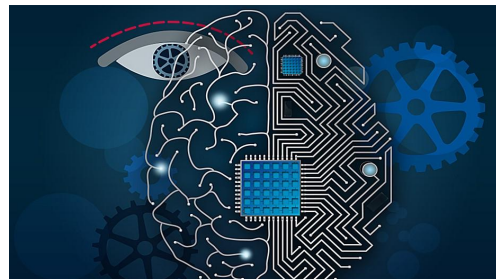


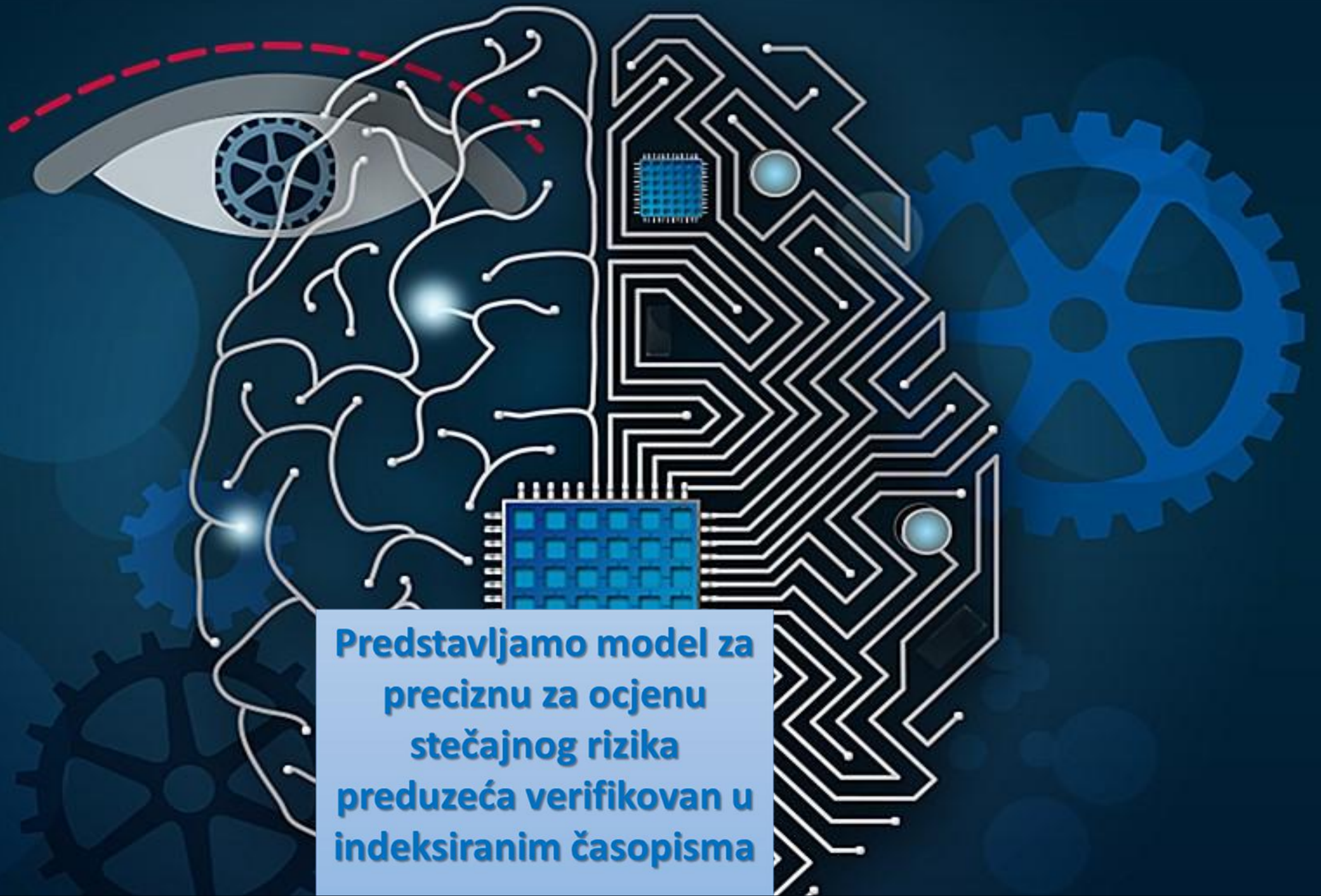
# Procjena stečajnog rizika (*Credit Default Prediction*) Dinamični Model

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&

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**Predstavljamo model za  
preciznu za ocjenu  
stečajnog rizika  
preduzeća verifikovan u  
indeksiranim časopisma**

# Šta?

Kao autori nezavisnih, kompatibilnih i naučno verifikovanih modela:

- ***Model za procjenu mogućnosti povrata kredita u narednom periodu*** (Memic, Deni, (2015), *Assessing Credit Default using Logistic Regression and Multiple Discriminant Analysis: Empirical Evidence from Bosnia and Herzegovina*, Interdisciplinary Description of Complex Systems - scientific journal, 13, issue 1, p. 128-153.)
- ***Model za mjerenje stečajnog rizika*** (Memić, Nedim, 2017), *Modeli za mjerenja performansi preduzeća u funkciji ocjene uzroka i posljedica stečaja preduzeća u Federaciji Bosne i Hercegovine*, upotrebom statističke naučne metode logistička regresija.

# Naučna verifikacija

## Modeli su naučno verifikovani (i) u časopisima:

- **Memic D.** (2013). *Assessing Credit Default Using Logistic Regression and Multiple Discriminant Analysis: Empirical Evidence from Bosnia and Herzegovina*, *Interdisciplinary Description of Complex Systems* 13(1), 128-153, 2015, DOI: 10.7906/indec.13.1.13
- **Memic, N. & Memic, D.** (2019). *'Financial Traits of Bankruptcy, Empirical Evidence from Bosnia and Herzegovina'*, *International Journal of Business Performance Management*, Vol. X, No. Y4, pp.000–000.

## Financial Traits of Bankruptcy, Empirical Evidence from Bosnia and Herzegovina

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**Abstract:** Bankruptcy prediction has been in the focus of research for many years. The benefits of bankruptcy predictive ability are several and possibly beneficial for all business entity stakeholders. This paper has an ultimate goal of revealing most significant financial traits of bankrupt companies as opposed to non-bankrupt companies. The research includes 50 bankrupt companies based in Federation of Bosnia and Herzegovina. They were matched with a random sample of 100 non-bankrupt company-years. Financial ratios of companies used in the sample were derived from their financial statements. Using logistic regression analysis and ANOVA, we were able to construct a several bankruptcy prediction models. The comprehensive model exhibited predictive ability of more than 95%, with high predictive ability of both bankrupt and non-bankrupt companies. The research has shown that bankrupt companies do leave significant financial traits that can be detected prior to official bankruptcy proceeding filing, which can be beneficial for all stakeholders.

**Keywords:** Bankruptcy, insolvency, prediction, financial ratios

**Reference to this paper should be made as follows:** Memic, N. & Memic, D. (2019) 'Financial Traits of Bankruptcy, Empirical Evidence from Bosnia and Herzegovina', *International Journal of Business Performance Management*, Vol. X, No. Y4, pp.000-000.

**Biographical notes:**

## ASSESSING CREDIT DEFAULT USING LOGISTIC REGRESSION AND MULTIPLE DISCRIMINANT ANALYSIS: EMPIRICAL EVIDENCE FROM BOSNIA AND HERZEGOVINA

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### ABSTRACT

This article has an aim to assess credit default prediction on the banking market in Bosnia and Herzegovina nationwide as well as on its constitutional entities (Federation of Bosnia and Herzegovina and Republika Srpska). Ability to classify companies into different predefined groups or finding an appropriate tool which would replace human assessment in classifying companies into good and bad buckets has been one of the main interests on risk management researchers for a long time. We investigated the possibility and accuracy of default prediction using traditional statistical methods logistic regression (logit) and multiple discriminant analysis (MDA) and compared their predictive abilities. The results show that the created models have high predictive ability. For logit models, some variables are more influential on the default prediction than the others. Return on assets (ROA) is statistically significant in all four periods prior to default, having very high regression coefficients, or high impact on the model's ability to predict default. Similar results are obtained for MDA models. It is also found that predictive ability differs between logistic regression and multiple discriminant analysis.

### KEY WORDS

Bosnia and Herzegovina, default prediction, logistic regression, multiple discriminant analysis, banking

# Reference

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[https://scholar.google.com/scholar?hl=en&as\\_sdt=0%2C5&q=deni+memic&oq=deni+me](https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=deni+memic&oq=deni+me)

The screenshot shows a Google Scholar search for "deni memic". The search results page includes a sidebar with filters for "Any time" (Since 2019, Since 2018, Since 2015, Custom range...), "Sort by relevance", "Sort by date", and checkboxes for "include patents" and "include citations". The main content area displays several articles with their titles, authors, and publication details. The first article is "Performance analysis and benchmarking of commercial banks operating in Bosnia and Herzegovina: A DEA approach" by Deni Memić and Škaljić Memić, published in Business Systems Research in 2013. The second article is "Assessing credit default using logistic regression and multiple discriminant analysis: Empirical evidence from bosnia and herzegovina" by Deni Memić, published in Interdisciplinary Description of Complex Systems in 2015. The third article is "Banking competition and efficiency: empirical analysis on the Bosnia and Herzegovina using panzar-rossie model" by Deni Memić, published in Business Systems Research Journal in 2015. The fourth article is "ON THE MAIN FINANCIAL PREDICTORS OF CREDIT DEFAULT: EVIDENCE FROM THE FEDERATION OF BOSNIA AND HERZEGOVINA" by Deni Memić and Božićević, published in Our Economy (Nashe Gospodarstvo) in 2012.

## Nedim Memić

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The screenshot shows the Academia.edu upgrade page for Nedim Memić. The page features a large background image of a building. The main heading reads "11 papers mention N. Memic, Ph.D." and includes a sub-heading "Including one Antibodies paper". Below this, there are three bullet points: "Don't miss a single Mention", "Track your growing reputation", and "See what academics are saying about you". A prominent green button says "Upgrade to view your Mentions". At the bottom, it states "Used by academics at 13,393 universities". The page also includes a search bar and a link to "Are there other ways we can search for your name?".

# HVALA!

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Sarajevo, 30.9.2019. godine