# ТРАКИЙСКИ УНИВЕРСИТЕТ - СТАРА ЗАГОРА

# Стопански факултет

ТРАКИЙСКИ УНИВЕРСИТЕТ
Стара Загора
Старански факултет
Вх. №: 118
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REVIEW

Reviewer: Professor Aneta Deneva, Ph.D., "D. A. Tsenov" Academy of Economics, Svishtov, Scientific area "Economics and Management (Industry)"

**Subject:** In relation with participation in competition for the academic position of "Associate Professor", announced by the Trakia University, Stara Zagora in the State Gazette, issue 99/28.11.2023, the scientific specialty Economics and Management (industry), Professional direction: 3.8. "Economy"; field of higher education: 3. "Social, economic and legal sciences" scientific area "Economics and Management (Industrial Economics and Conflict Management)", professional field 3.8. "Economics".

I present a review as a member of the Scientific Jury on the announced competition in implementation of Order No. 290/01.02.2024 of the Rector of Trakia University (TrU), Stara Zagora and Decision of the the Faculty Council of the Faculty of Economics (SF), protocol No. 5/ 24.01. 2024, based on Art. 4 (3), (4) of the Law on the Development of the Academic Staff in the Republic of Bulgaria, art. 5 (3), (4) of the Regulations for the Implementation of the Law on the Development of the Academic Staff in the TrU. The review was developed in compliance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation, the Regulations for the development of the academic staff at the Trakia University and in compliance with the scientometric criteria for professional field 3.8. "Economics" for occupying the academic position of "associate professor".

**Candidate:** Senior Assistant Professor Rumyana Ivanova Angelova from the Department of Industrial Business and Entrepreneurship at the Faculty of Economics at Trakia University, Stara Zagora, is the only candidate under the announced competition.

#### 1. PERSONAL CHARACTERISTIC OF THE APPLICANT

Senior Assistant Professor Rumyana Ivanova Angelova, Ph. D, was born on 28.03.1969. In 1993, she obtained a master's degree at the "D. A. Tsenov" Academy of Economics - Svishtov (diploma Series A 91- 1993, No. 013069, registration No. 22599/05.03.1993). Since 01.03.2009 she has been enrolled as a part-time doctoral student at the "Industrial Business and Entrepreneurship" course of the "D. A. Tsenov"Academy of Economics. In 2013, he acquired educational and scientific degree "Doctor", after successfully defending his dissertation on the topic "Stimulation of industrial entrepreneurship" (diploma No. 2013014 dated 09.05.12.2013).

In accordance with the requirements of the Regulations for the Implementation of the Law on the Development of the Academic Staff Senior Assistant Professor Rumyana Ivanova Angelova, Ph.D has declared the following career development:

Since February 18, 2013, he has been an assistant at Trakia University - Stara Zagora - Faculty of Economics. Since 04.06.2014 and at the present moment he is the Senior Assistant Professor at Trakia University.

From 03.12.2012 to 15.02.2013 - "Retail Sales" expert at Credit Agricol Bulgaria, Stara Zagora office.

From 17.12. 2009 until 13.05. 2011 - manager of "Stara Zagora 1" office - "Alfa Bank", branch Bulgaria, Stara Zagora.

From 11.02.2008 to 17.12.2009 - consultant "Business Clients" MKB "Union Bank", office Stara Zagora 2. From 22.03. 2006 to 11.02.2008 - consultant "Business clients" HVB Biochem, Stara Zagora.

From 14.09. 1998 until 21.07. 2005 - personnel management expert - DSK Bank - Stara Zagora.

From 01.07. 1996 until 13.09. 1998 - "Market Strategy" specialist, Agrobiochem AD, Stara Zagora.

From 15.03. 1993 until 01.07. 1996 - stock worker at Agrobiochem AD, Stara Zagora.

According to the attached certificate (Ex. H353/27.02.2024) Senior Assistant Professor Rumyana Ivanova Angelova, Ph.D., has 11 years, 0 months and 9 days of teaching experience at the Faculty of Economics of Trakia University, Stara Zagora. Accordingly, from 18.02.2013 to 05.06.2014 incl. as an assistant and from 06.06.2014 until now as a senior assistant.

He has a pedagogical qualification - "D. A. Tsenov" Academy of Economics - Svishtov.

Senior Assistant Professor Rumiana Angelova, Ph.D., conducted training in the period 05/1998 - 09/1998 at the Institute of Marketing and Management - Austria.

During the period 05/2001 – 12/2001, she was trained as an internal lecturer (multiplier) at the DSK Bank Academy.

The candidate conducted training during the period 05/2003 - 12/2003 at the Institute of Financial Services - London in the field of financial and credit analysis.

The candidate has good knowledge of English and Russian languages.

# 2. COMPARISON OF THE MINIMUM NATIONAL REQUIREMENTS AND THE ADDITIONAL REQUIREMENTS OF THE REGULATIONS FOR THE IMPLEMENTATION OF THE LAW ON THE DEVELOPMENT OF THE ACADEMIC STAFF IN THE TRU WITH THE RESULTS OF THE SCIENTIFIC ACTIVITY OF THE CANDIDATE FOR THE ACADEMIC POSITION "ASSOCIANT PROFESSOR".

In the competition for "Associate Professor" in the scientific specialty "Economics and Management (Industry)", documents from Senior Assistant Professor Rumiana Angelova, Ph.D., which are in accordance with the scientometric indicators laid down in the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its Implementation and the Regulations for the development of the academic staff at the Trakia University, as follows:

A group of indicators	Associate Professor	Reported by the candidate	Points above min national requirements
A	50	50	-
Б	-	-	-
В	100	100	
Γ	200	294,83	94,83
Д	50	70	20
Е	-	50	50
Ж	50	235	185
Total	450 points	799,83 points	349,83 points

#### GENERAL DESCRIPTION OF THE SCIENTIFIC PAPERS PRESENTED BY THE CANDIDATE

According to the presented documents and "List of publications of Senior Assistant Professor Dr. Rumyana Angelova" (containing publications and materials after taking the academic position of "senior assistant professor"), the total number of scientific works with which he participated in the competition is 25. The same are distributed in the following categories:

- Habilitation work (independent monograph) 1.
- 2) Articles and reports published in scientific publications, referenced and indexed in world-famous databases of scientific information 6 (List of publications: No. 1 to 6).
- 3) Articles and reports published in non-refereed peer-reviewed journals or published in edited collective

- 4) University textbooks 0 (List of publications: No. 15.2.1.).
- 5) Studies published in non-refereed peer-reviewed journals or published in edited collective volumes 1.
- 6) Published chapter of a collective monograph 2.

The relative shares of each of the specified categories in the total number of presented scientific works of Senior Assistant Professor Rumiana Angelova, Ph.D. are:

- 4% independent monographs;
- 24% articles and reports published in scientific publications, referenced and indexed in world-famous databases with scientific information:
- 60% articles and reports published in non-refereed peer-reviewed journals or published in edited collective volumes
  - 4% studies published in non-refereed peer-reviewed journals or published in edited collective volumes;
  - 8% published chapter of a collective monograph.

The total number of independent scientific works of the candidate for the academic position "docent" are 16. Their relative share is 64% of the total number.

The publications in co-authorship are 9, respectively – 36%.

Of the total number of 25 scientific works, 12 were published in English.

Scientific works published in referenced and indexed in world-renowned databases of scientific information:

Angelova R., Stoyancheva D. (2023). Digitalization, Financial Insolvency and Bankruptcy Risk Forecasting of Bulgarian Agricultural Enterprises. Scientific Papers-Series Management Economic Engeneering in Agriculture and Rural Development. Volume 23, Issue 2 – Web of science RecearcherID: CDN-3030-2022-https://managementjournal.usamv.ro/pdf/vol.23\_2/volume\_23\_2\_2023.

Dessisslava Ivanova, Rumyana Angelova (2023). Determinants of Firm Competitiveness: Econometric Evidence from Bulgarian Industry. Strategies for Policy in Science and Education. Volume 31, N3 - https://doi.org/10.53656/str2023-3s-4-det

Miroslava Ivanova, Rumyana Angelova, Lilko Dospatliev. (2020) Vector error correction model assessing the impact of consumption, investment and export on import on Bulgarian economy data. 46 International 10 9.1.3 Conference AMEE'20 – Application of Mathematics in Engineering and Economics, Volume 2333, doi 10.1063/5.0041752 – Web of science RecearcherID: CDN-3030-2022

R. Angelova. (2019), About the similarities and differences between shared value and corporate social responsibility. Trakia Journal of Sciences, Volume 17, 2019, Supplement 1, Series Social Sciences, p.186- 188, ISSN 1313-3551

R. Angelova, (2017) "Bulgarian Industrial Policy – a brief review of its development", IV International Scientific Conference "Business and regional development", Trakia Journal of Sciences, Volume 15, ISSN 1313-7050, p.104 - 107; http://tru.uni-sz.bg/tsj/TJS\_Suppl.1\_Vol.15\_2017/19.pdf

Stoyancheva, D., R. Angelova, (2015) "Investment activity and entrepreneurship in Stara Zagora region", Anniversary Scientific Conference " 20 Years Trakia University", Trakia Journal of Sciences, ISSN 1313-7050, p.294-300.

From the analysis of the presented scientific works of Senior Assistant Professor Rumiana Angelova, Ph.D., for participation in the competition for the academic position of "associate professor", can be summarized: the candidate has sufficient quantity and quality of scientific production, which corresponds to the profile of the competition - PF 3.8. "Economics", scientific specialty "Economics and management (industry)", field of higher education 3. "Social, economic and legal sciences".

#### 4. REFLECTION OF THE CANDIDATE'S SCIENTIFIC PUBLICATIONS IN THE LITERATURE (CITATIONS)

According to the provided List of citations of Senior Assistant Professor Rumiana Angelova, Ph.D., there are a total of 10, of which citations in scientific publications, referenced and indexed in global databases with scientific information or monographs and collective volumes - 1; citations in monographs and collective volumes with scientific review – 2; citations or reviews in non-refereed peer-reviewed journals - 7.

The analysis of the open citations of Senior Assistant Professor Dr. Rumyana Angelova gives me reason to say that her works are of interest to the scientific community not only in Bulgaria, but also abroad. The author's name is well known in scientific research circles, both in the country and beyond its borders.

# 5. GENERAL EVALUATION OF THE CANDIDATE'S ACTIVITY

## 5.1. Teaching and learning activity

It is clear from the attached Reference No. 1 that Senior Assistant Professor Dr. Rumiana Ivanova Angelova meets the requirements regarding the study load. With an average workload of one professor from the department of 459 hours, she declared 495 hours. Of these in lecture courses – 270 hours and exercises – 225 hours.

Senior Assistant Professor Professor Rumyana Angelova, Ph.D., holds 3 academic disciplines. Two of them are in the Bachelor's degree - "Financial and business analysis" and "Prices and pricing". In the Master's degree is one discipline - "Business analysis of entrepreneurial activity".

The candidate has developed 5 study programs in the disciplines: Financial and Economic Analysis - Bachelor's degree, International Economic Institutions - Bachelor's degree, Prices and Pricing - Bachelor's degree, Business Analysis of Entrepreneurial Activity - the Master's degree and Industrial Entrepreneurship - the Master's degree.

Senior Assistant Professor Rumyana Angelova, Ph.D., has published a university textbook - "Financial and Economic Analysis" - a textbook - UI "Paisiy Hilendarski" 2016. – ISBN 978-619-202-121-4.

A good certificate for her teaching work is the scientific guidance of 16 graduates (Reference 15.1.1.)

Senior Assistant Professor Rumiana Angelova, Ph.D., is a member of the Association of Economics and Industry Management Teachers.

The specified parameters - quantitative and qualitative - of the educational and teaching work of the candidate for the academic position of "associate professor" are grounds for a very good assessment of his professional level.

## 5.2. Research and applied activity

Research activity of Senior Assistant Professor Rumiana Angelova is in 4 areas: industrial policy, digitalization, economic analysis and entrepreneurship.

In his monograph *Bulgarian industrial policy - in search of harmony between theory and practice -* ISBN 978-619-202-162-7, the candidate analyzes and evaluates the Bulgarian industrial policy using a set of modern indicators. An essential point in the study is the clarification of the "horizontal" and "vertical" type of industrial policy by outlining the differences in areas of application and instrumentation. A comprehensive review of European and Bulgarian legislation in the field of industry was carried out. Based on an in-depth study of the scientific literature and the current normative documents, key indicators of the modern Bulgarian industrial policy have been identified, grouped according to four main criteria. On this basis, an analysis and evaluation of the Bulgarian industrial policy is presented and guidelines for its development are formulated.

Other scientific works from the same direction are those with numbers 2.5, 3.4, 3.5, 3.6, 3.7, 3.8, 3.10, 3.12, 5.2. Various aspects of evolution, normative regulation and models for the formation of industrial policy have been reflected in them. The author demonstrates a very good and thorough knowledge of European industrial policy.

The problems of *digitization* are presented in the developments with numbers 2.1, 3.1 and 3.2. Of particular interest is the study conducted on the existence of an impact between digitalization and the performance and risk of bankruptcy of agricultural enterprises. With the help of a study of the annual statistical reports of small, medium and large Bulgarian companies operating in this sector for a five-year period of time, an answer was given to the question of the application of Z-Score models in the livestock sector. Evidence was found for the relationship between the level of digitalization and application of information and communication technologies and the risk of bankruptcy through the application of the fixed effect and probit models. The econometric analysis clearly shows a statistically significant relationship between the risk of bankruptcy and the productivity of agricultural enterprises, measured by the profitability based on assets - ROA. Applying the probit model reveals a higher probability of bankruptcy for firms with lower productivity and higher leverage. The data from the survey show a relatively low level of digitization and readiness for investment in this area. There is also a direct correlation between the size of enterprises in terms of "number of personnel" and the drive for digital transformation.

In parallel, basic concepts related to digitization are presented, such as "digital maturity", "digital transformation", "digital intelligence", etc. A Probit model was used to investigate the relationship between digitization and firm performance of entrepreneurs in the livestock sector. Based on an empirical study of livestock

farms, the relationship between digitization and financial performance, sales revenue, size and innovation activity is analyzed.

In the area of *economic analysis* are publications 2.3, 2.4, 3.3, 3.7, 3.9 and 5.2. They apply various models and indicators such as - the vector error correction model (VECM), the strategy "Creation of shared value - CSV", indicators for revealing the national potential for the creation and acquisition of technological knowledge, indicators for the analysis and assessment of industrial policy, etc.

The fourth direction of the research activity of Senior Assistant Professor Rumyana Angelova - entrepreneurship is quite broad. Various aspects and problems of entrepreneurship have found their place in it - corporate social responsibility, investments and investment activity, competitiveness, stimulation of economic entities, clusters and cluster policy, re-industrialization, youth entrepreneurship, joint business forms, innovation potential, etc. These are presented in publications 2.6, 3.11, 3.12, 3.13, 3.14, 3.15, 4.1, 5.1, 5.2.

The publications of Senior Assistant Professor Rumiana Angelova, Ph.D., have a versatile character and a desire to focus on the essential and important problems for the industry. They are distinguished by their erudition, relevance, empiricism and fully satisfy the legal requirements for occupying the academic position of "associate professor".

In summary, it can be confirmed that, in quantitative and qualitative terms, the research activity of Senior Assistant Professor Rumyana Ivanova Angelova, Ph.D., is in accordance with the minimum national requirements in area 3. "Social, economic and legal sciences", according to Art. 24, para. 2 and 3 of the Law on the Development of the Academic Staff in the Republic of Bulgaria and fully meets the conditions for occupying the academic position " Associate Professor ", according to Art. 26, para. 2 and 3 of the Law on the Development of the Academic Staff in the Republic of Bulgaria, art. 53, para. 1 of the the Regulations for the Implementation of the Law on the Development of the Academic Staff for occupying the academic position of "Associate Professor" in the scientific specialty "Economics and Management (Industry)".

## 2) Participation in scientific forums

According to the presented Certificate of compliance with the minimum national requirements, the candidate has indicated participation with reports in 15 scientific forums. Of them, 2 are outside the country - Conference "Agriculture for Life, Life for Agriculture" June 8-10, 2023, Bucharest, Romania and International Seminar on Ergonomics "Human factors in a contemporary organization", Poznan University of Technology, Poznan, May 23 - 25, 2018.

## 3) Participation in scientific projects

Senior Assistant. Professor Dr. Rumyana Angelova, assistant, has declared participation in 9 research projects, 8 of them are within the framework of Thrace University, and 1 - at the Institute for Scientific Research of the "D. A. Tsenov". She is the head of Project 1I/2023 "Financial diagnostics of the company - models and possible solutions". In addition, there is participation in two national projects - 16.1. "Update of the current curricula and programs and development of new ones in professional areas BG051PO001-3.1.07-0014 3.8 "Economics" and 3.7 "Administration and management" at the Faculty of Economics, Thrace University, according to the needs of the regional labor market in the Stara Zagora region » and 16.2. NNP "Intelligent Animal Husbandry".

I can confidently assert that I have no information and have not detected plagiarism in the chapters presented by the candidate. Associate Professor Rumyana Angelova, Ph.D. scientific works. (according to Art. 5, Para. 17; Art. 74, Para. 1 Item 5 of the Regulations for the development of the academic staff at the Trakia University)

#### 5.3. Contributions to the candidate's scientific works

The candidate submits a detailed "Author's statement of scientific contributions", which I fully accept. According to it, the contributions can be distinguished in two main directions –

#### 1) Theoretical and methodological contributions

1.1. The essence of the concept of "industrial policy" has been clarified, after systematization and summarization of many author's definitions for it, and the main characteristics of modern industrial policy have been brought out, and an attempt has been made to determine its strategic goal, sub-goals and tasks, through a thorough

- 1.2. A comprehensive review of European and Bulgarian legislation directly or indirectly affecting industrial policy is presented. On this basis, essential priorities related to it have been derived. (9.2.8. "Normative basis of the modern Bulgarian industrial policy").
- 1.3. The essence of the indicators of the industrial policy is revealed, with the main principles and the levels of their action indicated. In the presented monographic work, some of them are systematized and separated into an independent cluster, through which the Bulgarian industrial policy is analyzed and evaluated.
- 1.4. A comparison is made between the concept of creating shared value (CSV) and the philosophy of corporate social responsibility (CSR) and their similarities and differences are outlined. The thesis is defended that the state can and must stimulate economic entities to create shared value, the effect of which is multiplied at the micro and macro level (9.2.9 The role of the state to stimulate the creation of shared value (On the example of the Republic of Bulgaria).
- 1.5. By applying Z-score models for analyzing the risk of bankruptcy and comparing the results obtained through them and through traditional financial ratios, a methodology has been developed to assess the possibility of their applicability in the agricultural sector, and more specifically in the "Livestock" sector. (9.1.1. Digitalization, Financial Insolvency and Bankruptcy Risk Forecasting of Bulgarian Agricultural Enterprises)
- 1.6. Determinants of company competitiveness are systematized and evaluated. By using panel data of enterprises from Bulgarian industry, the strength and direction of influence of factor variables on profitability (ROA, ROS) was analyzed (9.1.2. Determinants of Firm Competitiveness: Econometric Evidence from Bulgarian Industry.)

# 2) Practical-applied contributions

- 2.1. In the presented monographic work, a complex analysis and evaluation of the Bulgarian industrial policy has been carried out. Two research methods are applied: the first, by studying dynamic statistical series and the second, by comparing statistical series of the Bulgarian economy and the economies of the EU countries for a certain period of time. Based on the analysis, the author formulates several main guidelines for the development of the Bulgarian industrial policy.
- 2.2. A comprehensive review of active national and international programs and initiatives promoting youth entrepreneurship in Bulgaria was carried out. The mechanism of their spread among young people has been tracked, as well as the reasons for the discrepancy between expected and achieved results. Some good international practices in relation to the promotion of entrepreneurship, which would be applicable in the Bulgarian conditions, were examined (9.2.14. Fostering youth entrepreneurship in Bulgaria: Programs and initiatives).
- 2.3. The innovation environment of the South-East region of Bulgaria was analyzed, using a set of indicators aimed at revealing its innovation potential for creating or acquiring technological knowledge: R&D costs; staff engaged in R&D; development of industries related to high technologies, technological transfers, etc. The trend of their change is compared with the information on the relevant components at the national and European level (9.4.1. Innovation potential of the South-East region of Bulgaria for the period 2007 2017.).
- 2.4. The applicability of some of the most frequently used models for the analysis of financial sustainability in the agricultural sector has been diagnosed. In parallel, the relationship between financial health and innovation activity was also investigated, proving that a higher level of digitization leads to better financial sustainability and reduces the risk of bankruptcy (9.2.2. Digitalization and financial performance of enterprises from the livestock sector.).
- 2.5. Regarding the "Livestock" subsector, a methodology for assessing the level of digitization and digital transformation developed by the Organization for Economic Cooperation and Development (OECD) has been applied. The data shows a relatively low level of digitization and readiness for investment in this area. There is also a direct correlation between the size of enterprises in terms of "number of personnel" and the drive for digital transformation. (9.2.1. Potential for digitization of agriculture in Bulgaria. Innovative Development of Agricultural Business and Rural Areas.).

# 6. NOTES AND RECOMMENDATIONS

Emphasizing the high competence of the candidate in the issues of the announced competition, I believe that in his future research work he could make efforts to diversify and enrich the researched topics and cover different countries and aspects of economic theory and business practice.

#### 7. CONCLUSION

The presented arguments and findings prove in a categorical and unequivocal way that Senior Assistant Professor Rumiana Angelova, Ph.D., has achieved the unconditionally necessary teaching, research, methodological and theoretical-applied results in order to be awarded the academic position of "associate professor".

The candidate fully meets the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the Implementation of the Law on the Development of the Academic Staff at Trakia University.

The presented works and materials from Senior Assistant Professor Rumyana Ivanova Angelova, Ph.D., to participate in the competition for the academic position of "associate professor", quantitatively and qualitatively meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for the development of the academic staff and the Regulations for the Development of the Academic Staff at Trakia University (Appendix 8.5). All scientometric indicators have been met - proven 799.83 points with the minimum required 450 points. Contributions are available in sufficient number and scope.

Based on the analysis, I give my **POSITIVE ASSESSMENT** to the teaching, scientific, expert-applied activities of Senior Assistant Professor Rumiana Angelova, Ph.D.

I allow myself to propose to the honorable Scientific Jury to vote POSITIVELY, and the Faculty Council of the Faculty of Economics at Trakia University - Stara Zagora TO CHOOSE CH. AC. DR RUMYANA IVANOVA ANGELOVA FOR "ASSOCIATE PROFESSOR" in the scientific specialty "Economics and Management (Industry)" in professional direction 3.8. "Economics", field of higher education 3. "Social, economic and legal sciences".

Svishtov, 10.03.2024

Prepared the review: (Prof. Aneta Deneva, PhD)