

Broj:01/ *2599*

Podgorica, 19.09.2024.godine

UNIVERZITET CRNE GORE
-Odboru za doktorske studije i Senatu-

PODGORICA

Predmet: Materijal za sjednicu Odbora i Senata

Poštovani,

U skladu sa članom 38. Pravila doktorskih studija, dostavljamo Vam materijal za narednu sjednicu Odbora za doktorske studije, odnosno Senata Univerziteta Crne Gore i to:

-Ispunjenost uslova doktoranda (obrazac D2) sa propratnom dokumentacijom za mr Milicu Vukčević.



UNIVERZITET CRNE GORE
DEKAN
Prof.dr Mijat Jecović

**UNIVERZITET CRNE GORE
EKONOMSKI FAKULTET PODGORICA
DOKTORSKE STUDIJE**

Br. 01/2602

Podgorica, 19.09.2024.god.

Na osnovu čl. 64. Statuta Univerziteta Crne Gore, člana 41. Pravila doktorskih studija, Vijeće Ekonomskog fakulteta je na sjednici održanoj 19.09.2024.godine donijelo

ODLUKU

1. Utvrđuje se da su ispunjeni uslovi iz Pravila doktorskih studija za dalji rad na doktorskoj disertaciji **„Analiza mogućnosti primjene tradicionalnih i savremenih modela za rano otkrivanje bankrotstva preduzeća na tržištima Crne Gore i Srbije“** doktoranda **mr Milice Vukčević**.
2. Predlaže se Odboru za doktorske studije i Senatu UCG da formira Komisiju za ocjenu doktorske disertacije **„Analiza mogućnosti primjene tradicionalnih i savremenih modela za rano otkrivanje bankrotstva preduzeća na tržištima Crne Gore i Srbije“** doktoranda **mr Milice Vukčević** u sastavu:
 - Prof. dr Milan Lakićević, redovni profesor, Ekonomski fakultet Podgorica, Univerzitet Crne Gore, mentor;
 - Prof. dr Ana Lalević Filipović, redovni profesor, Ekonomski fakultet Podgorica, Univerzitet Crne Gore, član;
 - Prof. dr Mirko Andrić, redovni profesor, Ekonomski fakultet u Subotici, Univerzitet u Novom Sadu, Republika Srbija, član.
3. Odluka se dostavlja Centru za doktorske studije UCG na dalji postupak.

OBRAZLOŽENJE

Doktorand **mr Milica Vukčević** je uradila doktorsku disertaciju **„Analiza mogućnosti primjene tradicionalnih i savremenih modela za rano otkrivanje bankrotstva preduzeća na tržištima Crne Gore i Srbije“**, nakon čega je Komisiji za doktorske studije podnio zahtjev za formiranje Komisije za ocjenu doktorske disertacije.

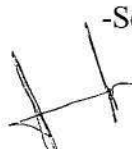
Komisija za doktorske studije je, nakon razmatranja dokumentacije, predložila Vijeću fakulteta da donese Odluku kojom predlaže Senatu UCG formiranje Komisije za ocjenu doktorske disertacije **„Analiza mogućnosti primjene tradicionalnih i savremenih modela za rano otkrivanje bankrotstva preduzeća na tržištima Crne Gore i Srbije“** doktoranda **mr Milice Vukčević**.

Na osnovu izloženog odlučeno je kao u dispozitivu.


DEKAN
Prof.dr Mijat Jocović

DOSTAVLJENO:

- a/a
- referentu doktorskih studija,
- Centru za doktorske studije.
- Senatu UCG.



UNIVERZITET CRNE GORE

EKONOMSKI FAKULTET

Saglasnost mentora sa tekstom disertacije doktoranda

Ovom izjavom dajem saglasnost na tekst doktorske disertacije doktoranda mr Milice Vukčević, koja je predata referentu doktorskih studija.

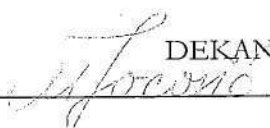
Podgorica, 27.08.2024.god.

MENTOR,


Prof. dr Milan Lakićević

ISPUNJENOST USLOVA DOKTORANDA

OPŠTI PODACI O DOKTORANDU			
Titula, ime, ime roditelja, prezime	Mr Milica (Predrag) Vukčević		
Fakultet	Ekonomski Fakultet Podgorica		
Studijski program	Doktorske studije Ekonomije		
Broj indeksa	D 1/19		
NAZIV DOKTORSKE DISERTACIJE			
Na službenom jeziku	Analiza mogućnosti primjene tradicionalnih i savremenih modela za rano otkrivanje bankrotstva preduzeća na tržištima Crne Gore i Srbije		
Na engleskom jeziku	Analysis of the possibilities of applying traditional and modern models for early detection of corporate bankruptcy in the Montenegrin and Serbian markets		
Naučna oblast	Računovodstvo i finansije		
MENTOR/MENTORI			
Prvi mentor	Prof. dr Milan Lakićević	Ekonomski Fakultet, Univerzitet Crne Gore, Crna Gora	Finansije i Računovodstvo i revizija
Drugi mentor			
KOMISIJA ZA PREGLED I OCJENU DOKTORSKE DISERTACIJE			
Prof. dr Milan Lakićević	Ekonomski Fakultet, Univerzitet Crne Gore, Crna Gora	Finansije i Računovodstvo i revizija	
Prof. dr Ana Lalević Filipović	Ekonomski Fakultet, Univerzitet Crne Gore, Crna Gora	Računovodstvo	
Prof. dr Mirko Andrić	Ekonomski fakultet u Subotici, Univerziteta u Novom Sadu, Srbija	Računovodstvo i revizija	
Datum značajni za ocjenu doktorske disertacije			
Sjednica Senata na kojoj je data saglasnost na ocjenu teme i kandidata	23.12.2020.god.		
Dostavljanja doktorske disertacije organizacionoj jedinici i saglasnost mentora	27.08.2024.god.		
Sjednica Vijeća organizacione jedinice na kojoj je dat prijedlog za imenovanje komisija za pregled i ocjenu doktorske disertacije	19. 09 2024.		

ISPUNJENOST USLOVA DOKTORANDA
U skladu sa članom 38 pravila doktorskih studija kandidat je cjelokupna ili dio sopstvenih istraživanja vezanih za doktorsku disertaciju publikovao u časopisu sa (SCI/SCIE)/(SSCI/A&HCI) liste kao prvi autor.
Spisak radova doktoranda iz oblasti doktorskih studija koje je publikovao u časopisima sa (upisati odgovarajuću listu)
SCI/SCIE: Vukčević M, Lakićević M, Melović B, Backović T, Dudić B. (2024). Modern models for predicting bankruptcy to detect early signals of business failure: Evidence from Montenegro. PLoS ONE 19(5): e0303793. https://doi.org/10.1371/journal.pone.0303793
Dodatno, metodologija primijenjena u disertaciji je korištena i u radu:
Lakićević M. & Vukčević, M. (2023). Financial distress prediction: empirical evidence from Montenegrin electric power companies, 1 Montenegrin International Conference on Economics & Business, Faculty of Economics, University of Montenegro, 25th - 27th May 2023, Budva Montenegro
Obrazloženje mentora o korišćenju doktorske disertacije u publikovanim radovima
Kandidat je, zajedno sa mentorom, u proteklom periodu radio na objavi rada u SCI/SCIE časopisu, u čemu je i uspio. Uspješno je primijenio savremene modele za predviđanje poslovnog neuspjeha (bankrotstva) kompanija. Publikovan rad je direktno povezan sa temom i naslovom doktorske disertacije.
Datum i ovjera (pečat i potpis odgovorne osobe)
U Podgorici, 27.08.2024. godine
  DEKAN

Prilog dokumenta sadrži:

1. Potvrdu o predaji doktorske disertacije organizacionoj jedinici
2. Odluku o imenovanju komisije za pregled i ocjenu doktorske disertacije
3. Kopiju rada publikovanog u časopisu sa odgovarajuće liste
4. Biografiju i bibliografiju kandidata
5. Biografiju i bibliografiju članova komisije za pregled i ocjenu doktorske disertacije sa potvrdom o izboru u odgovarajuće akademsko zvanje.

2204
27.8.24

Na osnovu službene evidencije i dokumentacije Ekonomskog fakulteta u Podgorici, izdaje se

P O T V R D A

o predaji doktorske disertacije na dalji postupak

Doktorand: mr Milica Vukčević

Naziv doktorske disertacije: „*Analiza mogućnosti primjene tradicionalnih i savremenih modela za rano otkrivanje bankrotstva preduzeća na tržištima Crne Gore i Srbije*“

Datum predaje: 27.08.2024.godine


Referent doktorskih studija

RESEARCH ARTICLE

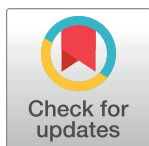
Modern models for predicting bankruptcy to detect early signals of business failure: Evidence from Montenegro

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Abstract

This paper explores predicting early signals of business failure using modern models for bankruptcy prediction. It reviews how continuous operations enhance market value, strengthening competitiveness and reputation among stakeholders. The study involves medium and large companies in the Montenegrin market from 2015 to 2020, comprising 30 bankrupt and 70 financially stable firms. Logistic regression is also employed to create a logit model for early detection of bankruptcy signals in companies. This research establishes the empirical validity of modern models in predicting business failure in the Montenegrin market, particularly through logistic regression. Significant indicators, such as the Degree of Indebtedness (DI) and turnover ratio of business assets (TR), exhibit strong predictive power with a p-value less than 0.001 according to Likelihood ratio tests. The paper underscores the potential benefits of bankruptcy prediction for both internal and external stakeholders, especially investors, in enhancing the competitiveness of Montenegro's large and medium-sized companies. Notably, the research contributes by bridging the gap between theory and practice in Montenegro, as bankruptcy prediction models have not been extensively applied in the market. The authors suggest the possible applicability of the created logit model to neighboring countries with similar economic development levels. In that sense, the concept of predicting bankruptcy is positioned as integral to corporate strategy, impacting the overall reduction of bankruptcies. The paper concludes by highlighting its role as a foundation for future research, addressing the literature gap in the application of bankruptcy prediction models in Montenegro. The created logit model, tailored to the specific needs of Montenegrin companies, is presented as an original contribution, emphasizing its potential to strengthen the competitiveness of companies in the market.

OPEN ACCESS

Citation: Vukčević M, Lakićević M, Melović B, Backović T, Dudić B (2024) Modern models for predicting bankruptcy to detect early signals of business failure: Evidence from Montenegro. PLoS ONE 19(5): e0303793. <https://doi.org/10.1371/journal.pone.0303793>

Editor: David Alaminos, University of Barcelona: Universitat de Barcelona, SPAIN

Received: March 12, 2024

Accepted: April 30, 2024

Published: May 21, 2024

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Data Availability Statement: All relevant data are within the manuscript and its [Supporting Information](#) files.

Funding: The author(s) received no specific funding for this work.

Competing interests: NO authors have competing interests Enter: The authors have declared that no competing interests exist.

Introduction

A dynamic and unstable business environment, the growth of competition, pronounced changes, and specific operations in crisis conditions are just some of the factors that

characterize the way companies operate on the market nowadays [1–3]. Therefore, an important question for stakeholders is whether the company, due to numerous market challenges, will operate in the future or will go bankrupt [4,5]. The above points to the need to predict the bankruptcy of the company [6], so the developed models are based on indicators from financial reports, which allow predicting the success of the business entity in the future [7]. The importance of the indicators from the financial report is shown by the research of the author Rodríguez-Valencia [8], which used selected indicators to estimate the value of the company. Users of financial statements want to predict the future performance of companies [9,10] to make adequate business decisions, from which they will realize a certain benefit in the future and have the highest return on investment. Additionally, the requirements of the International Financial Reporting Standards and the International Auditing Standards indicate the issue of the responsibility of the company's management, as well as the independent audit of the financial statements, so that the assumption of the continuity of the company's operations is sustainable [11–13]. The previously stated, as well as the fact that the models for early detection of bankruptcy of companies are gaining more and more importance, became the motive for conducting this research. In this regard, an increasing number of bankruptcy proceedings is evident, which is also confirmed by the Eurostat report [14]. In this way, early indicators of business failure can be observed in time, so that measures can be taken by the management to improve the company's business. To achieve this, decision-makers should have adequate knowledge, especially in the field of finance and accounting. That way, based on information obtained from a set of financial reports, the management would be able to recognize early signals of business failure. Forecasting the business failure of companies, according to previous research, can be done using a traditional model (based on selected indicators) [15–17], but also by using existing, modern models (Altman Z^o model, Springate model, Zmijewski model, Kralicek's model, BEX model, logit model) [18–22] to recognize early signals of business failure, i.e. determine whether the analyzed company will go bankrupt or not.

However, this topic is still insufficiently researched in countries with a low and medium level of development, including Montenegro, which is one of the reasons for conducting this research. The previous research was mainly based on the application of the model to a sample of small and medium-sized enterprises. In contrast to such research, this work will be based on the application of a model for predicting business failure on the example of large and medium-sized enterprises. It is important to point out that by analyzing the literature, according to the author's knowledge, there are very few papers that include the integral application of several models for predicting business failure. It is important to find out which models can be considered reliable for application, all to prevent the trend of increasing the number of bankruptcy proceedings, which is also evident in Montenegro. The aforementioned, along with the fact that, according to the author's knowledge, no comprehensive research in this field has been carried out in Montenegro yet, represents an observed literal gap. Analyzing the application of the model for predicting business failure would also ensure compliance with the principle of going concern as one of the most important concepts for business operations as well as preparing financial statements [23], which is an additional motive for conducting this research.

In this way, the research will provide insight into whether it is necessary to create a new model, adapted to the Montenegrin market, and whether the created logit model will enable decision-makers to predict the bankruptcy of a company based on pre-selected indicators, or whether the existing models have a satisfactory level of reliability. In this way, a clearer picture is provided to the decision-makers regarding the operations of the company. It also indicates the measures that the management should take to improve the business of the company, and therefore its competitiveness in the market. In this way, the probability of companies achieving business failure would be reduced.

The paper consists of four parts and, in addition to the introduction, contains an overview of previous research, a description of the methodology, research results and discussion, conclusion, and implications, as well as limitations and recommendations for future research.

Literature review

Rapid changes in business, especially during crises and an unstable environment with advanced technology and increased competition, significantly affect the company's operations. Decision makers must continuously research to make more confident business decisions. In other words, decision-makers, due to the increasing number of business failures of companies on the market [14], should analyze financial reports. Financial report analysis serves as a tool for applying bankruptcy prediction models, utilizing various financial indicators to assess a company's performance compared to the previous year. These indicators identify areas for improvement, helping prevent company bankruptcy. Business failure occurs when a company, regardless of its size or activity, cannot meet its obligations. Therefore, companies that have experienced business failure have certain indicators in the form of financial indicators, which point to unsatisfactory ways of doing business operations [24]. For that reason, models for the early detection of company bankruptcy, created based on financial indicators, are gaining more and more importance, so it is not surprising that this issue is the subject of research by numerous authors. Thus, financial distress is one of the most important factors affecting the solvency of companies. It has influenced the development of models for assessing financial problems in industrial and financial sectors [25].

In general, models for predicting company bankruptcy can be divided into three groups. The first group consists of models based on statistical methods. These are univariate and multivariate models. This group involves MDA, logit, and probit models [5]. The second group consists of artificial intelligence models, which are more complex to apply. Within these models, there are Decision Trees, Neural Networks (multilayer perceptron and the novel quantum neural network), and Support Vector Machines (SVM) [26–29]. The third group consists of theoretical models for which statistical analysis supports theoretical foundations [20,30]. It is important to emphasize that Dynamic Stochastic General Equilibrium (DSGE) and Vector Autoregressive (VAR) models are becoming more and more important and relevant in analyzing business cycles and detecting recessions [31]. However, models for predicting company bankruptcy can be divided into traditional and modern models [32] and the authors note that traditional models involve indicators related to property, financial, and profitability analysis based on financial statements. In contrast, modern models involve the Altman model, Springate model, Zmijewski model, BEX model, and others. Until the appearance of Beaver's research, the first study dedicated to business failure was developed by Charles L. Merwin, and it was considered the most significant study until the 1960s. However, the univariate analysis of Beaver [33], who based his study on the sample of 79 bankrupt companies, will be of great importance for the development of multivariate models for predicting corporate bankruptcy. The first multivariate model was developed by Altman in 1968, based on five analytical indicators, and was originally developed for the needs of the American market. According to this model, if the company had a Z-score value greater than 3, the company was characterized by financial stability. However, since Altman's original model only applied to manufacturing companies listed on the stock exchange, over time there was a need to develop models that also apply to other economic activities, regardless of whether the company is listed on the stock exchange or not. Thus, the Z' score model was developed for companies that are not listed on the stock exchange, and the Z" score model, was intended for companies that do not belong to the production sector Altman et al. [34].

In addition to Altman's model, the Springate model is also important for predicting company bankruptcy, which classifies companies into two groups: healthy companies and companies with a high probability of bankruptcy in the next year. The model was formed based on four indicators (Assets to working capital, EBIT / total assets, EBT / current liabilities, and Total assets/sales) [35] with a threshold value of 0.862 [36]. An important model for predicting company bankruptcy was developed by Ohlson in 1980, forming a logit model, to overcome the shortcomings of the discrimination function [37]. Ohlson criticizes previous research on predicting business failure for using paired samples and not meeting the mandatory assumptions of discriminant analysis. Therefore, logistic regression does not require normality of the distribution of independent variables, which is a commitment in application to the discriminant function [38]. Also, the Zmijewski model is well-known in the literature, based on three analytical indicators (Net Income/Total Assets, Total Liabilities /Total Assets, and Current Assets / Current Liabilities) [39] and gives the value of the probability function between 0 and 1. The probability of a company going bankrupt within the next year increases as the value approaches 1 [40].

Kralicek's DF indicator is also used for identifying a crisis in a company for European companies. This indicator can record positive and negative values, where a positive value indicates the company's solvency, while a negative value indicates insolvency. The value of this indicator ranges from -1 to 3. Companies with a DF indicator value greater than 3 belong to companies with excellent financial stability [41]. The IN99 model was developed in the Czech Republic based on the application of four analytical indicators (assets/liabilities; EBIT/assets; revenue/assets; assets/(short-term liabilities and short-term bank loans)) to assess the success of the company's operations by the owner [41]. It indicates that if the value of the indicator is more than 2.07, it is a healthy company, while if the value is less than 0.684, the company is bankrupt. The indicator value, obtained between the upper and lower limits, indicates that the company is in the "grey" zone [42]. In contrast to the IN99 model, the IN05 model was developed in the Czech Republic for the needs of creditors to evaluate the company's performance. Depending on the value of the indicator, companies are classified as healthy ones, if the value is more than 0.5, that is, the company is bankrupt if the value is less than 0.9. In addition to the previously mentioned models, the BEX model is developed for the Croatian market and intended for evaluating the performance of companies on the capital market. It was formed based on four indicators (the ratio between (EBIT) and total assets, the ratio of net operating profit to equity capital, the ratio of working capital to total assets, ratio of theoretically free money from all activities) [43] from the financial report and it indicates that if the value of the BEX indicator is greater than 6, the company operates with outstanding results, while if the value is less than 0, the company operates on the unsatisfactory way [44]. The application of neural network models, decision trees Support Vector Machines, and Restricted Boltzmann Machine, represents new approaches to predicting bankruptcy based on artificial intelligence [28]. The previously mentioned models of artificial intelligence can find a foothold in the market, but they are complex for application and interpretation of the obtained results. However, these models still do not always provide the most accurate results [20]. How important statistical models are for the analysis of this issue for decision-makers is best shown by the research of numerous authors, who apply them to examine whether there is a probability that the analyzed company records a business failure on the market [24,45,46]. Unlike the previous authors, the logit model and Altman's Z score were applied to predict the bankruptcy of small and large companies in Asia, whereby the subject of the analysis is to determine which of these two models is more reliable for predicting business failure [47]. A similar study was conducted in Jordan where Altman's Z score and the Kida model were applied to predict corporate bankruptcy [48]. The research conducted in Pakistan examined the ability of financial indicators

and Altman's Z model to predict bankruptcy in the textile sector. [16]. In the same country, a study was conducted on the application of the Altman and Abbas model to predict bankruptcy of non-financial companies listed on the stock exchange [49].

The application of Altman's Z score is shown in research conducted in Sri Lanka, where the subject of research was the possibility of predicting the bankruptcy of listed manufacturing companies [18]. Unlike the previously mentioned, the application of Altman's model in the market of the same country was analyzed, but in this case for the trade sector [50]. The prediction of company bankruptcy was also carried out in Tehran, to determine the possibility of predicting bankruptcy for listed companies using the Altman, Springate, Zmijewski, and Grover models [21]. The results obtained using these models indicated good predictive capabilities for predicting business failure. The application of artificial intelligence models was the subject of research to compare the ability to predict the bankruptcy of companies using these models to Altman's Z model [51]. Unlike the previous authors, who aimed to analyze the application of the model for predicting the bankruptcy of companies in one country for a specific market segment, the author Alaminos et al. [20], applying the logit model, investigated the possibility of forming a global model that can be applied to predict the bankruptcy of companies. Thus, it covered the regions of Asia, Europe, and America. Logistic regression was also applied in Albania to predict the bankruptcy of companies [52]. In order to predict the bankruptcy of small companies in Romania, during the financial crisis, the models of Altman, Toffler's model and the logistics model were applied [53]. Logit and probit models were used to analyze the potential for predicting company bankruptcy in the Russian market [54]. The application of Altman's model was also tested in Italy, on companies listed on the stock exchange [55].

The possibility of applying a model for predicting company bankruptcy was implemented in Croatia analyzing company bankruptcy using logistic regression, on the example of small and medium-sized enterprises [56]. Also, in the same country it was examined the possibility of predicting company bankruptcy, based on relevant financial indicators of liquidity, solvency, and profitability for small and medium enterprises [57].

By applying the corrected model Z", an analysis of the creditworthiness of companies in Serbia was carried out to determine the probability of bankruptcy [58]. In the Serbian market, it was researched the example of manufacturing companies, using logistic regression, to analyze the possibility of predicting company bankruptcy [59]. The beginning of research on models for predicting company bankruptcy in Montenegro was related on the application of seven selected financial indicators and four models for the possibility of predicting the bankruptcy of a company [32].

Based on previous research and the variety of models and methods available in the field of business difficulties research, it can be concluded that the most widely used models in the markets are those based on statistical methods and financial indicators [60,61]. Also, it can be seen that this problem is current and popular among authors around the world and models for predicting bankruptcy are applied regardless of the size, activity of the company, and the market in which they operate. However, despite the great importance of these models for maintaining the stability of the company's operations, they are rarely applied in Montenegro, which is also an observed literature gap. Therefore, this paper will analyze the possibility of applying modern models for the early detection of bankruptcy of companies in the Montenegrin market. The goal is to determine the reliability of their application for the mentioned market and obtain the parameters of financial analysis that contribute the most to predicting business failure, using logistic regression, intended for the Montenegrin market and economy, to ultimately reduce the number of bankruptcy proceedings. In this way, the gap between theory and practice will be bridged and a conclusion will be reached on whether it is necessary to create a new model for the Montenegrin market or whether the existing models have nevertheless, a

satisfactory level of reliability for the application. It should make it easier for managers to make business decisions. It is important to point out that maintaining a long-term business company's competitiveness in the market is significant, considering that Montenegro needs to have a stable economy. However, to achieve this goal, healthy large and medium-sized companies are necessary, especially those in which the state has a majority share. The aforementioned is also significant due to the fulfillment of the conditions for accession to the European Union, specifically Chapter 6, which is related to corporate governance.

Materials and methods

Taking into account previous research, as well as the identified literature gap and the aim of the research, this paper will examine whether modern models such as Altman's Z" model, Springate model, Kralicek's model, Zmijewski model and BEX model [21,32,34,36,40,41,57] reliable for application on the Montenegrin market. Previous research has focused on the analysis of individual models, but until now, according to the author's knowledge, no research has been conducted that had a combination of models for predicting business failure as a subject, on the example of large and medium-sized companies. Following the above, the hypotheses were formulated:

H1: Altman's Z"Model is reliable for predicting the business failure of large and medium-sized enterprises in Montenegro.

H2: The Springate model is reliable for predicting the business failure of large and medium-sized enterprises in Montenegro.

H3: The Zmijewski model is reliable for predicting the business failure of large and medium-sized enterprises in Montenegro.

H4: Kralicek's DF model is reliable for predicting the business failure of large and medium-sized enterprises in Montenegro.

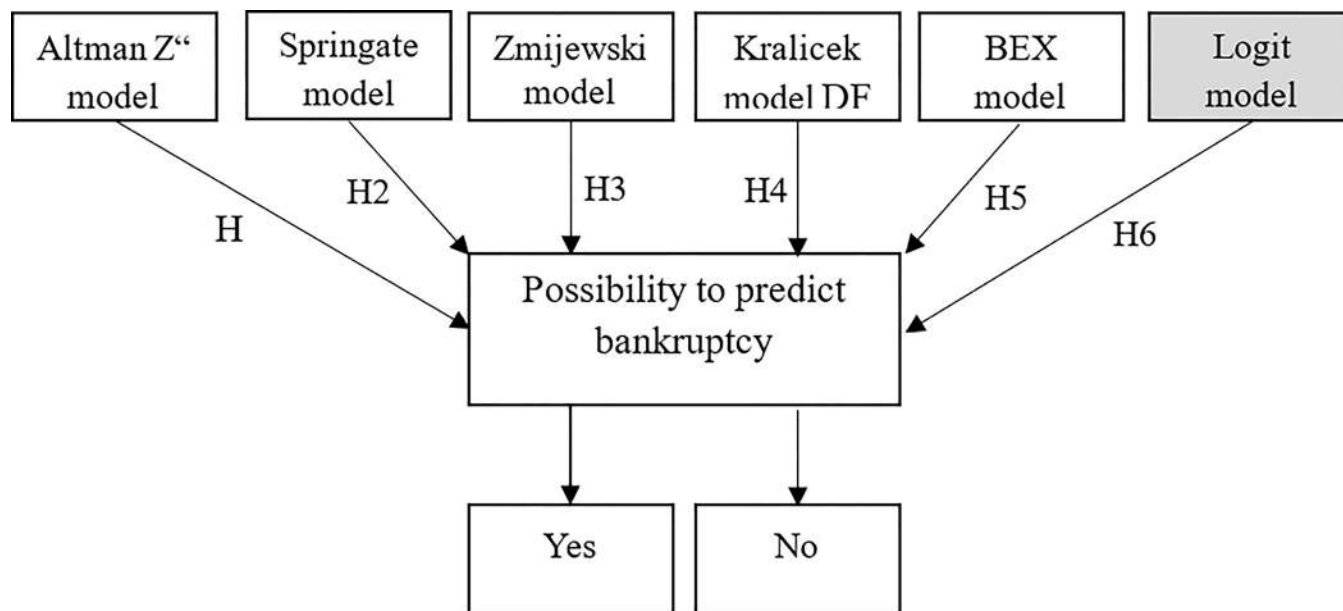
H5: The BEX model is reliable for predicting the business failure of large and medium-sized enterprises in Montenegro.

Global and regional research used frequency-based indicators from previous studies to create a logit model for predicting business failure [24,45,52]. However, despite this, this model was not the subject of the author's analysis and application in this area in Montenegro, which will further overcome the observed literature gap. Therefore, the sixth hypothesis was formalized and will be tested using logistic regression. In other words, by applying logistic regression, it will be determined which of the analyzed indicators of financial analysis (degree of indebtedness, business asset turnover ratio, EBIT, general liquidity ratio, ROA, and ROE), selected based on previous research) have the greatest statistical significance for predicting business failure of large and medium enterprises in Montenegro.

H6: The degree of indebtedness and the turnover ratio of business assets have a statistically significant influence on the prediction of business failure of enterprises in Montenegro.

Following the previously formulated hypotheses, a conceptual research model was created, shown in Fig 1.

Based on the conceptual model, it can be seen that the research is based on the application of five moderns, and specially created logit model intended for the Montenegrin market. For each of the five models, data will first be collected based on the official financial reports of the company (Balance Sheet, Income Statement, and Cash Flow Statement) and then the indicators will be calculated. Each of these models has its score, and according to the value obtained



Source: authors' processing

Fig 1. Conceptual model of research.

<https://doi.org/10.1371/journal.pone.0303793.g001>

from the analysis, it will be determined whether the company operates in the bankruptcy zone, the gray zone of business with the possibility of recovery and improvement, or whether it is still a question of financially healthy companies. As a special type of modern model, logistic regression will be applied in the paper to create a logit model, created based on the specifics of the Montenegrin economic environment.

The methodology of this research is based on the application of modern models (Altman's Z" model, Springate model, Kralicek's DF model, Zmijewski's model, and BEX model) to detect early signals of the possible bankruptcy of the company. It is important to point out that the models were selected based on their popularity, relevant literature, availability of data, as well as technological possibilities for conducting research. The research involved medium and large companies that operate, or operate in the Montenegrin market. In other words, according to the Law on Bankruptcy and the list obtained by the Central Registry of Montenegro, companies that went bankrupt in the period from 2015 to 2020 were selected. Therefore, medium and large companies that went bankrupt were included in the research. Besides that, more than twice as many healthy companies will be included in the research, which is in line with previous studies [24,52,62]. The criterion for selection of large and medium-sized enterprises was based on the Law on Accounting, which defined medium-sized enterprises as those with an average number of employees in the business year up to 250, total annual income up to 40,000,000 €, or total assets up to 20,000,000 €. Large companies are those that meet two of the three criteria IFAC [63]. These categories of business entities are important because they employ the largest number of employees in their companies, viewed per individual company, and generate the highest business results, which is particularly important for the state and due to the establishment of an adequate fiscal policy. In addition, these companies must compile and publicly publish a complete set of financial reports, which is important due to the availability of data, and therefore the application of models for predicting business failure. All of

the above is the basis for the establishment of good corporate practice in Montenegro, and the company's operations on a healthy and sustainable basis. It means that the application of a model for predicting business failure is a segment that should be analyzed in companies to fulfill the principle of going concern and enable good corporate governance. This is especially important taking into account that Montenegro is in the process of joining the EU and the important chapter that it needs to close is related to the arrangement of the corporate governance and the establishment of the foundations that will greatly contribute to that goal. It is important to emphasize that in some large and medium-sized enterprises in Montenegro, the state is the majority owner, and therefore the operations of these companies are particularly important for the Montenegrin market and the economy as a whole.

For each observed company (a sample of 30 companies) that went bankrupt, modern models will be applied to assess the reliability of their application for predicting bankruptcy. For example, if the company went bankrupt in 2016, the application of modern models will be carried out based on the financial statements for 2015, to see whether these models predict the bankruptcy of the company in the following year, or this case in 2016. The final decision on whether the models are reliable or not is made based on a comparison of the number of bankrupt companies and the number of healthy companies. For healthy companies, the research was conducted on a sample of 70 large and medium-sized companies, based on financial reports (balance sheet and income statement), taken from the website of the Revenue and Customs Administration of Montenegro [64]. It is important to emphasize that this segment of the research was conducted in such a way that the data was taken from the white list of taxpayers for 2020, and based on the report from 2019, we want to predict whether the company will record business continuity in 2020. After the application of modern analysis, with the help of logistic regression, based on the most represented financial indicators in the literature (Debt ratio, Asset Turnover Ratio, EBIT, Current Liquidity Ratio, ROA, and ROE) it is possible to make the conclusion which parameters have the most influence on predicting the bankruptcy of large and medium-sized enterprises in Montenegro.

Modern models that will be applied in this research are Altman's Z" model, the Springate model, the Zmijewski model, Kralicek's model, the BEX model, and Logistic regression. It is important to point out that each of the mentioned models was explained in the previous part of the paper through a review of the literature. In this part, the equations of the model will be given with the analytical parameters that make them up, as well as the threshold values based on which the decision on the financial condition of the company is made. The foregoing is given in Table 1.

Results and discussion

To examine the claims presented through the formulated hypotheses, modern models were applied. Table 2 shows how many companies for which the applied models predict bankruptcy. Also, it represents how many of them would continue to operate according to the going concern principle.

The previous table shows that most of the applied models, out of a total of 30 large and medium-sized companies that are bankrupt, predicted that the observed companies would go bankrupt. However, the analysis found that Altman's Z" model only predicted bankruptcy for 40% of the companies in the sample, which was not expected, especially considering that it is a model that records good predictive performance in most of the studies in which it was applied. However, although this model is intended for developing markets, the results of the research showed that it is not reliable enough for application in the Montenegrin market, thus the claim given by the first hypothesis was not confirmed. The result obtained in this way follows the

Table 1. Overview of modern models for predicting business failure.

Models	Equation	Indicators	Threshold values	Source
Altman's Z" model	$Z'' = 6.56 \cdot X_1 + 3.26 \cdot X_2 + 6.72 \cdot X_3 + 1.05 \cdot X_4$	X_1 —Working Capital/Total Assets X_2 —Retained Earnings/Total Assets X_3 —EBIT/ Total Assets X_4 —Book value of equity/Book value of total liabilities	$Z'' > 2.6$ —financially successful companies $Z'' > 1.11$, and $Z'' < 2.59$, the gray area of business operations, $Z'' < 1.10$ —financially unsuccessful companies	[58], [65], [66]
Springate model	$SS = 1.03 \cdot X_1 + 3.0 \cdot X_2 + 0.66 \cdot X_3 + 0.4 \cdot X_4$	X_1 —Working Capital/Total Assets X_2 —Net profit before interest and tax / Total assets X_3 —Net profit before tax / current liabilities X_4 —Sales / Total assets	$SS < 0.862$, Potentially Bankrupt.	[66], [67], [68]
Zmijewski model	$ZZ = -4.336 - 4.513 \cdot X_1 + 5.679 \cdot X_2 + 0.004 \cdot X_3$	X_1 —Net Income / Total Assets X_2 —Total Liabilities / Total Assets X_3 —Current Assets / Current Liabilities	A probability function greater than 0.5 represents a higher probability of bankruptcy.	[36], [67], [69]
Kralicek's model	$DF = 1.5 \cdot X_1 + 0.08 \cdot X_2 + 10 \cdot X_3 + 5 \cdot X_4 + 0.3 \cdot X_5 + 0.1 \cdot X_6$	X_1 —net cash flow/total liabilities X_2 —total assets/total liabilities X_3 —profit/total assets X_4 —profit/operating income X_5 —inventories/operating income X_6 —operating income/total assets	$DF > 3.0$ Excellent $DF > 2.2$ Very good $DF > 1.5$ Good $DF > 1.0$ Average $DF > 0.3$ Bad $DF = 0.3$ Beginning of insolvency $DF \leq 0.0$ Moderate insolvency $DF \leq -1.0$ The striking insolvency	[41], [70]
BEX model	$BEX = 0.388 \cdot EX_1 + 0.579 \cdot EX_2 + 0.153 \cdot EX_3 + 0.316 \cdot EX_4$	EX_1 —EBIT/ Total Assets EX_2 —Net Income /(Equity · cost of capital) EX_3 —Working Capital / Total Assets $EX_4 = (5 \cdot (\text{Net income} + \text{depreciation} + \text{amortization}))/\text{Total liabilities}$	Greater than 6.01 for 4 years in a row —World class Greater than 6.01- World-class candidate 4.01–6.00 Excellent 2.01–4.00 Very good 1.01–2.00 Good 0.00–1.00 Borderline Negative—The company's existence threatened	[44]
Logistic regression	$P(Z) = \frac{1}{1 + \exp(-Z)} = 1/(1 + \exp(-(a + b_1x_1 + \dots + b_nx_n))$	$P_{(Z)}$ —the probability of an event, $\exp$ - base of natural logarithm, x_i —($i = 1, \dots, n$) -- independent variable, α - line segment b_i —($i = 1, \dots, n$)—regression coefficients.	The probability ranges from 0 to 1	[20], [71]

Source: Authors' processing.

<https://doi.org/10.1371/journal.pone.0303793.t001>

Table 2. Modern models—companies in bankruptcy.

Models	Results		%
Altman Z" model	Bankrupt	12	0.40
	Non—Bankrupt	18	0.60
Springate model	Bankrupt	30	1.00
Zmijewski model	Bankrupt	24	0.80
	Non—Bankrupt	6	0.20
Kralicek model	Bankrupt	30	1.00
Bex model	Bankrupt	30	1.00

Source: Authors' processing.

<https://doi.org/10.1371/journal.pone.0303793.t002>

findings obtained in the research of the author Heaton [72]. Evident differences in the degree of reliability of the application of Altman's Z'' in economies, such as the Montenegrin one, stem from the different economic environments and legal regulations that characterize the operations of companies.

Unlike Altman's Z'' model, Zmijewski's model classified 24 companies, or 80% of them, as bankrupt, which indicates that it can be applied to the Montenegrin market to predict business failure. In this way, the third hypothesis was confirmed, and it can be considered reliable for application in Montenegro. That the Zmijewski model is significant for predicting business failure was also confirmed through research by Aminian et al. [21]. The aforementioned finding is particularly important because it was conducted on a sample of large companies, which proved that the Zmijewski model has a foothold for predicting bankruptcy over defined business entities. Also, that it is a model that can be considered reliable, was confirmed in the research conducted in Serbia, which has a similar level of development as Montenegro Index of Global Competitiveness [73]. Significantly, the Springate, DF, and BEX models predict that all analyzed companies (which are bankrupt) will indeed go bankrupt, which is a 100% effect, thus confirming the second, fourth, and fifth hypotheses. That the Springate model is reliable for predicting business failure was also confirmed through the results of research by Wahyu-ningsih & Venusita [74] and Aminian et al. [21]. Unlike the author Salkić [75], who indicated in his research that Kralicek's DF model cannot be considered reliable for predicting the bankruptcy of companies in Bosnia and Herzegovina, which is also a developing country like Montenegro, the findings of this research indicate 100% reliability on a defined sample. A significantly lower level of reliability was also pointed out in the research of the author Mijić [76], who indicated that by applying Kralicek's DF model, bankruptcy is predicted for 60% (observed from the point of view of those who are bankrupt). When it comes to the results of the BEX model, its reliability on the Montenegrin market is almost the same as the market for which it was created [44]. Additionally, to show whether these models predict the continuity of business of healthy companies, modern models were also applied, and the results are shown in Table 3.

Based on the previous table, it can be seen that the most reliable model that indicates that companies will continue to operate in the next year is Altman's Z'' model, which for 69 companies, i.e., 99% of the sample, indicated the continuation of operations. In addition to Altman's model, the BEX model also recorded a level of reliability higher than 90%, which indicated business continuity for 65 companies in the following year. In addition to these two models,

Table 3. Modern models for predicting bankruptcy—"healthy companies".

Models	Results		Probability
Altman Z'' model	Bankrupt	1	0.01
	Non—Bankrupt	69	0.99
Springate model	Bankrupt	36	0.51
	Non—Bankrupt	34	0.49
Zmijewski model	Bankrupt	11	0.16
	Non—Bankrupt	59	0.84
Kralicek model	Bankrupt	20	0.29
	Non—Bankrupt	50	0.71
BEX model	Bankrupt	5	0.07
	Non—Bankrupt	65	0.93

Source: Authors' processing.

<https://doi.org/10.1371/journal.pone.0303793.t003>

the Zmijewski and DF models also achieve significant reliability, which classified 84% and 71% of companies, respectively, as operating following the principle of going concern. The model that is considered insufficiently reliable is the Springate model, which characterizes only 34 companies as healthy. Therefore, it can be concluded that all the analyzed modern models, except for the Springate model, can be applied in the Montenegrin market to assess the continuity of business of the analyzed companies.

The results of the logistic regression show that by applying the reliability quotient test to examine the significance of the coefficients in the model, it was indicated that the values of the credibility quotient test are statistically significant, which means that the model with introduced financial indicators is statistically significant (Table A1 in [S1 Appendix](#)).

The results of the Likelihood Ratio test indicate which one of the listed financial indicators has a statistically significant effect on explaining the probability of bankruptcy of a certain company. The importance of this test is reflected in the fact that the significance of the influence of variables is seen through the measurement of individual independent influences on the dependent variable, which cannot be done in the case of evaluating logistic regression. The results of the Likelihood ratio test indicate that for predicting the bankruptcy of the company, the influence of the financial indicators Degree of Indebtedness (DI) and the turnover ratio of business assets (TR) is significant. Table A2 in [S1 Appendix](#) provides an assessment of the parameters included in the creation of the logit model with a confidence interval of 95%

To assess the significance of each financial indicator to assess the company's bankruptcy, it is necessary to analyze the results of the Wald test. The initial hypothesis of the Wald test claims that the value of the parameter with the given explanatory variable is equal to zero, that is, that variable does not significantly affect the assessment of company bankruptcy. The results of the Wald test for the initial logistic regression are identical to the results of the reliability coefficient test and indicate that DI and TR are the only financial indicators that can statistically significantly influence the assessment of company bankruptcy. Therefore, a new logistic regression of company bankruptcy assessment was evaluated below, in which the financial indicators DI and TR appear as explanatory variables (Tables 4–6).

The results of the reliability coefficient test showed that the bankruptcy model with explanatory variables DI and TR are more significant than the bankruptcy model without these explanatory variables.

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Table 4. Case processing summary.

Case Processing Summary			
		N	Marginal Percentage
Bankruptcy	.00	70	70.0%
	1.00	30	30.0%
Valid		100	100.0%
Missing		0	
Total		100	
Subpopulation		100 ^a	

a. The dependent variable has only one value observed in 100 (100.0%) subpopulations.

Source: Authors' processing.

<https://doi.org/10.1371/journal.pone.0303793.t004>

Table 5. Model fitting information.

Model Fitting Information				
Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	122.173			
Final	59.742	62.430	2	< .001

Source: Authors' processing.

<https://doi.org/10.1371/journal.pone.0303793.t005>

Table 6. Likelihood ratio tests.

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	72.144	12.401	1	< .001
DI	97.304	37.561	1	< .001
TR	95.932	36.189	1	< .001

Source: Authors' processing.

<https://doi.org/10.1371/journal.pone.0303793.t006>

The coefficient ratio test, which examines the individual influence of the explanatory variables of the new logistic regression model of bankruptcy, shows that DI and TR are significant variables for assessing the chance of bankruptcy of a certain company, which was confirmed by parameter estimation with a confidence interval of 95% (Table 7).

The initial hypothesis of the Wald test, according to which the parameters along with the explanatory variables DI and TR are equal to zero, can be rejected with a risk of error of 1%. It can be concluded that all parameters of the logistic regression of the assessment of company bankruptcy are statistically significant. Companies that did not go bankrupt have a 0.049 times lower chance of having a higher level of indebtedness than companies that went bankrupt. Companies that are not currently in a state of bankruptcy have a 21,085 times higher turnover ratio of business assets compared to companies that have gone bankrupt. The importance of the TR parameter was also confirmed in the research of the author Ptak-Chmielewska [77], who, unlike this research, applied LDA and SVM methods and found that the turnover ratio of business assets is significant for predicting the bankruptcy of companies. The authors Ogashi et al. [78] used logistic regression to prove that the turnover coefficient of business assets and the degree of indebtedness are statistically significant variables for predicting business failure, among others. This finding is in contrast to the study conducted by Ptak-Chmielewska [77].

Table 7. Parameter estimates.

Bankruptcy ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
.00	Intercept	1.916	.640	8.954	1	.003			
	DI	-.050	.012	16.248	1	< .001	.951	.929	.975
	TR	3.082	.869	12.593	1	< .001	21.805	3.974	119.628

Source: Authors' processing.

a. The reference category is non—bankruptcy.

<https://doi.org/10.1371/journal.pone.0303793.t007>

Conclusions

Bearing in mind presented in this paper, it can be concluded that early signals of business failure of companies in Montenegro can be observed based on financial reports. However, for this to be possible, the financial reports must be prepared following IAS, IFRS, and EU Directives, while it is important to emphasize that the accounting information contained in the reports should be relevant and precise, thus reducing the possibility of materially significant errors, which greatly influence decision makers when making business decisions.

In this sense, the quality of financial reports should be confirmed by independent persons, i.e., auditors, so an additional goal is to increase the quality of the audit of financial statements. In this way, it is possible to influence the provision of financial stability, which is increasingly threatened by the presence of various forms of speculation, which in the long term may threaten business continuity [79]. This is because the financial failure of companies represents a problem for the economy of a country, and therefore it is not surprising that bankruptcy processes have become an international problem, due to the internationalization of business. Based on the above, it is clear why the number of bankruptcy proceedings is seen as a kind of indicator of the strength and success of national and regional economies, and therefore it is important to have accurate and reliable instruments based on adequate accounting information, for early bankruptcy prediction.

Many bankruptcy prediction models have been developed in theory and practice. In addition to the traditional model, based on the analysis of the property, financial, and profitability position of the company, in practice, there are models based on mathematical and statistical methods. However, to apply modern models, it is necessary to know and understand the indicators of financial analysis, as the basis for the analysis of the traditional model. This is because some modern models were created by combining financial indicators.

The results of modern models applied in the Montenegrin market depend on the model that was applied and the threshold value about which it was observed whether the company achieves good or bad business operations. Altman's Z" model classified 40% of the 30 analyzed companies in bankruptcy as going bankrupt, while the remaining 60% indicated that they would continue doing business in the future. Analysis shows that out of the 70 analyzed "healthy" companies, modern models 69 entities classify as healthy ones, and only one company, according to the results, would not continue to operate in line with the going concern principle. Unlike Altman's Z" model, the Springate model predicted for all bankrupt companies that it will start, which makes the effect of this model 100% for the sample of bankrupt companies, while the analysis of "healthy" companies shows that this model, out of a total of 70 companies, predicted business continuity only for 33. Furthermore, the Zmijewski model showed that out of 30 bankrupt companies, 80% of them will go bankrupt, while out of a sample of 70 healthy companies, it classified 60 as companies with good business performance. Kralicek's and BEX's models, like European models, predict bankruptcy for all companies that are in bankruptcy, while for "healthy" companies, Kralicek's model predicts that 75% of them will continue to operate in the next year. The BEX model indicates that out of 70 companies, only 11 are doing well, while 4 companies are classified as going bankrupt. This model showed that as many as 55 companies are characterized by borderline operations, which means that their business excellence is positive, but not satisfactory.

Therefore, a general conclusion can be made that all but Altman's Z" model can be said to have a sufficient level of reliability for predicting early signals of bad business. Also, by applying logistic regression, it was determined that the degree of indebtedness of the company and the turnover ratio of business assets have the greatest influence on predicting the bankruptcy of companies in Montenegro.

It is important to point out that the research results emphasized the unsatisfactory operations of financially "healthy" companies, which should become a clear signal to the decision-makers in the company. This is because if early signals are noticed in time, timely action can be taken and bad business can be prevented in the future. On the aforementioned, the practical, theoretical, and methodological contribution of the research is based.

The main practical contribution is reflected in the examination of the reliability of the application of traditional and modern models for predicting company bankruptcy, but also in the creation of own models, which is also a methodological contribution, intended primarily for the Montenegrin market to preventing the occurrence of business failure, and then for all markets of the countries which are at a similar level of economic development. In this way, more efficient and safer business decision-making is directly affected, which is especially important for managers at all levels. It also provides an insight into the direction in which additional knowledge and skills of decision-makers in Montenegro, as a transition country, should be developed in terms of the possibility of applying these models, bearing in mind the specific market requirements. In other words, the business of companies should be supported by advanced knowledge of finance, accounting, and statistics. This is the first research in this scope, according to the knowledge of the author, of the mentioned problem, which will be realized in Montenegro, as a transition country, which is his special practical and theoretical contribution. Hence, the existing literature is given additional value by analysing the concept of company bankruptcy through the application of the most significant models in this area, so this paper gains particular importance and at the same time becomes the basis for directing future research in this area, which will bridge the observed literature gap. The obtained results can serve managers and other decision-makers as guidelines for further improvement of the company's operations to advance business performance, but also to strengthen the competitiveness of the company, especially if it is taken into account that Montenegro is a transitional country and that the competitiveness of companies with continuous operations is their primary goal. This will also fulfil the requirements of the International Financial Reporting Standards and the International Auditing Standards related to the way of doing business respecting the principle of going concern. In other words, decision-makers must be aware that adequate knowledge and skills, as well as trend monitoring, are prerequisites for the development and better usage of bankruptcy prediction models. Therefore, it is not enough to decide on the application of the model, but to essentially implement them and finally to consider their effects. Therefore, the concept of predicting the bankruptcy of a company should be seen as part of not only business but also corporate strategy, which directly affects the reduction of the number of companies in bankruptcy.

However, it is important to point out that the analysis of this paper implied the prediction of business failure based on financial statements for the year before the onset of bankruptcy. The authors of the research, due to the unavailability of financial reports for the periods before the onset of bankruptcy, did not take into account a wider time frame, which is one of the limitations of the work. In this way, it was not possible to observe the trend of the calculated indicators throughout the period. Another limitation stems from the fact that the research covers only the Montenegrin market, which means that future research can also cover other countries of the Western Balkans, which will provide a clearer insight into the way companies operate in this market, draw general conclusions that can help managers at all levels to detect early signals of business failure.

In terms of methodology, five modern models were included along with the creation of a logit model, so future research can apply the same models in other countries to examine their level of reliability and draw general conclusions based on comparative analysis. Also, future research can include other models for predicting business failure, and test the level of reliability

of the created logit models for predicting business failure. And finally, further research on this topic can also include artificial intelligence models, to examine the level of their reliability for application in the Montenegrin market.

Supporting information

S1 Appendix. Logistic regression estimation output.
(DOCX)

S1 Data.
(XLSX)

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References

1. Ahlstrom D, Arregle J-L, Hitt MA, Qian G, Ma X, Faems D. Managing technological, sociopolitical, and institutional change in the New Normal. *J Manag Stud* [Internet]. 2020; 57(3):411–37. Available from: <https://doi.org/10.1111/joms.12569>
2. Pogodina TV, Muzhzhavleva TV, Udaltsova NL. Strategic management of the competitiveness of industrial companies in an unstable economy. *J Entrep. Sustain Issu* [Internet]. 2020; 7(3):1555–64. Available from: <https://doi.org/10.9770/jesi.2020.7.3%289>.
3. Arokodare Asikhia. Strategic agility: Achieving superior organizational performance through strategic foresight. *Global Journal of Management and Business Research* [Internet]. 2020;7–16. Available from: <https://doi.org/10.34257/gjmbavol20is3pg7>
4. Jaffari AA, Ghafoor Z. Predicting corporate bankruptcy in Pakistan A comparative study of multiple discriminant analysis (MDA) and logistic regression. *Research Journal of Finance and Accounting*. 2017; 8(3):81–100. ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online).
5. Nanayakkara KGM, Azeez AA. Predicting corporate financial distress in Sri Lanka: an extension to Z-score model. *International Journal of Business and Social Research*. 2015; 5(03):41–56. Available from: <https://thejournalofbusiness.org/index.php/site/issue/view/42>.
6. Fernández-Gámez MÁ, Soria JAC, Santos JAC, Alaminos D. European country heterogeneity in financial distress prediction: An empirical analysis with macroeconomic and regulatory factors. *Econ Model* [Internet]. 2020; 88:398–407. Available from: <https://doi.org/10.1016/j.econmod.2019.09.050>
7. Rashid A, Abbas Q. Predicting Bankruptcy in Pakistan. *Theoretical & Applied Economics*. 2011; 18(9).
8. Rodríguez-Valencia L., Lamothe-Fernández P., & Alaminos D. (2023). The market value of SMEs: a comparative study between private and listed firms in alternative stock markets. *Annals of Finance*. Available from: <https://doi.org/10.1007/s10436-022-00420-z>

9. Alam TM, Shaukat K, Mushtaq M, Ali Y, Khushi M, Luo S, et al. Corporate bankruptcy prediction: An approach towards better corporate world. *Comput J [Internet]*. 2021; 64(11):1731–46. Available from: <https://doi.org/10.1093/comjnl/bxaa056>
10. Panigrahi C. M. A. Validity of Altman's 'Z' score model in predicting financial distress of pharmaceutical companies. *NMIMS journal of economics and public policy*, (2019); 4(1).
11. Winarta W, Kuntadi C. Literature review: The effect of company size, company growth, and company liquidity on going concern audit opinion. *Dinasti International Journal of Economics, Finance & Accounting [Internet]*. 2022; 3(4):430–7. Available from: <https://doi.org/10.38035/dijefa.v3i4.1438>
12. Begović SV, Tomašević S, Momčilović M. External audit in the function of assuring the correctness of the assumptions about the going concern assumption. *BizInfo (Blace) Journal of Economics*. 2022; 13(1):49–55. Available from: <https://doi.org/10.5937/bizinfo2201049V>
13. Abadi K, Purba DM, Fauzia Q. The Impact of Liquidity Ratio, Leverage Ratio, Company Size, and Audit Quality on Going Concern Audit Opinion. *Jurnal Akuntansi Trisakti*. 2019; 6(1):69–82.
14. Eurostat. Q2 2023: Business bankruptcies at highest level since 2015 [Internet]. Eurostat. 2023 [cited 2024 Mar 7]. Available from: <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20230817-1>.
15. Correa-Mejía DA, Lopera-Castaño M. Financial ratios as a powerful instrument to predict insolvency; a study using boosting algorithms in Colombian firms. *Estud Gerenc [Internet]*. 2020;229–38. Available from: <https://doi.org/10.18046/j.estger.2020.155.3588>
16. Awais M, Hayat F, Mehar N, Hassan W. Do Z-Score and Current Ratio have the Ability to Predict Bankruptcy? *Developing Country Studies*. 2015; 5:30–6. ISSN 2224-607X (Paper) ISSN 2225-0565 (Online).
17. Sahu PA, Charan P. Ratio analysis is an instrument-For decision making-A study. *Asia Pacific Journal of Research*. 2013; 1(8):36–41. ISSN 2320-5504 (Print).
18. Anandasayanan S, Subramaniam VA. Predicting Bankruptcy of selected manufacturing companies listed in Colombo Stock Exchange: Applying Altman'S Z-score. 2017; Available from: <https://doi.org/10.5281/zenodo.376051>
19. Boshkoska M, Prisagjanec M. Business Success and Failure Prediction Software-BEX Model. *Ecoforum Journal*. 2017;6(1).
20. Alaminos D, del Castillo A, Fernández MÁ (2018) Correction: A Global Model for Bankruptcy Prediction. *PLOS ONE* 13(11): e0208476. Available from: <https://doi.org/10.1371/journal.pone.0208476> PMID: 30485378
21. Aminian A, Mousazade H, Khoshkho OI. Investigate the ability of bankruptcy prediction models of Altman and springate and zmijewski and Grover in Tehran stock exchange. *Mediterr J Soc Sci [Internet]*. 2016; Available from: <https://doi.org/10.5901/mjss.2016.v7n4s1p208>
22. Kozjak SK, Sestanji-Peric T, Besvir B. Assessment of Bankruptcy Prediction Models' applicability In Croatia. In: *An Enterprise Odyssey International Conference Proceedings*. 2014. ISBN 978-953-6025-91-6.
23. Manuel Ángel Fernández, José Ramón Sánchez, Alaminos D, Casado G. Predicting going concern opinion for hotel industry using classifiers combination. *International journal of scientific management and tourism*. 2018 Mar 10; 4(1):91–106. ISSN-e 2386–8570, ISSN 2444-0299.
24. Ahmadi APS, Soleimani B, Vaghfi SH, Salimi M. Corporate bankruptcy prediction using a logit model: Evidence from listed companies of Iran. *World Applied Sciences Journal*. 2012; 17(9):1143–8.
25. Alaminos D, Fernández MÁ. Why do football clubs fail financially? A financial distress prediction model for European professional football industry. Gherghina SC, editor. *PLOS ONE*. 2019 Dec 26; 14(12): e0225989 Available from: <https://doi.org/10.1371/journal.pone.0225989> PMID: 31877154
26. Alaminos D, Fernández SM, García F, Fernández MA. Data Mining for Municipal Financial Distress Prediction. *Lecture notes in computer science*. 2018 Jan 1;296–308. Available from: https://doi.org/10.1007/978-3-319-95786-9_23
27. Alaminos D, Esteban I, Fernández-Gámez MA. Financial Performance Analysis in European Football Clubs. *Entropy*. 2020; 22(9):1056. Available from: <https://doi.org/10.3390/e22091056> PMID: 33286825
28. Panchal MH, Bodar MB, Maurya SR, Tatwadarshi PN. An Innovative Approach to Predict Bankruptcy. *VIVA-Tech International Journal for Research and Innovation*. 2019; 1(2):1–6. ISSN (Online): 2581–7280.
29. Olson DL, Delen D, Meng Y. Comparative analysis of data mining methods for bankruptcy prediction. *Decis Support Syst [Internet]*. 2012; 52(2):464–73. Available from: <https://doi.org/10.1016/j.dss.2011.10.007>
30. Klepáč V, Hampel D. Predicting bankruptcy of manufacturing companies in EU. *E+M Ekon Manag [Internet]*. 2018; 21(1):159–74. Available from: <https://doi.org/10.15240/tul/001/2018-1-011>

31. Alaminos D, Belén Salas M. Tourism Stock Prices, Systemic Risk and Tourism Growth: A Kalman Filter with Prior Update DSGE-VAR Model. *Lecture notes in computer science*. 2023 Jan 1;167–81. Available from: <https://doi.org/10.1007/97>
32. Lakičević M, Mijić K. Pouzdanost primjene modela za predviđanje stečaja preduzeća u Crnoj Gori, XIII Kongres računovođa i revizora Crne Gore—Računovodstvena i revizijska profesija budućnosti: Povjerenja—Integritet—Transparantnost, 2018 (Oktobar 19–21); p. 139–53.
33. Beaver WH. Financial ratios as predictors of failure. *J Acc Res* [Internet]. 1966; 4:71. Available from: <https://doi.org/10.2307/2490171>
34. Altman EI, Iwanicz-Drozdowska M, Laitinen EK, Suvas A. Distressed firm and bankruptcy prediction in an international context: A review and empirical analysis of Altman's Z-score model. *SSRN Electron J* [Internet]. 2014; Available from: <https://doi.org/10.2139/ssrn.2536340>
35. Seto AA. Altman Z-Score Model, Springate, Grover, Ohlson, and Zmijewski to Assess the Financial Distress Potential of PT. Garuda Indonesia Tbk During and After the Covid-19 Pandemic. *Enrichment: Journal of Management*. 2022; 12(5):3819–26. Available from: <https://doi.org/10.35335/enrichment.v12i5.923>
36. S, Sembiring TM. Bankruptcy Prediction Analysis of Manufacturing Companies Listed in Indonesia Stock Exchange. *IJEFI*. 2015; 5(1):354–9.
37. Ohlson JA. Financial ratios and the probabilistic prediction of bankruptcy. *J Acc Res* [Internet]. 1980; 18(1):109. Available from: <https://doi.org/10.2307/2490395>
38. Bateni L, Asghari F. Bankruptcy prediction using logit and genetic algorithm models: A comparative analysis. *Comput Econ* [Internet]. 2020; 55(1):335–48. Available from: <https://doi.org/10.1007/s10614-016-9590-3>
39. Viciwati V. Bankruptcy prediction analysis using the Zmijewski model (x-Score) and the Altman model (z-Score). *Dinasti International Journal of Economics, Finance & Accounting* [Internet]. 2020; 1(5):794–806. Available from: <https://doi.org/10.38035/dijefa.v1i5.608>
40. Zmijewski ME. Methodological issues related to the estimation of financial distress prediction models. *J Acc Res* [Internet]. 1984; 22:59. Available from: <https://doi.org/10.2307/2490859>
41. Machek O. Long-term predictive ability of bankruptcy models in the Czech Republic: Evidence from 2007–2012. *Cent Eur Bus Rev* [Internet]. 2014; 3(2):14–7. Available from: <https://doi.org/10.18267/j.cebr.80>
42. Neumaierová I, Neumaier I. INFA Performance Indicator Diagnostic System. *Cent Eur Bus Rev* [Internet]. 2014; 3(1):35–41. Available from: <https://doi.org/10.18267/j.cebr.73>
43. Cita M, Stanić M, Stanić Šulentić M. Predicting Bankruptcy of Shipbuilding Companies on the Basic of Financial Statement Data. *Journal of Accounting and Management* [Internet]. 2019 [accessed 15.04.2024.]; IX(2):67–76. Available from: <https://hrcak.srce.hr/234524>.
44. Belak V, Barać Ž. Business excellence (BEX) indeks-za procjenu poslovne izvrsnosti tvrtki na tržištu kapitala u Republici Hrvatskoj. *Računovodstvo, revizija i financije*. 2007; 17:15–25. ISSN 0353-8087.
45. Low SW, Nor FM, Yatim P. Predicting corporate financial distress using the logit model: The case of Malaysia. *Asian Academy of Management Journal*. 2001; 6(1):49–61.
46. Abdullah NAH, Ma'aji MM, Khaw KL-H. The value of governance variables in predicting financial distress among small and medium-sized enterprises in Malaysia. *Asian Academy of Management Journal of Accounting & Finance* [Internet]. 2016; 12(Suppl. 1):75–88. Available from: <https://doi.org/10.21315/aamjaf2016.12.s1.4>
47. Pongsatit S, Ramage J, Lawrence H. Bankruptcy prediction for large and small firms in Asia: a comparison of Ohlson and Altman. *Journal of Accounting and Corporate Governance*. 2004; 1(2):1–13.
48. Alkhatib K, Eqab Al Bzour A. Predicting corporate bankruptcy of Jordanian listed companies: Using Altman and Kida models. *Int J Bus Manag* [Internet]. 2011; 6(3). Available from: <https://doi.org/10.5539/ijbm.v6n3p208>
49. Roomi MS, Ahmad W, Ramzan M, Zia-ur-Rehman M. Bankruptcy prediction for non-financial firms of Pakistan. *Int J Account Financ Report* [Internet]. 2015; 5(2):26. Available from: <https://doi.org/10.5296/ijaf.v5i2.7782>
50. Nireesh J, Pratheepan T. The application of Altman's z-score model in predicting bankruptcy: Evidence from the trading sector in Sri Lanka. *International Journal of Business and Management*. 2015; 10(12):269–75. Available from: <https://ssrn.com/abstract=2698532>.
51. Hanić A, Žunić E, Dželihodžić A. Scoring Models of Bank Credit Policy Management. *Economic analysis*. 2013; 46(1–2):12–27. ID: 198577676.
52. Ballkoci V, Gremi E. Logit analysis for predicting the bankruptcy of Albanian retail firms. *Acad J Interdiscip Stud* [Internet]. 2016; Available from: <https://doi.org/10.5901/ajis.2016.v5n3s1p137>

53. Smaranda C. Scoring functions and bankruptcy prediction models-case study for Romanian companies. *Procedia Economics and Finance*. 2014; 10:217–26. Available from: [https://doi.org/10.1016/S2212-5671\(14\)00296-2](https://doi.org/10.1016/S2212-5671(14)00296-2)
54. Makeeva E, Neretina E. The prediction of bankruptcy in a construction industry of Russian Federation. *Journal of Modern Accounting and Auditing*. 2013; 9(2). ISSN 1548-6583.
55. Celli M. Can Z-score model predict listed companies' failures in Italy? An empirical test. *Int J Bus Manag [Internet]*. 2015; 10(3). Available from: <https://doi.org/10.5539/ijbm.v10n3p57>
56. Pervan I. Predviđanje stečaja—sme proizvodna poduzeća u Hrvatskoj. *Zbornik radova Veleučilišta u Šibeniku [Internet]*. 2017 [cited 2024 March 08]; 11(3–4):33–45. Available from: <https://hrcak.srce.hr/184255>.
57. Zenzerović R. Credit scoring models in estimating the creditworthiness of small and medium and big enterprises. *Croatian Operational Research Review [Internet]*. 2011 [accessed: 15.04.2024.]; 2(1):143–157. Available from: <https://hrcak.srce.hr/96659>.
58. Begović SV, Momčilović M, Tomašević S. Ocena kreditnog boniteta preduzeća Z"-score modelom. 1. Stevan Luković, Milka Grbić. [Internet]. 2014; 52:193–204. Available from: <http://www.eknfak.ni.ac.rs/src/Ekonomske-teme.php>.
59. Bešlić Obradović D, Jakšić D, Bešlić Rupić I, Andrić M. Insolvency prediction model of the company: the case of the Republic of Serbia. *Econ Res-Ekon Istraž [Internet]*. 2018; 31(1):139–57. Available from: <https://doi.org/10.1080/1331677x.2017.1421990>
60. Liang D, Lu C-C, Tsai C-F, Shih G-A. Financial ratios and corporate governance indicators in bankruptcy prediction: A comprehensive study. *Eur J Oper Res [Internet]*. 2016; 252(2):561–72. Available from: <https://doi.org/10.1016/j.ejor.2016.01.012>
61. Shin K-S, Lee Y-J. A genetic algorithm application in bankruptcy prediction modeling. *Expert Syst Appl [Internet]*. 2002; 23(3):321–8. Available from: <https://doi.org/10.1016/S0957-4174%2802%2900051-9>
62. Wu C-H, Fang W-C, Goo Y-J. Variable selection method affects SVM-based models in bankruptcy prediction. In: *Proceedings of the 9th Joint International Conference on Information Sciences (JCIS-06)*. Paris, France: Atlantis Press; 2006. Available from: <https://doi.org/10.2991/jcis.2006.114>.
63. IFAC.org. [cited 2024 Mar 7]. Available from: <https://www.ifac.org/about-ifac/membership/profile/montenegro>.
64. Gov.me. [cited 2020 June 10]. Available from: <http://www.poreskauprava.gov.me/uprava>.
65. Altman EI, Iwanicz-Drozdowska M, Laitinen EK, Suvas A. Financial distress prediction in an international context: A review and empirical analysis of Altman's Z-score model. *Journal of International Financial Management & Accounting*. 2017; 28(2):131–71. Available from: <https://doi.org/10.1111/jifm.12053>
66. Agarwal A, Patni I. Bankruptcy prediction models: An empirical comparison. *International Journal of Innovative Technology and Exploring Engineering*. 2019; 8(6):131–9.
67. Bărbuță-Mișu N, Madaleno M. Assessment of bankruptcy risk of large companies: European countries evolution analysis. *J Risk Fin Manag [Internet]*. 2020; 13(3):58. Available from: <https://doi.org/10.3390/jrfm13030058>
68. Prasetyani E, Sofyan M. Bankruptcy analysis using Altman Z-score model and Springate model in retail trading company listed in Indonesia Stock Exchange. *Ilomata International Journal of Tax and Accounting*. 2020; 1(3):139–44. Available from: <https://doi.org/10.52728/ijtc.v1i3.98>
69. Muzani M, Yuliana I. Comparative analysis of Altman, Springate and Zmijewski models in predicting the bankruptcy of retail companies in Indonesia and Singapore. *TIJAB (The International Journal of Applied Business)*. 2021; 5(1):81–93. Available from: <https://doi.org/10.20473/tijab.V5.I1.2021.81–93>.
70. Schönfeld J, Kuděj M, Smrčka L. Financial health of enterprises introducing safeguard procedure based on bankruptcy models. *J Bus Econ Manage [Internet]*. 2018; 19(5):692–705. Available from: <https://doi.org/10.3846/jbem.2018.7063>
71. Onofrei M, Lupu D. The Modeling Of Forecasting The Bankruptcy Risk In Romania. *Romania Economic Computation & Economic Cybernetics Studies & Research*. 2014; 48(3).
72. Heaton JB. The Altman Z score does not predict bankruptcy. *SSRN Electron J [Internet]*. 2020; Available from: <https://doi.org/10.2139/ssrn.3570149>
73. World economic forum [Internet]. Weforum.org. [cited 2020 Aug 5]. Available from: http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf.
74. Wahyuningsih T, Venusita L. Financial Analysis Of Retail Companies Using The Altman, Springate, Zmijewski, Fulmer, And Grover Bankruptcy Prediction Models: Case Study Of Retail Companies Listed on the Indonesia Stock Exchange for the Period 2019–2020. *Journal Of Accounting, Entrepreneurship and Financial Technology (Jaef)*. 2022; 3(2):149–68. Available from: <https://doi.org/10.37715/jaef.v3i2.2661>

75. Salkic A. Testing possibility of establishing creditworthiness of small and medium enterprises in Bosnia and Herzegovina by applying Kralicek DF indicator. *Economic Review: Journal of Economics and Business*. 2013; 11(2):57–70. Available from: <https://hdl.handle.net/10419/193829>.
76. Mijić K. Implementation of Business Performance Projection Models Based on Data from Financial Statements. *Financing-naučni časopis za ekonomiju*. 2020; 11:3–15. Available from: <https://doi.org/10.7251/FIN2003003M>
77. Ptak-Chmielewska A. Bankruptcy prediction of small-and medium-sized enterprises in Poland based on the LDA and SVM methods. *Statistics in Transition New Series*. 2021; 22(1):179–95. Available from: <https://doi.org/10.21307/stattrans-2021-010>
78. Ogachi D, Ndege R, Gaturu P, Zoltan Z. Corporate bankruptcy prediction model, a special focus on listed companies in Kenya. *J Risk Fin Manag* [Internet]. 2020; 13(3):47. Available from: <https://doi.org/10.3390/jrfm13030047>
79. Alaminos D, Guillén-Pujadas M, Emili Vizuete-Luciano, José María Merigó. What is going on with studies on financial speculation? Evidence from a bibliometric analysis. *International review of economics & finance*. 2024 Jan 1; 89:429–45. Available from: <https://doi.org/10.1016/j.iref.2023.10.040>



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RADNO ISKUSTVO

09/2020 – TRENUTNO

SARADNIK U NASTAVI – EKONOMSKI FAKULTET, UNIVERZITET CRNE GORE

Predmeti:

- Korporativno upravljanje
- Korporativna analiza i kontrola
- Računovodstveni informacioni sistemi
- Evaluacija investicionih proekata

09/2017 – TRENUTNO

SARADNIK U NASTAVI – EKONOMSKI FAKULTET, UNIVERZITET CRNE GORE

Predmeti:

- Analiza poslovanja
- Biznis analiza
- Analiza finansijskih izvještaja
- Upravljačko računovodstvo

09/2017 – 09/2020

SARADNIK U NASTAVI – EKONOMSKI FAKULTET, UNIVERZITET CRNE GORE

Predmeti:

- Računovodstvo troškova
- Budžetsko računovodstvo

Podgorica, Crna Gora

09/2019 – 09/2020

SARADNIK U NASTAVI – EKONOMSKI FAKULTET, UNIVERZITET CRNE GORE

Predmet:

- Biznis

01/2017 – 09/2017

- Saradnik (pripravnik) na predmetima:

- Statistika
- Biznis statistika
- Analiza poslovanja
- Biznis analiza

-Administrativni poslovi za potrebe Fakulteta (rad u studentskoj službi)

Podgorica, Crna Gora

09/2016 – 01/2017

HONORARNI SARADNIK – EKONOMSKI FAKULTET UNIVERZITET CRNE GORE

Predmet:

- Operaciona istraživanja

Podgorica, Crna Gora

● **OBRAZOVANJE I OSPOSOBLJAVANJE**

2019 – TRENUTNO – Podgorica, Crna Gora

DOKTORSKE STUDIJE EKONOMIJE – Ekonomski fakultet Podgorica - Univerzitet Crne Gore

2016 – 2019 – Podgorica, Crna Gora

POSTDIPLOMSKE AKADEMSKE MAGISTARSKJE STUDIJE (MSC) – Ekonomski fakultet Univerzitet Crne Gore

Smjer:

Marketing i biznis

Prosječna ocjena: 9.88

Tema magistarskog rada: "*Procjena vrijednosti brenda banaka na crnogorskom tržištu primjenom Interbrand metodologije*"

2012 – 2016 – Podgorica, Crna Gora

OSNOVNE AKADEMSKE STUDIJE - BACHELOR (240 ECTS) – Ekonomski fakultet Univerzitet Crne Gore

Smjer:

Kvantitativna ekonomija

Prosječna ocjena : 9,69

Tema: "*Rangiranje banaka na crnogorskom tržištu primjenom modela Analitički hijerarhijski proces*"

2008 – 2012 – Podgorica, Crna Gora

OPŠTE SREDNJE OBRAZOVANJE – Gimnazija "Slobodan Škerović"

Oblast: Finansije i računovodstvo

10/2020 – 02/2021

CERTIFICATE OF COMPLETION (ENGLISH FOR UNIVERSITY LECTURERS COURSE)

● JEZIČKE VEŠTINE

Maternji jezik ili jezici: **CRNOGORSKI**

Drugi jezik/jezici:

	RAZUMEVANJE		GOVOR		PISANJE
	Slušanje	Čitanje	Govorna produkcija	Govorna interakcija	
ENGLESKI	B2	B2	B2	B2	B2
RUSKI	B1	B1	B1	B1	B1
ITALIJANSKI	A1	A1	A1	A1	A1

Nivoi: A1 i A2: osnovni korisnik; B1 i B2: nezavisni korisnik; C1 i C2: stručni korisnik

● PUBLIKACIJE

Strategic business decision making: the use and relevance of marketing metrics and knowledge management

2021

Melović, B., Dabić, M., **Vukčević, M.**, Ćirović, D. & Backović, T. (2021). Strategic business decision making: the use and relevance of marketing metrics and knowledge management. *Journal of Knowledge Management*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JKM-10-2020-0764>

Behavior of Older Consumers in the Digital Age and Creating Marketing Strategies: Mature Population as Part of Customer 4.0

2021

Melović, B., Ćirović, D., **Vukčević, M.**, & Stojanović, A. J. (2021). Behavior of Older Consumers in the Digital Age and Creating Marketing Strategies: Mature Population as Part of Customer 4.0. In *Handbook of Research on Economic and Social Impacts of Population Aging* (pp. 17-38). IGI Global.

The Midas touch of branding: banks' brand value, intellectual capital and the optimization of the Interbrand methodology

2021

Melović, B., **Vukčević, M.**, & Dabić, M. (2021). The Midas touch of branding: banks' brand value, intellectual capital and the optimization of the Interbrand methodology. *Journal of Intellectual Capital*. Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JIC-08-2020-0272>

Financial System in Montenegro

2021

Melović, B., **Vukčević, M.**, & Šehović, D. (2021). Financial System in Montenegro In P. Trpeski & M. Djogo (Ed.), *Western Balkans Financial Systems Guidelines* (323-381). Amazon kdp.

Analiza računovodstvene pismenosti studenata u Crnoj Gori

2021

Lalević-Filipović, A. & **Vukčević, M. (2021)**. Analiza računovodstvene pismenosti studenata u Crnoj Gori, Naučni skup: Računovodstvena znanja kao činilac ekonomskog i društvenog napretka, Ekonomski fakultet Univerziteta u Kragujevcu, 422-435, ISBN 978-86-6091-118-8, jun 2021, Kragujevac, Srbija.

Montenegrin Sport Associations on Social Media – Quality of Performance Assessment

2021

Rogić, S., **Vukčević, M.**, Muhadinović, M. & Cerović Smolović, J. (2021). Montenegrin Sport Associations on Social Media – Quality of Performance Assessment. 18th Annual Scientific Conference – Sport Physical Activity and Health: Contemporary Perspectives, Hybrid Conference (Cavtat, Croatia/Online), April 2021.

UTICAJ PANDEMIJE COVID-19 NA POSLOVANJE MIKRO, MALIH I SREDNJIH PREDUZEĆA U CRNOJ GORI

2021

Melović, B., Mitrović, V. S., Ćirović, D. & **Vukčević, M. (2020)**. UTICAJ PANDEMIJE COVID-19 NA POSLOVANJE MIKRO, MALIH I SREDNJIH PREDUZEĆA U CRNOJ GORI, X Naučna konferencija sa međunarodnim učešćem "Jahorinski poslovni forum 2021" : Jugoistočna Evropa u vrtlogu krize 2020, disruptivnih inovacija, politika i mjera za održivi privredni rast, 121-130, ISSN 2303-8969, Jahorina, BIH, 26. mart 2021.

Ranking of hotels in Mediterranean countries to improve the tourist offer

2020

Dragašević, Z., **Vukčević, M. (2020)**. Ranking of hotels in Mediterranean countries to improve the tourist offer, International Interdepartmental Conference "30 Years of Transition – Results, Challenges and Perspectives", Faculty of Economics and Business, University of Zagreb, Proceedings Book, November 19-21, 2020, Zagreb

Marketing metrics: Knowledge and Implementation by managers in Montenegro

2020

Melovic, B., **Vukcevic, M.**, & Cirovic, D. (2020). MARKETING METRICS: KNOWLEDGE AND IMPLEMENTATION BY MANAGERS IN MONTENEGRO. 1st international scientific conference "Economic and Business Trends Shaping the Future", Faculty of Economics-Skopje, SS. Cyril and Methodius University in Skopje, <http://doi.org/10.47063/EBTSF.2020.0039>

Analiza identitetskih elemenata brenda na crnogorskom bankarskom tržištu

2020

Vukčević, M., Melović, B., Mitrović, V. S., Ćirović, D. (2020), Analiza identitetskih elemenata brenda na crnogorskom bankarskom tržištu u funkciji jačanja konkurentnosti, IX Scientific Conference With International Participation Jahorina Business Forum 2020: Real and financial sector in the light of new technologies, new world trends and new challenges, 179-187, ISSN 2303-8969, Jahorina, BIH, 23-25.03.2020.

Motivi i barijere u kupovini organskih proizvoda u Crnoj Gori

2020

Ćirović, D., Melović, B., Mitrović, V. S., **Vukčević, M.** (2020), Motivi i barijere u kupovini organskih proizvoda u Crnoj Gori, IX Scientific Conference With International Participation Jahorina Business Forum 2020: Real and financial sector in the light of new technologies, new world trends and new challenges, 397-405, ISSN 2303-8969, Jahorina, BIH, 23-25.03.2020.

Organska proizvodnja u Crnoj Gori – analiza stanja i mogućnosti u funkciji brendiranja proizvoda

2019

Ćirović, D., **Vukčević, M.**, Melović, B., Mitrović, V. S. (2019), Organska proizvodnja u Crnoj Gori – analiza stanja i mogućnosti u funkciji brendiranja proizvoda, VIII naučna konferencija sa međunarodnim učešćem Jahorina poslovni forum: Tržište, etika i ekonomska politika u svjetlu modernizacije ekonomije i društva ISBN 978-99976-771-0-5, Jahorina, BIH, 27-29.03.2019

Primjena WAI metodologije za analizu zastupljenosti elektronskog marketinga u hotelima

2018

Vukčević, M., Ćirović, D., Muhadinović, M. (2018), Primjena WAI metodologije za analizu zastupljenosti elektronskog marketinga u hotelima na crnogorskom tržištu, Peta međunarodna naučna konferencija: Savremeni menadžerski izazovi i organizacijske nauke, BAS Institut za menadžment Bitolj, Makedonija

SEE-6 Economic Outlook – Montenegro

2018

Muhadinović, M., Đurišić, V., **Vukčević, M.** (2018), SEE-6 Economic Outlook – Montenegro, Vol. 4, 20-25, SEEA, Institute of Economic Sciences Belgrade, /e-ISSN 1849-8884/ ISSN 1849-8817

Primjena FAI metodologije za analizu stepena primjene elektronskog marketinga

2018

Vukčević, M., Ćirović, D. (2018), Primjena FAI metodologije za analizu stepena primjene elektronskog marketinga u turističkim agencijama na crnogorskom tržištu, VII naučna konferencija sa međunarodnim učešćem: Jahorinski poslovni forum, Jahorina, BIH 22-24.03.2018.

Primjena modela Analitički hijerarhijski proces

2017

Vukčević, M. (2017). Primjena modela Analitički hijerarhijski proces, *Bankar*, 39(52-57). Udruženje banaka Crne Gore. ISSN 1800-7465.

KONFERENCIJE I SEMINARI

Konferencije

- **2021. Oktobar** - XVI Međunarodni kongres računovođa i revizora Crne Gore: **Finansijsko-računovodstvene inovacije u funkciji pouzdanog finansijskog izvještavanja**, Budva, Crna Gora
- **2021. Jun** - Naučni skup: **Računovodstvena znanja kao činilac ekonomskog i društvenog napretka**, Kragujevac, Srbija
- **2021. April** - 18th Annual Scientific Conference – **Sport Physical Activity and Health: Contemporary Perspectives, Hybrid Conference** (Cavtat, Croatia/Online)
- **2021. Mart** - X Naučna konferencija sa međunarodnim učešćem "Jahorinski poslovni forum 2021" : **Jugoistočna Evropa u vrtlogu krize 2020, disruptivnih inovacija, politika i mjera za održivi privredni rast**, Jahorina, Bosna i Hercegovina
- **2020. Novembar** - International Interdepartmental Conference **"30 Years of Transition – Results, Challenges and Perspectives"**, Zagreb, Hrvatska
- **2020. Novembar** - 1st international scientific conference **"Economic and Business Trends Shaping the Future"**, Skoplje, Sjeverna Makedonija
- **2020. Mart** - IX Naučna konferencija sa međunarodnim učešćem: Jahorinski poslovni forum, **Realni i finansijski sektor u svjetlu novih tehnologija, novih svjetskih kretanja i novih izazova**, Jahorina, Bosna i Hercegovina
- **2019. Oktobar** - XIV Međunarodni kongres računovođa i revizora Crne Gore: **Susret računovodstva, poreza i bankarstva: Korporativno izvještavanje – Quo Vadis?**, Budva, Crna Gora
- **2019. Mart** - VIII naučna konferencija sa međunarodnim učešćem: Jahorina Business Forum, **Tržište, etika i ekonomska politika u svjetlu modernizacije ekonomije i društva**, Jahorina, Bosna i Hercegovina
- **2018. Novembar** - V Međunarodna konferencija **"Savremeni menadžerski izazovi i organizacijske nauke"**, BAS Institut za menadžment Bitolj, Makedonija
- **2018. Oktobar** - Economic Conference (**The Balkans and European Union cycle**), Budva
- **2018. Mart** - Jahorina business forum 2018, VII scientific conference with international participation
- **2017. Maj** - CEO Conference, Podgorica
- **2016. Maj** - FREI, Miločer, Budva
- **2015. Novembar** - CEO Youth Conference **"Life changing moments"**, Podgorica

PROJEKTI

2021 – TRENUTNO

Strengthening capacities for the implementation of dual education in Montenegro higher education DUALMON

PRIZNANJA I NAGRADE

Priznanja i nagrade

- **2017. maj** - Nagrada za ostvareni ukupni uspjeh poslije završenih studija, Ekonomski fakultet Podgorica
- **2017. april** – Godišnja nagrada Centralne banke Crne Gore za najbolji diplomski rad na temu: **"Rangiranje banaka na crnogorskom tržištu primjenom modela Analitički hijerarhijski proces"**
- **2015. decembar** - Plaketa za izuzetne rezultate postignute na prve tri godine Ekonomskog fakulteta
- **2014. decembar** - Plaketa za izuzetne rezultate postignute na drugoj godini Ekonomskog fakulteta
- **2012. maj** - diploma „Luča“, Gimnazija „Slobodan Škerović“, Podgorica
- **2008. maj** - diploma „Luča“, Osnovna škola „Vlado Milić“, Podgorica

● ORGANIZACIONE VEŠTINE

Vještine

- Presentacione vještine
- Sposobnost timskog rada i upravljanja zadacima
- Istraživanje
- Organizacione sposobnosti

● VOZAČKA DOZVOLA

Vozačka dozvola: B

Prof. dr Milan Lakićević

Biografija

Fotografija:



Rođen je 30.12.1971. godine u Kolašinu, gdje je završio osnovnu i srednju školu (prirodno matematičku gimnaziju – smjer fizika) sa odličnim uspjehom. (diploma Luča A)

Ekonomski fakultet Univerziteta «Veljko Vlahović» u Titogradu upisao je školske 1990/1991. Na istom fakultetu – smjer finansije diplomirao je 1995. godine. U toku studiranja nagrađivan je nagradama Ekonomskog fakulteta i Instituta za društveno-ekonomska istraživanja, koje se dodjeljuju najboljim studentima.

Postdiplomske studije, na Ekonomskom fakultetu Univerziteta u Beogradu (smjer Monetarni bankarski i finansijski menadžment) završio je sa prosječnom ocjenom 9,7. Magistarski rad pod nazivom «Mogućnosti finansiranja preduzeća na tržištu kapitala» odbranio je 20.11.2000. godine.

Disertaciju pod nazivom «Oblikovanje strukture kapitala akcionarskog društva» odbranio je 06.07.2006. godine na Univerzitetu Crne Gore - Ekonomski fakultetu u Podgorici.

PODACI O RADNIM MJESTIMA I IZBORIMA U ZVANJE

Stalni radni odnos je zasnovao 01.12.1995. godine na Ekonomskom fakultetu u Podgorici kao saradnik na predmetu Finansijski menadžment.

U zvanje asistenta na predmetu Finansijski menadžment i oblastima Računovodstvo i Finansije izabran je 08.10.2001. godine.

U zvanje docenta na predmetima: Analiza poslovanja i Revizija i kontrola na Ekonomskom fakultetu u Podgorici i na predmetu Poslovna statistika na Fakultetu za turizam i hotelijerstvo izabran je 13.04.2007. godine. (Bilten UCG br. 217 od 01. maja 2007. godine)

Osim predmeta za koje je biran u zvanje docenta izvodio je nastavu na osnovnim akademskim studijama Ekonomskog fakulteta u Podgorici na predmetima: Preduzetničke finansije, Računovodstvo finansijskih institucija i Korporativna analiza i kontrola. Na akademskim postdiplmskim studijama izvodio je nastavu na predmetima: Korporativne finansije i Finansijski menadžment u obrazovanju.

Na Studijama menadžmenta u Podgorici izvodio je nastavu na predmetima: Biznis analiza, Kontrola i revizija i Finansijska tržišta, a na Studijama menadžmenta u Bijelom Polju izvodio je nastavu na predmetu Biznis analiza.

Na primijenjenim postdiplomskim studijama izvodio je nastavu na predmetima: Evaluacija preduzeća i Evaluacija investicionih projekata

U zvanje vanredni profesor izabran je na Ekonomskom fakultetu u Podgorici 03.05.2012. godine na predmetima: Analiza poslovanja, Revizija i kontrola i Korporativna analiza i kontrola. (Bilten UCG br. 284 od 09. maja 2012. godine).

Na akademskim postdiplomskim studijama smjer Računovodstvo i revizija izvodi nastavu na predmetu Korporativne finansije.

Na Studijama menadžmenta u Podgorici izvodi nastavu na predmetima: Biznis analiza i Kontrola i revizija, a na Studijama menadžmenta u Bijelom Polju izvodi nastavu na predmetu Biznis analiza.

Gostujući je profesor na postdiplomskim studijama Ekonomskog fakulteta u Banja Luci na predmetu Korporativne finansije.

U periodu od 2007. do 2012. godine obavljao je funkciju prodekana za naučno-istraživački rad i odnose sa javnošću na Ekonomskom fakultetu u Podgorici. Bio je rukovodilac smjera Računovodstvo i revizija na akademskim postdiplomskim studijama i smjera Menadžment investicijama na primijenjenim postdiplomskim studijama.

Za redovnog profesora izabran je 5.03.2018. godine na Univerzitetu Crne Gore za naučne oblasti Finansije i Računovodstvo i revizija.

U periodu od 2013. do 2015. godine bio je direktor Poreske uprave Crne Gore.

Predsjednik je Revizorskog odbora AD „Elektroprivreda Crne Gore“ Nikšić i predsjednik Odbora direktora AD „Otrant Komerc“ Podgorica.

Bio je član upravnog odbora Instituta certifikovanih računovođa Crne Gore i Odbora za reviziju NLB Montenegrobanka AD Podgorica. Obavljao je dužnosti člana Odbora direktora i predsjednika Odbora direktora u više privrednih društava u Crnoj Gori (AD „Bor“ Plav, AD FLZK Nikšić, AD „Željeznice Crne Gore“ Podgorica, AD „Barska plovidba“ Bar itd.).

Član je Savjeta za visoko obrazovanje.

Član je Nacionalnog udruženja procjenitelja Crne Gore i ovlašćeni procjenitelj.

Oblast istraživanja:

Autor više od 60 naučnih i stručnih radova koji su objavljeni u međunarodnim i domaćim časopisima (neki od njih se nalaze SSCI, Scopus i drugim relevantnim bazama) i koautor dvije monografije. Učestvovao na velikom broju međunarodnih i domaćih naučnih skupova, simpozijuma, konferencija i seminara.

Učestvovao u izradi velikog broja projekata i studija koje je realizovao Ekonomski fakultet, a koji su se odnosili na procjenu vijednosti, transformaciju, privatizaciju i restrukturiranje, ocjenu boniteta i izradu investicionih projekata.

Najvažniji radovi:

- Spalevic, V., **Lakicevic, M.**, Radanovic, D., Billi, P., Barovic, G., Vujacic, D., Sestras, P., Darvishan Khaledi, A., (2017) Ecological- Economic (Eco-Eco) Modelling in the River Basins of Mountainous Regions: Impact of Land Cover Changes on Sediment Yield in the Velicka Rijeka, Montenegro, *Notulae Botanicae Horti Agrobotanici Cluj-Napoca*, Vol 45, No 2, ISSN 0255-965X
- Koman, M., **Lakićević, M.**, Prašnikar, J., Svejnar, J. (2015) Asset stripping and firm survival in mass privatization: Testing the Hoff - Stiglitz and Campos - Giovannoni models in Montenegro. *Journal of comparative economics*, May 2015, vol 43, (iss. 2), str. 274-289, ISSN 0147-5967.
- **Lakicevic, M.**, Shachmurove, Y., Vulcanovic, M. (2014) Institutional Changes of Specified Purpose Acquisition Companies (SPACs), *The North American Journal of Economics and Finance*, April 2014, Vol. 28, pp. 149-169, ISSN: 1062-9408.
- **Lakicevic, M.**, Vulcanovic, M. (2013) A Story on SPACs, *Managerial Finance*, Volume 39, (Number 3 and 4), pp. 384 - 403, ISSN: 307-4358.
- Čizmović, M., **Lakićević, M.**, Vulcanović, M. (2013) Unit i po'S: A Case Of Specified purpose Acquisition Companies (Spacs). *Montenegrin Journal of Economics*, Volume 9, (Number 1), March 2013, str. 45-52, ISSN 1800-5845
- **Lakićević, M.**, Vulcanović, M. (2011) Determinants of mergers: a case of specified purpose acquisition companies (SPACs), *Investment Management and Financial Innovations*, Volume 8, str. 112-119, ISSN 1810 – 4967
- **Lakićević, M.**, M. Vulcanović: The Role of Warrants in Shelf Offerings, *Montenegrin Journal of Economics* Vol 7, N^o1 jun 2011, ELIT Podgorica, ISSN 1800 – 5845, str. 73 – 79
- **Lakićević, M.** (2011) Lice i naličje privatizacije, časopis *Acta Economica* br. 15, Ekonomski fakultet u Banjoj Luci, str. 51-77, ISSN 1512-858X,.



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Broj / Ref 03-810

Datum / Date 05.03.2018



Crna Gora
UNIVERZITET CRNE GORE
EKONOMSKI FAKULTET

Broj. 01/ 480

Podgorica, 07/03/2018 god.

Na osnovu člana 72 stav 2 Zakona o visokom obrazovanju („Službeni list Crne Gore“ br. 44/14, 47/15, 40/16, 42/17, 71/17) i člana 32 stav 1 tačka 9 Statuta Univerziteta Crne Gore, Senat Univerziteta Crne Gore na sjednici održanoj 05.03.2018.godine, donio je

**ODLUKU
O IZBORU U ZVANJE**

Dr MILAN LAKIĆEVIĆ bira se u akademsko zvanje **redovni profesor Univerziteta Crne Gore za oblasti Finansije i Računovodstvo i revizija na Ekonomskom fakultetu**, na neodređeno vrijeme.



**SENAT UNIVERZITETA CRNE GORE
PREDSJEDNIK**

Prof.dr Danilo Nikolić, rektor

BIOGRAFIJA

Prezime i ime: **Dr Ana Lalević Filipović**

Rođena sam 20.12.1976.godine u Bijelom Polju. Osnovnu školu i gimnaziju „Miloje Dobrašinović“, završila sam u rodnom gradu sa odličnim uspjehom. Dobitnik sam diploma „Luča“.

Akadske 1995/96 godine započela sam studije na Ekonomskom fakultetu Univerziteta Crne Gore (UCG) u Podgorici. Na istom fakultetu sam diplomirala 1999.godine, gdje sam tokom studija više puta bila nagrađivana od strane Ekonomskog fakulteta, UCG kao jedan od najboljih studenata. Na završnoj godini studija dobila sam nagradu Univerziteta Crne Gore. Prosječna ocjena tokom studija je bila 9,54 (odbrani diplomski rad, ocjena 10). Tokom studiranja bila sam dobitnik stipendije za talentovane studente Ministarstva prosvjete i nauke Crne Gore, kao i Ekonomskog fakulteta UCG.

Postdiplomske studije koje sam upisala na Ekonomskom fakultetu Univerziteta u Beogradu (smjer Ekonomika biznisa), 1999.godine, završila sam sa prosječnom ocjenom 9,75. Na istom Fakultetu odbranila sam magistarsku tezu «Upravljanje ekonomijom obima», jula 2002.godine.

Doktorsku disertaciju «Obračun ciljnih troškova u funkciji jačanja konkurentske pozicije preduzeća», odbranila sam na Ekonomskom fakultetu u Kragujevcu Univerziteta u Kragujevcu, 14 jula 2006.godine, čime sam stekla akademski stepen doktora ekonomskih nauka.

Udata sam i majka djevojčica Marte i Andree i dječaka Koste.

Podaci o radnim mjestima i izborima u zvanje

U periodu od oktobra 1999.godine do januara 2000.godine bila sam zaposlena kao pripravnik u AD „TELEKOM“ Podgorica u finansijsko-računovodstvenom sektoru.

Stalni radni odnos na Ekonomskom fakultetu, UCG, kao saradnik-asistent na predmetima Ekonomika preduzeća (Osnovne akademske studije i Primijenjene studije menadžmenta) i Menadžment investicija (Primijenjene studije menadžmenta) zasnovala sam **01.01.2000.godine**.

U zvanje **docenta** na predmetima: **Računovodstvo, Metodi za ekonomske analize i Održivi razvoj** izabrana sam **30.08.2007.godine**.

Za **vanrednog profesora** na Ekonomskom fakultetu Univerziteta Crne Gore izabrana sam **28.03.2013. godine** na predmetima: **Računovodstvo i Računovodstvo troškova**.

U zvanje **redovni profesor** na predmetima: Računovodstvo, Računovodstvo troškova i Upravljačko računovodstvo izabrana sam **25.12.2018. godine**.

Pored nastave na predmetima na koje sam izabrana u zvanje, izvodim nastavu i na sjedećim predmetima: **Računovodstvo** (Primijenjene studije menadžmenta u Podgorici i Bijelom Polju); **Upravljačko računovodstvo** (Studije menadžmenta i Postdiplomske akademske studije (smjer: Računovodstvo i revizija)); **Računovodstveni informacioni sistem** (Osnovne akademske studije-izborni predmet), **Održivi razvoj** (Osnovne akademske studije -izborni predmet), **Ekonomika za menadžere u sportu** (Spec. studije –Program: Sportski menadžment, Fakultet za

sport i fizičko vaspitanje).

U zvanje **redovni profesor** na predmetima: Računovodstvo, Računovodstvo troškova i Upravljačko računovodstvo izabrana sam 25.12.2018. godine.

Na **Institutu sertifikovanih računovođa Crne Gore** angažovana je kao predavač na sljedećim predmetima: **Ispit 1.2 Informacije za menadžment kontrolu; Ispit 1.4 Računovodstvo troškova; Ispit 1.9 Planiranje, kontrola i menadžment performansi.**

Na **Institutu računovođa i revizora Crne Gore** izvodi nastavu na predmetu: **Finansijsko računovodstvo.**

Pored navedenih aktivnosti, u toku dosadašnjeg rada ističem i sljedeće reference:

- **Dekan** Ekonomskog fakulteta, UCG (mart 2015-april 2016);
- **Predsjednik Nacionalnog savjeta za obrazovanje** (maj 2015-oktobar 2017);
- **Prodekan** za finansije i odnos sa biznis zajednicom (novembar 2012-novembar 2014);
- **Član Savjeta za kvalifikacije** (maj 2015-oktobar 2017);
- **Podtresjdnik Etičkog komiteta** (novemba 2019-)
- **Rukovodilac** umjerenja na IV godini (Računovodstvo) i na postdiplomskim studijama (smjer: Računovodstvo I revzija);
- **Rukovodilac** postdiplomskih primijenjenih magistarskih i specijalističkih studija (2011-2013);
- **Član Komisije za obrazovanje, edukaciju i organizaciju ispita** Instituta sertifikovanih računovođa Crne Gore (**ISRCG**) (2014-)
- **Koordinator projekta** „Acquiring practical knowledge trough “Virtual enterprise” program and internship in real companies” (MNE-HERIC-81180-PRACTing-IC-CS-16-3.1) koji se realizovao u periodu od 15.04.2016 do 31.05.2017. godine.
- **Predsjednik redakcije časopisa** “Računovodstvo i Revizija”, Računovođa doo- Institut sertifikovanih računovođa Crne Gore (mart 2015 - jul 2017);
- **Član** Odbora direktora “Monteregro turist” AD Budva (decembar 2012-avgust 2015),
- **Član** Odbora direktora HTP „Ulcinjska rivijera“ AD Ulcinj (jul 2016-jul 207).
- **Član Savjeta** za ekonomski razvoj Opštine Bijelo Polje (novembar, 2016-);
- **Član Savjeta** za razvoj i zaštitu lokalne samouprave (jul, 2017-).
- **Predsjednik Odbora direktora** HTP „Ulcinjska rivijera“ AD Ulcinj (jul, 2017-).
- **Predsjednika Revizorskog odbora** „ŽICG“ AD, Podgorica (januar, 2013-),
- **Predsjednika Revizorskog odbora** „Luka Bar“ AD, Bar (novembar, 2017-),
- **Član Revizorskog odbora** „ŽPCG“ AD, Podgorica (decembar, 2017-),
- **Člana Radne grupe** za pregovaračko poglavlje 32 - Finansijski nadzor
- **Člana Radne grupe** za izradu Nacrta Zakona o računovodstvu javnog sektora (februar, 2018-)
- **Učesnik** PULSAR programa the Public Sector Accounting Education Community of Practice (EduCoP) (decembar 2017; april 2018-).
- **Učesnik** u izradi nastavnog plana i programa (reakreditacija 2017-2022) za Ekonomski fakultet UCG,
- **Učesnik** u izradi studije “Accountancy education-benchmarking study” CFRR, World Bank Group, 2016, EU REPARIS EDUCoP,
- **Savjetnik** za eksterno utvrđivanje kvaliteta obrazovno-vaspitnog rada u JU Srednja ekonomska škola „Mirko Vešović“ u Podgorici (2014, 2015);
- **Član Radne grupe** za izradu obrazovnog programa Ekonomski tehničar (2016)
- **Član Konsultativne grupe** za izradu Strateškog plana razvoja opštine Bijelo Polje, 2017-2021. godine,

- Jedna od **osnivača** NVO „Nacionalni osmijeh Crne Gore“ (2017);
- Jedna od **osnivača** DOO „CORE Consulting“ Podgorica (2018)

Autor sam većeg broja naučnih i stručnih radova koji su objavljeni u međunarodnim i domaćim časopisima (neki od njih se nalaze SSCI, Scopus i drugim relevantnim bazama). Kooautor sam univerzitetskog udžbenika „Osnovi računovodstvo“, kao i udžbenika „Računovodstvo I“ i „Računovodstvo II“ za srednju stručnu školu „Ekonomske tehnike“. Učestvovala sam na velikom broju međunarodnih i domaćih naučnih skupova, simpozijuma, konferencija i seminara, na kojima sam imala i izlaganja (*prilog: Klasifikacija biografija*).

Imala sam aktivno učešće u izradi velikog broja projekata i studija koje je realizovao Ekonomski fakultet, UCG a koji su se odnosili na procjenu vrijednosti preduzeća, restrukturiranje, privatizaciju, davanje mišljenja, izradu biznis planova, investicionih programa većeg broja kompanija i sl., od kojih su neki bili od velikog državnog značaja (*prilog: Klasifikacija biografija*). Takođe, bila sam rukovodilac dva (Ekonomski fakultet u Ljubljani, Slovenija; Ekonomski fakultet u Mostaru, Univerzitet „Džemal Bijedić“) , kao i član tri bilateralna projekta (Vienna University for Economics and Business; Sveučilište Josipa Jurja Strossmayera u Osijeku, Ekonomski fakultet u Osijeku; Univerzitet u Banjoj Luci, Ekonomski fakultet).

U proteklom periodu obavila sam sljedeća stručna usavršavanja: Ekonomski fakultet u Ljubljani (2016; 2018); Ekonomski fakultet u Osijeku (2015); Ekonomski fakultet u Mostaru (2016; 2018); Eduniversal World convention, USA, Boston (Oktobar 2015); Vienna University for Economics and Business (2015; 2016); Centre for Financial Reporting Reform (CFRR), PULSAR (EduCoP), Vienna (decembar 2017; april 2018); University of Greenwich, England, (2007, 2009); FNEGE foundation (2005; Moldavija; 2003, Bukurešt; 2002; Bugarska); SAD, “Katz Business School“, University of Pittsburgh, Pittsburgh, (maj-jun 2003.godine); Francuska, Business School Bordeaux, specijalizacija FNEGE foundation (januar, februar 2004.godine). U periodu od 16-22 maja 2018. godine po programu Erasmus + bila je predavač na Faculty of Economics, Business and Tourism, Split. Takođe, po istom programu u periodu od 17-24.jula boravila je na University of Freiberg.

1. NAUČNOISTRAŽIVAČKA DJELATNOST (od 2013. godine)

1.2. Radovi objavljeni u časopisima

1.2.1. Radovi objavljeni u časopisima koji se nalaze u međunarodnim bazama podataka

1. Novović Burić, M., Cerović Smolović, J., Lipovina Božović M., **Lalević Filipović, A.**, *Impact of economic factors on life insurance development in Western Balkan Countries*, Zbornik radova Ekonomskog fakulteta u Rijeci: časopis za ekonomsku teoriju i praksu, Vol.35 No.2, decembar 2017. ISSN 1331-8004, str. 331-352, (*potvrda o vodećem autorstvu u prilogu*)
<https://doi.org/10.18045/zbefri.2017.2.331>
2. **Lalević Filipović, A.**, Brkan Vejzović, A., Novović Burić, M., Vujošević, S., *A VAR analysis of the effect of macroeconomic variables on non-performing loans in Western Balkan Countries*, International Journal of Scholarly Papers, Transformations in Business & Economics (TIBE), Vo. 17, No. 2A (44A), ISSN 1648 – 4460, str.511-523

1.2.2. Radovi u međunarodnim časopisima koji se ne nalaze u bazi podataka, a imaju redovnu međunarodnu distribuciju i rezime na stranom jeziku

3. **Lalević Filipović, A.**, Martić, V., Demirović, S., *Digitalization of financial reporting in local governments of three Montenegrin regions – current situation and perspectives*, Management – Journal of Contemporary Management Issues, University of Split, Faculty of Economics, Vol. 3, 2018, ISSN 1331-0194, str.59-79, DOI <https://doi.org/10.30924/mjcmi/2018.23.1.59>

4. Martić, V., **Lalević Filipović, A.**, Radović M., *XBRL Implementation in the Banking Sector in Montenegro*, Journal of Central Banking Theory and Practice, Volume 6, No. 2, may 2017, 2, Print edition ISSN 1800-9581, Web edition ISSN 2336-9205, str. 5-22, DOI: 10.1515/jcbtp-2017-0010,
5. Novović Burić, M., Kaščelan, V., Radović, M., **Lalević Filipović, A.**, *Mechanisms of Protection from Interest Rate Risk with Reference to the Life Insurance Market in Montenegro*, Journal of Central Banking Theory and Practice, 2018, 1, Print edition ISSN 1800-9581, Web edition ISSN 2336-9205, str. 17-42, DOI: 10.2478/jcbtp-2018-0002
6. **Lalević-Filipović, A.**, Demirović, S., *The relationship between debt and profitability of stock companies in Montenegro*, Journal of Contemporary Economic and Business Issues JCEBI, Vol.3, No.2, Skopje 2016, ISSN: 1857 – 9094, Print ISSN 1857-9094, online ISSN 1857-9108, str. 19-34, <http://www.eccfjournal.mk/index.php/journal-archive/volume-3-2016/>
7. **Lalević Filipović, A.**, Drobnjak, R., *Business ethich through the prism of moral dilemmas of the accounting profession in Montenegro*, Economic thought and practice, Dubrovnik, Vol. XXVI, No. 1, 2017. ISSN 1330-1039, str.301-321.
8. **Lalević Filipović, A.**, *The modern approach to business reporting in the function of satisfying the information needs of stakeholders-review of Montenegro*, Acta Economica, ISSN 1512-858X, e-ISSN 2232-738X, Godina XIII, No. 22, February 2015, str.229-247

1.2.3. Radovi objavljeni u domaćim časopisima

9. **Lalević Filipović, A.**, Demirović, S., *Upravljačko računovodstvo održivog razvoja kao nova dimenzija razvoja računovodstva preduzeća*, Računovodstvo i revizija, 03/04 2017, ISSN 1800-6159, str.20-28
10. **Lalević Filipović, A.**, *Poslovna etika kao (ne)bitna pretpostavka kvaliteta finansijskog izvještavanja iz ugla računovodstvene profesije u Crnoj Gori*, Računovodstvo i revizija 01/02 2018, ISSN 1800-6159, str. 170-178
11. Lojpur, A., **Lalević-Filipović, A.**, Lojpur, A., *Finansijsko izvještavanje kroz prizmu menadžment i računovodstvene profesije*, Računovodstvo i revizija 5-6/ 2014, ISSN 1800-6159, str.10-16

1.3. Radovi na kongresima, simpozijumima i seminarima

1.3.1. Međunarodni kongresi, simpozijumi i seminari

12. **Lalević-Filipović, A.**, Stanković, J.: *(Un)awareness of the significance and the necessity of application of costing systems-a regarding Montenegro*, IV International Conference Entrepreneurship and innovations as precondition for economics development, Podgorica june 17, 2014, ISBN 978-86-80133-71-3, str. 343-250
13. Lojpur, A., **Lalević-Filipović, A.**, *Recovery of the countries in transition – reindustrialisation as "emergency exit", 4th REDETE Conference 2015; Researching economic development and entrepreneurship in transition economies; Graz, Austria, October 22-25; 2015, ISBN 978-99938-46-54-3, str. 362-384*
14. **Lalević- Filipović, A.**: *Izazovi računovodstvene profesije u procesu približavanja EU*, XXXV Simpozijum, Računovodstvo i menadžment privatnog i javnog sektora, Zlatibor, 22-24. Maj 2014, ISBN 978-86-475-0157-9, str. 55-76
15. **Lalević Filipović, A.**, Demirović, S., *Finansijsko izvještavanje za mala i srednja preduzeća u svijetlu evropskih integracija*, Računovodstvo i menadžment- RiM, 15. Međunarodna znanstvena i stručna konferencija, Zbornik radova, Svesak II, stručni radovi, Rovinj, 2014., ISBN 978-853-7828-07-3, str. 73-85
16. **Lalević Filipović, A.**, Lojpur A., *Računovodstveno- izvještajni altruizam menadžmenta kao pretpostavka kreiranja (ne)povoljnijeg poslovnog ambijenta*, 18 th International Congress, The significance and role of accounting, auditing and finance in the process of economic recovery, Banja Vrućica, 18-20 septembra, 2014. ISBN 978-99976-620-0-2, str. 161-175
17. **Lalević Filipović, A.**, Martić, V., *Mala i srednja preduzeća kroz prizmu upravljačkog računovodstva- osvrt na Crnu Goru*, Računovodstvo i menadžment- RiM, 15. Međunarodna znanstvena i stručna konferencija, Zbornik radova, Zbornik radova, Svezak I, Scientific papers, Opatija 2017, ISBN 978-953-7828-16-5, str. 127-140
18. Lojpur, A., Radović, M., **Lalević Filipović, A.**, *EUROPE 2020" Strategy As A Global Imperative For SEE Countries*, ICEIRD, The 7th International Conference for Entrepreneurship, Innovation and Regional

- Development 5-6 June 2014, Nicosia, Cyprus, ISBN 978-9963-7355-4-9, str.210-219.
19. Stanovčić, T., **Lalević Filipović, A.**, Peković, S., *Influence of USALI methodology on the quality of financial reporting in hotel industry*, Montenegrin International Conference for Entrepreneurial Development (MICED), Proceedings Book, University of Montenegro, Faculty of Economics, ISBN 978-86-80133-72-0, str.184-194.
 20. **Lalević-Filipović, A.**, Demirović, S., *Management accounting for sustainable development as a new dimension in the accounting development of companies*, International Scientific Conference „Economy and Integration“ ICEI, Conference Proceedings, Tuzla 3-5 December 2015, ISSN 2490-2616; str. 383-398
 21. Lojpur, A., **Lalević-Filipović, A.**, *Reindustrialization as the backbone of the new development paradigm in transition countries*, 13th International Scientific Conference on Economic and Social Development, Barcelona, April 14-16, 2016, ISSN 1849-7535, str. 408-416
 22. **Lalević Filipović, A.**, Martić, V., *Savremene tendencije razvoja finansijskog izvještavanja kao pretpostavke izgradnje i očuvanja ekonomije jedne zemlje-osvrt na Crnu Goru*, Zbornik radova, IV Naučno stručna konferencija sa međunarodnim učešćem „Jahorinski poslovni dani-turizam u funkciji ekonomskog razvoja“, Jahorina, 25-27. februar 2015. godine, ISSN 2303-6168, str. 81-89
 23. **Lalević-Filipović.**, Demirović, S., *Financial structure of stock companies in Montenegro in function of profitability*, 13th International Scientific Conference on Economic and Social Development, Barcelona, April 14-16, 2016, ISSN 1849-7535, str. 408-416
 24. Todorović, M., **Lalević Filipović, A.**, *Profesionalni računovođa kao faktor zaštite javnog interesa-osvrt na Srbiju i Crnu Goru*, XI Kongres računovođa i revizora Crne Gore, Međunarodni kongres, oktobar 2016, ISBN 978-9940-9399-6-0, str. 175-196
 25. **Lalević-Filipović, A.**, Đurašković, J., Radović, M. *Disparitet obrazovnog sistema i tržišta rada u Crnoj Gori – osvrt na grupu zanimanja ekonomista i menadžer*, Zbornik radova naučnog skupa- Ekonomske politike malih zemalja u uslovima evropskih integracija, Banja Luka 7-8. Februar, 2017.god.,ISBN 978-99938-46-75-8, str. 220-232
 26. **Лалевић-Филиповић, А.**, Демировић, С.: *Регулирање на процесот на финансиското известување во Црна Гора*, XIV Симпозијум на сметководителите на Република Македонија, Зборник на трудови, Струга, 15-17 ноември 2012, ISBN 978-9989-747-31-1, str. 333-353
 27. **Lalević Filipović, A.**, Lojpur, A., *Gender equality in Montenegro through the prism of regional representation*, 28th International Scientific Conference on Economic and Social Development, Paris, 19-20 april, 2018, ISSN 1849-7535, str. 222-230

1.3.2. Domaći kongresi simpozijumi i seminari

28. **Lalević Filipović, A.**, Demirović, S., *Uloga žene u savremenim upravljačkim i računovodstvenim poslovima sa osvrtom na Crnu Goru*, VIII Kongres računovođa i revizora Crne Gore, oktobar 2013, ISBN 978-9940-9399-3-9, str.7-20
29. **Lalević Filipović A.**, Računovodstvena ili ženska profesija, Konferencija Zapošljavanje kroz prizmu preduzetništva, Podgorica 2013, ISBN 978-86-80133-63-8., str.159-167
30. **Lalević-Filipović A.**, Demirović S., Fuglister J.: *Mogućnost uvođenja MSFI za MSP u Crnoj Gori*, VII Kongres računovođa i revizora Crne Gore, Zbornik radova „Razvoj finansijskog izvještavanja po svjetskim standardima kao podrška rastu ekonomije Crne Gore i članstvu u EU, Bečići, 2012, str. 54-68

1.5. Recenziranje

Radova u međunarodnim časopisima koji se ne nalaze u bazi podataka, a imaju redovnu međunarodnu distribuciju

31. Management – Journal of Contemporary Management Issues, University of Split, Faculty of Economics, Vol. 22 (potvrda u prilogu)
32. Journal of Contemporary Economic and Business Issues JCEBI, August, 2016 (potvrda u prilogu)

Udžbenik

33. Stanovčić, T. Analiza finansijskih izvještaja hotelsko-turističkih preduzeća, turistička organizacija Kotor, 2016, str. 1-105, ISBN 978-9940-9732-0-9.

Zbornici sa Konferencija

34. Peta Međunarodna naučna konferencija Ekonomija integracija „Uloga ekonomske misli u savremenom okruženju“ ICEI 2017 (recenzent 4 rada; dokaz u prilogu).
35. Časopis Zbornik radova Ekonomskog fakulteta u Istočnom Sarajevu - časopis za ekonomsku teoriju i praksu (od 2014); (dokaz u prilogu).

3.1.1. Univerzitetski udžbenik koji se koristi kod nas (novo, dopunjeno izdanje)

1. Malinić, D. Slobodan, **Lalević Filipović, M. A.**, *Osnove računovodstva*, IV izdanje, Univerzitet Crne Gore, str. 1-564, Podgorica, 2016. (*Odluka Senata br. 03-313/1 od 01.03.2017. godine*)

3.1.4. Udžbenici za preduniverzitetski nivo obrazovanja

2. **Lalević- Filipović, A.**, Lukić, B., Đurović, A., Klikovac, M., *Računovodstvo I*, 2018, Udžbenik za srednju stručnu školu Zavod za udžbenike i nastavna sredstva, 2018.
3. **Lalević- Filipović, A.**, Lukić, B., Đurović, A., Klikovac, M., *Računovodstvo II*, 2018, Udžbenik za srednju stručnu školu, Zavod za udžbenike i nastavna sredstva, 2018.

3.3.1. Gostujući profesor na inostranim Univerzitetima

4. Faculty of Economics, Business and Tourism, University of Split, Erasmus + program, maj 2018.

3.4. Mentorstvo

3.4.2. Na postdiplomskim studijama

Akadske magistarske studije – Ekonomski fakultet Podgorica

5. Ivanović Veselinka, Uloga i značaj upravljačkog računovodstva u postupku donošenja poslovnih odluka od strane menadžmenta preduzeća- primjer CG
6. Jaredić Sanja, Uticaj kontrolinga na uspješnost poslovanja banke sa osvrtom na bankarski sektor CG (**Nagrađen za najbolji magistarski rad od strane Centralne banke Crne Gore u 2013. godini**)
7. Đokić Mirjana, Istorijski razvoj računovodstvenog IS sa osvrtom na AD Institut za crnu metalurgiju
8. Zelenović Gordana, Uloga i značaj metoda upravljačkog računovodstva pri određivanju cijene električne energije na primjeru hiroelektrana na Vrbasu
9. Kostić Anđela, Računovodstveni dokument menadžment sistema i njegov doprinos računovodstvenoj praksi primjer Finance plus
10. Mićković Dragana, Značaj i postignuti nivo standardizacije i harmonizacija finansijskog izvještavanja
11. Čadenović Aleksandra, Mogućnost i implementacija Just - in Time sistema sa osvrtom na veleprodajna preduzeća u Crnoj Gori,
12. Petrović Dražen, Finansijsko restrukturiranje velikih poslovnih sistema sa osvrtom na AD Željeznica CG Podgorica;
13. Kapetanović Melida, Računovodstveni koncept područja odgovornosti sa osvrtom na kompanije u CG,
14. Mitrović Kristina, Primjena cost - benefit analize u odabiru optimalne varijante sa posebnim osvrtom na IT projekte;
15. Rakočević Mladen, Stečajni postupak u funkciji unapređenja poslovnog ambijenta u Crnoj Gori

Primijenjene magistarske studije menadžmenta - Podgorica

16. Radonjić Branko, Metodi obračuna troškova u funkciji donošenja poslovnih odluka u preuzeću
17. Šofranac Maja, Organizacija računovodstvene funkcije u preduzeću,
18. Kadić Dragan, Finansijska opravdanost primjene IVR -a u centrima za kontakt sa korisnicima primjer Telenor DOO,
19. Milović Vesna, Primjena i značaj etičkog kodeksa za kvalitet finansijskog izvještavanja sa osvrtom na Crnu Goru

Primijenjene specijalističke studije menadžmenta - Podgorica

20. Lekić Željka, Utvrđivanje relevantnih informacija za ocjenjivanje investicionog projekta

21. Jokić Danijela, Značaj računovodstvenog aspekta formiranja cijena za evaulaciju investicionog projekta kroz primjer PANEVIVO D.O.O.,

22. Pavićević Stefan, Finansijska ocjena investicionog projekta

3.4.3 Na dodiplomskim studijama

23. Ukupan broj mentorstava 44 ((44* 0,5) - spisak kandidata sa pratećim priložima se nalazi u prilogu)

3.5. Kvalitet pedagoškog rada

Po Odluci Vijeća Ekonomskog fakulteta br. 01/1896 od 19.07.2018. godine.

4.2. Urednik ili koeditor časopisa, knjige, urednik kontinuiranih umjetničkih programa (u trajanju dužem od 9 mjeseci)

1. **Predsjednik redakcije časopisa** "Računovodstvo i Revizija", Računovođa doo- Institut sertifikovanih računovođa Crne Gore (mart 2015 - jul 2017);

4.3. Stručni članak

2. **Lalević Filipović, A.**, *Dometi, ograničenja i perspektiva računovodstvene profesije u Crnoj Gori*, Preduzetnik No. 8, Faculty of Economics Podgorica, 2012, ISSN 1800-8429, str. 40-43
3. **Lalević-Filipović A.**, Demirović S.: *Possibility of introduction of IFRS for SMEs*, Preduzetnik No. 9, Faculty of Economics Podgorica, 2013, ISSN 1800-8429, str. 40-44

4.6. Ostala dokumentovana stručna djelatnost

Organizacija naučnih skupova

4. Predsjednik Naučnog Odbora i Organizacionog odbora, Montenegrin International Conference for Entrepreneurial Development – MICED, UCG – Ekonomski fakultet u Podgorici, 2015. godina, Podgorica
5. Član Programskog odbora VIII Kongresa računovođa i revizora Crne Gore, Perspektive računovodstveno-finansijske profesije u procesu pridruživanja Eu, oktobar 2013, Bečići,
6. Član Programskog Odbora IX Kongresa računovođa i revizora Crne Gore, *Računovodstvena profesija u funkciji stvaranja poslovnog ambijenta za naredak preduzeća i smanjenje kreditnog rizika*, oktobar 2014, Bečići
7. Član Programskog odbora X Kongresa računovođa i revizora Crne Gore, Finansijsko izvještavanje u funkciji unapređenja kvaliteta menadžmenta, oktobar 2015, Bečići,
8. Član Programskog odbora International Scientific Conference „Economy and Integration“ ICEI, Tuzla 3-5 December 2015,
9. Član Programskog odbora International Scientific Conference, Tuzla 2017,

Učešće u realizaciji naučno-istraživačkih projekata (selektovane reference)

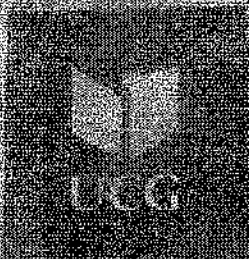
10. *Koordinator projekta* „Acquiring practical knowledge trough “Virtual enterprise” program and internship in real companies” (MNE-HERIC-81180-PRACTing-IC-CS-16-3.1) koji se realizovao u periodu od 15.04.2016 do 31.05.2017. godine.
11. *Rukovodilac međunarodnog bilateralnog projekta*: »Analiza razvoja računovodstvene profesije i njenog uticaja na unapređenje kvaliteta korporativnog izvještavanja: komparativni prikaz Crne Gore i Slovenije« (2016-2017), Univerzitet Ljubljana, Ekonomski fakultet u Ljubljani
12. *Rukovodilac međunarodnog bilateralnog projekta*: »Kauzalitet poslovnih ciklusa i strukture finansiranja preduzeća u Bosni i Hercegovini i Crnoj Gori-komparativna analiza«, (2016-2017), Univerzitet »Džemal Bijedić« Mostar, Ekonomski fakultet u Mostaru
13. *Član međunarodnog bilateralnog projekta*: »Mjerenje nivoa kvaliteta i kreiranje modela uvođenja korporativnog upravljanja u Bosni i Hercegovini i Crnoj Gori« (2016-2017), Univerzitet u Banjoj

- Luci, Ekonomski fakultet,
14. *Član međunarodnog bilateralnog projekta, "Razvoj istraživačkih kapaciteta na ekonomskim fakultetima" (2015-2016)*, naučna saradnja između Crne Gore i Austrije u partnerstvu sa Vienna University for Economics and Business
 15. *Član međunarodnog bilateralnog projekta "Upravljanje znanjem u funkciji strategije razvoja" (2015-2016)*, Sveučilište Josipa Jurja Strossmayera u Osijeku, Ekonomski fakultet u Osijeku
 16. Član Konsultativne grupe za izradu dokumenta: *Strateški plan razvoja opštine Bijelo Polje, 2017-2021. godine*, Bijelo Polje 2017. godine
 17. Projekat: Valorizacija telekomunikacione infrastrukture u državnom vlasništvu, opravdanost uvođenja četvrtog operatera, naručilac Vlada Crne Gore, Ekonomski fakultet i Elektrotehnički fakultet UCG, 2014. godina.
 18. Procjena (reprocjena) akcijskog kapitala HG „Budvanska rivijera“ a.d. Budva, Ekonomski fakultet Podgorica, 2014
 19. Mišljenje o mogućim modelima isknjiženja državne imovine iz bilansa AD „Marina Bar“, 2014,
 20. Društveno-ekonomska opravdanost organizacije Igara malih država 2019, Crnogorski olimpijski komitet, 2014
 21. Procjena vrijednosti imovine „Intours“ d.o.o. Podgorica“, Centar za izvrsnost u menadžmentu, Podgorica, 2014
 22. Ekonomsko-finansijska i društvena opravdanost organizacije biciklističke trke Giro d'Italia, Ministarstvo održivog razvoja i turizma, 2014
 23. Pravno-finansijska analiza poslovanja FK „Sutjeska – Nikšić“ Nikšić, Ekonomski fakultet Podgorica, 2014
 24. Procjena imovine „Jadransko brodogradilište“ a.d. Bijela, 2014
 25. Investicioni program za revitalizaciju i povećanje proizvodnih kapaciteta sektora za poljoprivredu i stočarsku proizvodnju u Zavodu za izvršenje krivičnih sankcija, Ekonomski fakultet Podgorica, 2013
 26. Procjena vrijednosti kapitala Novog duvanskog kombinata AD Podgorica i brendova Duvanskog kombinata AD Podgorica u stečaju, 2015

Ostale reference

27. **Dekan** Ekonomskog fakulteta, UCG (mart 2015-april 2016);
28. **Prodekan** za finansije i odnos sa biznis zajednicom (novembar 2012-novembar 2014);
29. **Rukovodilac** umjerenja na IV godini (Računovodstvo) i na postdiplomskim studijama (smjer: Računovodstvo I revzija);
30. **Rukovodilac** postdiplomskih primijenjenih magistarskih i specijalističkih studija (2011-2013);
31. **Predsjednik Nacionalnog savjeta za obrazovanje** (maj 2015-oktobar 2017);
32. **Član Savjeta za kvalifikacije** (maj 2015-oktobar 2017);
33. **Član Komisije za obrazovanje, edukaciju i organizaciju ispita** Instituta sertifikovanih računovođa Crne Gore (**ISRCG**).
34. **Član** Odbora direktora Montenegro turist“ AD Budva (decembar 2012-avgust 2015),
35. **Član** Odbora direktora Montenegro turist“ AD Budva (decembar 2012-avgust 2015), odnosno HTP „Ulcinjska rivijera“ AD Ulcinj (jul 2016-jul 2017).
36. **Član Savjeta** za ekonomski razvoj Opštine Bijelo Polje (novembar, 2016-);
37. **Član Savjeta** za razvoj i zaštitu lokalne samouprave (jul, 2017-).
38. **Predsjednik Odbora direktora** HTP „Ulcinjska rivijera“ AD Ulcinj (jul, 2017-).
39. **Predsjednika Revizorskog odbora** „ŽICG“ AD, Podgorica (januar, 2013-),
40. **Predsjednika Revizorskog odbora** „Luka Bar“ AD, Bar (novembar, 2017-),
41. **Član Revizorskog odbora** „ŽPCG“ AD, Podgorica (decembar, 2017-),
42. **Člana Radne grupe** za pregovaračko poglavlje 32 - Finansijski nadzor
43. **Člana Radne grupe** za izradu Nacrta Zakona o računovodstvu javnog sektora (februar, 2018-)
44. **Učesnik** PULSAR programa the Public Sector Accounting Education Community of Practice (EduCoP) (decembar 2017; april 2018-).
45. **Učesnik** u izradi plana i programa (reakreditacija 2017-2022) za Ekonomski fakultet UCG,

46. **Učesnik** u izradi studije "Accountancy education-benchmarking study" CFRR, World Bank Group, 2016, EU REPARIS EDUCoP,
47. **Savjetnik** za eksterno utvrđivanje kvaliteta obrazovno-vaspitnog rada u JU Srednja ekonomska škola „Mirko Vešović“ u Podgorici (2014, 2015);
48. **Član Radne grupe** za izradu obrazovnog programa Ekonomski tehničar (2015)
49. **Član Konsultativne grupe** za izradu Strateškog plana razvoja opštine Bijelo Polje, 2017-2021. godine,
50. Jedna od **osnivača** NVO „Nacionalni osmjeh Crne Gore“;
51. Jedna od **osnivača** DOO „CORE Consalting“ Podgorica
52. **Ovlašćeni procjenjivač** za ekonomsku vrijednost pravnog lica sa licencom br. OP0361LF- Institut sertifikovanih računovođa Crne Gore
53. **Certifikat CFRR** – World bank – Public Sector Education Community of Practice Workshop, decembar 2017, april, 2018



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Broj / No: 93-4/93
Datum: 25.12.2018

Na osnovu člana 72 stav 2 Zakona o visokom obrazovanju ("Službeni list Crne Gore" br. 44/14, 47/15, 40/16, 42/17, 71/17 i 55/18) i člana 32 stav 1 tačka 9 Statuta Univerziteta Crne Gore, Senat Univerziteta Crne Gore na sjednici održanoj 25.12.2018. godine, donio je

ODLUKU O IZBORU U ZVANJE

Dr ANA LALEVIĆ-FILIPOVIĆ bira se u akademsko zvanje redovni profesor Univerziteta Crne Gore za predmete Računovodstvo, Računovodstvo troškova i Upravljačko računovodstvo na Ekonomskom fakultetu Univerziteta Crne Gore, na neodređeno vrijeme

SENAT UNIVERZITETA CRNE GORE
PREDSJEDNIK

Prof. dr Danilo Nikolić, rektor

**Андрић др Мирко,
редовни професор**



Рођен је 1951. године на Губавици код Мостара у Босни и Херцеговини. Дипломирао је на Економском факултету у Сарајеву 1974. године, где је и стекао диплому магистра економских наука 1979. године. Докторат економских наука одбранио је на Економском факултету у Мостару 1983. године.

Запослио се на Економски факултет у Суботици 1992. године. У звање редовног професора за ужу научну област Рачуноводство, анализе и ревизија изабран је 1996 године. Ангажован је на предметима: Ревизија, Пословна анализа, Ревизија јавног сектора. Објавио је у коауторству уџбенике: Ревизија-теорија и пракса, Анализа финансијских извештаја, Ревизија јавног сектора.

Аутор је бројних радова који су публиковани у часописима или презентовани на научним скуповима у земљи и иностранству. Из уже научне области био је ментор на десет докторских дисертација. Има богато практично искуство на пословима ревизије, анализе и процене вредности предузећа. Учесник је на већем броју научних и стручних пројеката. Члан је Савета Економског факултета у Суботици и Савета Универзитета у Новом Саду.

Име и презиме		МИРКО И. АНДРИЋ	
Звање		Редовни професор	
Назив институције у којој наставник ради са пуним радним временом и од када		Економски факултет, Суботица, од 1992. године	
Ужа научна односно уметничка област		Рачуноводство, анализа и ревизија	
Академска каријера			
	Година	Институција	Област
Избор у звање	1996	Економски факултет Суботица	Рачуноводство, анализа, ревизија
Докторат	1983	Економски факултет Сарајево	Финансије и рачуноводство
Специјализација			
Магистратура	1977	Економски факултет Сарајево	Пословне финансије
Диплома	1974	Економски факултет Сарајево	Пословне финансије
Списак предмета које наставник држи у текућој школској години			
	назив предмета	врста студија	
1.	Анализа финансијских извештаја	Основне академске студије	
2.	Ревизија	Основне академске студије	
3.	Ревизија јавног сектора	Мастер академске студије	
4.			
5.			
Репрезентативне референце			
1.	Dr Mirko Andrić, dr Dejan Jakšić, Kristina Mijić, Bojana Vuković, <i>Implementation of Accounting Software as a Support to Company Management</i> , TTEM. Tehnics technologies education management ISSN: 1840-1503, Sarajevo, 2011.		
2.	Др Мирко Андрић, Бојана Вуковић, <i>Анализа финансијског извештаја и оцена перформанси</i> , Зборник радова XV Конгреса Савеза рачуновођа и ревизора Републике Српске, Бања Врућица, 2011.		
3.	Др Мирко Андрић, Бојана Вуковић, <i>Улога ревизије у корпоративном управљању</i> , Зборник радова VI Конгреса рачуновођа и ревизора Црне Горе: Финансијско извештавање у функцији унапређења пословног амбијента у Црној Гори, Бечићи, 2011.		
4.	Др Јован Родић, др Гордана Вукелић, др Мирко Андрић, <i>Анализа финансијских извештаја</i> , Економски факултет, Суботица, 2011.		
5.	Dr Mirko Andrić, Kristina Mijić, dr Dejan Jakšić, <i>Financial Reporting and Characteristics of Impairment of Assets in the Republic of Serbia, According to IAS/IFRS and National Regulation</i> , Economic Annals ISSN: 0013-3264 Faculty of Economics, University of Belgrade, 2011.		
6.	Др Мирко Андрић, Бојана Вуковић, Кристина Мијић, <i>Ефекти кризе на перформансе пословања пољопривредних предузећа у Војводини</i> , часопис за Пословну економију, предузетништво и финансије, Нови Сад, 2011.		
7.	dr Dejan Jakšić, Kristina Mijić, Dr Mirko Andrić. <i>Analysis of Variations in the Performance of Audit Firms in the Republic of Serbia</i> , Economic Annals ISSN: 0013-3264 Faculty of Economics, University of Belgrade, 2012.		
8.	Др Мирко Андрић, Бојана Вуковић. <i>Улога ревизије јавних набавки у превазилажењу кризе</i> . VII Међународни Симпозијум о корпоративном управљању: Промјенама стратегија, политика и модела корпоративног управљања до превладавања кризе. Теслић, Бања Врућица: Савез рачуновођа и ревизора Републике Српске, 2012.		
9.	Др Мирко Андрић, Кристина Мијић. <i>Ревизија против ревизије</i> . XVI Конгрес рачуновођа и ревизора Републике Српске: Значај рачуноводства, ревизије и финансија у процесу превладавања економске кризе. Теслић, Бања Врућица: Савез рачуновођа и ревизора Републике Српске, 2012.		
10.	Dr Mirko Andrić, Bojana Vuković. <i>Reflections of the Crisis on the Corporate Operational Performance of Serbian Industrial Companies</i> . Strategic Management ISSN: 1821-3448.		

	Faculty of Economics Subotica, 2012.
11.	Др Мирко Андрић, др Бранко Крсмановић, др Дејан Јакшић. <i>Ревизија-теорија и пракса</i> . Економски факултет Суботица. 2012.
12.	Др Мирко Андрић. <i>Ревизија јавног сектора</i> . Економски факултет Суботица. 2012.
13.	Бојана Вуковић, др Мирко Андрић. <i>Основе за мишљење ревизора о консолидованим финансијским извештајима</i> . Рачуноводство ISSN: 1450-6114, Савез рачуновођа и ревизора Србије, Београд, 2013.
14.	Бојана Вуковић, др Мирко Андрић. <i>Стицање разумног уверавања у истинитост и објективност консолидованих финансијских извештаја</i> . Часопис: Ревизор ISSN: 1450-7005. Институт за економику и финансије, Београд. 2014.
15.	Др Мирко Андрић, др Дејан Јакшић, др Кристина Мијић. <i>Актуелни утицаји информационих технологија на процес ревизије</i> . Економски факултет Суботица. 2015.
16.	Др Мирко Андрић, др Бојана Вуковић. <i>Процена природе и интензитета пословања унутар групе предузећа</i> . Анали Економског факултета у Суботици ISSN: 0350-2120. Економски факултет Суботица. 2015.
17.	Bojana Vukovic, Mirko Andric, Dejan Jaksic. <i>The impact of working capital management on company's profitability: empirical evidence from Serbia</i> . CUSTOS E AGRONEGOCIO ON LINE ISSN: 1808-2882. Universidade Federal Rural de Pernambuco. Recife, 2017.

УНИВЕРЗИТЕТ У НОВОМ САДУ

ЕКОНОМСКИ ФАКУЛТЕТ

БРОЈ: 12- 1062

Дана: 15.XI 1996.

С У Б О Т И Ц А

На основу члана 86. Закона о Универзитету /"Службени гласник РС" број 54/92/, Изборно веће Економског факултета у Суботици, на својој седници од 10. октобра 1996. године, донело је једногласно следећу

О Д Л У К У

Б и р а с е АНДРИЋ ДР МИРКО, у звање редовног професора Универзитета, на Економском факултету у Суботици, за предмет Финансијска контрола и ревизија, научну област Рачуноводство, анализе и пословне финансије.

На ову Одлуку дата је сагласност од стране Наставно-научног већа Универзитета у Новом Саду 14. октобра 1996. године.



ДЕКАН,
Војин Калинић
Проф. др Војин Калинић