#### Higher School for Insurance and Finance (VUZF University)

#### **REVIEW**

#### by Prof. Mariana Mateeva Petrova, PhD

of dissertation for awarding the scientific degree "Doctor of Science" in the field of higher education 3. Social, economic, and legal sciences Professional field 3.8. Economics PhD program: "Finance, Insurance and Social Security" Author: Bożena Agnieszka Sowa Ph.D. Title: Indirect taxes and their impact on the level and structure of state budget revenues. Analysis on the example of Poland for the years: 2017-2021

#### **1.** General description of the presented materials

Following Order No. 105 dated March 1, 2023, the Rector of the Higher School for Insurance and Finance - Professor Boris Velchev, was appointed as a member of the scientific jury for providing a procedure for the defense of a dissertation on the topic of "Indirect taxes and their impact on the level and structure of state budget revenues. Analysis on the example of Poland for the years: 2017-2021" for obtaining the educational and scientific degree "Doctor of Science" in the field of higher education 3. Social, economic, and legal sciences, Professional field 3.8. Economics, the program "Finance, Insurance, and Social Security". The author of the dissertation is Bożena Agnieszka Sowa Ph.D.

The materials submitted by **Bożena Sowa** include documents according to the presented inventory: reference for the scientific and scientific-applied contributions in the dissertation; reference for the fulfillment of the minimum national requirements for the acquisition of a degree "Doctor of Sciences" in professional field 3.8. Economics; dissertation work; summary of professional accomplishments. In addition, the doctoral student submitted 26 publications, including 1 monograph on tax harmonization, 9 chapters in monographs, and a list of citations.

## 2. Brief biographical data about the candidate

Bożena Agnieszka Sowa holds a Ph.D. in economics (Ph.D. - 1997, Warsaw School of Economics); earlier, she completed uniform master's studies (1993) in economics at the University mentioned above. In addition, he is a graduate of the Pedagogical College at the Warsaw School of Economics.

In 1993-2001 she was employed at the Tax Control Office (customs and tax administration), first in Przemyśl and later in Rzeszów, where she was responsible for controlling business entities and public finance sector entities in the field of tax settlements with the state budget.

At the same time, since 1999, she has been associated with higher education. This year, she started working at the University of Administration and Management in Przemyśl (currently the University of Law and Administration Rzeszów, with its registered office in Rzeszów), where she is currently employed as the Vice-Rector. In addition, as an assistant professor in 2001-2019, she was employed at the University of Rzeszów, Faculty of Economics, Department of Finance.

## The most important scientific and organizational achievements

Bożena Agnieszka Sowa Ph.D. developed programs of first and second-degree studies and postgraduate studies in finance, tax issues, and accounting. He is also the author of items in the above scope.

She also conducts classes in this area and is a promoter and reviewer of diploma theses in first and second-degree studies and postgraduate studies. In addition, he conducts didactic classes as part of international exchange at universities in Slovakia.

As part of the international exchange, she completed 8 internships in Slovakia, Georgia, and Ukraine research centers.

She participated actively in 30 international and 8 national conferences, scientific forums, and seminars, giving papers on tax issues, public finances, and the state budget. Member of the Scientific Committee of the Conferences (2015-2022).

She took part in 6 research projects financed by EU funds, including 2 projects as a project coordinator. She was also a member of 3 research projects carried out as part of the University's statutory research.

Bożena Agnieszka Sowa is a member of the Editorial Committee in the: "Journal of Finance and Accounting" (JFA), Science Publishing Group, New York, USA), Former member of the Scientific Council of the Publishing House Academy of Security and Bases of Health, Kyiv (Ukraine), Member of the Polish Economic Society in Poland, Rzeszów Branch, Member of the Audit Committee. She is also a reviewer of scientific monographs, chapters in monographs, and scientific articles.

Since 2001, she has been conducting ongoing substantive cooperation in the field of public finance, budget, and taxes with: Chamber of Commerce and Industry in Rzeszów; National Chamber of Tax Advisers, Podkarpackie Branch; Polish Economic Society, Branch in Rzeszów.

She is also a lecturer at the Chamber of Legal Advisers in Rzeszów and a member of the Examination Committee of Ph.D. students at the WSPiA Rzeszów University.

For her scientific achievements, she was awarded:

- Bronze Medal for long-term service (Resolution of the President of the Republic of Poland of September 29, 2008),
- 2. Medal of the Commission of National Education for merits for education and upbringing; (Ministry of Scientific Education Warsaw, August 20, 2014),
- Silver medal for long-term service (Decision of the President of the Republic of Poland on September 18, 2021).

Summarizing the above achievements, it can be concluded that Bożena Agnieszka Sowa Ph.D. is a scientist and professional practitioner dealing with current problem areas such as public finance, state budget economy, and the modern tax system.

The predominant part of the scientific and applied activity Bożena Agnieszka Sowa Ph.D. is on the issues studied in the dissertation for awarding the scientific degree "Doctor of Sciences".

# 3. Relevance of the topic and expediency of the set goals and objectives

The central budget plays a crucial role in implementing state economic policy. This is because, thanks to adequately planned revenues and expenditures, it is possible to create the right conditions for the country's socioeconomic development and strengthen economic cooperation with other countries.

Every country bases its activities on decisions of a political and economic nature, and the central pillar of a properly functioning state is a rational tax system. For the public authority, which carries out the state's economic policy, to influence the behavior of market participants or to shape the state's economic structure, it must have the appropriate instruments and financial resources, especially revenues.

The primary source of revenue for the state budget is taxation (in the first place - indirect taxes, while in the second place - direct taxes). In Poland, to which the work relates, as in other countries, taxes account for about 90% of all receipts to the central budget and local government units' budgets.

The research thesis models the logic of the dissertation research and the applied analytical tools.

The work has a non-standard structure because its central part was divided into 7 chapters, each divided into subsections and points.

Such a work structure allowed the realization of the stated goal, research hypotheses, and the author's approach to the subject matter.

## 4. Knowledge of the problem

The author has made an extensive, thorough, and correct analysis of the various issues addressed in the work, allowing for correct conclusions. For the preparation of this publication, the author analyzed 504 source materials (including those in foreign languages), especially acts of domestic and international law, specialized literature on the subject, statistical data, and source materials of central authorities.

## 5. Research methodology

With a view to the stated purpose of the work and verification of the adopted research hypotheses, the following research methods were adopted:

- The theoretical part of the work uses a descriptive method considering domestic and foreign source materials. The comparative analysis of source data, cause-effect analysis, and descriptive-statistical analysis of the structure and dynamics of phenomena were also applied;
- 2) In the empirical part of the work, a quantitative analysis was carried out using statistical data relating to the period under study, i.e., the years 2017-2021.

The author presented the results of the research conducted and interpreted them correctly.

## 6. Characteristics and evaluation of the dissertation

**The dissertation** consists of 396 pages, of which 376 are the main text and 52 are the other elements. The main text includes 14 figures and 22 tables. On the other hand, the literature used to prepare this publication constitutes 504 source items.

The study has an introduction, seven chapters, a conclusion, and a bibliography. Each chapter consists of subsections and points.

# Purpose and scope of the study

The primary purpose of this publication is to assess the structure and dynamics of budget revenues from indirect taxes. Particular attention was paid to the tax revenue plans included in the budget laws for each year (2017-2021) and then to the implementation of the plans regarding discrepancies and the factors causing them.

To this end, the projected budget revenues resulting from the budget laws and the realized tax revenues were examined, and then the discrepancies and the factors causing them, mainly of an external nature, were addressed.

Thus defined, the primary objective was assigned the following sub-objectives defined as:

- 1) A review of scientific achievements and determinants of fiscal efficiency of the tax;
- 2) Identification of the causes, scope, and course of harmonization of indirect taxes with particular emphasis on VAT as an essential tax revenue;
- 3) Determination of financial performance measures of indirect taxes;
- 4) Identifying the VAT gap.

## The hypothesis

When writing papers of a scientific nature, the rule is that hypotheses should be closely related to the stated research objectives, so it seems necessary to comment on this aspect. The author has set three hypotheses:

**Hypothesis One**: Harmonization of indirect tax regulations in the European Union (especially VAT and excise taxes) promotes the fiscal efficiency of these taxes;

**Hypothesis Two:** The design of taxes is a fundamental determinant of their fiscal efficiency;

**Hypothesis Three:** The specific nature of indirect taxes and the non-fiscal functions they perform (this is especially true of excise taxes) affect their fiscal efficiency.

The formulated hypotheses made it possible, in a clear way, to demonstrate the mutual coherence and logical connections occurring between the formulated research hypothesis and the structure of the work, as well as the substantive content of its individual parts. The formulated hypotheses were, in a methodologically correct manner, positively verified by the author.

In addition, it sought to prove that the amount of realized tax revenue is affected by, among other things: the amount of tax rates; concessions; exemptions; tax collectability.

It also stressed that internal and external factors, such as legal changes, the country's political and economic situation, social changes, and independent factors (such as the COVID-19 pandemic), should also be considered when planning the volume of tax revenues.

In the theoretical part covering Chapters I-IV, reference is made to:

- the fundamentals of state fiscal policy;

- harmonization of indirect taxes and their impact on tax revenues;

- state budget revenues, particularly on revenues from indirect taxes (VAT, excise, game tax).

On the other hand, the empirical part, covering Chapters V-VII, analyzes and evaluates the volume and dynamics of budget revenues for 2017-2021 from indirect taxes. Each chapter closes with correct conclusions and recommendations.

#### Time scope

The time scope of the dissertation covers the years: 2017-2021, with a particular focus on the COVID-19 pandemic period (March 2020 - December 2021). In addition to the timeframe mentioned above, reference is also made to the changes in tax laws introduced in H1 2022 in the context of introducing Poland's post-pandemic economic recovery plan (the so-called "New Deal") aimed, among other things, at tightening the tax system.

**The results of the scientific research** are presented in the empirical part of the work. Based on them, it was found that the factors affecting the level and structure of budget revenues are diverse. It was proved that there are correlations between changes in their construction and budget revenues in the key taxes for the budget. The statistical data analysis for 2017-2021 unambiguously indicates a systematic increase in state budget revenues from indirect taxes (VAT, excise tax and gaming tax) while indicating this type of public tribute's importance in the efficient functioning of the state.

The final part of the dissertation addresses the impact of the COVID-19 pandemic on budget revenues by pointing out changes in the structure and dynamics of receipts with particular emphasis on excise taxes.

The author also proved that the level of actual budget revenues from indirect taxes was influenced by the measures taken by the Polish government to tighten the tax system (especially the clarification of legal regulations) and the actions taken by the National Tax Administration to enforce budget receivables.

Attention was also paid to the effects of the war in Ukraine and its impact on Poland's social and economic situation and, thus, on budget revenues. It was proved that the war in Ukraine and the high inflation rate caused a reduction in consumption in the face of the deterioration of the material situation of families. It was also noted that the legislature's raising of excise tax rates could result in lower demand for these products and the subsequent collapse of the activities of specific industries, which is reflected in lower revenues from all tax titles.

The author of the dissertation does not limit herself only to criticism of the existing state, but also points to certain directions of desirable changes not only in the field of legal regulations affecting the amount of real tax revenues of the state budget, but also indicates measures that would seal the system and ensure the correct identification of the causes of the relatively low tax efficiency. These postulates are a kind of "added value" of the reviewed dissertation.

## 7. Contributions and significance of development for science and practice

The problem posed by Bożena Agnieszka Sowa Ph.D. is interdisciplinary and entirely refers to the current achievements and needs of science and practice, which deserves

to appreciate the author's contribution. The chosen research problem is not an easy problem to study due to its interdisciplinary and multifaceted nature.

In the course of scientific research, which demonstrates the potential of scientific contributions:

- a new theoretical and methodological approach has been developed for economic research in the public sector in Poland concerning the tax system;
- it has been proven that there are close correlations between changes in the construction of the most fiscally significant taxes (VAT, excise) and the level of state budget revenues;
- it has been proven that the peculiarities of indirect taxes and the non-fiscal functions they perform (especially concerning excise taxes) affect their fiscal efficiency;
- 4) it has been proven that when planning budget revenues, especially tax revenues, one should also take into account internal and external factors of a country, such as changes in legislation, the political and economic situation (inflation), social changes, and independent factors (such as a pandemic).

Practical and theoretical application of the solutions obtained by the author and presented in the doctoral dissertation:

1) the solutions obtained in work provide tools to improve the process of planning tax budget revenues;

2) the studied process of planning and implementation of budget revenues takes into account endogenous and exogenous factors and can be used to improve the efficiency and quality of realized tax revenues;

3) the dependence on the quantitative characteristics obtained in work impacts these values in forecasting aspects and unpredictable decisions at the central level.

## 8. Evaluation of dissertation publications

The results of the scientific research are reflected in 26 publications prepared independently (e.g., a monograph) or co-authored. They testify to the doctoral student's long-standing and deep scientific interest in tax issues and the fact that the prepared dissertation is the author's work. Most of the work has been published in collective monographs, conference materials, and local publications. Some were published in foreign publications (Slovakia, Czech Republic, Ukraine, Bulgaria, United Kingdom). 2 publications included in international journals (SCOPUS) were noted, including 1 published in Bulgaria.

## 9. Assessment of compliance with the minimum national requirements

Attached is a Certificate for fulfillment by the doctoral student of the minimum national requirements for acquiring the educational and scientific degree "Doctor of Science" in the professional field 3.8. Economics. The total number of points is many times higher than required.

## 10. Assessment of the applicant's personal contribution

The presented dissertation on: "Indirect taxes and their impact on the level and structure of state budget revenues. Analysis on the example of Poland for the years: 2017-2021" is the result of sound scientific research confirmed by constructive results. There is no doubt about the author's contribution, in-depth scientific research, creative thinking, and pursuit of the set goal and research hypotheses.

The dissertation demonstrates the author's advanced theoretical knowledge and proves her ability to conduct scientific work independently. The author easily navigates the many facets of public finance, including the tax system, with particular attention to socioeconomic conditions and consequences.

## 11. Summary of professional accomplishments

The summary of professional accomplishments consisting of 58 pages, has been prepared following the requirements of LDAS and RILDAS. It is structurally correct and adequately reflects the dissertation's logic, consistency, and contributions. It demonstrates Bożena Agnieszka Sowa Ph.D.'s skills in synthesizing and summarizing her most essential ideas and conclusions.

## 12. Critical comments and recommendations

The submitted work will be defended in 2023, with no indication of the impact of pandemics, the effects of the war in Ukraine, inflation (especially in Poland), and the introduction of economic reforms on the size and structure of tax revenues.

This raises the question of whether the conclusions posted in the paper will change under the influence of the above events.

Duplication and repetition of texts were noted in some places.

I recommend presenting the results in specialized international publications with IF / IR, allowing higher visibility of scientific results and creating conditions for more intensive citations.

#### 13. Personal impressions

I do not know the doctoral student personally. We do not have joint publications and developments.

My impressions come from the dissertation, the author's summary of professional accomplishments, and dissertation publications. They show a serious and erudite researcher, a bona fide scientist with an extensive theoretical background and a proven ability for independent research.

## CONCLUSION

The dissertation contains scientific, scientific-applied, and applied results, representing an original contribution to science and meeting all the requirements (s) of LDASRB and RILDASRB. The presented materials and dissertation results correspond to the specific requirements of the Regulations for admission and training doctoral students at the Higher School of Insurance and Finance.

The dissertation shows that **Bożena Agnieszka Sowa Ph.D.** has in-depth theoretical knowledge and professional skills in the Professional field 3. 8. Economics, demonstrating qualities and skills for independent research.

Due to the above, I give my positive assessment of the research presented by the abovereviewed dissertation, a summary of professional accomplishments, results, and contributions, and I invite the scientific jury to award the educational and scientific degree "Doctor of Science" to **Bożena Agnieszka Sowa Ph.D.** in the field of higher education 3. Social, economic, and legal sciences; Professional field 3. 8. Economics; Ph.D. program "Finance, Insurance and Social Security".

31.03.2023

REVIEWER:

/prof. Mariana Petrova, PhD/