

APPENDICES

Applications of 'Pitching Research' in an Emerging Economies Research Journal: Insights and Reflections

APPENDIX A: Supplementary Pitches
 Figure A1: Completed 'PR Reverse Engineered Template' on "Accounting Internships"

Pitcher's Name	Scholar 3 and Scholar 4	ForR Category	Accounting	Date Completed	21st July 2017
(A) Full Reference	Albu, N., Calu, D.A. & Guse, G.R. (2016) "The role of accounting internships in preparing students' transition from school to active life", Journal of Accounting and Management Information Systems, vol 15, no. 1: 131-153				
(B) Basic Research Question	To what extent do accounting internships contribute to forming and developing students' competencies, practical abilities, professional and ethical values and understanding of the accounting profession.				
(C) Key paper(s)	Deloitte (2013) <i>First steps into the labour market</i> , Deloitte Central Europe, available online at http://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/dtll-cei-firststeps2013-web-v03.pdf Martin, D.R., Wilkerson, J.E. (2006) "An examination of the impact of accounting internships on student attitudes and perceptions", The Accounting Educators' Journal, vol. XVI: 129-138 Saemann, G.P. & Crooker, K.J. (1999) "Student perceptions of the profession and its effect on decisions to major in accounting", Journal of Accounting Education, vol. 17: 1-22				
(D) Motivation/Puzzle	Universities facilitate partnerships with the business environment to create and enhance benefits for students through opportunities. Accounting students are pushed by their universities to undertake accounting internships in order to ensure students have not only developed the appropriate competencies from their education but also from practical experience, drawing a connection between education and the labour market. Despite the rich existing literature on the consequences of internships, additional studies are needed to expand past education studies performed in the Anglo-Saxon environment, and reduce diverse and sometimes contradictory results, eg. Martin and Wilkerson (2006) did not find that internships improved academic motivation. Previous research investigates the need of the accounting market or the role of stereotypes about the profession held by students, there is a lack of research on the consequence of internships on students' competencies and image about the accounting profession.				
THREE	Three core aspects of any empirical research project i.e. the "IDIoTs" guide				
(E) Idea?	By examining the appropriate competencies of accounting university students, it should be possible to determine the extent to which internships have a positive effect on the competencies. To explore the impact of accounting internships on student's competencies, demographics among respondents (independent variables), including gender, previous internship experience and if the student studied economics in secondary school, are recognised in this study. Dependent variables in this study include the development of competencies that students achieved as a result of internship experience. Competencies are technical and soft, such as understanding the role of accounting; applying in practice theoretical knowledge; teamwork; written and oral communication; critical thinking; analysis and synthesis; research and professional development; problem solving and decision making; time management, ethics, initiative and professional maturity. The literature review identified conflicting papers stating that there is an expectation that internships lead to a closer relationship between the theoretical and technical knowledge and practice, while other research states that internship experience more so leads to the development of personal skills, known as soft skills. Furthermore, existing research on the consequences of internships, the diversity of results often leads to contradictory findings.				
(F) Data?	<p>Country: Romania</p> <p>Unit of analysis: Second year students completing a bachelor degree of the Bucharest University of Economics Studies, Faculty of Accounting and Management Information Systems and tutors employed at the host organisation in which students partook internships</p> <p>Sample period: October and November 2015</p> <p>Time interval: The beginning and end of the internship</p> <p>Data sources: Authors conducted a survey of the students and tutors and analysed the content of students essays that described their internship experience</p> <p>Sample size: 159 students and 11 tutors</p> <p>Data limitations:</p> <ul style="list-style-type: none"> • The study was conducted using only one cohort of students from one university • Students had contact with their business environment for a short period - changes in their perceptions occur as they are more exposed to a practice. <p>Data obstacles:</p> <ul style="list-style-type: none"> • Data is based on students and tutors estimates and perception of competencies 				

<p>(G) Tools?</p>	<ul style="list-style-type: none"> • 5-point Likert scale survey of students and tutors. Descriptive statistics are used to analyse survey results. • Principal component analysis (PCA) with varimax rotation is used to explain a large number of variables using a few factors and helped clustering objects into categories. Factor loadings are inspected in order to discuss the impact of the internship on the overall competencies held by students. • Student responses are triangulated with content analysis of student essays describing the internship experience. • The methodology developed by Saemann & Crooker (1999) is utilised analyse students' perception of accounting. The perception is measured on a scale of 1 to 5 with antonyms placed on each end of the scale.
<p>TWO</p>	<p>Two key questions</p>
<p>(H) What's New?</p>	<p>Although there are a lot of papers which investigate consequences of internships, this is the first study in the Romanian context to explicitly recognise the extent to which accounting internships contribute to students' competencies, practical abilities, professional and ethical values and understanding of the profession, achieved through comparing skills prior to and after the internship. Furthermore, it is the first time that findings related to Romanian students having a bias towards positive self-perception has been investigated.</p>
<p>(I) So What?</p>	<p>Findings are of high value to stakeholders, which includes not only students, but also universities and host organisations such as accounting firms. Universities will use findings to determine if the promotion and encouragement (cost involved) towards students completing internships is worth the level of competencies achieved from such experience (perceived benefits). Students will use findings to determine if they need such skills and abilities to increase their employability. Accounting firms will use the data from this study to recognise student competencies and needs, tailoring internship programs accordingly to increase benefits from the experience.</p>
<p>ONE</p>	<p>One bottom line</p>
<p>(J) Contribution?</p>	<p>This study enhances current literature on the consequence of internships on students' competencies and image about accounting, identifying a range of competencies and the extent they are influenced by accounting internships.</p>
<p>(K) 3 Key Findings</p>	<ul style="list-style-type: none"> • The internship contributed to the development of students' competencies, and that the expectations generally associated with internships were met. Internships are perceived to have significant benefits for students in terms of career analysis and planning, understanding the role of accounting within an organisation and integrating into a professional network. • Internships represent an instrument allowing to bridge theoretical and practical knowledge, in line with the students' expectations and those from the business environment in the Romanian environment. • Takeaways from papers - interaction between students, supervisors and tutors is essential; professional counselling maximises students' benefits; for students, the internship is a self-knowledge/awareness tool; and, the internship is an opportunity for the students to become familiar with the accounting profession and to choose their future careers.

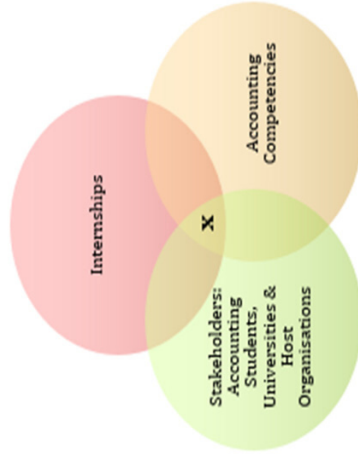


Figure A2: Completed 'PR Reverse Engineered Template' on "University Rankings"

Pitcher's Name	Scholar 5 and Scholar 6	FoR category	Management	Date Completed	4th July, 2017
(A) Full Reference	Maricic, M., Zornic, N., Pilcevic, I. and Dacic-Pilcevic, A. (2017). ARWU vs. Alternative ARWU Ranking: What are the Consequences for Lower Ranked Universities?. Management: Journal of Sustainable Business and Management Solutions in Emerging Economies, 22(1), pp.1-14.				
(B) Basic Research Question	This essay is focusing on some changes between ARWU (Academic Ranking of World Universities) and alternative ARWU Ranking which removed Alumni and Award indicators, and discussing its consequence that impact on lower ranked universities.				
(C) Key paper(s)	Daraio, C. and Bonaccorsi, A. (2016). Beyond university rankings? Generating new indicators on universities by linking data in open platforms. Journal of the Association for Information Science and Technology, 68(2), pp.508-529. Dobrota, M. and Dobrota, M. (2015). ARWU ranking uncertainty and sensitivity: What if the award factor was Excluded?. Journal of the Association for Information Science and Technology, 67(2), pp.480-482. Piro, F. and Sivertsen, G. (2016). How can differences in international university rankings be explained?. Scientometrics, 109(3), pp.2263-2278.				
(D) Motivation/Puzzle	It has a violent controversy about ARWU since it was published by 2003. The indicators that number of received Nobel Prizes and Fields Medals by alumni or University staff are weighted much in ARWU, however it is difficult for a university to achieve that. For instance, universities have lower ranking in ARWU because of less award may still get sound performance in other aspects. Therefore, alternative ARWU was risen in response to involve less prestigious award factor. Although various types of alternative ARWU existed at present, there has been no detail routinization about consequences of getting rid of alumni and award indicators, especially for those lower ranked universities. Considering the needs for designing a stable and reasonable methodology for ranking universities, an in-depth investigation of the comparison of these two rankings are necessary.				
THREE	Three core aspects of any empirical research project i.e. the "IDioTs" guide				
(E) Idea?	By employing a series of statistical tests, we could explore the impacts of exclusion of two indicators, Alumni and Award, on ARWU ranking and alternative ARWU ranking. The universities in the ranking is examined by the entire samples or by groups. Also, it could unveil whether there is a significant difference in ranks, scores, indicator value between ARWU ranking and alternative ARWU ranking. Besides, we could find whether the indicators should be aggregated in a single metrics in the rankings.				
(F) Data?	(1) Source: The data is collected from the official database of ARWU (2) Unit of analysis: Universities (3) sample period & sample interval: ARWU rankings in 2014 (4) Sample size: ranks, ranking scores of 500 universities (5) The data is Cross-sectional data on rankings of universities				

(G) Tools?	<p>(1) Basic empirical framework and research design: Descriptive statistics and inferential statistics including Parametric tests, non-parametric tests and Principal component analysis (PCA)</p> <p>(2) Knowledge of implementation of appropriate or best statistical/econometric tests: Descriptive statistics includes mean, standard deviation, minimum, maximum; parametric tests includes Pearson's correlation coefficient, student's t-test, Analysis of variance (ANOVA) and its Post hoc test, Tamhane's test and Fisher's Z transformation; non-parametric tests includes Spearman's Rho, Kruskal-Wallis test and its Post hoc test, Dunn's test.</p>
TWO	Two key questions
(H) What's New?	The idea of this study is new about exploring idea of "Alternative ARWU 's impact on universities", this will be the first study to explicitly examine this influence via three aspects.
(I) So What?	The study identifies three aspects on the difference between ARWU rankings and alternative rankings, which are ranking order, ranking scores and indicators value. This research may demonstrate generally in three ways, it may give some comparison of both student and educators, as university ranking is viewed as crucial guidance to follow. Also encourage university ranking institutions devote themselves in creating more justly and comprehensively methodology to measure universities' performance. Last but not least, this research could cause other fellows a deep think in future study academic research about others interesting topic of Alternative ARWU ranking and its list length. Also, it might trigger further thoughts and research on the methodology of other rankings and on the impact of university ranking's list length.
ONE	One bottom line
(J) Contribution?	This study will be one of the first in addressing the impact of two indicators value Alumni and Award on ARWU ranking and its alternative version. It will ensure the institutions better measure the ranking of universities. The research will provide an avenue for future research to be built on, such as better understanding of the ranking systems.
(K) 3 Key Findings	<p>(1) Generally, Alternative ARWU statistically significantly improves the ranks of ARWU. If universities are divided into five groups in an ascending order of ranking, Universities from the last group improved their ranks the most and worsened its rank the least. While the first and the last groups are not affected significantly within the groups, the second group is the most volatile group. Besides, under alternative ARWU, it is more likely to affect rankings of universities who have had Nobel Prizes or Fields Medals recently or have a large weight on this criterion.</p> <p>(2) Six indicators are examined in ARWU and alternative ARWU rankings. They are the quality of education (Alumni), quality of faculty (Awards), research output (HiCi, N&S, and PUB). In the entire sample, the values of the indicators, HiCi, N&S and PUB do not differ between the two grouping systems. However, the values of PCP and the APCP differentiates between groups, despite between the second and third groups.</p> <p>(3) Based on PCA approach, it is possible that the four indicators could be aggregated into a single metrics in the entire rankings. However, before the aggregation, all measures should be transformed so that their direction is the same. Besides, it is suggested that one component can be retained in the entire rankings while two components are necessary to explain the rankings within groups.</p>

APPENDIX B: Additional Exhibits**Exhibit 1: 'Pitch Sparring Highlights' for Scholar 1 & Scholar 2 using the paper by Milinković, Kovačević and Mihailović (2017).**

Basic Research Question: During discussion, it was evident that Scholar 2's suggestion had more to do with the whole 'field' research area, whereas Scholar 1's suggestion provided more specifics. Both agreed to adopt a more general approach to the basic research question, recognizing that more detail could be provided through the 'hypothesis' section of the PR Template.

Key Papers: Both students highlighted the importance of making sure the papers were as strongly related as possible to the research questions, in order to define them as "key" papers. Based on Faff's framework description, it was also important that we considered the reputation of the journals they were published in, and how recently they were published. Both Research Scholars agreed that the present study builds on the paper by Petrovic et al. (2015) and extends the research focus from choice of faculty to professional aspiration. However, it was excluded from the final list as it was written in Serbian and therefore no follow up reading or analysis can be made to evaluate its level of relevance to the present paper. The Deci & Ryan (2008) paper, detailing Self-Determination Theory (SDT), was included as it forms a big part of the rationale for this research. SDT introduces the notion that individuals engage in activities directed towards the attainment of personal goals and aspirations. Kasser & Ryan (1996) distinguished between extrinsic and intrinsic goals and provided detail which has been used to frame the 'life goals' and related questionnaires in the present study. It is also from a top-tier journal. Both Research Scholars identified the relevance and importance of the study by Malach-Pines et al. (2002) as it is relevant to the way the present study has structured its methodology, identifying a distinction between managerial and entrepreneurial career paths. This article also introduces key theory in terms of the relationship between goals and careers - in this case managers and entrepreneurs.

Motivation/Puzzle: Scholar 1 had difficulty defining the specific motivations behind this study, with respect to the way it contributes and is applied to a real-world context in a practical and meaningful way. Scholar 2 was able to provide a clear explanation of his interpretation and together they worked on how to incorporate this into the body of this section in the PR Framework. Many of Scholar 2's points had overlapping ideas with the 'So What?' section of the framework and we were able to reuse it this capacity. This brought up the discussion of challenge to make sections of the pitching research template mutually exclusive yet collectively exhaustive. The Research Scholars discussed the difference between signalling the motivation for a study and the danger of a researcher having a specific agenda. An example of this difference is shown in the study, whereby researchers may be prone towards promoting entrepreneurial education and design the study accordingly.

Idea: This section is very straightforward to populate retrospectively as experimental design is an objective observation. Both Research Scholars had drawn the same information from the paper and it was easy to collaborate.

Data: Objective from a retrospective standpoint

Tools: Objective from a retrospective standpoint

What's New? Arguably the hardest part of populating the template, understanding what ideas are taken from existing research and extended and communicating in a concise way.

So What? This section of the template was challenging from a retrospective position as it is hard to reconcile what's new with the findings, however we both stuck closely to the specific motivation of the article which was to further examine the effectiveness of entrepreneurial education.

Contribution: The contribution was a natural answer to the "so what" question and thereby a consensus was reached with ease.

Other Key Findings: The key findings were based on the results that were most interesting with respect to the outlined hypotheses for the study. We agreed that what would be considered 'key' was where insight was provided in light of the motivation for the study. More specifically, what could be identified as 'new' or 'novel' and had implications for real world decisions/behaviours/activities.

Appendix C: ‘PR 400 Word Abstract Template’
C.1 ‘PR 400 Word Abstract Template’ Initial Writing Guide

Research Question	20-30 words	In one sentence, define the key features of the research question (in “neutral” language).
Motivation	100-150 words	In a few sentences, capture the core scholarly motivation for the study. <ul style="list-style-type: none"> - Can you identify a ‘puzzle’ that this research aims to resolve? - Identify up to 3 key papers upon which the research builds. - What’s New? Highlight where novelty exists in the study; how does it improve or build on existing literature? - So What? Outline the primary reason why it is important to know the answer to your research question.
Idea	40-60 words	Articulate the core idea behind the research – what specifically does the study do? If relevant: <ul style="list-style-type: none"> - Articulate the central hypothesis - Highlight key Independent Variables and Dependent Variable(s).
Data	40-60 words	Provide an overview of what data were collected/analysed/used in the study; including data source(s), time period, sample size and measurement tool(s).
Tools	40-60 words	Provide a brief summary of the empirical framework, research design and approach.
Findings	60-80 words	Highlight the key takeaway points <ul style="list-style-type: none"> - Highlight any novel result - How do the findings agree/disagree with existing literature? What do the findings add? - Highlight any important implications this research has for influence in real-world decisions/behaviour/activity
Contributi	20-30 words	Outline the primary contribution of this paper to the relevant research literature

C.2 Completed ‘PR 400 Word Abstract Template’ for all three papers

<p><i>Paper</i></p>	<p>Milinković, I., Kovačević, I., & Mihailović, D. (2017). What Do Freshmen Want? Career Path Preferences Among Students, <i>Management: Journal of Sustainable Business and Management Solutions in Emerging Economies</i>, 22(1), 37-45.</p>
<p>Research Question: The present study investigated whether a relationship exists between students’ life goals and preferences for career type in the future. Motivation: The aim of the study was to discover whether career aspirations in entrepreneurship are strongly linked to concrete life goals in freshmen. If this were the case – if entrepreneurial orientation was pre-destined before University - entrepreneurial education for a wide range of students may be rendered ineffective. The paper draws on both Goal Setting Theory (Locke & Latham, 2006) and Self Determination Theory (Deci & Ryan, 2008), applying them to the context of intrinsic and extrinsic goals (Kasser & Ryan, 1996) among students with preferences for entrepreneurship or management. The study builds on existing literature by distinguishing the difference between intrinsic and extrinsic goals, creating a more rigid structure with which to measure individual goal orientation. It also investigates whether this orientation has any relationship with individual career path plans. Idea: The core idea of this paper was to empirically evaluate the relationship between intrinsic/extrinsic life goals and chosen career path. The study was conducted using gender, department and career path as separate IVs and measured the distinction between extrinsic and intrinsic life goals. Data: Analysis was conducted using responses to 384 surveys completed by first year Serbian students in semester one of 2016/2017 at the Faculty of Organizational Sciences. Students identified gender, department and career path and completed a questionnaire that assessed. Tools: Statistical analyses of all collected data (Utilizing ANOVA, t test, C coefficient, linear correlation analysis and cluster analysis) were used to draw conclusions about the relationships between variables, particularly the correlation between life goals and career preference. Findings: This study eliminates endowed life goals as a factor in predicting which freshmen would be prone to entrepreneurship as a career, even after considering gender and choice of department (field of study). It suggests that there may be other variables worth considering, such as individual differences and education. It also highlights the potential role for education and development, in order to foster the next generation of Serbian entrepreneurs. Contribution: This paper has demonstrated that there is no clear relationship between life goals and entrepreneurial career path, and as such, there is a role for entrepreneurial education.</p>	

<i>Paper</i>	Albu, N., Calu, D.A. & Guse, G.R. (2016) "The role of accounting internships in preparing students' transition from school to active life", Journal of Accounting and Management Information Systems, vol 15, no. 1: 131-153
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Research Question: This study investigates the extent to which accounting internships contribute to forming and developing student's' competencies practical abilities, professional and ethical values and understanding of the accounting profession. **Motivation:** Accounting students are encouraged by their universities to undertake accounting internships in order to ensure students have developed appropriate competencies from both theoretical education and practical experience. Despite the rich existing literature on the consequences of internships, additional studies are needed to expand past education studies performed in the Anglo-Saxon environment, and reduce diverse and sometimes contradictory results. This paper draws on previous research that examines the impact of accounting internships on students attitudes and perceptions (Martin, D.R., Wilkerson, J.E. 2006) and employs the methodology developed by Saemann, G.P. & Crooker, K.J. (1999) to measure students perceptions. Findings are of a high value to an array of stakeholders including students as they can determine if they need such skills and abilities to increase their employability, organisations so they can tailor internship programs to increase benefits from the experience and universities so they can determine if they perceived benefits from internships outweigh the costs associated with assisting students to engage in internships. **Idea:** The core idea of this paper was to examine the appropriate competencies of accounting university students in order to determine the extent to which internships have a positive effect on competencies. The study was conducted using demographics among respondents were used as the independent variables and an array competencies were used as the dependent variables. **Data:** Authors focus on the analysis on 159 second year students before and after the internship experience and survey 11 tutors from host organisations. **Tools:** A 5-point Likert scale survey of students is conducted and principal component analysis (PCA) is applied to better explain the variables. Student responses are triangulated with content analysis of students' essays describing the internship experience. Tutors from the host organisations are also surveyed. **Findings:** The internships contributed to the development of students' competencies; interaction between students, supervisors and tutors is essential; professional counseling maximises students' benefits; for students, the internship is a self-knowledge/awareness tool; and the internships bridge the gap between theoretical and practical knowledge whilst allowing student to become familiar with the accounting profession. **Contribution:** This study enhances current literature on the consequence of internships on students' competencies and image about accounting, identifying a range of competencies and the extent they are influenced by accounting internships.

<p><i>Paper</i></p>	<p>Maricic, M., Zornic, N., Pilcevic, I. and Dacic-Pilcevic, A. (2017). ARWU vs. Alternative ARWU Ranking: What are the Consequences for Lower Ranked Universities?. <i>Management:Journal of Sustainable Business and Management Solutions in Emerging Economies</i>, 22(1), pp.1-14.</p>
<p>Research Question: This essay is focusing on some changes between ARWU (Academic Ranking of World Universities) and alternative ARWU Ranking which removed Alumni and Award indicators, and discussing its consequence that impact on lower ranked universities. Motivation: This study is aim for a detail routinization about consequences of getting rid of alumni and award indicators, especially for those lower ranked universities. It may give some comparison evidence for both student and educators, as university ranking is viewed as crucial guidance to fellow. Also encourage university ranking institutions devote themselves in creating more justly and comprehensively methodology to measure universities' performance. Idea: the independent variables are ARWU rankings and Alternative-ARWU rankings, and dependent variables are six indicators which are: Alumni of an institution winning Nobel Prizes and Field Medals Alumni; Staff of an institution winning Nobel Prizes and Fields Medals; Highly cited researchers in 21 broad subject categories, Papers published in "Nature and Science; Papers" indexed in SCle and Social SCI, Per capita academic performance of an institution. Data: The data are collected from the official database of ARWU, based on ARWU rankings from 2014 scores of 500 universities. The data is Cross-sectional data on rankings of universities. Tools: The study made use of descriptive statistics and inferential statistics including Parametric tests, non-parametric tests and Principal component analysis (PCA). Descriptive statistics included mean, standard deviation, minimum, maximum. parametric tests include Pearson's correlation coefficient, student's t-test, Analysis of variance (ANOVA) and its Post hoc test, Tamhane's test and Fisher's Z transformation. non-parametric tests include Spearman's Rho, Kruskal-Wallis test and its Post hoc test, Dunn's test. Findings: Generally, Alternative ARWU statistically significantly improves the ranks of ARWU. If all universities are divided into five groups in an ascending order of ranking, Universities from the last group improved their ranks the most, overall. Besides, the first and the last groups are not affected significantly within the groups, the second group is the most volatile group. (2) In the entire sample, the values of the indicators, HiCi, N&S and PUB do not differ between the two grouping systems. However, the values of PCP and the APCP differentiates between groups, despite between the second and third groups. (3) Based on PCA approach, it is possible that the four indicators could be aggregated into a single metrics only in the first group. Contribution: This study will be one of the first in addressing the impact of two indicators value Alumni and Award on ARWU ranking and its alternative version. It will ensure the institutions better measure the ranking of universities. The research will provide an avenue for future research to be built on, such as better understanding of the ranking systems.</p>	

Appendix D: Revised Guidelines for the ‘Structured Abstract’

Abstract (maximum 350 words): The abstract should briefly summarize the submitted paper, and help the reader to quickly acknowledge the paper in general. Specific parts required in the structured abstract are described as follows.

Research Question: (15-25 words) In one sentence, define the key features of the research question (in “neutral” language – do not presume existence or direction of the relationships). **Motivation: (90-120 words)** In a few sentences, capture the core scholarly motivation for the study. If relevant, identify a ‘puzzle’ that this research aims to resolve. Identify up to 3 key papers upon which the research builds. **What’s New?** Highlight where novelty exists in the study; how does it improve or build on existing literature? **So What?** Outline the primary reason why it is important to know the answer to your research question. **Idea: (40-60 words)** Articulate the core idea behind the research – what specifically does the study do? If relevant: articulate the central hypothesis; highlight key independent variables and dependent variable(s). **Data: (30-50 words)** Provide an overview of what data were collected/analysed/used in the study; including data source(s), time period, sample size and measurement tool(s). **Tools: (30-50 words)** Provide a brief summary of the empirical framework, research design and approach. **Findings: (60-80 words)** Highlight the key takeaway points. Highlight any novel result - how do the findings agree/disagree with existing literature? What do the findings add? Highlight any important implications this research has for influence in real-world decisions/behaviour/activity. **Contribution: (15-25 words)** Outline the primary contribution of this paper to the relevant research literature.

Appendix E: Further Examples of the “Pitching Research” Inspired Abstract Design Adopted by this Journal

An Example created for the paper by: Milinković, I., Kovačević, I., & Mihailović, D. (2017). What Do Freshmen Want? Career Path Preferences Among Students, *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*, 22(1), 37-45.

Research Question: This paper investigated whether a relationship exists between students’ life goals and preferences for future career type, specifically in entrepreneurship. **Motivation:** Our goal was to explore if there exists a strong link. If this were the case – if entrepreneurial orientation was pre-destined before University - entrepreneurial education for a wide range of students may be rendered ineffective. The paper draws on both Goal Setting Theory (Locke & Latham, 2006) and Self Determination Theory (Deci & Ryan, 2008), applying them to the context of intrinsic and extrinsic goals (Kasser & Ryan, 1996) among students with preferences for entrepreneurship or management. The study builds on existing literature by distinguishing the difference between intrinsic and extrinsic goals, creating a more rigid structure with which to measure individual goal orientation. **Idea:** The core idea of this paper was to empirically evaluate the relationship between intrinsic/extrinsic life goals and chosen career path. The study was conducted using gender, department and career path as independent variables and measured the distinction between extrinsic and intrinsic life goals. **Data:** Analysis was conducted using responses to 384 surveys completed by first year Serbian students in semester one of 2016/2017 at the Faculty of Organizational Sciences. Students identified gender, department and career path. **Tools:** Statistical analyses of all collected data (Utilizing ANOVA, t test, C coefficient, linear correlation analysis and cluster analysis) were used to draw conclusions about the relationships between variables, particularly the correlation between life goals and career preference. **Findings:** This study eliminates endowed life goals as a factor in predicting which freshmen would be prone to entrepreneurship as a career, even after considering gender and choice of department (field of study). It suggests that there may be other variables worth considering, such as individual differences and education. It also highlights the potential role for education and development, in order to foster the next generation of Serbian entrepreneurs. **Contribution:** This paper expands existing research related to the life goals and entrepreneurial career path and formulates practical suggestions for higher education of future entrepreneurs.

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A Sensitivity Analysis of ELECTRE Based Stepwise Benchmarking for Policy: the Case of EU Digital Agenda

DOI: 10.7595/management.fon.2018.0003

Abstract: Research question: This paper introduces a new parameter for evaluating the sensitivity of development paths in ELECTRE (*ELimination Et Choix Traduisant la Réalité*) based stepwise benchmarking model. **Motivation:** The aim of the research was to devise a 'path sensitivity coefficient' which measures the sensitivity of a development path depending on parameters set by the decision-maker (DM). The need for such a measure comes from the fact that the hierarchical preorder of benchmarking units is affected by the DM's subjective decisions on the threshold for declaring outranking relations among them. Consequently, this may disrupt the sequence of intermediate benchmarks - transitional targets to be followed on the route to the ultimate policy goals. The proposed approach is an extension of a stepwise benchmarking procedure devised by Petrović et al. (2014) which evaluates development paths based on their gradualism. **Idea:** In this paper, we propose to characterize development paths by considering both gradualism and sensitivity to outranking thresholds. The standpoint of our research is that in order to make a reliable final choice the DM should be aware that the most gradual path is not necessarily the most stable one. **Tools:** The proposed 'path sensitivity coefficient' combines four levels of uncertainty coming from two threshold values set by the DM. The coefficient has a relative nature, it points to the "distance" from the theoretically ideal solution - a path fully indifferent to threshold values. An approach to merge coefficients associated with gradualism and stability is also introduced. **Data:** To illustrate the proposed approach we applied it in the field of digital transformation of the EU countries. We exploited indicators and data from Digital Agenda Scoreboard regarding specific policy goals to be achieved until 2020. **Findings:** The findings imply that the decision on the most gradual development path should be reconsidered in regards to the influence of model parameters. The final choice depends on whether the DM prefers the smoothness of the path or the overall stability in terms of underlying a partial preorder. **Contribution:** This work contributes to the existing ELECTRE-based stepwise benchmarking by reducing the uncertainty coming from subjective parameterization and allows the DM to be more confident in the final path selection.

Keywords: stepwise benchmarking, ELECTRE, multiple criteria decision aiding, sensitivity analysis, digital agenda targets

JEL Classification: C44, L96, L 98, O57