and ensuring fair labor practices which can serve as corrective mechanisms (Kalistratov, 2024).

Another study focused on the issues of tax morale presents a comprehensive analysis of this phenomenon within the Bulgarian population (Petranov et al, 2023). Utilizing data from a questionnaire survey of a random sample consisting of 1280 individuals employed across various sectors of the economy, the study evaluates the tax morale in Bulgaria as heterogeneous and significantly influencing the tax compliance and revenue collection. The analysis introduces an index to measure the tax morale of respondents and explores factors that might have an impact on it, including demographic, social, and economic dimensions. The research methodology involved hypotheses testing and ordinal regressions that provide empirical evidence to support the conclusions. The findings suggest that a considerable share of the Bulgarian population possesses average to low tax morale, which has clear implications for the success of economic policy reforms. The study identifies the profile of these individuals as typically having lower income, residing in regional cities, being younger, and having a poorer education. These insights are pivotal for understanding the nuances of tax morale and could guide targeted interventions to bolster tax compliance. The paper underscores the role of tax morale as a component of social capital and its substantial influence on tax compliance and collection – by addressing the heterogeneity of tax morale, the authors argue that policymakers can enact focused reforms to improve tax collection efficiency (Petranov et al, 2023).

Ivcheva (2023) considers the intricate socio-economic issue related to the shadow economy in Bulgaria, particularly focusing on undeclared employment. The study is grounded on a comprehensive survey conducted across Bulgaria in early 2020, aiming to uncover the primary motivations behind individuals' engagement in the shadow economy. The research suggests that the shadow economy emerges as a response to ineffective operation of governmental units, a rupture in the public contract, and a decline in civic morale. This underground economic activity has significant implications, negatively impacting the state budget and distorting critical economic indicators such as growth, unemployment, and real GDP. The analysis employs linear and probit binary regression in order to estimate the likelihood of individuals to participate in undeclared work, based on their perceptions of why others in their employment sector might choose to receive part of their compensation "in envelope". Key factors contributing to the shadow economy include low labor productivity, inadequate staff qualifications that do not meet market demands, and a lack of business-friendly environments and legislative frameworks that foster economic development. Conversely, investments and favorable legislative frameworks are identified as elements that promote economic growth and competitiveness. The findings underline the importance for authorities and managers to understand the main drivers of the shadow economy, as this knowledge can inform targeted measures to address the root causes of such behavior.

A recent monography presents and analyzes the results of in-depth analyses of the emergence and spread of the shadow economy (Chengelova et al, 2024). The study is performed in the context of the Multifactor Theory that is

adopted as a novel tool for social research specifically developed to utilize data from empirical studies of the shadow economy issues. Moreover, Shadow Economy Tolerance Index is introduced by this research as a new composite measure evaluated empirically by data from questionnaire surveys capturing the core attitudes towards the grey economy operation. The index methodology is implemented to the total population and particularly to three age cohorts: 15-35, 36-55, and over 55 years. The variation of the index provides evidence in favor of one of the major hypotheses, i.e. the tolerance of the individual towards the grey economy clearly depends on the essential social, economic, and demographic characteristics of this individual.

4. DISCUSSIONS

There is no doubt that the shadow economy in Bulgaria is driven by a complex interaction of factors that encourage individuals and business units to engage in economic activities outside the formal sector. High levels of bureaucracy, stringent regulations, and low effectiveness of the law enforcement have been identified as significant drivers of this phenomenon. These factors definitely induce disincentives for full compliance with tax and labor laws, leading to an increase in unreported economic activities. Even though, the process of harmonization with EU legislation and targeted measures by successive governments have been associated with a declining trend in the shadow economy's share in GDP in the second decade of the XXI-st century.

Recent findings indicate that the shadow economic activities in Bulgaria constitute a notable share of the national economy, with estimates suggesting for over 20% of the total economic activity during the third decade. Grey economy largely spreads within agriculture, construction, trade, and services sectors representing a turnover of at least EUR 12 billion annually. The persistence of the shadow economy poses challenges to the fair competition and the protection of workers' rights, prompting proposals for legislative changes aimed at curbing undeclared employment and illicit economic practices. Understanding the drivers behind individuals' participation in the shadow economy, particularly in undeclared labor, appears crucial for policymakers. Studies suggest that the shadow economy emerges as a response to the inefficiency of public institutions and erosion of the social contract, impacting the state budget and distorting key economic indicators like growth and real GDP. Efforts to address the shadow economy require targeted measures that directly confront the primary causes of such behavior, fostering an environment where economic development is not hindered by these unregulated activities. Recent studies confirm the role of cultural and historical characteristics that facilitate the shadow economy operations in a former transition country like Bulgaria, suggesting that specifically designed approaches are necessary to effectively mitigate this complex phenomenon (Ivcheva, 2023).

However, despite these efforts the share of shadow economic transactions remains substantial which raises challenges to the social and economic development of the country. The persistence of this phenomenon is widely attributed to several major drivers as low tax morale that reflects the individual's response to perceived inefficiencies in the operation of social, political, and law enforcement systems. This is further transposed to undeclared employment where workers receive part of their remuneration as "envelope wages" thus escaping the income tax and social insurance burden. Besides, the shadow economy is often more prevalent in certain sectors such as construction, trade, tourism, and other services where transactions are easier to be underreported without detection. The sectors specifics indicate a need for tailored approaches from both the government and society to address, limit, and control the shadow economy operations.

5. CONCLUSIONS

According to a majority of recent studies authors the shadow economy in Bulgaria is influenced by a variety of factors, including complicated tax system, heavy administrative regulation, low civic morale, and sector-specific tendencies towards informal activities. While there has been progress in reducing its size relative to the GDP, ongoing efforts are required to further diminish its impact and integrate these economic activities into the formal sector. This will not only improve the accuracy of economic indicators but also enhance the overall economic development and competitiveness of the country.

The recent academic literature emphasizes on the importance of understanding the shadow economy's underlying sources and its interaction with both formal and informal institutions. There is no doubt in the importance of aligning formal institutions, such as legal regulations, with the informal values of the populace to enhance tax morale and reduce non-compliance. Addressing such challenges requires a comprehensive approach that requires increasing of the trust in institutions, enhancing the effectiveness of regulatory frameworks, and fostering a culture of compliance among businesses and individuals (Williams, 2020). Understanding these factors is essential for policymakers to devise effective measures that target the root causes of this phenomenon which can in turn reduce the incentives for engaging in shadow economic activities. Only addressing core issues such as improving

institutional quality and simplifying regulations, authorities can foster a more transparent and compliant social environment that facilitates a desired economic development.

ACKNOWLEDGEMENTS

This work was financially supported by the UNWE Research Programme (Research Grant № 29/2023).

REFERENCES

- Bogdanov, H., Marinov, G., and Boshnakov, P. (2019). Hidden economy and tax evasion in Bulgaria a study of public opinion. *Economics and Computer Science E-Journal*, (3), 20-26.
- Chengelova, E., and Angelova, M. (2022). Factors determining the undeclared work in Bulgaria. *Economic Studies*, 31(2), 65-94.
- Chengelova, E., Nakova-Manolova, A., Alexandrova, S., and Gerganov, A. (2024). Factor Determinism of the "Shadow Economy". Sofia: Prof. Marin Drinov Publishing House of BAS.
- Ivcheva, R. (2023). Modeling the shadow economy. Why does the Bulgarian carry out undeclared employment? *Economic Alternatives*, 29(4), 856-866.
- Kalistratov, N. (2024). The shadow economy and tax evasion behavioral attitudes and countermeasures. *Economic Archive*, (1), 65-78.
- Nikolova, N., and Nozharov, S. (2020). Shadow economy and populism risk and uncertainty factors for establishing low-carbon economy of Balkan countries (case study for Bulgaria). *Economic Studies*, 29(3), 121-144.
- OECD (2023), OECD Economic Surveys: Bulgaria 2023. Paris: OECD Publishing.
- Petranov, S., Zlatinov, D, Atanasov, I. (2022). The shadow economy in Bulgaria during the period 2006-2019. *Economic Studies*, 31(5), 3-18.
- Petranov, S., Angelova, M., Georgieva, L., Ivcheva, R., and Avreyski, N. (2023). Is tax morale homogeneous in Bulgaria? *Economic Studies*, 32(3), 64-87.
- Vasilev, A. (2022). Decomposing the Grey Economy in Bulgaria: A General-Equilibrium Analysis. *Bulgarian Economic Papers*, BEP 06-2022.
- Williams, C. (2020). An institutional theory of tax non-compliance in Bulgaria: a tax morale approach. *Economic Alternatives*, (1), 33-49.