A REVIEW

by Dr. Victor Ivanov Yotzov, Associate Professor at the Department of Finance, UNWE of the materials submitted for participation in the academic contest for the position of Associate Professor at "Paisii Hilendarski" University of Plovdiv (UP) in higher education: 3. Social sciences, economics and law; Prof. Degree: 3.8 Economics (Financial Markets and Financial Instruments)

In the contest for 'Associate Professor', announced in the State Gazette, issue 31 of April 12, 2019 and on the website of the Paisii Hilendarski University of Plovdiv for the needs of the Department of Finance and Accounting at the Faculty of Economic and Social Sciences, as the sole candidate Assoc. Prof. Dr. Gergana Valcheva Taneva from the Paisii Hilendarski University in Plovdiv.

1 General presentation of materials received

By order # P33-3750 of 11.07.2019 of the Rector of the Paisii Hilendarski University of Plovdiv (PS) I was appointed as a member of the scientific jury of the contest for the position of associate professor at the UP "Paisii Hilendarski" in the field of higher education: 3. Social sciences, economics and law; professional direction: 3.8 Economics (Financial Markets and Financial Instruments), announced for the needs of the Department of Finance and Accounting at the Faculty of Economic and Social Sciences of the University of Sofia (FESS).

For the participation in the announced competition, Dr. Gergana Valcheva Taneva has submitted documents. She has an employment contract with the UP Paisii Hilendarski, where she is a chief assistant at the Department of Finance and Accounting, FESS.

Presented by chief assistant Gergana Valcheva Taneva are set of paper materials, which are in accordance with the Rules for the Development of the Academic Staff of the UP, and includes the following documents:

- 1. Application to the Rector for admission to the contest;
- 2. Autobiography;
- 3. Degrees for Master and Doctor;
- 4. A list of scientific publications;
- 5. Copies of the submitted scientific papers for review;
- 6. Compliance with the minimum national and additional faculty requirements;
- 7. Annotation of the materials in Bulgarian and English;
- 8. Declaration of originality and authenticity of the attached documents;
- 9. Copies of protocols of the Department, Faculty and Academic Council of the UP;
- 10. Copy of the state gazette with the announcement of the competition;
- 11. Certificate of work experience;
- 12. Information about the study activity;
- 13. Certificates for participation in projects;
- 14. Documents in accordance with the additional requirements of FISN.

The candidate Assistant Professor Gergana Valcheva Taneva has applied a total of 17 scientific works, of which: 2 standalone monographs; one individual studio; 8 articles (four of which are co-authored); a single textbook; 3 scientific reports; one book on doctorate; summary and a list of 5 research projects, in which the applicant has participated. 13 scientific papers, which are outside the dissertation and are considered in the final evaluation, are accepted for review. There are 4 peer reviewed scientific papers on the dissertation, as well as research projects in which the applicant has participated. The distribution of scientific papers by relevant titles, at home and abroad, is presented in the table below.

N⁰	Type of scientific publications	Standalone		Co-authored		Total	
		#	pp.	#	рр	#	рр
	Reviewable						
1	Monographs	2	445			2	445
2	Studios	1	31			1	31
3	Scientific articles	4	68	3	16.5	7	84.5
5	Scientific reports			1	4	1	4
6	Textbooks and teaching resources	1	444			1	444
7	Book on Doctorate	1	127			1	127
	Total	9	1115	4	20.5	13	1135.5
	Non reviewable						
1	Doctorate's abstract	1	96			1	96
2	Scientific articles	1	5			1	5
3	Scientific reports	2	20			2	20
	Total	4	121			4	121

<u>Note</u>: The attached annotations of the materials under Art. 65 of PRASPU states (p.2) that 14 publications for reviewing were submitted, but as can be seen from the list of publications as well as the submitted copies, the publications are actually 13, 2 of which are in English, 1 in French and 10 in Bulgarian. Some publications have a slight discrepancy between the volume of pages indicated by the applicant and the actual volume.

2 Brief CVs of the applicant

Gergana Taneva holds a bachelor's and a master's degree in Macroeconomics (professional qualification in Banking and Insurance), obtained by the Paisii Hilendarski University. She continued her studies in France, where she holds a master's degree Diplôme d'études approfondies from Université Montesquieu Bordeaux IV. At the same university, the candidate also defended his doctoral thesis on the topic "French Banking Groups and Financing of the Bulgarian Market, 1880-1947". Her professional career is almost entirely related to teaching and research activities carried out at the Paisii Hilendarski University. The applicant's research interests are in the areas of financial markets, competitiveness of economies, development economics and international financial and business history.

3 General features of the applicant's activities

3.1 Assessment of educational and pedagogical activity and preparation of the applicant

The applicant has a teaching load at the FESS of UP, where she teaches the disciplines "Financial Markets", "International Financial and Business History" and "Stock Exchanges". The applicant declares that she has developed e-courses in Focus on the courses Financial Markets, International Financial and Business History and International Business. According to the reports, the candidate has supervised a successfully defended PhD student, who is also employed with the UP.

3.2 Evaluation of the applicant's scientific and applied activities

3.2.1 <u>Monographs</u>

The applicant has submitted two standalone monographic studies for review:

1. Taneva, G., Crypto-Assets and Payment Systems of the Future, Plovdiv, Fast Print Books, 2019. ISBN 978-619-236-116-7

The study addresses a very topical issue - the rapid entry into the daily life of cryptocurrencies. The study analyzes blockchain technology, within which it is changing and its potential for future development. It is argued that the revolutionary application of blockchain technology contributes to the creation of a new system and modern payment currencies based on trust between participants. The study also focuses on the nature, functioning and organization of the centralized payment system. It is argued that the trend towards modernization is important, but only when it is implemented in a payment system with a risk minimization system in place. It is also noted that the potential of cryptocurrencies is not the same as blockchain technology, since blockchain technology may have different applications, while cryptocurrencies would maintain their level of risk due primarily to the anonymity that is their main characteristic.

2. Taneva G., Foreign Exchange Risk Hedging Strategies, Plovdiv, Fast Books Print, 2017, ISBN 978-619-236-073-3

Although not mentioned by the applicant as a teaching tool, this publication is actually appropriate for a textbook insofar as it lacks author's research and describes and systematizes the tools and strategies through which investors can hedge currency risk. It should be noted that the applicant has coped well with the main purpose of the publication and I would recommend that it be used as a teaching resource.

3.2.2 <u>Textbooks, teaching resources, book on doctorate</u>

In this section, the applicant indicates two publications:

1. Taneva G., Financial Markets, Plovdiv, Fast Print Books, 2017, ISBN: 978-619-7312-88-1.

There is no doubt that the last decades have been marked by a global trend of rapid development of financial markets. Bulgaria does not stay away from this trend. Despite the fact that the depth and importance of financial markets remain relatively limited, the need for 'financial literacy' is still strong. In this regard, the textbook offered is up-to-date and provides a good level of knowledge of the peculiarities of the capital and money markets for students studying the subjects "Financial Markets" and "Stock Exchanges".

 Taneva G., Les stratégies d'internationalisation financière de la Société Générale en Bulgarie au XIX – XX siècle, Plovdiv, Fast Books Print, 2019. ISBN 978-619-236-072-6.

I am not familiar with this peace of research as I do not speak French. According to the candidate's annotation, the study reveals the function of the French financial intermediaries, which increase their activity and commitments on the Bulgarian market by servicing the financing of the Balkan railway sector, the banking system, participating in the consolidation of the Bulgarian finances by granting external bonds. The result of the study is the provision of statistics unknown to Bulgarian researchers for all activities and areas of French intervention and a financial analysis based on them. It covers the strategy, mechanisms of development of the banking market and the influence of Société Générale in the liberalization process and in the establishment of the Bulgarian banking system, which underpins the architecture of the modern economy.

3.2.3 <u>Studios</u>

 Taneva G., French investment banking and Bulgaria in the 1880s-1930s: Portfolio of skills and strategies, in: Hubert Bonin & Carlo Brambilla (eds.), Investment Banking History, National and Comparative Issues (19th-21st centuries), Bruxelles, P. I. E Peter Lang, 2014, pp. 381- 411 ISBN: 978-2-87574-115-8

This publication is closely related to the candidate's doctoral dissertation and is a standalone chapter of a collection of researchers from different countries. The collection is devoted to the history of investment banking. The author argues that the evolution and organization of the French financial market makes it possible to determine the importance of French banks, their operations in the stock and financial markets and their internationalization policy. It is argued that the French banking groups influence Bulgarian finances with the stock market organization by providing long-term financing for the Bulgarian market by investing indirectly (bond issue and placement) or directly (shares in financial and financial corporations). credit companies). The study analyzes their strategies and operations on the money and capital markets, their relationships with other financial institutions.

3.2.4 <u>Articles</u>

 Taneva G., Competitiveness as a Factor for Achieving Sustainable Economic Growth, Scientific Papers of PU, University Publishing House, 2012, cc. 98-120. ISSN: 1313-227X

The author's motivation for this research is the ongoing globalization processes and the accompanying crises that lead to different changes in the relative competitive positions of individual countries. In turn, economic and financial crises are associated with a decrease in competitiveness due to the interconnectedness of national economies in liberalizing markets. In this

publication, the applicant has set himself the goal of building a theoretical model of competitiveness management based on an analysis of key indicators and the relationships between them. To this end, specific methods for measuring the competitive environment have been derived. There are three main parts to the publication: a) explaining the different concepts of competitiveness; (b) defining indicators for measuring competitiveness; and (c) analysis of competitiveness assessment instruments.

 Yosifov T., Taneva G., Innovation Processes and Conditions for Financing Innovations in Bulgaria, Trakia Journal of Sciences, Vol. 15, Suppl. 1, pp. 132-136, 2017, ISSN 1313-7069.

This publication is a joint report presented at an international conference on regional development issues. The aim is to analyze the innovation processes in the country. It is reported that during the study period (2009-2015) the economy has been developing at low and unstable rates. It is concluded that in such conditions innovation and the development of entrepreneurial activity are developing at extremely low rates because of the mentioned problems.

Yosifov T., Taneva G., A Model for Assessing Economic Risk in Financing Innovation Projects of Venture Capital Funds, Journal of Economic Studies, Volume 27, Issue 4, 2018, ISSN: 0205-3292, pp. 146 – 161

The motivation for this research stems from the problems associated with the risk assessment of investment projects. The authors' thesis is that accurate risk assessment enables its more efficient management, which is a prerequisite for avoiding unwanted and unexpected events, optimizing costs and freeing up resources for development of the business, evaluating the opportunities for profitable investments. The aim is to build a basic model for economic risk assessment, using some specific approaches developed by the authors. Of interest is the approach chosen by the authors, which is based on a real innovation project related to drone production. The results of the study attest the practical feasibility of implementing an adaptive risk assessment model for innovative projects.

4. Popchev I., **Taneva** G., Cryptocurrencies: Enigma and Reality, Technosphere Magazine, 1 (39), 2018, pp. 37-44, ISNN: 1313-3861.

The publication has a rather popular sound. The nature of cryptocurrencies, their capabilities and limitations are described. The cryptocurrencies are classified according to the algorithm on which their operating principles and usage are based. The essence of blockchain as a technological innovation is revealed and the methodology for making cryptocurrency payments is presented.

5. Popchev I., **Taneva** G., Blockchain - the New Economy and Risks, Technosphere Magazine, Issue 4 (42), 2018, pp. 63-67, ISNN: 1313-3861.

The publication can be seen as a kind of continuation of the previous article. The emergence of the digital revolution and the impact of cryptocurrencies in the global market are discussed. The main risks associated with the trading of cryptocurrencies and the processes of initial regulation in some countries are analyzed. The benefits of blockchain and the challenges facing financial institutions and regulators are revealed. It should be noted that both this and the previous article have a direct connection with the main habilitation work.

 Taneva G., The Contradictory Views in Defining the Concept and Regulation of Cryptocurrencies, FISN Annual, Paisii Hilendarski IM, 2019, pp. 296-311, ISSN: 1313-227X.

This publication also has its roots in basic habilitation work. The author's thesis is that cryptocurrencies are alternative means of payment that are not regulated, which raises the question of their legitimacy, since they are not supported by the state. Given that cryptocurrencies do not meet the requirements for fiat money but are characterized by rapid development and global character, this is forcing governments to take various regulatory measures to reduce the risks associated with them. It is concluded that regulatory measures are needed to hedge the crypto market. The above conclusion is justified by the high risks that economic agents can take that could lead to speculative bubbles. The contradictory attitude towards cryptocurrencies requires clarification of the preconditions for this contradiction, which is actually the main purpose of the study.

7. Taneva G., The Ideological Paradigms at the Basis of Cryptocurrencies, FISN Annual, Paisii Hilendarski IM, 2019, pp. 312-323, ISSN: 1313-227X.

This study is directly related to the previous one. The starting point of the research is the relatively rapid penetration of cryptocurrencies, which changes the traditional concepts of value transfer. The author's thesis is that this process is generated by a number of socio-economic prerequisites and ideological paradigms, which are directly related to the nature and mode of operation of digital currencies. The main objective of the study is to present the main elements of digital innovation, the ideological and historical aspects of cryptocurrencies and their classification depending on the application and how they function.

8. Taneva G., Analysis and Forecasting of the Crypto Market by ARIMA Model, Economic Thought Magazine, Issue 4, 2019. ISSN 0013-2993.

The peer reviewed article has a certain technical nature and shows that the applicant has a good knowledge of econometric techniques. The purpose of the study is to analyze the investment potential of the crypto market by analyzing the factors leading to sharp fluctuations and to predict its volatility through the CRIX index. One of the traditional ARIMA time series approaches has been used, tracking the monthly price of CRIX for the period January 2015 - January 2019. Based on econometric studies, the correlation between the return on traditional financial assets and that of crypto currencies is low. At the same time, the calculations show that if CRIX is added to a traditional portfolio, the correlation coefficient values improve.

3.3 Contributions (scientific and applied) and citations

After acquaintance with the scientific production of the applicant the following scientific and applied scientific contributions can be ascertained:

3.3.1 With regard to monographs:

- 1. The multidimensionality of cryptocurrencies, with an emphasis on the challenges facing regulatory authorities, has been thoroughly studied and presented in detail;
- 2. Arguments to support the hypothesis of the study are presented crypto currencies are a chaotic and disorganized market and cannot function in a crisis;
- 3. Up-to-date and rich facts from international practice related to centralized and decentralized payment systems have been collected and processed;
- 4. A criteria system for analyzing and evaluating the efficiency and security of the decentralized market has been developed;
- 5. Based on an empirical study, the lack of knowledge, interest and lack of active participation of economics students (potential economic agents) in the cryptocurrency market were found;
- 6. Risk management strategies have been critically analyzed by various methods, which are a key prerequisite for preventive action against possible crisis situations.

3.3.2 With regard to articles and reports

- 1. By developing a criterion system for analyzing and evaluating the efficiency and security of the decentralized market, a comparative characteristic of the essential features between centralized and decentralized payment systems has been made;
- 2. The advantages of DLT, its challenges and applications in modern payment systems are analyzed;
- 3. The investment capabilities of cryptocurrencies have been explored by the econometric model ARIMA, which gives a clear idea of the dynamics and development of the CRIX crypto index, which is a barometer for measuring the market.

3.3.3 <u>Citations</u>

The applicant has provided a detailed reference to the citations of the scientific papers submitted. The report shows that two of the publications are cited as follows:

- The publication: Taneva G., Competitiveness as a Factor for Achieving Sustainable Economic Growth, Scientific Papers of PU, University Publishing House, 2012, cc. 98-120. ISSN: 1313-227X has been cited 7 times, including three times in monographs and collective volumes;
- The publication by Yosifov T., **Taneva** G., Innovation Processes and Conditions for Financing Innovations in Bulgaria, Trakia Journal of Sciences, Vol. 15, Suppl. 1, pp. 132-136, 2017, ISSN 1313-7069 is cited once in a collective monograph.

4 Assessment of the applicant's personal contribution

It is apparent from the breakdown table of the applicant's scientific publications that the vast majority of the reviewed materials (just over 98%) are standalone studies, for which there is a declaration of originality and veracity. On this basis it can be concluded that the described

contribution points are in practice entirely the work of the applicant, the sources are quoted correctly and there is no reason to suspect plagiarism.

5 Critical comments and recommendations

As a critical note, one-sided publications can be cited - 6 out of 13 publications are devoted to cryptocurrencies and to a large extent the analysis and conclusions overlap. In some of the publications there is excessive descriptiveness and a very strong emphasis on historical analysis. I recommend that the scope of her research activities be expanded, she should use the quantitative methods of analysis, and especially of econometric techniques, more boldly and more often.

6 Personal impressions

I have no personal impressions of the candidate.

7 Conclusion

The documents and materials presented by the sole candidate Gergana Valcheva Taneva meet the minimum requirements of the Academic Staff Development Act of the Republic of Bulgaria, the Rules for the implementation of the law and the corresponding Rules of the UP "Paisii Hilendarski".

The candidate submitted a sufficient number of scientific papers published after the materials used in the defense of the Doctor 's thesis. Some scientific and applied scientific contributions can be found in the works of the candidate, which are described in section 3.3. The theoretical developments of the applicant have a certain practical applicability, with a significant part of them being directly oriented towards academic work. The scientific and teaching qualification of chief assistant Dr. Gergana Taneva is at the necessary level. The results achieved by the applicant in the educational and research activities are in accordance with the specific requirements of the Faculty of Economic and Social Sciences, adopted in connection with the Regulations of the University of Applied Sciences.

After getting acquainted with the materials and scientific works presented in the contest, analysis of their importance and their scientific and applied contributions, I find it justifiable to give my positive assessment and to recommend to the Scientific Jury to prepare a report proposal to the Faculty Council of the Faculty of Economic and Social Sciences for the selection of chief assistant Dr. Gergana Taneva at the Academic Position "Associate Professor" at UO "P. Hilendarski" by professional field 3.8 Economics (Financial markets and financial instruments).

30.08.2019

Reviewer:

Associate Prof. Victor Yotzov, PhD