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Employers' Perceptions of Business and Economics Graduates' Competencies in Croatia

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Abstract

Background: The issue of graduates' competencies is not a new one, but was brought back into the spotlight after the 2007-2008 Global Financial Crisis and the ensuing disturbances in the labour market. These disturbances were manifested through an increased unemployment rate, with a significant share of highly educated people. **Objectives:** This paper provides an insight into employers' assessment of the importance and sufficiency of the competencies acquired by business and economics university bachelor graduates in Croatia. **Methods/Approach:** The methodology applied in this research includes the importance-performance analysis (IPA) that provides a two-dimensional importance-satisfaction grid. Data for the IPA analysis were collected by the structured questionnaire. **Results:** Results indicated that employers are satisfied with specific competencies (business and economic) and that the emphasis of business and economics higher education institutions (HEI) should be placed on generic competencies. **Conclusions:** Findings imply that mobility of highly educated people could be caused by the level and quality of specific competencies of bachelors with a degree from Croatian economics higher education institutions. Additionally, the conclusion of the conducted study indicates a need for implementation of student-oriented teaching methods, the introduction of obligatory internship, and introduction of courses oriented towards the development of generic competencies.

Keywords: competencies, importance-performance analysis - IPA, business and economics, demographics and finance, Croatia
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Introduction

During the last decade, employability of young people – especially manifested through unemployment of tertiary graduates – was one of the main issues in the European Union (EU) (O'Reilly et al., 2015; Van Mol, 2016; Hernanz and Jimeno, 2017). This issue came into the focus of common people, economists, academics, and politicians due to the impact it had on the overall economy. The growth of the unemployment rate and disproportionate rate between supply and demand of highly educated work force from 2008 to 2012 was a result of disturbance in the economy of the European Union under the impact of Global Financial Crisis (Zwiers et al., 2016; Ferreiro and Gómez, 2017; Malega and Horváth, 2017). The negative effects to the European Union economy were manifested trough negative Gross Domestic Product (GDP) growth, a spike in the unemployment rate, overall disturbances in the financial markets, growing mistrust towards banks and banking systems, increased cost of capital, and in some countries even restrictions in monetary systems - capital controls on weekly cash withdrawal (Pagoulatos and Triantopoulos, 2009; Jones, Clark and Cameron, 2010; Kickert, 2012; Tosun, Wetzel and Zapryanova, 2014; Di Mascio and Natalini, 2015). Several countries managed the 2007-2008 Global Financial Crisis better than the others did, and even now a decade later, some countries are still struggling to overcome problems that have emerged ten years ago. Simultaneously with the outbreak of the Global Financial Crisis, the issue of competencies that graduates attain upon completing their education also emerged in academic circles and among employers. This issue has even been recognized by the European Commission and included in the Europe 2020 Strategy. The main priorities of this document are based on the issues of employability, knowledge, and innovations. One of the seven flagship initiatives precisely focuses on the problem-solving skills of young people entering the labour market. Parallel with that employers started emphasizing the importance of satisfaction levels with graduates' competencies. It should be noted that the issue of graduates' competencies is a not a new one, quite the contrary many authors investigated this issue before Global Financial Crisis has emerged like Gibbs (2000); Holmes and Miller (2000); Glover, Law, and Youngman (2002); Taylor (2005); Širca et al., (2006) and Cranmer (2006). Then again, the Global Financial Crisis and the spike of the unemployment rate triggered stakeholders to put this topic once more back into focus. All these factors introduced an atmosphere of education market valorisation. According to Antunes (2016), the Bologna Process and its first implications on European Higher Education were manifested through the perception of education being a marketable service, in terms of a business as well as a European-wide and global market (p. 410). Additionally, the first class of Bologna Process graduates coincided with the eruption of the Global Financial Crisis. This outcome further sparked the flare of education perception primarily through economic valorisation. On that account, Čirić (2016) summarizes that the ultimate goal of higher education is to train individuals for more active contribution to their own and community development (p. 53). European policymakers have determined that the gap between students' competencies expected by the market and the competencies obtained at universities represents one of the main challenges of higher education.

With regards to Croatia, the issues of graduate competencies combined with one of the highest rates of youth unemployment - according to Eurostat 27,2% in 2017 (EUROSTAT, 2018), a new negative demographic trend started emerging – the emigration of young people and graduates with tertiary degrees. Corroborating the above assertion, Tomić and Taylor (2018) forewarn that the number of emigrants from Croatia to Germany only was over 100,000 until 2016, highlighting the fact that young unemployed and tertiary-educated experts were an especially mobile population (p.

3-4). This new issue emerged as a result of Croatia becoming a full-fledged member state of the European Union thus taking advantage of reduced workforce movement limitations to which it was previously exposed by a number of EU member countries. The emigration problem in Croatia emerged under a set of circumstances such as slow growth of the domestic economy, long time recessionary exposure, numerous limitations for starting own business as described by complicated administrative procedures and bureaucracy, tax system, unnecessary procedures, etc.

The main purpose of this paper is to investigate employers' perception of Croatian university business and economic bachelor graduates' competencies using importance-performance, i.e. importance and satisfaction analysis. The findings will indicate the needs of the Croatian labour market in the field of business and economic bachelor graduates' competencies. Additionally, the result of this study may be used by business and economic HEIs for the purpose of adjusting and strategically developing new programs and syllabus according to the needs of the labour market. Results may be useful to students for the purpose of selecting elective courses with which they will increase their generic and specific competencies and become more attractive to employers. The literature on the competencies is extensive (Jackson, 2010), and there are different approaches to defining the main categories as variables within those categories. The competencies that were examined in this analysis were divided into two groups, generic and specific competencies. Division and variables within the generic competencies were adopted and modified from TUNING Educational Structures in Europe project carried out by Sánchez et al. (2008) – instrumental, interpersonal and systemic – and were subsequently investigated. The specific competencies were set up via six variables; business planning and analysis, human resources, marketing, generic economics, management and organization, and finance. Using those six variables, the authors investigated the business and economic competencies of bachelor graduates' in Croatia.

In response to the above stated issues of graduate's competencies, the goal of this study is to research and compare Croatian employer's perception on the importance and satisfaction on business and economic bachelor graduates' competencies.

The paper is structured as follows: Section 1 provides the Introduction, Section 2 offers an overview of the existing literature on the topic on employers' perception on importance and satisfaction of graduates' competencies, Section 3 defines Methodology, Section 4 Results, and Section 5 Discussion, while Section 6 concludes.

Literature review

The significance of graduates' competencies started to be a hot topic sometime after the meeting of Ministers in Berlin 2003 i.e., after the publication of the consultative document on EU Qualification Framework in the 2005 (Bologna Working Group, 2005). From that day onwards, along with the Global Financial Crisis breakout and all the implications that were brought to the labour market, this issue started to attract the attention of all parties involved. Three major forces interact in-directly on the labour market: a) employers, b) employees, and the c) education institutions (professor). In the literature, there are different approaches towards the investigation of the level of graduates' competencies. Investigations from the employers' perspective, alumni/students' perspective, professors' perspective, and last one analysis that combines the perspective of all the previously mentioned actors.

Many studies have been published on the topic of competencies from the perspective of employers. In that first group of studies belongs and Lowden et al. (2011) study which indicate that "Employers expect graduates to have the technical and discipline competencies from their degrees but require graduates to

demonstrate a range of broader skills and attributes that include team-working, communication, leadership, critical thinking, problem solving and often managerial abilities or potential" (p. 24). Usually, these broader skills are referred to as a 'soft-skills'. Hodges and Burchell (2003) also investigated the employers' perspective using IPA analysis on the preparedness of the New Zealand business graduates for the work place. Their results indicated that students have underperformed with employers, especially with regards to 'soft skills'. Additionally, employers are expecting 'well-rounded' graduates with a broad range of competencies. Similar results using IPA analysis regarding the underperformance of the Malaysian business graduates in the 'soft-skills' were obtained by Ken, Ting, and Ying (2012). Using the IPA method, same results were obtained by Saludin and Salahudin (2015) who examined employability skills of Malaysian business management and accounting graduates among employers. In a study carried by McMurray et al. (2016) the employers indicated trustworthiness, reliability, motivation, communication skills, and a willingness to learn as most important skills. The same method was used by Martensen and Grønholdt (2009) to examine what competencies evaluated by employers underperform by the MSc graduates of Copenhagen Business School. The results of this study have shown that employers have grouped the personal/social competencies in the II quadrant "keep up the good work" and the professional competencies in the quadrant III and IV "low priority" and "possible overkill". Dubreta and Bulian (2018) have investigated the employers' perspective of engineering skills in the Croatian economy. Although, they have investigated engineering competencies their findings indicated that employers have higher importance on professionalism (ability to respect deadlines, ability to follow directions when working on tasks, motivated approach to work tasks, ability to work under pressure - deadlines, downsizings, and demanding clients)

The second group of the studies examined the graduate's competencies but from professor perspective. Somewhat different (lower importance) results on 'soft skills' 'were obtained by Sugahara and Coman (2010), which connected the 'soft-skills' perception of the professors for certified public accountants. The third group of studies examined students' perception of competencies. Nale et al. (2000) explored the alumni perception on their preparedness for careers connected to their major area of study using IPA analysis. The findings of their study indicated that the majority of investigated professional competencies were marked in the quadrant II "keep up the good work", and quadrant III and IV "low priority" and "possible overkill". Moreover, they concluded that IPA is suitable as an assessment tool for business schools' curricula. In the study carried out by Duke (2002, p. 2014) students indicated higher needs for interpersonal, leadership, global economy, and communication skills. Additionally, students are more confident in their abilities in skills like analysis, technology, and decision-making. Student perception on the competencies of accounting and finance graduates were examined by Osmani et al. (2017) and their conclusion analysis brought into light the problem of the low importance of critical thinking, research and creativity skills and opposites with studies stated above and carried out by employers.

The fourth and most comprehensive group of studies carried out to examine all three parties (students, employers, and academics-professor) and their perception of competencies. This kind of study was carried out by (Quang Duoc and Metzger, 2007; Jurše and Tominc, 2008; Wickramasinghe and Perera, 2010). In a study of Quanq Douc and Metzger (2007) 19 variables were examined. They have indicated that that critical analysis, problem-solving skills, and overall quality of work are the most important competencies. Also, it was noted that there is a significant difference of perception on graduate quality between all three groups surveyed.

In a study carried out by Wickramasinghe and Perera (2010) the authors have examined software and computer services competencies from the perspective of employers, students, and professors. Findings presented in the paper suggest that employability skills are influenced by the gender of the graduates. Skills that were indicated as important were individual creativity, essential skills, and talent. Finings of a study carried out by Jurše and Tominc (2007) showed analogous results as the TUNING Educational Structures in Europe project report.

Methodology

The targeted population of this study was Croatian employers that have had employed business and economic bachelors' in the last five years. Moreover, in the questionnaire, it was defined that a university bachelor is a person that has completed university undergraduate study of economics, lasting at least 3, i.e., 4 years. The questionnaire was distributed just to one of the decision maker in the company, in a case of medium and large companies to the human resource manager or in the small companies to the owner.

Register of the business subjects of the Croatian Chamber of Economy and data of Croatian Bureau of Statistics were used for the sampling frame. We have randomly selected companies from the frame list, and we have used sampling weights and probability method to achieve representativeness according to the three criteria: the size of the company, regional affiliation, and type of business activity. The total response rate is 3.1%, i.e. 300 completed questionnaires were gathered out of 9678 tries (completed, refusal and break off, partial, non-contact, other). Time and financial limitations were the obstructing factors for gathering the data.

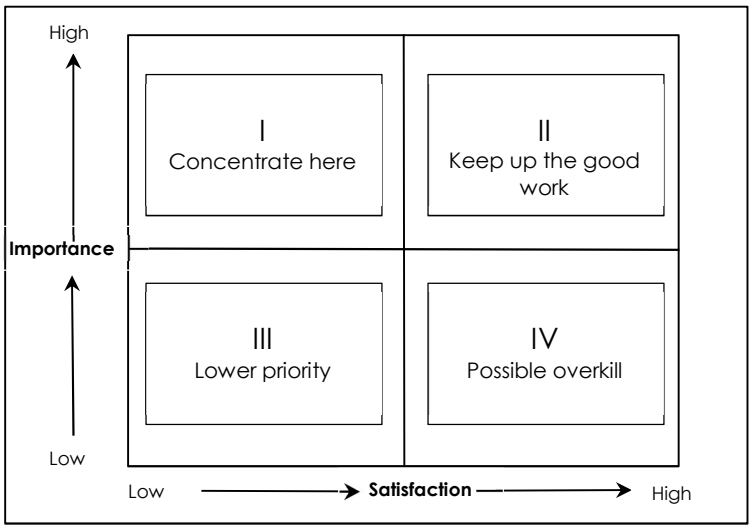
Data were gathered by the professional research agency "IPSOS" within the project ECONQUAL during September and October of 2015. A structured questionnaire was used to survey employers' perceptions of the importance and satisfaction analysis on business and economics university bachelor graduates' competencies. Generic competencies were examined by using the modified methodology of Sánchez et al. (2008) with 24 different variables (see Appendix 1) while the specific competencies were divided into six categories with overall 25 variables as defined by the authors. The level of importance and satisfaction of generic and specific competencies were measured by a five-point Likert scale. Furthermore, the possibility of an answer doesn't know/not sure/not applicable was offered as the answer to the employers. The reason for implementing this additional answer was to ensure the diversity of employers and their specialization and orientation, i.e., use of specific competencies. The survey was conducted combining two methods: web survey and Computer-assisted telephone interviewing - CATIe. Overall, 300 full questionnaires were gathered with a response rate of 3.1%. In order to achieve sample significance of the companies, the sample is defined by the share of employment on total employment.

Based on the previous results and studies importance performance analysis (IPA) was used for investigating employers' perceptions of business and economics bachelor graduates' competencies. IPA is a very useful tool for decision making about diverse variables, and can also indicate the issue on which decision makers should focus on more closely. Additionally, IPA is an easy-to use tool because all data are presented in a two-dimensional scale grid firstly introduced by Martilla and James (1977) and upgraded by Levenburg and Magal (2004). For the purposes of this analysis, the IPA data plots were constructed with a four-quadrant matrix. The dimensions of the four-quadrant matrix, as seen in Figure 1 are the following: I) Concentrate here (High Importance/Low Performance) – indicate key variables that

need to be improved; II) Keep up the good work (High Importance/High Performance) – indicate variables that are of great significate and strengths the company; III) Lower priority (Low Importance/Low Performance - indicate variables that are not important and have no high significance for the company; IV) Possible overkill (Low Importance/High Performance)- indicate variables on which company uses too much resources. It is possible to use average or median results for constructing IPA matrix and will use average results. The averages of each sub competencies will be compared with the average of the associated competency, in that way IPA matrix will be constructed.

Needs of the employers will be identified and ultimately appraised in what Business and Economic higher education institutions in Croatia should put more effort and emphasis.

Figure 1
Importance-performance matrix



Source: Adapted from Martilla and James (1977).

Results

Results for latent variables, i.e. GAP – the difference between average satisfaction and average importance level of employers on economic and business university bachelor graduates generic competencies are presented in appendix 1. Latent variables were created (see appendix 1 and 2) in order to get data that are more accurate for IPA data plots for cognitive methodological, language, individual, and entrepreneurial spirit competencies. From the analysis of the results on importance and satisfaction levels of employers on economic and business university bachelor graduates' generic competencies, i.e. latent variables, the following may be concluded. The calculated GAP for all latent variables is negative. This indicates that the employers had the highest average importance over average satisfaction level. The largest GAP may be found for the latent variable of methodological -0.41 This latent variable consists of three manifest variables: a) ability to identify, pose and resolve problems b) ability to plan and manage time and c) ability to learn and continuous training. Comparing score on average importance for this latent variable opposed to other four latent variables, it is evident that it has evaluated with the highest average score of 4.32. The overall average satisfaction result is somewhat discouraging and inadequate at just 3.91. This obviously indicates that business and economy higher education institutions (HEIs) should intensify their efforts on

developing methodological skills. GAP results are followed by the two latent variables of cognitive and entrepreneurial spirit competencies with the average GAP score of -0.39 and -0.35. Results for these two latent variables need to worry business and economy higher education institutions (HEI) demonstrating they are issues requiring special focus given that these competencies are linked to the following: the knowledge and understanding of the subject area, the ability to apply knowledge in practical situations, ability to take the initiative and ability to work autonomously. These negative results could be explained by the lack of organized praxis in the majority of study programs. Nevertheless, business and economy HEIs are aware of this, and slow progress is visible (some of them introduced praxis in their study programs). It should be highlighted that the overall average score of satisfaction for the cognitive variable is 3.87, but the average importance score was 4.26, and for entrepreneurial spirit, variable was average importance 4.14 and average satisfaction 3.79. Analysing the score of an overall difference of averages, it may be concluded that the GAP for both latent variables is not too big. However, business and economy HEIs unquestionably cannot be pleased with these negative results. Still, again, it should be underlined that these competencies should be and are developed through all levels of the educational system. GAP for the latent variable of individual competencies has a score of -0.14 and indicates that employers are almost satisfied with the ability of bachelor graduates to adopt in new situations, to work in international environments, to accept diversity and with their determination and perseverance in the task given and responsibilities taken. The best GAP score, although a negative one, has a language variable with a value of -0.07. The average importance result for this competence is 4.13, and satisfaction is 4.06.

GAP for instrumental competencies is -0.29, interpersonal -0.23, systemic -0.24, and overall GAP, i.e. GAP for generic competencies' is -0.25.

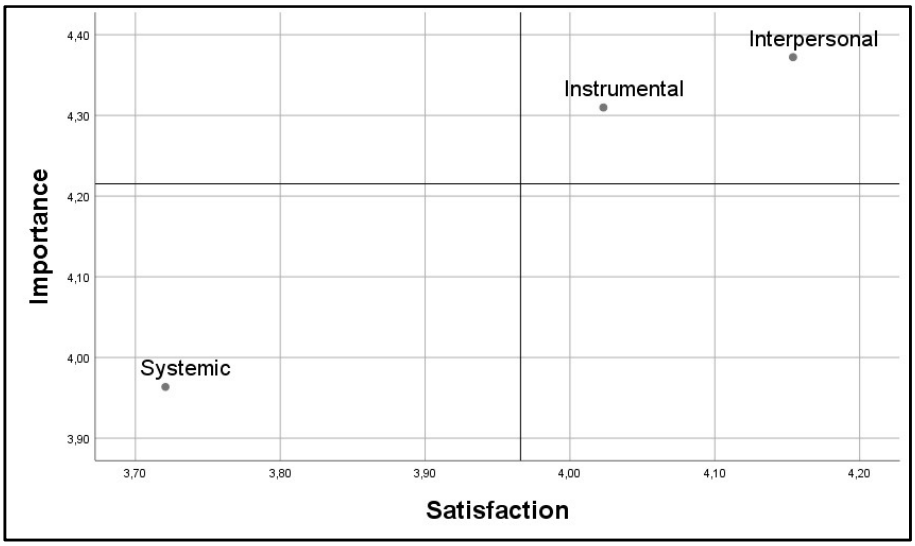
Despite to the fact that GAP for all latent variable is slightly negative (especially for language and individual), this indicates that business and economy HEI should do the additional effort for improving theirs programs and ways of teaching. Furthermore, it should be stressed that generic competencies and results that were obtained are the product of the overall educational system. These competencies should also be developed during the 12-year process of education (from elementary to high school). It may be concluded that overall curriculum reform is needed with an emphasis on the new way of teaching.

In addition, paired t-test has been done for the difference between latent variables satisfaction (S) and importance (I). Results indicate that the difference between satisfaction (S) and importance (I) (see appendix 3) for the latent variable (cognitive, methodological, entrepreneurial spirit, instrumental, interpersonal and generic) is significantly different from 0. The difference was calculated as the average difference of satisfaction and importance. The difference in results between GAP and difference variable (see appendix 2 and 3) is a result of N. N is the number of questionnaires that were in the analysis. Different N is generated under the possibility of answer don't know/not sure that wasn't counted.

IPA for generic competencies

In order to carry out Importance-performance analysis for generic competencies, IPA matrix was developed. In the following figure, the authors present the Importance-performance matrix for generic competencies.

Figure 2
Importance-performance matrix for generic competencies



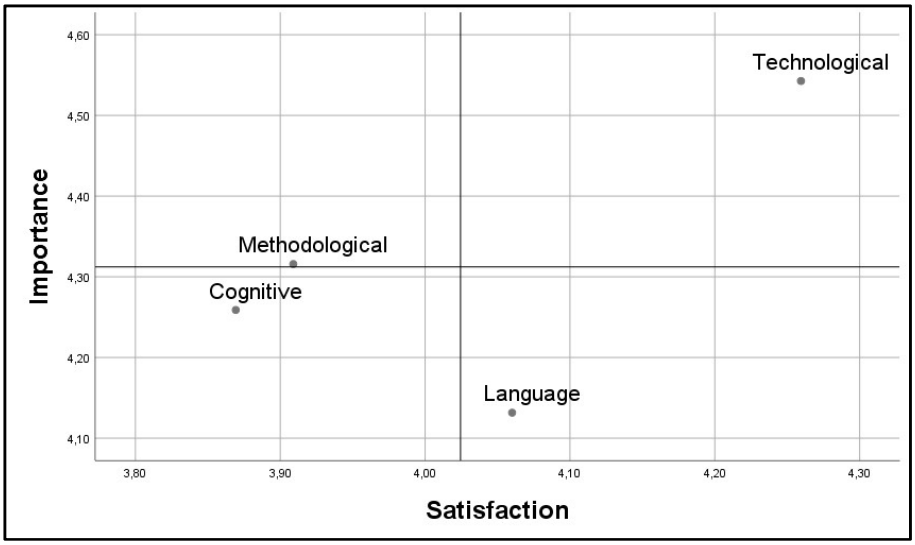
Source: Authors' work

From the analysis of the matrix it may be concluded that latent variables for instrumental and interpersonal competencies are marked in quadrant II and labelled as keep up the good work Martilla and James (1977); Levenburg and Magal (2004). Attributes for these latent variables are well scored, and business and economic HEIs in Croatia are encouraged to maintain their current strategies and process. Although the GAP analysis of latent variables – generic competencies' is negative, the result provide by IPA analysis suggests differently. The latent variable of systemic competencies is marked in quadrant III Lower priority. Employers indicate this latent variable is not that important in regards to instrumental and interpersonal competencies. In the following figure, IPA data plot is crated for instrumental competencies (Figure 3). The results of IPA are in the same line as GAP analysis. It could be concluded that methodological competencies (Ability to identify, pose and resolve problems; Ability to plan and manage time and Ability of learning and continuous training) is in quadrant I which indicates that this is something on which more focus should be given. Obviously, employers implied that they not satisfied with university bachelor graduates in economics and business with their ability to identify problems and to resolve using appropriate time management.

They are satisfied with the technical competency of graduates, and their good work should be kept up. The employers denoted the latent variable of cognitive competencies in low priority quadrant while latent variable language was marked as "possible overkill" (Q IV). Employers' are satisfied with language competencies, but they are not important.

Based on this we may conclude that business and economy HEIs should reorganize their program, relocate resources and time to focus more on development of methodological competencies (resolving the problems; time management and ability to learn) and less on languages competencies (ability of written and oral communication in first language; ability to communicate in a second language; ability to communicate with unskilled persons in a subject area).

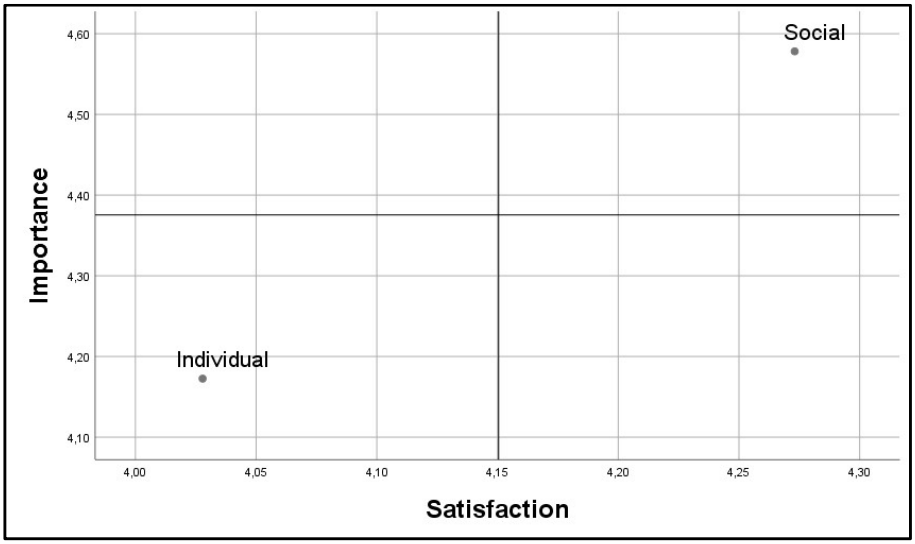
Figure 3
Importance-performance matrix for instrumental competencies



Source: Authors' work

Likewise, IPA was established for interpersonal competencies (see Figure 4), and results indicate that employers are satisfied with graduates' ability to work in a team. Individual competencies are marked in III quadrants indicating that these competencies' have low priority. It should be highlighted that GAP analysis indicates the negative gap between satisfaction and importance, but paired t-test does not show the significance of the difference between satisfaction and importance so, the results obtained by IPA are not that different.

Figure 4
Importance-performance matrix for interpersonal competencies

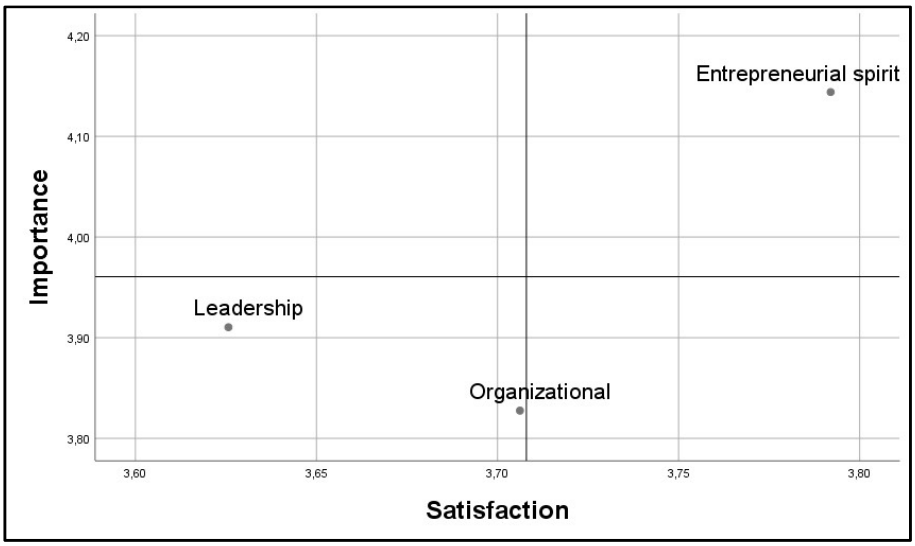


Source: Authors' work

In figure 5 importance-performance matrix for systemic competencies is displayed. In contrast to the GAP results, analysing the matrix following recommendation may be presented to the business and economy HEIs regarding their bachelor programs. Competency of entrepreneurial spirit is well developed, and employers consider it satisfactory. Organizational competency is marked as low priority and leans to the

quadrant of possible overkill. While leadership competence is in III. quadrant low priority, business and economy HEIs should put more focus on other competencies.

Figure 5
Importance-performance matrix for systemic competencies



Source: Authors' work

IPA for specific competencies

Finally, the Importance-performance matrix for specific competencies (business planning and analysis, human resource, marketing, generic economics, management and organization, and finance) were developed and presented in figure 6.

Figure 6
Importance-performance matrix for specific competencies

Source: Authors' work

The result from the matrix above indicates that four (generic economics, finance, management and organization, business planning and analysis) out six competencies are positioned in the II quadrant and that business and economy HEI should keep up the good work with these competencies. The competencies of marketing and human resource are set in III. quadrant "low priority". Overall results of IPA for specific

competencies implies that business and economy HEI should maintain their politicies regarding developing specific competencies.

Discussion

Overall research results indicate that there are some open issues regarding university business and economic bachelor graduates' generic competencies in Croatia. Using IPA analysis within instrumental competencies the latent variable methodological competencies was marked in quadrant I. The following competencies; a) Ability to identify, pose and resolve problems; b) Ability to plan and manage time and c) Ability of learning and continuous training, should be marked as the highest significance for business and economy HEIs. It must be underlined that the development of these competencies should be done through elementary and high school education. The biggest Gap is detected in the competencies of methodological. This is a signal for the business and economy HEIs to shift their attention more on these competencies and to try and develop a new way of student-oriented teaching. Negative GAP results may also be explained with the big groups of students attending class (more than 30) that are usual for business and economy HEIs. Perhaps smaller class groups and individual approach could contribute to a better result.

Findings for specific competencies generically indicate that business and economy HEI are performing well and that employers in generic have high levels of satisfaction with the knowledge that bachelor graduates demonstrate. Only competence in what business and economy HEIs should focus more is business planning and analysis.

The results of these papers are in line with the previous findings of Hodges and Burchell (2003); Martensen and Grønholdt (2009); Ken, Ting, and Ying (2012). Although, we must highlight that in this study competency classification of TUNING Educational Structures in Europe project was used unlike the studies mentioned before. The results of this study indicated that employers have stress out the importance of generic competencies and lower level of satisfaction. A higher level of satisfaction of specific competencies is found in this research. It can be concluded that overall results are in the same line with previous findings in the mentioned literature (Hodges and Burchell, 2003; Jurše and Tominc, 2008; Martensen and Grønholdt, 2009; Ken, Ting and Ying, 2012).

The main conclusion of this research is that business and economy HEIs in Croatia are providing sufficient specific competencies to their students. There is a respectful perception of the business and economic bachelor graduates' specific competencies in the eyes of employers. As far as generic competencies are concerned, there is room for improvement.

Conclusion

This paper aims to investigate the question of employers' perception of business and economic bachelor graduates' competencies. A comparison with the results from previous studies demonstrates that some similarities may be found regarding specific generic competencies. There were a few limitations to this research. The economic bachelor graduates – economists are employed in 95% of all sectors in the national economy. From there emerges the number of occupations and the complexity of jobs that are performed by business and economic bachelor graduates. Starting from there, a question may be raised regarding how well a generic survey of all employers is able to cover specific competencies. For example, employers from trade and commerce may have different priorities in regards to employers from the banking sector. Additionally, limitation of this research is that satisfaction of specific

competencies is done in generic just for six main variables and therefore, we cannot go into deeper analysis.

Our empirical research results clearly indicate the satisfaction of employers with the level of specific competencies. In addition, the result reveals that there is a room for business and economy HEIs improvement in the field of generic competencies. Again, it should be highlighted that generic competencies should be developed through all levels of education. Results are a sure indicator that the new curriculum reform is urgently needed on all levels of education. The conclusions and recommendations of this research are: a) Implementation of new, student-oriented teaching methods; b) Introduction of praxis as a mandatory part of the curriculum; c) Introduction of elective courses oriented toward developments of generic competencies.

This study indicated that Croatian business and economic bachelor graduates have a suitable level of specific competencies. Lack of available vacancies and small wages compared to more developed Western EU countries for bachelors with high levels of employers' satisfaction on specific competencies may encourage emigration. This can lead to a conclusion of existing interdependence between negative demographic trends and the labour market.

In order to enhance the employers' perception and needs on business and economic bachelor graduates' competencies suggestion for further research is that it should survey specific employers (finance, accounting, human resource, etc.) and the competencies of graduates that are finishing majors (programs) intend for that specific sector.

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Appendices

Appendix 1

Employers' perception and importance of economic bachelor graduates - generic competencies

		Description	Importance		Satisfaction		GAP
			Mean	s.e.	Mean	s.e.	
Instrumental	Cognitive	Ability of abstract thinking, analysis, and synthesis					
		Ability to apply knowledge in practical situations					
		Ability to generate new ideas (creativity)					
		Ability of critical and self-critical thinking					
		Ability to search for, process and analyze information from a variety of sources					
		Ability to make reasoned decisions					
		Knowledge and understanding of the subject area and understanding of the profession					
		AVERAGE	**4.26**	**.054**	**3.87**	**.087**	**-0.39**
	Methodological	Ability to identify, pose and resolve problems					
		Ability to plan and manage time					
		Ability of learning and continuous training					
		AVERAGE	**4.32**	**.050**	**3.91**	**.097**	**-0.41**
	Technological	Skills in the use of ICT					
	Language	The ability of written and oral communication in the first language					
		Ability to communicate in a second language					
		Ability to communicate with unskilled persons in a subject area					
		AVERAGE	**4.13**	**.054**	**4.06**	**.082**	**-0.07**
Interpersonal	Individual	Ability to adapt and work in new situations					
		Ability to work in an international environment					
		Acceptance and respect of diversity and multiculturalism					
		Determination and perseverance in the tasks given and responsibilities taken					
		Ability of social and civic responsibility					
		AVERAGE	**4.17**	**.048**	**4.03**	**.079**	**-0.14**
	Social	Ability to work in a team					
Systemic	Organizational	Ability to design and manage projects					
	Entrepreneurial spirit	Ability to work autonomously					
		Ability to take initiative (entrepreneurial spirit)					
		AVERAGE	**4.14**	**.071**	**3.79**	**.107**	**-0.35**
	Leadership	Ability to motivate people and move toward common goals					

Source: Authors' work

Appendix 2
Generic competencies

Description	Importance		Satisfaction		GAP
	Mean	s.e.	Mean	s.e.	
Instrumental	4.31	0.037	4.02	0.071	-0.29
Interpersonal	4.38	0.048	4.15	0.075	-0.23
Systemic	3.96	0.078	3.72	0.095	-0.24
Generic competencies	4.22	0.045	3.97	0.072	-0.25

Source: Authors' work

Appendix 3
Hypothesis test - Difference between satisfaction and impotence for latent variables

Description of variable	Difference	s.e.	t	df	Sig.	Star
Cognitive	-0.3920	0.09197	-4.263	135	0.000	**
Methodological	-0.3990	0.10412	-3.832	133	0.000	**
Language	-0.0662	0.11701	-0.566	135	0.573	
Individual	-0.1377	0.08814	-1.562	135	0.121	
Entrepreneurial spirit	-0.3192	0.14570	-2.191	134	0.030	*
Instrumental	-0.2911	0.08350	-3.486	135	0.001	**
Interpersonal	-0.2114	0.09109	-2.321	135	0.022	*
Systemic	-0.2038	0.13936	-1.462	134	0.146	
Generic	-0.2403	0.09238	-2.601	136	0.010	*
Specific	0.1581	0.13069	1.210	136	0.228	

Source: Authors' work
Note: *p<0,05; **p<0,01