СЪВРЕМЕННИ ТЕНДЕНЦИИ И ПРЕДИЗВИКАТЕЛСТВА НА ДАНЪЧНОТО ОБЛАГАНЕ И ДАНЪЧНИЯ КОНТРОЛ

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Резюме: Това изследване интерпретира популярни теории за естеството на данъците. Разгледани са функциите на данъците за осъществяване на съвременната данъчна политика — фискална, икономическа, социална, екологична и контролна. Изяснява се съвременната роля на данъчното облагане и данъчния контрол, насочена към осигуряване на регулярни данъчни приходи за устойчивото функциониране на държавата и публичните институции и за реализиране на стратегиите, политиките и програмите, свързани с устойчивото развитие. Изследват се съвременните проблеми на данъчното облагане и данъчния контрол в развитите и развиващите се страни. В тази връзка е извършен сравнителен анализ на практиката на Националната агенция за приходите в България и в резултат на изследването са систематизирани насоки за повишаване на ефективността и ефикасността в данъчната сфера.

Ключови думи: приходна агенция, органи по приходите, данъци, данъчна администрация, данъчен морал, спазване на данъчното законодателство, данъчен контрол

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CONTEMPORARY TRENDS AND CHALLENGES OF TAXATION AND TAX CONTROL

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Abstract: This study interprets popular theories about the nature of taxes. The functions of taxes for implementing modern tax policy – fiscal, economic, social, environmental, and control – are examined. The contemporary role of taxation and tax control, aimed at ensuring regular tax revenues for the sustainable functioning of the state and public institutions, and for realizing the strategies, policies, and programs, related to sustainable development, is clarified. The modern problems of taxation and tax control in developed and developing countries are studied. In this regard, a comparative analysis of the National Revenue Agency practice in Bulgaria is carried out and, as a result of the study, guidelines for effectiveness and efficiency improvement in the tax field are systematized.

Keywords: revenue agency, revenue authorities, taxes, tax administration, tax morale, tax compliance, tax control

JEL: H20, H26, H29, H83

CONTEMPORARY TRENDS AND CHALLENGES OF TAXATION AND TAX CONTROL

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Introduction

Taxes have been known since ancient times and have developed together with human civilization, with the state's needs for material resources or financial means. Taxation is established as the main method of accumulating the necessary revenues for the budget. Over time, in addition to the fiscal function inherent in taxes, they began performing other functions – economic, social, environmental, and control. The role and functions of taxes and taxation are expanding and becoming more complex. They find expression in the implemented tax policy. Thus, in modern conditions, taxes and taxation become part of the toolkit for carrying out sustainable development policy, through which a solution to issues related to environmental protection, limiting inequalities, poverty, social exclusion, and the gray economy is sought.

Understanding the role and functions of taxes implies clarifying their nature. Three main theories about the nature of the tax are popular: insurance theory, sacrificial theory (debt theory), and equivalent theory (Stoyanov, 2000, p. 22).

According to *the insurance theory*, the tax is identified with the insurance premium or contribution, which is paid to the insurer - in the person of the state - for the protection of the property, rights, and safety of the citizens. However, there are serious objections to this interpretation: (1) the size of the insurance contribution is determined by the degree of risk; (2) after the occurrence of the insured event, the insurance organization pays the insured person certain compensation depending on the scale and extent of the damage; (3) in the case of insurance, certain obligations of a financial nature arise for both parties, respectively – payment of insurance premiums and insurance benefits; (4) insurance as a rule is voluntary in nature. All these characteristics are not inherent in the relationship between the state and taxpayers in the fulfillment of their tax obligations, since the tax is determined unilaterally by the state, is mandatory, and subject to enforcement.

Supporters of *the sacrificial theory* consider the state as an objective necessity – an institution without which modern society cannot exist. According to them, after man realized this need, he concluded the so-called "social contract" by which the state was created, as a guarantor of the organized functioning of civilized human society. Since this is realized by the members of society (citizens of the state), they should make a certain "sacrifice" in the name of preserving and strengthening the state, without which the existence and development of human civilization is impossible. It is the tax that is seen as a form of this sacrifice. According to critics of this theory, the use of the concept of "sacrifice" is inappropriate in this case, since there is no exercise of free will due to the compulsory nature of taxes. Therefore, it is more acceptable to consider the tax as a "debt" and accordingly – the theory of debt.

Popularity has gained *the equivalent theory* of the nature of the tax, which has its origins in the classics of political economy. According to its proponents, the state is useful to citizens, as it provides them with various services, such as protection of property, maintenance of internal order and security, protection from external attack,

etc. However, these services are not free – their price is taxes. From here, the widespread modern understanding of the essence of the tax is confirmed, as the price of public goods and services, the production of which is financed through taxes. At the heart of this theory is the understanding of the market-equivalent nature of the tax: the state creates and provides public goods and services, in exchange for which individuals pay taxes.

Regarding this theory, Velcho Stoyanov expresses a critical opinion: "It can be assumed that the more property an individual owns, the more income he earns, and the more quality consumption he has, the greater his need for the more taxes the state should pay. However, this is not always the practice case, which is why every tax is a gratuitous payment, and its remunerative nature is very general and abstract" (Stoyanov, 2000, p. 24). These arguments of the author against the logic of the equivalent theory are perfectly valid. They are related to a realistic understanding of the tax sovereignty of the state, which provides a basis for taxing taxpayers and enforcing tax obligations – regardless of the utility that may be provided in the form of public services or goods. Thus, from an economic point of view, tax is a part of income, revenue, and profits, which is seized from individuals and placed at the disposal of the state. On the other hand, the possibility of the population exercising control over parliamentary activity and government policy, in the conditions of democracy, shapes the appearance of the tax system. In mature democracies, taxpayers can exercise control over the effective and appropriate spending of public funds. In this way, citizens are not only a passive party to the state and taxation. According to Stoyanov (2000), the scale and structure of the state apparatus decisively determine the level of taxation and the tax burden.

Each of the presented theories about the nature of the tax reveals its characteristics and the specifics of the relationship between the state and taxpayers. The integrative perception of these theories is the basis for understanding the complex nature of taxation and the modern role and functions of taxes and tax control. The main research thesis is that effective and efficient tax control ensures a regular flow of planned tax revenues to the budget for the sustainable functioning of the state and public institutions, and the implementation of national and international strategies, policies, and programs for achieving sustainable development.

The present study aims to reveal the role of taxation and tax control in providing the necessary financial resources for the state's and public institutions' sustainable functioning and for achieving economic, social, and environmental goals, as well as to contribute to improvement in the tax system. In this regard, the tasks of the study have been defined: analysis of the modern functions and challenges of taxation and tax control, revealing the opportunities for improving the work of the tax administration, and providing guidelines and recommendations for increasing tax compliance and the results of tax control.

1. Functions of taxes and tax control in the context of the concept of sustainable development

1.1. Modern interpretation of tax functions

Nowadays, not only on a global scale but also on a local level, ways and means are increasingly sought for conducting a policy aimed at sustainable development. In this regard, the need for regular tax revenues to finance public services (goods), environmental projects, health, education, research, innovation, and infrastructure is increasing. In this way, the prediction of the German economist Adolf Wagner from the

11th century, known as "Wagner's Law", is confirmed. According to him, the state will increase its activity and its expenses will increase in the future because new needs arise and old ones are satisfied. This is evidenced, for example, by the agreements presented in 2019 regarding the European Green Deal and the measures taken to overcome the consequences of the Covid-19 pandemic. In this way, the fiscal function of taxes is highlighted, but in modern times, other effects are also sought through taxation.

Functions that taxes can perform in modern society are:

- Fiscal (f): provision of the necessary financial means for the organized functioning of the state, for the creation of public services and goods.
 - Economic (f): impact on employment, economic development and growth.
- Social (f): redistribution of income to individual taxpayers and impact on social processes.
- Environmental (f): a tool for conducting environmental policy and influencing the behavior of tax subjects to protect the environment.
- Control (f): carrying out lawful activity, keeping legally regulated reporting, declaring data on taxation, and controlling for compliance with tax laws to accumulate regular revenues in the budget.

The fiscal function has established itself as primary and immanent to the tax. The active social function of the tax dates back to the second half of the 11th century, and the economic function from the 1930s. Proponents of the theory of functional taxes believe that the economic function of taxes is dominant. According to them, the main purpose of taxes is not to provide revenue in the budget, but to have the desired impact on economic processes (Stoyanov, 2000). In connection with the adoption of the principles of sustainable development, expectations for the environmental function of taxes and the possibilities of achieving environmental effects through the taxation system are growing.

The concept of sustainable development and its practical implementation aims to achieve results in three main areas – economic, social, and environmental, which should be considered holistically (Elliott, 2013). According to Mladenova (2015, p. 32), this is how we arrive at the modern widespread understanding that "sustainable" is a development that rests on three pillars – economic, social, and ecological. Mladenova (2015, p. 32) points out: "Sustainable is a development that achieves in unity the three goals: economic (growth of well-being), social (social equality, reduction of social differentiation) and ecological (ecological balance and preservation of nature)".

The three key areas of sustainable development – economic, social, and environmental, correspond to the modern functions of taxes in the following aspects:

- Economic aspect: maintaining a low level of unemployment by conducting an adequate policy on incomes and taxation to stimulate employment and economic development, limit the "grey economy" and ensure a regular income from taxes and insurance in the budget.
- Social aspect: reducing income inequality, and ensuring social justice and stability through the taxation system.
- Environmental aspect: stimulating the protection of the environment by implementing a tax policy aimed at a rational choice of resources and the use of innovative environmental technologies.

The inherent fiscal function of taxes is also important for realizing sustainable development. Without financial security and regular tax revenues in the budget, the state will not be able to provide its citizens with all those public services (goods) that are valued in modern society, for example: free quality education, health care, modern infrastructure, and innovative technologies. The implementation of environmental

projects, innovations, technological transformations, retraining, and redirection of human capital are mostly the result of public investments (Stiglitz, 2012), even though opportunities are being sought to expand the public-private partnership. The control function of taxation is important for raising tax morale in the society, which has a positive impact on the attitude of compliance with the laws in the country, as a whole, and the realization of the principle of "rule of law" in the democratic community.

1.2. Role and functions of tax control for modern development

The tax control system should guarantee a successful tax policy, including one aimed at achieving the goals for sustainable development by 2030, set by the United Nations. Without reliable tax control, systematic risk assessment, effective and efficient inspections, and audits – it will not be possible to implement the complex tax functions, accumulate the planned tax revenues, ensure social stability and targeted economic impact, as well as contribute to the protection of the ecological balance.

Tax revenues provide funds used by the state to develop infrastructure, education, science, technology, and healthcare; maintain security and public order; and make public expenditures that ensure sustainable economic growth. If tax control is weak, it will not be a reliable barrier to tax fraud and tax avoidance; it will not be possible to provide sufficient funds to finance the government spending that stimulates the development of the economy. The low collection of taxes is the reason for the deterioration of the budget balance. From there, there follows an increase in the budget deficit and an increase in government debt, which in turn is an unfavorable condition for maintaining stable public finances. Conversely, if taxpayers have expectations of permanent, comprehensive, and thorough tax control, then compliance with tax laws (tax compliance) will be higher. This makes it necessary to constantly develop quality and ensure competent and productive tax control following the dynamic changes in the economy and society. The fight against tax evasion and corporate tax avoidance should be strengthened, and international cooperation against tax havens that undermine the tax base in developed and developing economies should be strengthened.

In a democratic society, the tax control system consists of institutional control (specialized bodies and institutions for tax control, such as the National Revenue Agency) and non-institutional (civilian) control over taxes exercised by non-governmental organizations and individual citizens. On the other hand, civil control for compliance with tax legislation is both formal and informal. Formal (regulated) civil control over taxes is realized, for example, by creating a legal obligation for buyers to keep their fiscal receipt until leaving the commercial establishment, resp. to inform the tax administration in the absence of such. To ensure conditions for following this obligation telephone numbers must be displayed in a prominent place in the commercial establishments for contacting the control authorities. Cultivation of public intolerance towards tax abuses and the emergence of negative public reactions against them is an expression of informal (unregulated) civil control over taxes, which is realized mainly through the media and through citizens reporting tax violations and corrupt practices in the tax administration (Nikolova & Koleva, 2018, p. 37). Civil control of tax compliance can serve as a measure of the level of tax morale in society.

Given the exposition so far, the conclusion is reached that without stable tax revenues, the state cannot ensure the satisfaction of the constantly growing need for quality public services and goods, as well as the implementation of modern strategies, policies, and programs aimed at achieving the goals of sustainable development. On the other hand, especially with insufficient transparency and the presence of bureaucratic

practices in society, there is a possibility that the state will take advantage of the opportunity to seize from taxpayers a much larger part of their incomes, revenues, and profits compared to the actual needs, under rational and efficient management of public finances. Therefore, to overcome the manifestation of this risk, it is important to ensure not only the efficient functioning of tax control but also of the entire financial control system.

2. Taxation and tax control challenges

The current issues related to taxation and tax control (tax inspections and audits), which are on the agenda of the rulers and engage the attention of scholars, are diverse and need in-depth independent research. First, the autonomy of the tax system. States have tax sovereignty, but common solutions are increasingly sought in the formation of tax policy, as a result of which it acquires global characteristics. For example, in the months of June and July 2021, at the summits, the G-7 and G-20 countries discussed the introduction of a single corporate tax rate of 15%. The question of the autonomy of the tax system can be considered in another aspect, concerning the extent of autonomy and independence of the tax administration from the executive power. Second, expansion of electronic services and digitization in the field of taxation and tax control. Third, improving collection and reducing the cost of tax administration. Fourth, increasing tax morale and tax compliance. Fifth, limiting corruption in the tax sphere. Sixth, implementation of efficient control impact, including administration of justice, in the field of taxation. Seventh, improving interaction and cooperation to counter local tax abuses and cross-border tax fraud.

2.1. Autonomy and independence of the tax administration

The question of the degree of autonomy of the revenue authorities and ensuring independence from the government is related to the possibilities of increasing the efficiency of the tax administration and improving the results of the control impact.

The tax system is responsible for generating the bulk of the revenue needed to finance public goods. Given the self-assessment and quality management systems in place in revenue agencies, the scope of tax laws administered, and the large number of taxpayers, revenue authorities need adequate powers and a degree of autonomy to be operational and able to perform effectively and impartially its activity. On the other hand, they must work reliably in the public interest, which can be ensured through credible accountability and regular supervision to ensure transparency and legality in their activities and the overall administration of taxation. Therefore, it is necessary to ensure the independence of the tax authorities and, at the same time, to guarantee the implementation of lawful and socially beneficial activity on their part.

The European Commission has developed a set of requirements that were initially addressed to the candidate countries for membership in the European Union, and later to the member countries regarding the strengthening of national revenue authorities. Their priority is to guarantee an adequate level of autonomy. A study by the Organization for Economic Co-operation and Development (OECD) states that in terms of institutional design and autonomy the International Monetary Fund's (IMF) Tax Department provides some practical advice and recommendations to individual countries as part of technical assistance, which provides them under the Fund's programs. The IMF generally recommends that the revenue authority should have sufficient autonomy regarding the organization and planning of operations, budget

management, performance measurement, and human resource management, such as recruitment and career development (OECD, 2015, p. 23).

The practice of creating a single body for tax administration of all taxes (sometimes also customs), outside the official structure of the Ministry of Finance (or its equivalent) – with a wide range of autonomous powers, has found wide development in modern tax administration. According to the results of a large-scale comparative study of the OECD, conducted in 56 countries, more than half of them apply this model to the structure of revenue agencies (OECD, 2015, p. 28). The arguments in its favor relate primarily to efficiency and results: (1) as a single-purpose agency, it can focus its efforts on a common task; (2) as an autonomous organization, it can carry out its activities without political interference in day-to-day operations; (3) it can recruit, retain (or fire), and motivate higher-level personnel.

The same OECD study presents the delegated autonomous powers found in the practice of some revenue authorities (OECD, 2015). They are presented in Table 1 and can serve as criteria for assessing the level of autonomy of a given revenue agency.

Table 1
Criteria for assessing the autonomy of revenue agencies

Delegated	Characteristic
autonomous powers	
1. Budget expenditure management	Independent judgment to allocate or adjust the administration's budget, enabling revenue authorities to use their resources more rationally.
Organization and planning	The internal organization and administrative structure, including the location of the tax offices; formation of strategic and operational plans for the activity of the revenue authorities, following the changed circumstances, to increase the overall effectiveness and efficiency.
3. Performance standards	Setting own standards for administrative performance, for example, for the provision of services to taxpayers.
4. Recruitment, Development and Compensation	Opportunity to set qualification standards for newly appointed employees; recruit and release staff; create staff training and development programs; ability to negotiate staff remuneration in line with public sector policies and arrangements. These powers provide an opportunity for more efficient use of human resources.
5. Information technology	Administration of own internal information systems or outsourcing of such services to private contractors.
6. Interpretation of tax legislation to assist taxpayers	Clarifying the application of tax laws and their administration.
7. Execution	The power to exercise, without referral to another authority, certain actions related to the administration of taxes, for example, obtaining information from taxpayers and third parties, and imposing liens on property for unpaid debts; this allows revenue authorities to respond quickly to tax discrepancies.
8. Penalties and interest	The right to impose administrative penalties and interest for non-compliance with tax laws and to simplify them in certain cases.

Source: own elaboration based on OECD (2015, p. 33)

According to these criteria for assessing the autonomy of a given revenue agency (Table 1), for example, in Bulgaria, the National Revenue Agency and its management board are directly dependent on the Minister of Finance according to the provisions of Article 2 and Article 5 of the Law on the National Revenue Agency (Zakon za Natsionalnata agentsia za prihodite, 2023).

In discussing issues of revenue agency autonomy, however, the rule should always be borne in mind that even with increased autonomy, revenue authorities must operate

within a framework that ensures that they remain accountable to the government and the citizens. Therefore, reliable mechanisms for supervising the revenue agency and approaches to achieve adequate accountability for the objective and impartial performance of its activities are needed. For this purpose, in some countries management or advisory councils have been created, positioned between the revenue agency and the ministry of finance. For example, the Board of Her Majesty's Revenue and Customs in the United Kingdom, the Internal Revenue Service's Oversight Board in the United States, and Russia's Public Board of the Federal Tax Service. They consist of external officials, outside the revenue agency, who are tasked with overseeing the day-to-day operation of the tax system. Governing boards perform an oversight function and are involved in strategy and planning development, policy approval, signing of official budgets and plans, and overall performance evaluation. Board members do not participate in matters concerning the taxation of individual taxpayers and do not have access to specific data about them.

For comparison, according to the current Law on the National Revenue Agency (Zakon za Natsionalnata agentsia za prihodite, 2023), the National Revenue Agency (NRA) was established in Bulgaria as a specialized state body under the Minister of Finance for establishing, securing, and collecting public receivables and private state receivables determined by law. The governance structure of the NRA is presented in Figure 1.

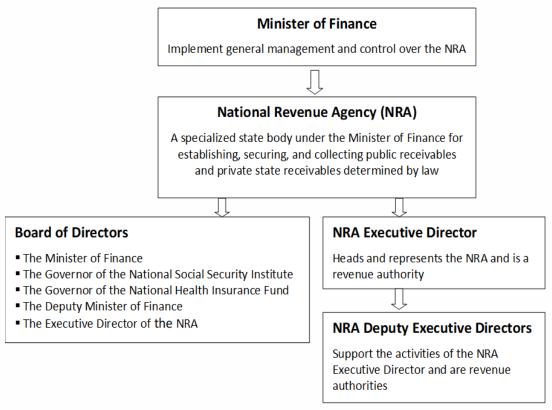


Figure 1. The governance structure of the National Revenue Agency in Bulgaria Source: own elaboration

The governing bodies of the NRA are the Management Board (Board of Directors) and the Executive Director, who leads and represents the agency. The Executive Director and his deputies are also revenue authorities. The Executive Director is appointed by the Council of Ministers on the proposal of the Minister of Finance. In

carrying out his activities, the Executive Director is assisted by Deputy Executive Directors who are appointed by the Minister of Finance on the proposal of the Executive Director. The Executive Director's remuneration is determined by the Council of Ministers. The general management and control over the activity of the agency is carried out by the Minister of Finance or by a deputy minister designated by him. The Management Board consists of the Minister of Finance, the Governor of the National Social Security Institute, the Governor of the National Health Insurance Fund, the Deputy Minister of Finance appointed by the Minister of Finance, and the Executive Director of the NRA. The chairman of the Management Board is the Minister of Finance.

When analyzing the powers of the executive director of the National Revenue Agency, as a member of the management board and at the same time – a revenue authority, it becomes clear that he can participate in solving issues related to the taxation of individual taxpayers and has access to specific data about them. This also applies to his deputies who are also revenue authorities. According to Article 10 of the Law on the National Revenue Agency, the executive director has broad powers, some of which he can assign by order to other officials of the agency, including the deputy executive directors and the directors of the "Appeals and tax-insurance practice" directorate.

According to data from the OECD, specialized bodies independent of the revenue agency function in some countries to report on the work of the tax system (OECD, 2015, p. 42). For example, in Australia, the Inspector-General of Taxation aims to report and make recommendations to the government on improving the system of tax administration to reduce the administrative burden on taxpayers. In the USA, the Treasury Inspector General for Tax Administration aims to provide independent oversight of the activities of the Internal Revenue Service (IRS). These bodies operate separately and independently from the national audit authorities, which oversee the work of all government agencies.

The OECD points out that many countries have established special bodies (ombudsmen) to deal with individual complaints against government agencies (including revenue authorities) lodged by citizens and businesses. The main aim is to ensure that citizens and businesses have the opportunity to seek help when they feel they have been treated harshly or unfairly and that these matters are dealt with independently of the agency to which they refer (OECD, 2015, p. 49). Examples include the Taxpayers' Ombudsman in Canada, Mexico's Office of Taxpayers' Advocate, and the Office of Tax Ombud in South Africa Africa) and US Taxpayer Advocate Office (Taxpayer Advocate Service in the United States).

Therefore, it can be concluded that the lack of operational independence of the revenue agency and the presence of direct subordination to the line minister (minister of finance) undermine the effectiveness and independence of specialized tax control; and create conditions for it to be directed in a tendentious and one-sided manner. Thus, the broad powers of the tax authorities could be used as a kind of tool for putting pressure on individual taxpayers or groups of taxpayers. To increase the independence of the revenue agency, transparency, and legality in the administration of taxes, it can be recommended that: (1) the executive director of the revenue agency be elected by the parliament, after extensive public discussion; (2) the revenue agency periodically reports its activities to the parliament; (3) to create an independent and independent body from the revenue agency and the Ministry of Finance, with supervisory functions, to observe the effective and efficient functioning of the tax system; (4) to create an independent body for considering complaints against revenue authorities and other

bodies of state agencies with broad powers, such as, for example, in Bulgaria the Agency for State Financial Inspection and the State Agency "National Security".

2.2. Increasing the efficiency of the tax administration through the use of information technology

The use of information technology (IT) makes it possible to reduce the costs of tax administration and meet the growing demands of taxpayers for the provision of modern services by the tax administration. This increases the efficiency of the tax administration and achieves higher satisfaction of taxpayers in the fulfillment of their obligations, which has a favorable impact on tax collection.

The proliferation of electronic devices makes it easy to access various services on the go. Every day, taxpayers use technologies that speed up the sharing of information and access to a range of services electronically. This creates higher expectations of the services and access they seek from public sector institutions, including revenue administration. Additionally, many individual taxpayers (individuals) are unwilling to invest their time and effort in learning the details of how to comply with tax laws that are constantly changing and becoming more complex. Therefore, revenue authorities should consider how to develop their services to assist and guide taxpayers to fulfill their tax obligations or exercise their rights in a timely and convenient manner. In this regard, many administrations in developed countries adopt an approach to providing services related to key events in the lives of taxpayers or their families, for example, getting married, having a child, registering a company, starting school or higher education, starting a job, buying a home, retiring or the death of a family member. Thus, revenue authorities could look for a way to combine taxation with other services that taxpayers consume (OECD, 2016, p. 25).

The development of electronic services in the tax administration can be seen in the context of the creation of a common digital platform for government programs, which provides a single digital access for all interactions with "e-government". When not handling confidential taxpayer information, the data must be shared between all government agencies. This eliminates the need for taxpayers to provide the same event information to multiple agencies (OECD, 2016, p. 39).

Big Data technology provides an opportunity to create new tools that will help revenue authorities provide proactive services, better manage and address tax risks – including tax avoidance, evasion, and fraud, as well as improve other targeted activities including debt collection. Big data represents large and complex, often unstructured data sets that are difficult to work with using conventional tools and techniques. This is data collected from many diverse sources, including the Internet, social media, sensors, text messages, video images, and audio files, as well as other often unstructured sources. The ability to analyze data in real-time or in real-time offers revenue authorities the opportunity to change the way they manage risks and the services they provide to taxpayers.

Public sector administrations are beginning to take advantage of big data flows for their operations, including crime prevention and public safety, as well as facilitating disaster responses and improving social services. Revenue authorities could also look to the opportunities that the use of big data presents to them for tax administration and revenue collection. A challenge for revenue agencies is to learn how to turn big data into useful information to comply with tax laws, improve services, and reduce administrative costs. Collecting big data from third-party sources and combining it with tax data will also allow revenue authorities to develop and create customized e-services

that target the specific needs of individual and business taxpayers. New synergies can be gained from combining Big Data with such modern analytics technologies as geospatial analytics, network analytics, text and voice analytics, click-stream analytics, operational intelligence, and real-time analytics. The availability of real-time data will create opportunities for revenue authorities, instead of capturing and analyzing transactions that happened in the past, to make tax assessments in real-time or promptly, provided that their information systems are integrated with the natural environment of taxpayers.

Combining Big Data technology with digital filing of tax returns will have a significant impact on tax administration in the future. Thus, revenue authorities will be able to introduce real-time or timely risk monitoring, as well as make a compliance assessment. Combining Big Data technology with advanced analytics creates opportunities to combat tax fraud and curb the shadow economy. As part of this approach, Big Data can assist revenue authorities in researching and understanding the historical activity and behavior of taxpayers. Given that most taxes result from business transactions carried out by taxpayers, it is possible that over time revenue authorities may, using big data technologies, achieve a shift in taxation to the point of transaction, removing the need to submit a large part of the tax returns.

Big Data technologies can also enable revenue authorities to review all transactions in the wider economy, grouping and comparing, not just analyzing the risks of specific taxpayers. Thus, the prospect for revenue authorities is to move from analyzing historical transactions to a state where they can review taxpayer activity in real time (OECD, 2016, p. 48).

Big Data technologies create an opportunity to improve many aspects of the operations of revenue authorities. The goal is to carry out a digital transformation aimed at transitioning from a tax administration that derives most of its data from information provided by taxpayers to one that extracts information from third parties to use it for optimal interaction with taxpayers in assessing risk and providing modern tax services (OECD, 2016, p. 64).

Big Data technology features improved access to data and new data sources that can be accessed in real-time or ad-hoc, as well as the ability to combine data and analytics. This creates enormous potential to transform the decision-making process of revenue authorities. It also provides an opportunity to derive better business value from existing data and thereby transform the support that revenue authorities provide to taxpayers in meeting their tax obligations to improve tax compliance, reducing the administrative burden and increasing taxpayer confidence (OECD, 2016, p. 102).

In connection with the international experience of expanding the possibilities for the use of information technologies in the tax administration, in 2020 in Bulgaria, the National Revenue Agency (NRA) prioritized the timely provision of information and support to taxpayers in fulfilling their obligations. as well as searching for opportunities to improve the electronic services that the revenue agency provides to citizens and companies (Natsionalna agentsia za prihodite, 2021).

In its annual report for 2020, the NRA announces that 17 new electronic services have been introduced. To make it easier for citizens to complete their annual income tax returns and to reduce the administrative burden for their processing, the NRA has made it possible to use, through its electronic services portal, officially filled-in data in the returns. Also, for several years, the possibility of payments of public obligations with debit and credit cards through virtual and physical terminals of the NRA, which are exempt from transfer fees, has been provided. The revenue agency seeks to increase the share of control proceedings in which specialized software is used to analyze data

in electronic format. Control actions were taken against persons who did not declare revenue or income from trading on the Internet as a result of which in 2020 additional tax and insurance obligations were established in an amount exceeding BGN 18.5 million. The National Revenue Agency cooperates and interacts with other state institutions (municipalities, commercial banks, post offices, National Statistical Institute, Registration Agency, and National Insurance Institute), applying the principle of service initiation for the electronic exchange of information, control, and support, to optimize terms and actions, reduce the administrative burden and increasing the quality of services. In 2020, several results related to administrative cooperation and the exchange of information in the field of value-added tax with revenue administrations from the member states of the European Union were reported. Actions have also been taken for the development, updating, and technological improvement of the information systems in the NRA. This development in the activity of the revenue agency of Bulgaria continues in the following years.

It can be concluded that the NRA follows the general trend of the OECD countries regarding the application of information technologies – both in administrative activity and cooperation with partners, as well as for risk assessment, audits, and inspections. In this regard, even better results are expected to be achieved after the creation of a common digital platform and "e-government". To improve the activity of the National Revenue Agency, at this stage, it can be recommended: (1) to look for opportunities to apply modern approaches to combating tax fraud and limiting the gray economy, such as "Big Data" technology; (2) development and provision of electronic services to assist (guidance) taxpayers in complying with tax legislation.

2.3. Increasing collection and reducing the costs of tax administration

In today's environment, many governments seek to improve the state of their budgets by increasing tax collection and reducing the costs of their administration. In this regard, opportunities are being sought for more efficient revenue collection, including through integrated tax and insurance collection. The majority of OECD countries still have separate administrations for tax and social security collection. Despite the dominance of this approach, in the last two decades, there has been a clear trend towards the integration of their collection both in developing countries seeking to reduce public administration costs and in advanced countries looking for opportunities to improve efficiency and the efficiency of revenue agencies. The main arguments for integration advanced in IMF working papers are (1) the common nature of the basic processes involved in tax and insurance collection; (2) efficient use of the resources and capacity of the revenue administration; (3) adequate development of the basic competencies related to the collection of taxes and social security contributions, without the need to maintain competencies for the payment of benefits; (4) reduction of costs for the state administration, as the duplication of the main functions related to the processing and verification of declarations, payments and forced collection of receivables is eliminated; (5) reducing tax compliance costs by completing common forms and optimizing documentation verification systems (IMF, 2004, p. 13).

For comparison, in Bulgaria, at the beginning of 2006, the administration of taxes was reformed and the National Revenue Agency (NRA) was created, with which the tax administration, the "Collection" function of the National Insurance Institute, and the activities of the State Receivables Agency were united (Nikolova, 2019, p. 28). As a result of the large-scale reform in the administration of public receivables in the country, an increase in the collection of tax-insurance receivables is reported. The

simplification of taxation through the introduction of a flat tax with a low flat rate of 10% for taxation of income and profits also contributed to this. In this way, Bulgaria has responded to the modern trends for institutional integration of public receivables intending to increase collection and reduce administrative costs.

2.4. Increasing tax morale and tax compliance

The modern tax system is oriented towards conducting a sustainable tax policy and increasing "tax morale". This concept generally refers to the motivation for voluntary compliance with tax legislation (tax compliance). Specialized research states that promoting voluntary compliance with tax obligations should be a primary objective of revenue authorities in improving tax administration and emphasizes the role of tax morale (OECD, 2001; 2013). According to them, the way revenue authorities interact with taxpayers influences public perception of the tax system and the level of voluntary tax compliance. Taxpayers who are aware of their rights and obligations, receive fair and efficient treatment and are more likely to comply with tax laws. Also, qualified and motivated employees who are valued and respected in their work are more likely to act with integrity and professionalism in their dealings with taxpayers. In addition to this, voluntary compliance with tax laws is encouraged through clear, simple, and 'user-friendly' administrative systems and procedures (OECD, 2001). A study on tax morale by the OECD found a significant relationship between tax morale and compliance with tax laws in both developing and developed countries (OECD, 2013).

According to Luttmer & Singhal (2014), people may have some intrinsic motivation to pay taxes or feel guilt and shame for not fulfilling their tax obligations. They can also be driven by reciprocal motivation: willingness to pay taxes in exchange for goods (services) that the state provides to them or other members of society. People can be influenced by the behavior of individuals in their environment and the possibility of social recognition or sanctions. Cultural or social norms may influence the strength of these internal motives, reciprocal motivation, or sensitivity to the opinions of others (Luttmer & Singhal, 2014). These authors conclude that tax morale significantly improves tax compliance, but a major factor in tax compliance is enforcement. They clarify the main mechanisms through which tax morality operates and its consequences on the implementation of tax policy. According to their research results, tax morale depends on the enforcement environment and there is a mutual relationship between them. At one extreme, if enforcement is so strong that compliance is perfect, then tax morality has no role. At the other extreme, without any enforcement, tax morale can be destroyed because the lack of enforcement sends a signal that tax compliance is unimportant.

DeBacker, Heim & Tran (2015) find that corporations with owners from more corrupt countries avoid more US taxes. Based on an examination of data from more than 25,000 Internal Revenue Service (IRS) corporate tax audits, they link corporate tax avoidance by foreign corporations in the United States to levels of corruption in the owners' home countries. Thus, the presence of a relationship between the tendency to avoid taxes and the level of corruption in the respective country is clarified (DeBacker, Heim & Tran, 2015). From this, it can be concluded that tax morality directly depends on the effectiveness and efficiency of the administration of justice and the level of corruption in a given system. When tax fraud and abuse remain undetected or unpunished, as well as when taxpayers feel that public revenues are being used inefficiently or illegally, then the propensity to voluntarily comply with tax obligations is significantly reduced.

Alm (1999) examines non-economic factors influencing tax compliance and concludes that: (1) social norms and social customs matter – taxpayers will comply as long as they believe that tax compliance laws are the social norm; conversely, if lawlessness becomes pervasive, then the social norm of compliance disappears; (2) because some taxpayers treat any tax payment as a loss, they are likely to report less income than intended; (3) if taxpayers place more weight on the likelihood of an audit than usual, then tax compliance will be greater (Alm, 1999). Therefore, compliance with tax legislation depends on the level of tax morale and the implementation of adequate control in the field of taxation. Based on these perceptions, it can be concluded that to improve the results of tax control it is essential to ensure:

- Efficient, comprehensive, and permanent tax control leading to productivity and systematic character of tax inspections and audits.
- Tax audits should be assigned randomly, which is a prerequisite for achieving objectivity and impartiality of the control.
- Competence of the revenue authorities, which is related to the quality of acquired knowledge and skills both in the higher education system and through periodic training of employees in the tax administration to maintain and expand their professional competence throughout their professional life.

Therefore, effective control impact requires reducing the probability of tax control avoidance and tax violations and abuses remaining undetected and unpunished, which requires both effective work of the tax administration and the administration of justice. In turn, this leads to equal treatment of taxpayers in the fulfillment of tax obligations. Thus, compliance with tax laws will be considered a social norm and the likelihood of deriving competitive advantages from tax non-payment will be limited.

Conclusion

Tax revenues provide the state administration with the necessary funds, not only for maintaining the state administration and public institutions but also for taking actions aimed at protecting the environment, reducing inequalities and poverty, providing quality public services and goods, and building physical and social infrastructure. Without a regular receipt of the planned tax revenues, it becomes difficult to realize the adopted goals, policies, and programs at the national and global level, including the Sustainable Development Goals of the United Nations. Therefore, the challenges related to taxation and the activity of revenue agencies involve not only individual state bodies but also international organizations such as the Organization for Economic Cooperation and Development and the International Monetary Fund.

The effectiveness of tax policy depends on various factors, such as the state of the economy, public support for government priorities, and the willingness of taxpayers to comply with tax laws. The main role of revenue authorities is to ensure the enhancement of tax morale and voluntary compliance with tax laws. In a rapidly changing environment, revenue authorities must have the attitude and ability to continually review their operational approaches and procedures to ensure the most effective and efficient use of available resources and administrative capacity. In connection with this, more and more modern electronic services are being introduced in tax administration and a transition to digitalization is being made. In these conditions, the appearance of tax control naturally changes: analytical and diagnostic functions are developed, and risk assessment is improved for adequate and productive targeting of control resources. Electronic audits and electronic monitoring of operational business activity are being

developed, for example, by maintaining a permanent connection of data from cash registers, vending machines, and gas stations with the revenue agency.

By improving cooperation and interaction, nationally and internationally, opportunities are created for timely data exchange and combating tax fraud, as well as for the adoption and adaptation of appropriate technologies, good practices, and experiences. In this way, the revenue agency improves both the public image and the organization of its work processes.

References

- 1. Alm, J. (1999). Handbook on Taxation,1st ed. In Hildreth, W.B. (Ed.), *Tax compliance and administration* (pp. 741-768). New York: Routledge. Retrieved from https://doi.org/10.4324/9781315093161.
- 2. DeBacker, J., Heim, B.T. & Tran, A. (2015). Importing corruption culture from overseas: Evidence from corporate tax evasion in the United States. *Journal of Financial Economics*, 117(1), 122-138. Retrieved from https://doi.org/10.1016/j.jfineco.2012.11.009.
- 3. Elliott, J. (2013). *An Introduction to Sustainable Development*, 4th ed. New York: Routledge.
- 4. IMF. (2004). Integrating a Unified Revenue Administration for Tax and Social Contribution Collections: Experiences of Central and Eastern European Countries. Washington DC: IMF, Working Paper No. 04/237. Retrieved from https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Integrating-a-Unified-Revenue-Administration-for-Tax-and-Social-Contribution-Collections-17834.
- 5. Luttmer, E., & Singhal, M. (2014). Tax Morale. *The Journal of Economic Perspectives*, 28(4), 149-168. Retrieved from http://www.jstor.org/stable/23973562.
- 6. Mladenova, Z. (2015). Globalizatsia na ikonomikata i novata paradigma na razvitieto: Plenaren doklad ot mezhdunarodna nauchna konferentsia "Ikonomikata v promenyashtia se svyat: Natsionalni, regionalni i globalni izmerenia". Varna: Nauka i ikonomika IU [Младенова, 3. (2015). Глобализация на икономиката и новата парадигма на развитието: Пленарен доклад от международна научна конференция "Икономиката в променящия се свят: Национални, регионални и глобални измерения". Варна: Наука и икономика ИУ].
- 7. Natsionalna agentsia za prihodite. (2021). Godishen otchet za deynostta na Natsionalnata agentsia za prihodite za 2020 g. Sofia: NAP [Национална агенция за приходите. (2021). Годишен отчет за дейността на Националната агенция за приходите за 2020 г. София: НАП]. Retrieved from https://nra.bg/wps/portal/nra/za-nap/osnovni-dokumenti/Godishni-otcheti-za-deynostta-na-NAP.
- 8. Nikolova, B. (2019). Vzaimodeystvieto i integratsiyata v sistemata na Natsionalnata agentsia za prihodite. Sofia: izd. na VUZF "Sv. Grigoriy Bogoslov" [Николова, Б. (2019). Взаимодействието и интеграцията в системата на Националната агенция за приходите. София: изд. на ВУЗФ "Св. Григорий Богослов"].
- 9. Nikolova, B. & Koleva, B. (2018). *Teoria na finansovia kontrol*. Dobrich: Martine [Николова, Б. & Колева, Б. (2018). *Теория на финансовия контрол*. Добрич: Мартине].

10. OECD. (2001). *Principles of Good Tax Administration-Practice Note*. OECD Publishing. Retrieved from https://www.oecd.org/tax/administration/1907918.pdf.

- 11. OECD. (2013). *Tax and Development: What Drives Tax Morale?* Paris: OECD Publishing. Retrieved from https://www.oecd.org/tax/tax-global/what-drives-tax-morale.pdf.
- 12. OECD. (2015). *Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies*. Paris: OECD Publishing. Retrieved from http://dx.doi.org/10.1787/tax_admin-2015-en.
- 13. OECD. (2016). *Technologies for Better Tax Administration: A Practical Guide for Revenue Bodies*. Paris: OECD Publishing. Retrieved from http://dx.doi.org/10.1787/9789264256439-en.
- 14. Stiglitz, J. (2012). The price of inequality: How today's divided society endangers our future. New York London: W.W. Norton & Company.
- 15. Stoyanov, V. (2000). *Danatsi i danachno oblagane*. Sofia: Galik [Стоянов, В. (2000). Данъци и данъчно облагане. София: Галик].
- 16. Zakon za Natsionalnata agentsia za prihodite. (2023). Obn., DV. br. 112 ot 29 Noemvri 2002 g., posl. izm. DV. br. 84 ot 6 Oktomvri 2023 g. [Закон за Националната агенция за приходите. Обн., ДВ. бр. 112 от 29 Ноември 2002 г., посл. изм. ДВ. бр. 84 от 6 Октомври 2023 г.].