

Influence of Economic Factors on Selection of Field of Study

Abstract: At present, the supply of free places at universities in the Czech Republic outstrips the demand of students in many fields of study. As a result, universities are trying to understand the circumstances that influence a student's decision-making. The aim of this study is to identify these factors. Using a Friedman ANOVA and Wilcoxon test it was discovered that the most important role is played by the institutional factors, i.e. ones that the university can itself influence. In statistical terms, they are significantly more important than economic or social factors. Out of the institutional factors, the entry requirements, structure of mandatory subjects and quality of teachers have a significant influence. A regressive analysis showed that whereas students find out the first two mentioned items in advance, there is generally no verification of the quality of teachers. At present, the supply of free places at universities in the Czech Republic outstrips the demand of students in many fields of study. As a result, universities are trying to understand the circumstances that influence a student's decision-making. The aim of this study is to identify these factors. Using a Friedman ANOVA and Wilcoxon test it was discovered that the most important role is played by the institutional factors, i.e. ones that the university can itself influence. In statistical terms, they are significantly more important than economic or social factors. Out of the institutional factors, the entry requirements, structure of mandatory subjects and quality of teachers have a significant influence.

Alice Reissova

UJEP Ústí nad Labem, Czech Republic

Jana Šimsová

UJEP Ústí nad Labem, Czech Republic

Michala Pátková

UJEP Ústí nad Labem, Czech Republic

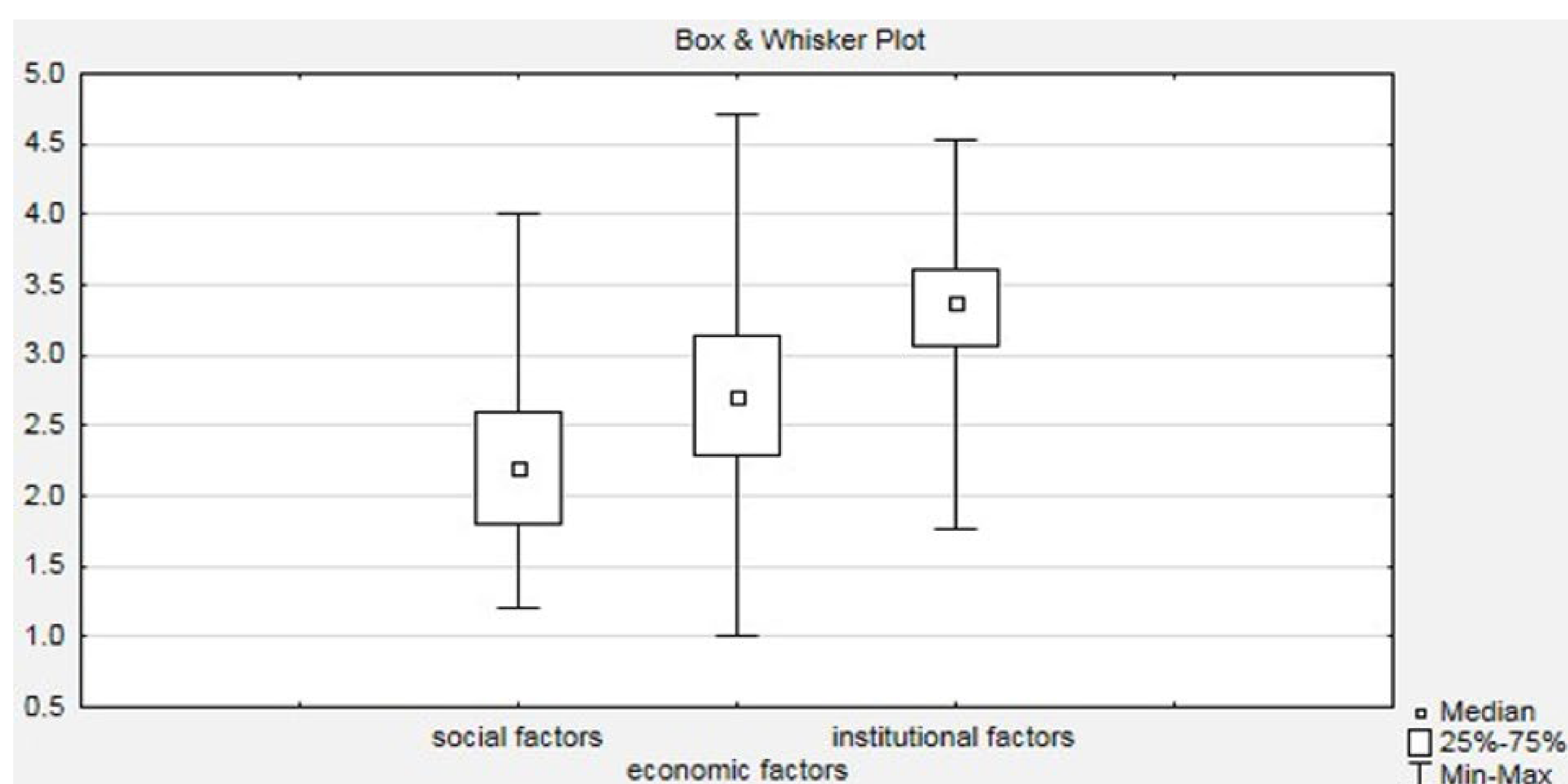
Introduction

In view of the fact that in the Czech Republic the financing of universities is still partially dependent on the number of students who study at the relevant university, and the fact that the supply of free places exceeds demand, there is an evident attempt on the part of individual universities to appeal to and gain the greatest number of students. Many studies examine the influence of the individual tools that universities use as part of their marketing on students' decision-making (Chase, Geringer and Stratemeyer, 2019; Songan et. al, 2010; and others).

Maniu and Maniu (2014) state that it is not easy to understand the process by which a student chooses a university because it is a complex decision influenced by many factors. The authors include the reputation of the institution, economic demands, influence of parents, possibility of finding work and many other things amongst the important factors. The aim of this study is to find out whether the economic factors are dominant in the choice of university for the Czech students living in a socially disadvantaged region with high unemployment, low average pay, the highest proportion of inhabitants with bankruptcy orders, and high proportion of inhabitants with low education.

Results

From picture 1 it is evident that institutional factors have the most significant influence, followed by economic factors and then social factors in third place.



Picture 1: Importance of individual groups of factors - all students (source: own calculation)

Materials and methods

In order to achieve the goal, i.e. to discover which factors play a role in decisions about the choice of university, three groups of factors were created: economic, social and institutional. An overview of the individual groups of factors is given in Table 1.

Social (personal) factors	Institutional factors
I have sufficient abilities for this university and skills to complete it successfully	Entry requirements (entrance exams, Scio tests)
The university is close to my home	What are the mandatory subjects (math, statistics, languages)
My friends are applying to the same university	Quality of teachers
I am continuing in a family tradition (for example, all the men in the family are firemen)	Difficulty of subjects
Someone from my family studied at this university	Opinion on teaching evaluation of current students
Economic factors	Reputation of university
Price per semester	Life at university (atmosphere, people, lifestyle)
Price for halls of residence	Possibility of fellowship/internship
Level of possible scholarships	Possibility to work during studies
Price for commute	Possibility to travel (Erasmus)
Price for extended study	Extra-curricular activities organised by university
Price for textbooks and study aids	(non-traditional lectures, breakfast with teachers, trade fairs)
Price for lunches	Facilities of university
	Possibility of scholarships
	Appearance of halls of residence
	Successes of scientific works of former students
	Possibility of combined study program
	Appearance of university complex

Table 1: Monitored groups of factors and their operationalization (source: own)

For each item students responded on a Likert scale of 1 to 5, according to how they consider it to be important for the choice of university (1 = not at all important to 5 = is definitely important).

Based on previously performed research, the following hypotheses were formulated:

H1: Out of the monitored groups of factors the most important for choice of university are economic ones (Maniu and Maniu, 2014; Hemsley-Brown and Oplatka, 2015).

H2: The students who are considering the study of economic fields will differ in the preferences of individual factors from the students who want to study other fields of study (Navratilova, 2013).

The selection data set consisted of students of the last years of grammar schools and specialist schools with economic focus in the Most area (N = 155), i.e. in one of the disadvantaged localities of the Czech Republic.

The data were collected in the autumn of 2019 and developed using MS Excel and Software Statistica. The tests used:

Friedman's ANOVA ($H_0: \mu_1 = \mu_2 = \dots = \mu_k; H_1: \text{non } H_0$) and Kendall Coeff. of Concordance, Wilcoxon test ($H_0: \mu_1 = \mu_2; H_1: \mu_1 \neq \mu_2$)

Variable	Average	Sum of Ranks	Mean	Std.Dev.
Social factors	1.253472	180.5	2.240278	0.482754
Economic factors	1.972222	284	2.734127	0.678233
Institutional fac.	2.774306	399.5	3.360703	0.472397

Friedman ANOVA and Kendall Coeff. of Concordance (ANOVA Chi Sqr. (N = 144, df = 2) = 167.2787 p = 0.00000 Coeff. of Concordance = .58083 Aver. rank r = .57790

H₁, which assumes that out of the monitored groups of factors the economic factors are the most important for choice of university, was rejected.

Variable	Average	Sum of Ranks	Mean	Std.Dev.
Social factors	1.196429	67	2.325	0.490732
Economic factors	2.089286	117	2.854592	0.692655
Institutional factors	2.714286	152	3.358193	0.472892

Friedman ANOVA and Kendall Coeff. of Concordance ANOVA Chi Sqr. (N = 56, df = 2) = 65.17857 p = .00000 Coeff. of Concordance = .58195 Aver. rank r = .57435

H₂, which assumed that students of economic fields will differ in terms of the evaluation of importance of individual factors, was also rejected.

Conclusion

In order for universities to gain new students successfully, they need to understand the students' decision-making process, which is not that simple and may be influenced by many variables. Within this study three groups of factors were created: economic, social and institutional. There are statistically significant differences between these factors. It was discovered that not even in a socially and economically disadvantaged locality are economic factors of the greatest importance. One piece of good news for universities may be the finding that factors described as institutional have the greatest importance, and these are factors which each institution can itself influence.

References

- Chase, C., Geringer, S. and Stratemeyer, A. (2019) 'The Effect of University Marketing Efforts on Students' Academic Decision-Making: An Empirical Study', *Journal of Higher Education Theory and Practice*, vol. 19, no. 6, pp. 40-48.
- Songan, P., Hong Kian Sam, Tonga, G., Rahman, M.A. and Wah T.K. (2010) 'Factors Influencing Student Choice: A Study of a Malaysian Public University', *Asian Journal of University Education*, vol. 6, no. 1, pp. 75-89 <https://doaj.org/article/821e783c88fe442a8a5cab4f8f7889e4>
- Maniu, I. and Maniu, G.C. (2014) 'Educational Marketing: Factors Influencing the Selection of a University', *SEA: Practical Application of Science*, vol. 2, no. 3, pp. 37-41.
- Hemsley-Brown, J. and Oplatka, I. (2015) 'University choice: What do we know, what don't we know and what do we still need to find out?', *International Journal of Educational Management*, vol. 29, no. 3, pp. 254-274. <https://doi.org/10.1108/IJEM-10-2013-0150>
- Navratilova, T. (2013) 'Analysis and Comparison of Factors Influencing University Choice', *Journal of Competitiveness*, vol. 5, no.3, pp. 90-100. <https://doi.org/10.7441/joc.2013.03.07>