THE ROLE OF INFORMATION QUALITY MANAGED BY PUBLIC INSTITUTIONS IN THE PROCESS OF UNOBSERVED ECONOMY REDUCING

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Abstract: The economic security of the state is constantly affected by the phenomenon of the unobserved economy. The international community has developed international conventions and standards to combat the unobserved economy and the movement of illicit financial flows. However, insufficient law enforcement, inadequate compliance and high-risk countries can both have detrimental consequences, affecting the effectiveness of the whole prevention framework. The public institutions involved in reducing this phenomenon correlate its decisions with the economic-financial information accumulated, stored and managed in accordance with its statutory purposes. This requires the authorities to assess the role of the quality of information managed in its decision-making process. The purpose of the article is to identify the role of information quality accumulated by public institutions in the process of reducing the unobserved economy in the Republic of Moldova. As a result of the research, some gaps were found in the process of organizing the information management activity and some recommendations were developed.

Keywords: information, information system, unobserved economy, illicit financial flow, corruption, public institution.

JEL Classification: E26.

1. Introduction

The economic reality in the Republic of Moldova is characterized by a constant influence of external and internal economic, financial and political factors. During the 30 years since independence, public and private actors in the Republic of Moldova have learned the lesson of the cyclicality of economic development. Thus, after periods of economic growth, there are declines, which in turn are followed, finally, by economic gains. GDP growth is seen as a positive and long-awaited phenomenon, and the decrease in this indicator increases the size of the unobserved economy in the Republic of Moldova. Economic growth is not very useful if the income generated is captured by an elite, thus not being used to create jobs and opportunities for the population.

The transactions generated by the unobserved economy are a reflection of the process of permanent transformation of the economy under the influence of socio-economic changes in society. In the case of the Republic of Moldova, the value of transactions generated by the unobserved economy is decisive for the negative impact on the economy and society as a whole. At the same time, the high values of these transactions and considerable financial means require the actors involved in the unobserved economy to legalize the illegally obtained capital. More recently, the financial system of the Republic of Moldova, starting from the geographical location and the high level of corruption has been used as a tool to legalize the financial means obtained abroad. It is for these reasons that it is imperative to investigate the phenomenon of illicit financial flows, which, manifesting themselves in fairly large proportions in the Republic of Moldova, affect economic development and society and cause serious damage to the public budget. The link between informality and corruption turns into a vicious circle, illicit activities contribute to the deterioration of the state structure and the official economy, and a weak state, weakened by corruption, facilitates trafficking and money laundering (Corneliu-Sorin Baicu 2017). Thus, the importance of identifying and analyzing information related

to illicit financial flows is evident in the context of a decision-making process of public institutions aimed at reducing the unobserved economy. The state, through its institutions, must act as a whole in order to efficiently accumulate and manage economic, financial and social information.

The purpose of the article is to identify the role of information quality accumulated by public institutions in the process of reducing the unobserved economy in the Republic of Moldova. In order to achieve the proposed goal, the following objectives have been proposed:

> Identification of the management mechanism with the information accumulated and stored by public institutions in the decision-making process.

> Identifying the vulnerabilities and risks that hover over the decision-making process of public institutions from the perspective of accumulating information in the process of reducing the unobserved economy.

 \succ Generating recommendations on improving the process of information accumulation by public institutions in the Republic of Moldova as a result of identifying common elements and differentiating the situations analyzed.

The informational support of the researches constitutes the existing normative framework, as well as the internal regulations, but also official statistical data of some public institutions from the Republic of Moldova. At the same time, the works of some local and foreign researchers were analyzed.

The research methodology was based on the following methods: analysis and synthesis, induction and deduction, graphical and tabular methods, methods inherent in economic disciplines - observation, reasoning, comparison, classification, which allowed a deep analysis of the research topic.

2. Literature review

The role of data is very important in developing efficient and reliable policies, as they provide a solid information base that can be used by decision makers. This involves collecting and interpreting data from different sources and opinions, as well as challenging preconceived ideas and current practices in search of more effective policy solutions (European Commission, 2015). The availability of basic statistical data is fundamental. Policy representatives need to clarify what basic data they need.

The information can be considered a mass consumer good, being used by a lot of users: small and medium enterprises, listed companies, investors, state, etc. Initially, the term information was introduced in the technical field to denote the uncertainty removed by performing an event from a set of possible events. Subsequently, the meaning of the term was extended to knowledge, in general, ie to the appearance of a new element, previously unknown, on the surrounding reality. For this purpose, symbols are used which, by associating them with reality, provide information (Mihalciuc, 2008).

The emergence of the unobserved economy in the Republic of Moldova was inevitable, given the multitude of existing problems. Thus, the highest level was attested in 2000 - of 34.6% of GDP, and the lowest level in 2007 - 20.6% of GDP. In the following period, there was an increase in the level of the unobserved economy, the main cause being the financial crisis of 2008-2009 and the drought of 2009, which caused the share of the unseen economy in GDP to increase by 1.5 percentage points in 2008 and further by 0.3 percentage points in 2009. In the next two years (2010-2011) there was a slow decrease of this indicator, followed by an increase of 2 percentage points in 2012, the increase caused by drought. In 2013, measures to combat tax fraud were implemented, as a result of which there was a decrease of 0.6 percentage points (see table 1) (Ganciucov, Gutium and Ceban, 2014).

The process of estimating the unobserved economy is difficult due to many obstacles, primarily due to the high level of corruption and lobbying for some activities that are generating illicit financial flows. Although the National Bureau of Statistics assesses the unobserved economy through the indicator of the share of the unobserved economy in GDP, the proportions of this phenomenon are not fully known, and the damage to state revenues and the welfare of the population is enormous. Policies to reduce the unobserved economy start, first of all, from an estimate of its value, classification and, finally, its understanding as a phenomenon.

In these conditions, it is imperative that the decisions taken by state institutions in the field of diminishing the unobserved economy be based on analyzes of economic and financial information, which do not involve exaggerated administration costs in relation to the phenomenon of unobserved economy.

ΠΟΙΟΟΥΑ				
Period	Total % in GDP	Formal sector	Informal sector	Household production
2012	23,7	8	6,5	9,2
2013	23,1	7,5	6,3	9,3
2014	23,2	7,4	6,4	9,5
2015	23,7	9,02	5,8	8,9
2016	22,4	8,3	5,5	8,6
2017	24,5	6,8	6,1	11,5
2018	28	10	6,6	11,3
2019	25,4	7	7,9	10,5

 Table 1. The share of unobserved economy in Gross Domestic Product in Rep.

 Moldova

Source: elaborated by authors in base of data offered by the National Bureau of Statistics

The purpose of information for public institutions involved in reducing the unobserved economy is to provide accurate data on economic and financial transactions of individuals and legal entities performed on the territory of the Republic of Moldova, which can be divided as internal, external and transit, cash flows, the financial results recorded for certain periods of time, their indebtedness on the internal and external market, etc.

Thus, the quality of information underlying the decision-making process of public entities involved in reducing the unobserved economy is influenced, like private information, by some characteristics of information. At the forefront is the accuracy of the information, which is influenced by the process of collecting it. The process of gathering information is determined by the source of the information itself, where we can distinguish financial reports of companies prepared according to the rigors of regulations in force, declarations on their own responsibility, documents issued in other states, verbal statements, etc. It is clear that, in general, the level of accuracy of the information provided by a financial report and a verbal statement will be different. The collection process is also directly dependent on the technical solutions applied and the qualification of the employees responsible in the field. In conclusion we can say that the accuracy of information is influenced by the sender (source of information), receiver (the one who accumulates information and technical solutions for storing it) and the communication channel, which includes how to send and receive information. Another characteristic of the information is the completeness, which represents the degree of explicitness regarding a transaction, subject, etc. An eloquent example would be the value of a bank transaction without knowing the authorizing officer, the recipient, the destination, the date of transfer.

The cost-effectiveness of the information will influence the quality of the information, or the cost of accumulating and managing the information will be acceptable in relation to the expected result.

The need for information at the level of public institutions involved in the process of diminishing the unobserved economy results from the very task of the institutions concerned and the purpose of its use. Thus, in the process of reducing the phenomenon of unobserved economy, the information managed by the State Fiscal Service will be used, which has as basic purpose the accumulation of revenues to the national public budget; The information system of the Customs Service, which is used to record and calculate import / export duties; The information system of the Service for the Prevention and Combating of Money Laundering, whose basic task is to prevent and combat money laundering, terrorist financing and the proliferation of weapons of mass destruction; Automated Information System Register of unavailable (seized) criminal assets, which is a set of information and technologies, technical means of program and methodologies, resources interconnected and intended for recording and processing of unavailable criminal assets, documentation of procedures part of parallel financial investigations and asset management procedures, as well as the automation of specific processes and workflows for the recovery of criminal assets (Government Decision, 2020).

3. Results of own research and discussions

As described above, decisions to reduce the phenomenon of the unobserved economy by identifying illicit financial flows can be taken by public institutions only if they are provided with accurate, complete, relevant, accessible and current information. At the same time, starting from the huge volume of information generated by the illicit financial flows related to the unobserved economy, there is a need to develop information systems that contribute to the accumulation of information, verification, storage, analysis and generation of conclusions.

In order to ensure a solid legal basis for this process, to ensure the transparency and standardization of state information resources, the Parliament and the Government of the Republic of Moldova have developed and adopted a series of normative acts to ensure the necessary legal support for this process. By *Government Decision no.* 414/2018 on data center consolidation measures in the public sector and to rationalize the administration of state information systems the public institution *Information Technology and Cyber Security Service* was created, by transforming the State Enterprise "Special Telecommunications Center" and by covering the following areas of competence: information technology infrastructure management and the Telecommunications System of public administration authorities as part of the special communications network, administration and maintenance of state information systems, cyber security, management of the Government's unique public key infrastructure, implementation of information technologies in the public key infrastructure, implementation of information technologies in the public key infrastructure, implementation of information technologies in the public key infrastructure.

Also, by Government Decision no. 760/2010 was approved the Statute of the public institution Electronic Government Agency, the main purpose of this public institution being to improve the quality of governance and public services through intensive application of information and communication technologies, while the areas of competence of the Electronic Government Agency being the modernization of government services, e-Government transformation, interoperability, cyber security audit, other areas assigned in the competence of the Agency through normative acts (Government Decision no. 760/2010).

Thus, these two institutions (the Public Institution "Information Technology and Cyber Security Service" and the Public Institution "Electronic Government Agency") are at the forefront of the process of providing quality information to public institutions involved in the process of reducing the unobserved economy.

It should be mentioned that the existence of the regulation of the elaboration and implementation at state level of the information systems has optimized the characteristics of the information administered and analyzed by the public institutions.

At the same time, the relevance of the accumulated information is ensured directly by each institution, which, starting from the specifics of the information needed to be managed, information sources, communication channels, etc., develops its own information systems, being different from one institution to another. Thus, the optimal methods of accumulation and administration of information used by public institutions in the process of combating the unobserved economy involve several essential elements:

 \succ the generated information is to be processed according to unique standards until their accumulation by public institutions, an eloquent case would be the information and reports on economic and financial activity submitted to the State Tax Service;

 \succ the mechanism for accumulating information is to involve fixed, transparent, well-defined and applicable procedures;

 \succ the accumulated information is to be stored within a unique information system, which allows the operational and strategic analysis of the accumulated information;

 \succ the mechanisms for accumulating and administering the relevant information are to be subordinated to the normative acts in force;

> the developed information systems are to ensure a high level of interoperability;

 \succ the effectiveness of the information analysis process is directly related to the capabilities of the information system in which it is processed.

We believe that information management must be a major concern for public institutions, as not only the quantity but also the quality of information is one of the prerequisites for developing correct and effective strategies. Although information management can be viewed in different ways, what is important is that its characteristic actions must be adapted to the specifics of the categories of information. Also, due to the fact that information is an element of heritage assets that become necessary resources for formulating strategies and making decisions, their management involves ensuring their protection.

The decision takes the form of a decision act in situations of low complexity or when the situation is repetitive, the variables involved being very well known by the decision maker so that it is no longer necessary to gather information and analyze it. The decision-making act is largely based on the experience and intuition of the people involved in the decision-making process. Thus, the decision-making process takes into account more complex situations that involve a longer time during which a large amount of information is collected and analyzed in order to outline the decision. We can say that *the decision-making process involves all the phases through which the decision is prepared, adopted, applied and evolved* (Popeangă, 2007).

Of particular interest today is the way in which information managed by state institutions is reflected in the decision-making process. In turn, the usefulness of the information managed is determined by the characteristics of the information, namely its accuracy, completeness, relevance, cost-effectiveness, simplicity, verifiability, accessibility and security. At the same time, equally important for the decision-making process are the information systems used for the systematization of information, as well as the qualification of the staff involved in generating conclusions. And if in the enterprise for the quality of information and its systematization is responsible accounting, which has strict

rules of record, as well as a limited number of technical solutions for their processing, then in the case of public institutions there is no general rule for all on the type of information accumulated, the type of reports generated, unique analysis procedures. In this sense, each public institution, starting from its attributions and competences, models the systems of accumulation and management of information according to its needs. At the same time, if some public institutions, such as the State Tax Service benefit from the products generated by the accounting standards, namely the Information System of the State Tax Service is supplemented with reports of the economic agents in the value added tax part, income tax, employees, other taxes and others, which are generated by information systems guided by the rules of accounting, established by the Accounting Law and National Accounting Standards, and moreover, automatically loaded into the information system, then in the case of others public institutions, the latter are to make additional efforts in terms of the quality of the information administered. An eloquent example would be in this sense the information system that ensures the record of real estate of the Public Services Agency, where, starting from the quality of the documents presented, errors can be identified in the system, which in turn can affect the decision-making process.

In order to regulate the state information resources and to homogenize the processes of creation and development of the national information infrastructure, Law no. 467/2003 on computerization and state information resources was elaborated. The object of regulation of this law is the basic rules and conditions of activity in the field of creation and development of national information infrastructure as a functioning environment of the information society in the Republic of Moldova, regulates the legal relations that appear in the process of creation, training and use of information resources. automated state, information technologies, systems and networks. Also, the above-mentioned law defines some notions, which ensure a standardization in the process of creating the state information systems, which come to ensure the functional attributions of public institutions, namely:

 \succ database - totality of data, organized according to a conceptual structure, which describes the main characteristics and the relations between the essences, destined to a field or several fields of application;

 \succ information infrastructure - all computer information centers, data banks and knowledge in the integrated automated system of telecommunications and organization that provide users with general conditions for access to stored information;

 \succ information system - totality of interdependent information resources and technologies, methods and personnel, intended for storage, processing and provision of information.

In turn, Law no. 71/2007 regarding the registers, published in the Monitorul Oficial no. 70-73, art. 314 of 25.05.2007, regulates the manner of establishing, registering, maintaining, reorganizing and liquidating the registers, the type of registers and their form of keeping, the system of state registers and the general principles of interaction of state registers. It is these elements that have the role of providing public institutions with qualitative, relevant information, efficiently accumulated in terms of administration cost, to allow the management of the information accumulated in order, in the end, to positively influence the decision-making process within public institutions. Or, the decision-making process represents the activity of logical thinking, realized in a certain organizational and legal framework and carried out in time by the management bodies, with the attraction of some compartments and specialists, in connection with the preparation, elaboration, realization and control of a decision.

The efficient management of information, its storage and access whenever necessary ensures, last but not least, the improvement of the institutional memory of the

public authorities of the Republic of Moldova. This fact becomes even more important as public authorities such as the State Fiscal Service already have 31 years of activity, the National Anticorruption Center 19 years, the Money Laundering Prevention and Combating Service 18 years. More recently, the Criminal Assets Recovery Agency, which is considered a "young" institution, has been operating for 4 years. Decisions taken over the years form an institutional practice, which, if they take into account previous decisions, increase the institution's experience in facing challenges, becoming more predictable and transparent in activity, thus increasing the integrity of public authority.

4. Conclusions

As a result of the research in order to establish the role of information quality managed by public institutions in the process of reducing the unobserved economy, *the following conclusions were established, as follows:*

 \succ The decision-making process in public institutions involved in reducing the phenomenon of the unobserved economy is dependent on both the quality of the information managed and the information systems that store and process that information.

 \succ Information managed by state institutions that is generated in compliance with accounting standards has characteristics that positively influence their quality.

 \succ Illicit financial flows leave "traces", which are used as relevant information by public institutions in the decision-making process in the field of reducing the unobserved economy. The state regulates the general principles, through the adopted normative framework, regarding the elaboration of information systems and their interoperability.

 \succ Each public institution shall set up information systems to manage information relevant to its tasks, while paying particular attention to interoperability with existing information systems. It is necessary to standardize the acts and documents that are used as primary sources of information in public institutions.

> The activity of public institutions involved in reducing the phenomenon of the unobserved economy acts in a decentralized manner, both at the level of information accumulation and at the level of decision-making.

As a result of the shortcomings and risks of reducing the role of information for decision-making in public institutions involved in reducing the phenomenon of the unobserved economy, *some recommendations can be mentioned to overcome deficiencies and reduce risks that hover over the decision-making process.*

> Thus, public institutions are to evaluate all its information systems in terms of the relevance of the information and, if necessary, the transfer of information to a system, the maintenance of which will be further ensured.

> In order to ensure coherence between paper and electronic information, the archives are to be digitized, but taking into account the cost-effectiveness.

> In order to ensure unique standards for the issuance of different types of documents, which are a source of information for the information systems that are used to identify illicit financial flows, the issuance of these documents itself should be done within the same information system, an eloquent example would be document management, where any generated document has predefined fields, and the information entered in these fields is stored in the system databases.

> It is also necessary to organize a country-wide audit of all information systems in order to exclude the practice of accumulating and managing the same type of information by different institutions, ensuring the interoperability of all information systems.

 \succ It should be noted that, once the role of economic and financial information in the decision-making process of public institutions involved in reducing the phenomenon of

unobserved economy has been assessed, it is still necessary to evaluate the costeffectiveness of the proposals submitted and the impact of the information on this decisionmaking process. At the same time, it is necessary to coordinate the activities of public institutions involved in reducing the phenomenon of the unobserved economy in order to streamline this process.

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