

---

## Factors influencing the accounting and finance undergraduate department choice in Greece

---

Mihail Diakomihalis\*

Department of Accounting and Finance,  
Epirus University of Applied Sciences,  
Greece  
Email: diakom@teiep.gr  
\*Corresponding author

Alina Hyz

Department of Accounting and Finance,  
Piraeus University of Applied Sciences,  
Greece  
Email: alinahyz@teipir.gr

Grigorios Gikas

Department of Accounting and Finance,  
Epirus University of Applied Sciences,  
Greece  
Email: gikas@teiep.gr

**Abstract:** The paper examines and tries to establish the ranking of the criteria that determine the selection of a higher educational institute' department by the prospect students in Greece. The methodology applied in order to satisfy the research aim is the analytic hierarchy process (AHP). The case study concerns two groups of students. One group consists of students of the central Greek technological educational institute situated in Athens and another from peripheral tertiary institution situated in the region of Epirus. The results confirm that the ranking of students' selection criteria is different in two investigating groups. Most students from the central educational institutions seem to be attracted by 'financial factors' with 'family income' being the decisive sub-criterion, while the selection of a peripheral department is more affected by 'personal factors' among which 'life quality' and 'leisure time options' are the most important.

**Keywords:** analytic hierarchy process; AHP; decision making process; university/college choices; higher education; accounting; finance; Greece.

**Reference** to this paper should be made as follows: Diakomihalis, M., Hyz, A. and Gikas, G. (2015) 'Factors influencing the accounting and finance undergraduate department choice in Greece', *Int. J. Education Economics and Development*, Vol. 6, No. 3, pp.220–235.

**Biographical notes:** Mihail Diakomihalis received his BSc from City University of N.Y., MSc from State University of N.Y., MSc and PhD from the University of the Aegean. He has more than 17 years of teaching and research

experience and is presently working as an Associate Professor in the Accounting and Finance Department at the Technological Educational Institute of Epirus. He is also a co-operating faculty in the Program of Business Administration, of the Hellenic Open University, since 2003. His research interests include accounting, auditing and finance, economic impact of tourism, education, environment (TSA, ESA, IEESA), transportation systems and regional development. He has in total over 80 publications in refereed journals, international conference papers (full-text review) and articles in economic newspapers and journals and, more than 100 citations to his published research work.

Alina Hyz is a Professor of Business Administration in the Department of Accounting and Finance at the Technological Educational Institute (T.E.I.) of Piraeus, Greece. She studied economics and she holds a PhD in Business Administration from the University of Lodz. Her research interests are focused on business analysis, strategy development, budgeting and finance. She is an author of many research monographs and scientific articles in Greece and abroad. She has professional and teaching experience as Assistant Professor at the University of Lodz (1988–1997), postdoctoral research fellowship from the Greek Ministry of Education at the University of Macedonia, Department of International and European Economic Studies, and Robert Schuman scholar at the European Parliament, Directorate General for Research, Luxembourg. She has been a member of the Research Committee and Editorial Director of scientific journal *Review of Economic Sciences*, and head of the Accounting Department of the T.E.I. of Epirus (2005–2007, 2013).

Grigorios Gikas is currently a Professor of Financial System in the Department of Accounting and Finance at the Technological Educational Institute (T.E.I.) of Epirus, Greece and Adjunct Professor, Hellenic Open University, Postgraduate program in Banking. He has been President of the Technological Educational Institute of Epirus, Greece from 2005 till 2013, Dean of the Faculty of Management and Economics (2003–2005), and Head of the Department of Accounting of the Epirus T.E.I. (2001–2003). He taught at the Universities of Lodz, Warsaw, Gdansk, Ioannina, and the T.E.I. of Mesolloggi and the T.E.I. of Patras. He has over 50 publications in refereed journals, international conference papers (full-text review) and articles in economic newspapers and journals.

This paper is a revised and expanded version of a paper entitled ‘The factors affecting the choice of undergraduate studies in accounting and finance: A case study of Greece’ presented at the 1st International Conference on Business and Economics (ICBE), Hellenic Open University, Titania Hotel, Athens, 6–7 February 2015.

---

## **1 Introduction**

Until 1964, due to the centralised model of development, Greece had universities only in Athens and Thessaloniki. After 1981, and more intensely after 1999, the reverse tendency began: a multitude of universities and technological educational institutes (TEIs) were established across the country.

The establishment of a tertiary institution in a less developed region can provide many important benefits to this area, such as: exploitation of inactive scientific resources, reduction of emigration, retainment or/and attraction of high prestige scientists, boosting of domestic demand, redistribution of income through the social demand for education, modernisation of businesses, technological development of the greater area, increase of productivity, cultivation of a new economic behaviour of citizens, development of the periphery and so on. There are some researches in Greece which try to examine the effects of higher education institutions on the GDP and/or on other macroeconomic values of the region (Diakomihalis, 2014, 2012; Gikas and Tangas, 2005; Gikas and Hyz, 2007, 2010; Hyz and Gikas, 2007; Hyz, 2001, 2011). There is still though, lack of studies of the factors that influence students' choice among higher educational institutions in different regions of Greece. Their choices of the place of study influence the distribution of students among different cities and regions. Finding out how the candidates select the place of study is the key to attracting a balanced distribution of students among all cities. Candidates consider many factors when selecting a higher education institution, including such factors as career planning, economic aspects and non-economic aspects, etc. (Yang and Tsai, 1999).

The purpose of this study is to investigate and analyse the factors that candidates consider when choosing the higher education institution for their studies. In our research we choose one educational institution from the metropolitan – capital city of Greece and one from the periphery. Methodology is based on analytic hierarchy process (AHP) and we use post-choice decision survey.

The paper is organised as follows: in the next section we briefly review the existing body of literature and summarise major findings. This is followed by the presentation of research methodology. The results are presented in Section 4 and discussed in Section 5. We conclude with further opportunities for research. The results of this study may serve to guide policymakers to achieve a balanced distribution of students in the country. The results may be beneficial also to higher educational institutes in the development of appropriate promotions to differentiate themselves in a meaningful way to potential students.

## **2 Review of literature on the determinants of college choice decision**

There is a vast literature describing the factors that candidates consider when choosing the higher education institution for their studies.

Many studies use economic and sociologic theoretical frameworks to examine factors of college choice (Hearn, 1984; Thierney, 1983; Somers et al., 2006). There are many researches which emphasised on institutional characteristics (Hanson and Litten, 1982) such as cost, size, distance, quality of programs, and availability of financial aid. Somers et al. (2006) use in their research eight factors: financial variables (St. John, 1990, 1991), net cost (St. John and Starkey, 1995), institutional characteristics (Hanson and Litten, 1982), student background (Jackson, 1982), educational achievement (Hanson and Litten, 1982; Jackson, 1982), institutional climate (Chapman, 1984), social environment (Hossler and Gallagher, 1987), aspirations (Chapman, 1984; Jackson, 1982). This model is used also by Lee and Chatfield. Lee and Chatfield (2015) examined a case study

to understand college students' choices in tourism sector. The study identified 11 factors of college choice and the results extended previous research to find more factors such as degree of benefit, career preparation and media impact. Furthermore, this research compared the differences in the factors among three different groups: in-state, out-of-state students and international students. The results indicated out-of-state students consider cost, facilities, and fairly support as significantly important factors when choosing college compared to the other groups. Kallio (1995) examined the importance of 31 college characteristics yielded dimensions upon which student decisions are based. He found that the decisions are influenced by the following factors: residency status, quality and other academic environment characteristics, work-related concerns, spouse considerations, financial aid and the campus social environment. Plank and Chiagouris (1998) reported that the choice of which college to enrol in depends on five components: academic programs offered, leadership opportunities in college, perceived good job after graduation, financial aid, and value for money (cost/benefit analysis). Webb et al. (1998) did a survey using a 52 item questionnaire, which resulted in the clustering of ten criteria for students selecting a college, namely: academic program available, academic reputation of institutions, the marketability of the degree conferred, faculty contact time, accreditations, campus employment, financial aids, placement reputation, completion time and library size. In a study on service quality in higher education, Joseph and Ford (1999) showed that six factors are important to students: program issues, academic reputation (prestige of the degree conferred), physical aspects (quality of facilities for academic, accommodation, sports and recreation), carrier opportunities, geographical location (of institution) and time (duration of study). Sidin et al. (2003) concluded in their research that student selection of colleges depends on several criteria, including academic quality, facilities, campus surroundings and personal characteristics. It also validates the contention that income affects the choice of students along the public-private education divide. According to Niu and Tienda (2008), geography also imposes constrains on college choices. For most students, attending public, in-state institutions, implies that college options are circumscribed by state of residence. The Lipman Hearne (2009) study investigated the importance of total costs versus location, program reputation and overall reputation. The study found economic downturns do affect some students' choice of institution. He reported that parents are deeply involved and influential to their high achieving children's college choices. The report also found open hours, dialogue with college friends, alumni, and admitted-student programs are extremely influential to students. The study also found that 26% of sampled students paid a specialist or advisor during the college decision process.

Njagi et al. (2014) also showed that parental involvement had positive significant relationship with both students attitude towards school and academic performance, authoritarian style had significant negative correlation with academic performance. Miningou et al. (2014) consider students' financial difficulties as one of the most important barriers in postsecondary education. Although the growing body of literature on the college choice decisions exists, to our best knowledge this is the first study which tries to investigate the factors that determine the selection of department between two educational institutions of different geographical regions in Greece. This problem is extremely important in countries with unbalanced regional development.

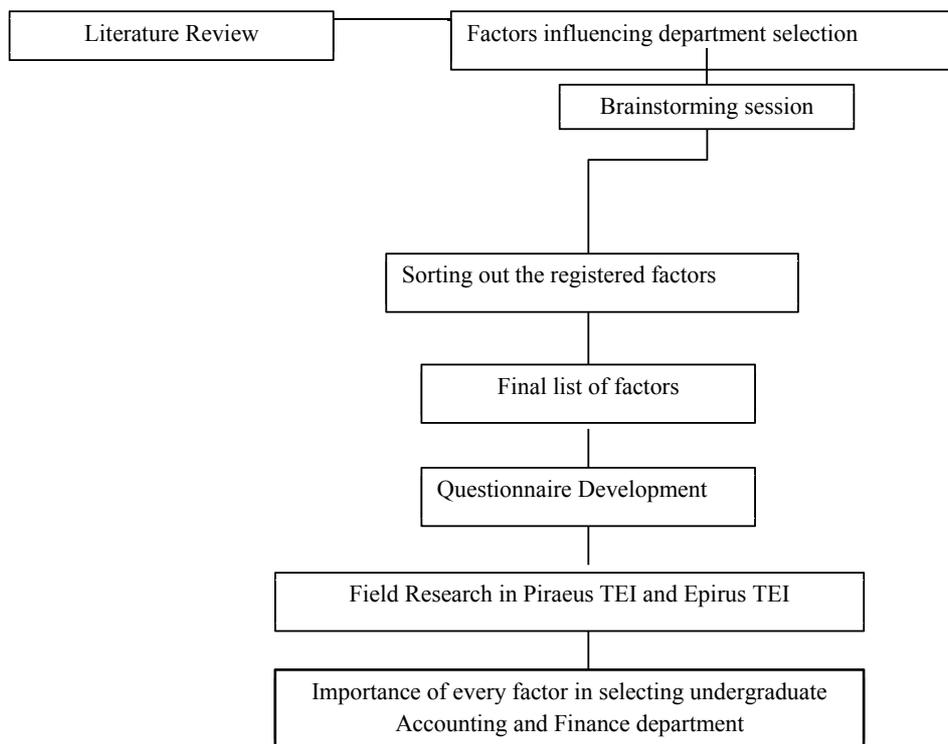
### 3 Methodology

In this study we try to:

- a identify the criteria determining the choice of TEIs accounting and finance department for undergraduate studies
- b conclude on the hierarchy that each of these criteria has.

The methodology that was used is illustrated in Figure 1.

**Figure 1** Methodological framework



More precisely, the first step was to identify the key parameters that affect the factors that influence the decision of students concerning their choice for the higher educational institute of their undergraduate studies and particularly the key parameters that affect their preference between the accounting and finance department of the peripheral institute (Epirus TEI) and the same department of the metropolitan – capital city (Piraeus TEI). In order to map the total number of factors that could influence this kind of decision we used two sources: literature review as presented in Section 2 and brainstorming session among students. The next step of the research was the development of a questionnaire based on the findings of the previous step. The structure of the questionnaire comprises 60 pairwise comparisons on a nine-point Likert type scale. The final stage was the data elaboration and the calculation of the importance of each factor by using the AHP.

The AHP uses hierarchical decision models that have a mathematical basis. AHP is a multi-criteria method developed by Saaty (1977, 1980b, 1999) for decision making and priorities ranking. This method combines subjective and objective estimations or perceptions in an integrated framework, which is based on scale ratios from pair comparisons (Saaty, 1980a). The judgments from the pair comparisons are made by experts or decision makers and in combination with the use of the AHP algorithm produce the final outcome. The criteria with which the comparisons are made and the final hierarchy deriving from them, are not necessarily determined. It is possible and acceptable to be based on non-measurable factors such as experience and subjective judgment. After the completion of the process, the most important factors have the highest gravity coefficients (Saaty, 1999). AHP method has the ability to structure complex, multi-person, multi-attribute, and multi-period problem hierarchically. Pairwise comparisons of the element (usually, alternatives and attributes) can be established using a scale indicating the strength with which one element dominates another with respect to a higher-level element. This scaling process can then be translated into priority weights – scores [Yusuff et al., (2001), p.421].

The AHP is the most widely used multi criteria decision making (MCDM) method.

Even though the majority of opinion is that AHP is both technically valid and practically useful, the method is criticised by some researchers for its credibility. This criticism has been addressed by the founder of the method in Saaty and Vargas (1984) and Saaty (1997) as well as McCaffrey (2005). Most of the criticisms concern the *rank reversal* phenomenon. In 1993, Forman introduced the so called by himself, ‘ideal synthesis mode’ for the AHP, to address choice situations in which the addition or removal of an ‘irrelevant’ alternative should not and will not cause a change in the ranks of existing alternatives (Forman, 1993). The value of the AHP is recognised in developed and developing countries around the world. It has unique advantages when important elements of the decision are difficult to quantify or compare. The AHP converts these evaluations to numerical values that can be processed and compared over the entire range of the problem. A numerical weight or priority is derived for each element of the hierarchy, allowing diverse and often incommensurable elements to be compared to one another in a rational and consistent way. This capability distinguishes the AHP from other decision making techniques.

The AHP is preferred to other methodologies, since it is concerned the appropriate as it is included in most operations research and management science textbooks, and is taught in numerous universities. It is also used extensively in organisations that have carefully investigated its theoretical underpinnings (Forman and Saul, 2001).

### *3.1 Identification of critical decision factors and questionnaire development*

The first step includes the identification of factors that influence the decisions of potential students filling out their computerised file concerning their preference which leads to the selection of the department for their undergraduate studies. The list of the key factors consists of a set of four major criteria categories, each of which can be further broke down into sub-criteria.

These categories are the following:

- *Academic factors*: includes all the academic characteristics of the department such as its prestige, the development of research, the required grade for admission, the studies program, the library and the laboratory facilities, the ability for postgraduate studies and finally the number and the quality of the faculty staff.
- *Financial factors*: refers to the food and residential services offered by the institution, the ability to earn income from part time employment, the distance from hometown, family income, the cost of living and any other benefits offered by the institution or the city.
- *Personal factors*: includes the influence of the students' family, the size of the city and the options for leisure time, sport facilities and the quality of students' life.
- *Department information*: refers to information concerning the department obtained by the department's site, the print and electronic media, as well as from informal sources such as friends, relatives, other students, professors.

The hierarchic structure of the levels of criteria as well as the number of criteria on each level, are quite significant in the implementation of AHP. For this reason, the structure of the present research is relatively simple, with data present of two levels (the 'criteria' and the 'sub-criteria'). The groups of criteria selected with the sub-criteria of each group of criteria are presented below per couple in the form of the final questionnaire.

A questionnaire consisting of a total number of 60 questions (comparisons per couples) was developed. The questionnaire simply asks for a pairwise comparison of the 'sub-criteria' for the four major criteria categories which is the major input of the AHP analysis.

It should be mentioned that the structure of the questionnaire was such that, the respondents were asked to compare each sub-criterion included in the criterion, with the remaining sub-criteria of the criterion. Therefore, there is no comparison of all the sub-criteria separately with the remaining belonging to other criteria. This was done for purposes of abridging the number of the questions. Despite all these, with the Expert Choice™ software that was used, the gravity coefficients were calculated without the aid of such a comparison.

### 3.2 *Field research and data analysis*

The questionnaire was addressed to freshman students of the accounting and finance departments of both TEIs. The sample consisted of 97 questionnaires from the students of the Piraeus TEI and another 48 questionnaires were completed by students of the Epirus TEI. The study was conducted between October and December of 2014.

As discussed above, the AHP method was used to analyse the data and determine the rank of each alternative criterion on a numerical scale. AHP aims to identify the experts' opinions by using questionnaires in which the criteria and sub-criteria of each criterion are prioritised in couples. These can determine the impact of the criteria influencing the selection of college department.

#### **4 Results**

This section presents the results derived by using the Expert Choice™ software. The degree of participation of each criterion and sub-criterion, which depicts its gravity for the achievement of the objective, reveals the existing differences and ranks the decision factors.

Tables 1 and 2 present the local (L) and global (G) priorities based on our goal. Global priorities (G) are obtained for nodes by applying each node's local priority (L) and its parent's global priority (G). The global priorities for each alternative are then summed to yield overall or synthesised priorities. The preferred alternative is the one with the highest priority.

**Table 1** Tree view of criteria and sub-criteria of students from Piraeus TEI

<i>Goal: Factors affecting the choice of a university department for undergraduate studies (TEI of Piraeus)</i>		
	<i>Local</i>	<i>Global</i>
Academic factors	<i>0.216</i>	<i>0.216</i>
Academic reputation	0.094	0.021
Research development	0.100	0.022
Admission grade	0.126	0.027
Quality of program	0.209	0.045
Library – laboratories	0.107	0.023
Ability for postgraduate studies	0.214	0.047
Academic staff	0.151	0.031
Financial factors	<i>0.332</i>	<i>0.332</i>
Food services	0.074	0.025
Residential accommodation	0.101	0.033
Ability for part time employment	0.157	0.053
Distance from hometown	0.135	0.045
Family income	0.226	0.075
Cost of living	0.166	0.055
Other financial benefits (i.e. free transportation)	0.141	0.047
Personal factors	<i>0.282</i>	<i>0.282</i>
Influence of family	0.263	0.075
City size – leisure time options	0.221	0.062
Sport facilities	0.166	0.046
Students life quality	0.351	0.098
Department information	<i>0.170</i>	<i>0.170</i>
Department's site	0.316	0.053
Informal sources of information (friends, relatives, etc.)	0.211	0.036
Information from media (newspapers, magazines, TV, etc.)	0.183	0.031
Information from other students/professors	0.290	0.049

**Table 2** Tree view of criteria and sub-criteria of students from Epirus TEI

<i>Goal: Factors affecting the choice of a university department for undergraduate studies (Epirus TEI)</i>		
	<i>Local</i>	<i>Global</i>
Academic factors	0.237	0.237
Academic reputation	0.095	0.022
Research development	0.079	0.019
Admission grade	0.183	0.043
Quality of program	0.191	0.045
Library – laboratories	0.107	0.025
Ability for postgraduate studies	0.218	0.051
Academic staff	0.129	0.031
Financial factors	0.280	0.280
Food services	0.093	0.026
Residential accommodation	0.112	0.031
Ability for part time employment	0.110	0.031
Distance from hometown	0.157	0.044
Family income	0.224	0.062
Cost of living	0.192	0.053
Other financial benefits (i.e. free transportation)	0.115	0.032
Personal factors	0.317	0.317
Influence of family	0.243	0.077
City size – leisure time options	0.260	0.082
Sport facilities	0.210	0.067
Students life quality	0.287	0.091
Department information	0.167	0.167
Department's site	0.291	0.049
Informal sources of information (friends, relatives, etc.)	0.218	0.035
Information from media (newspapers, magazines, TV, etc.)	0.193	0.033
Information from other students/professors	0.299	0.051

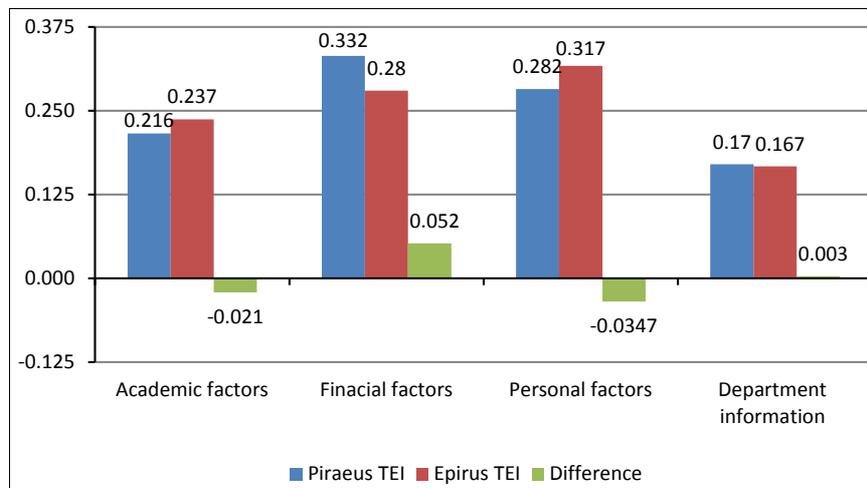
The ranking of factors and their significance presented in Table 3 is also illustrated in Figure 2. For the Piraeus TEI students, 'financial factors' is the major drive for selecting an undergraduate department, but it ranks in second place for the Epirus TEI students, for whom 'personal factors' are evaluated as the top criterion for selecting the specific department for their studies. This criterion ranks second for the Piraeus TEI students. In summation, the criteria, 'academic factors' and 'department information' receive the same ranking, from both the Piraeus and Epirus TEI students, with some difference in their significance (see Table 3).

**Table 3** The criteria of students from Piraeus TEI and their ranking by significance

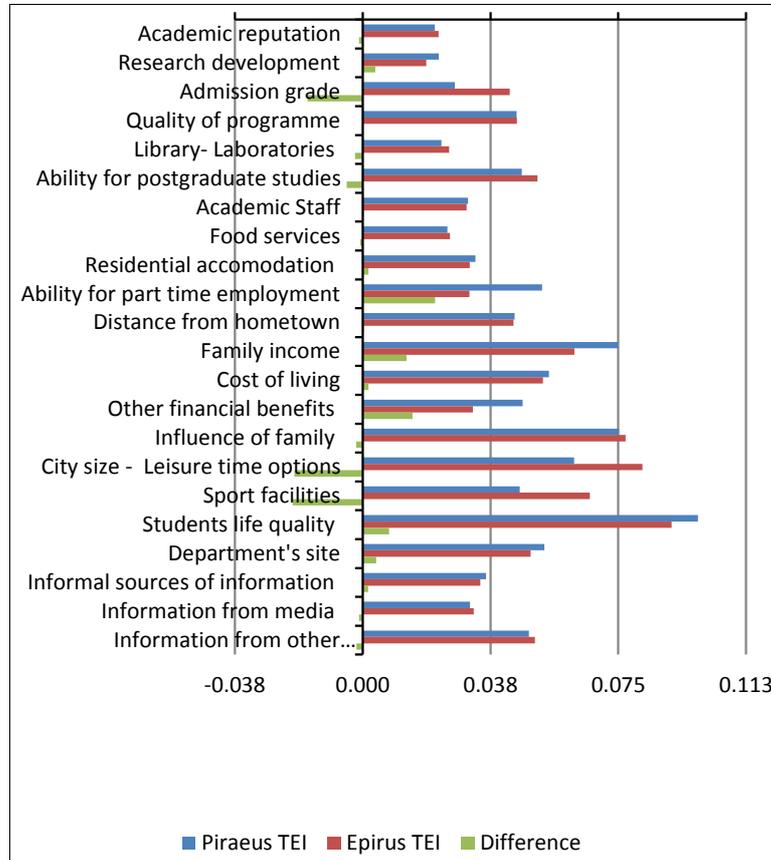
Criteria	Piraeus TEI		Epirus TEI		Difference
	Rank	Significance	Rank	Significance	
Academic factors	3	0.216	3	0.237	-0.021
Financial factors	1	0.332	2	0.280	0.052
Personal factors	2	0.282	1	0.317	-0.035
Department information	4	0.170	4	0.167	0.003

Regarding the differences in significance among the criteria, the results (gravities) from the AHP analysis of the research with the questionnaires clearly demonstrate the greatest significance for the ‘financial factors’ with 0.332 for the Piraeus TEI over the significance of 0.280 for the Epirus TEI. Contrary to that, the ‘personal factors’ criterion depicts the greatest significance for the Epirus TEI compared to that of the Piraeus TEI, 0.317 to 0.282. The other two criteria rank in the same position for both TEIs, with relatively the same significance (illustrated in Figure 2). ‘Academic factors’ is in third place with 0.216 and 0.237 significance for Piraeus and Epirus TEI respectively, while ‘department information’ ranks in fourth place with 0.170 significance for Piraeus TEI and 0.167 for Epirus TEI.

**Figure 2** Criteria differences between students from Piraeus TEI and from Epirus TEI (see online version for colours)



The synthesis with respect to our goal for both the Piraeus TEI and from Epirus TEI was also calculated by the Expert Choice™ software and is shown in Figure 3. Note that synthesis is the process of weighting and combining priorities throughout the model to yield the final result after judgments have been made.

**Figure 3** Sub-criteria differences between students from Piraeus TEI and from Epirus TEI (see online version for colours)

The significance differences of the sub-criteria between the Piraeus TEI and the Epirus TEI students are illustrated in Figure 3. For comparison purposes, we selected all the sub-criteria to present the difference in significance between the students of the two institutions.

The five most significant sub-criteria for the Piraeus TEI students ranked by gravity are 'students life quality' (0.098), 'influence of family' (0.075), 'family income' (0.075), 'city size – leisure time options' (0.062) and 'cost of living' (0.055). Respectively for the Epirus TEI students are 'students life quality' (0.091), 'city size – leisure time options' (0.082), 'influence of family' (0.077), 'sport facilities' (0.067) and 'family income' (0.062).

According to significance comparison (see Table 4 and Figure 3), the differences in significance between the sub-criteria are relatively small, with the highest difference located in the 'ability for part time employment', with 0.021% higher significance for Piraeus TEI, and 'sport facilities' with the same difference (0.021), this time for the Epirus TEI. The second highest difference occurred in the 'city size – leisure time options' by 0.020 higher significance for Epirus TEI compared to Piraeus TEI, followed by 'admission grade' with 0.016 higher significance for Epirus TEI compared to Piraeus

TEI, the ‘other financial benefits’ sub-criteria, by 0.015 higher significance for Piraeus TEI compared to Epirus TEI, and ‘family income’ with 0.013 higher significance for Piraeus TEI compared to Epirus TEI. The differences are justified by the ranking gap of the sub-criteria between the two groups of students. All other differences between sub-criteria are less than 0.010 of significance.

**Table 4** The total of sub-criteria of students from Piraeus TEI and from Epirus TEI and their ranking by significance

<i>Sub-criteria</i>	<i>Piraeus TEI</i>		<i>Epirus TEI</i>		<i>Difference</i>
	<i>Significance</i>	<i>Rank</i>	<i>Significance</i>	<i>Rank</i>	
Academic reputation	0.021	22	0.022	21	-0.001
Research development	0.022	21	0.019	22	0.004
Admission grade	0.027	18	0.043	12	-0.016
Quality of program	0.045	13	0.045	10	0.000
Library – laboratories	0.023	20	0.025	20	-0.002
Ability for postgraduate studies	0.047	9	0.051	8	-0.005
Academic staff	0.031	16	0.031	16	0.000
Food services	0.025	19	0.026	19	-0.001
Residential accommodation	0.033	15	0.031	17	0.002
Ability for part time employment	0.053	6	0.031	18	0.021
Distance from hometown	0.045	12	0.044	11	0.000
Family income	0.075	3	0.062	5	0.013
Cost of living	0.055	5	0.053	6	0.002
Other financial benefits	0.047	10	0.032	15	0.015
Influence of family	0.075	2	0.077	3	-0.002
City size – leisure time options	0.062	4	0.082	2	-0.020
Sport facilities	0.046	11	0.067	4	-0.021
Students life quality	0.098	1	0.091	1	0.008
Department’s site	0.053	7	0.049	9	0.004
Informal sources of information	0.036	14	0.035	13	0.002
Information from media	0.031	17	0.033	14	-0.001
Information from other people	0.049	8	0.051	7	-0.002

The five smallest differences in significance are depicted in the sub-criteria with no difference at all, ‘quality of program’, ‘academic staff’ and ‘distance from hometown’. Other sub-criteria with difference of 0.001 are ‘academic reputation’, ‘food services’ and ‘information from media’. The sub-criteria ‘library-laboratories’, ‘residential accommodation’, ‘cost of living’, ‘influence of family’, ‘informal sources of information’ and ‘information from other people’ have significance difference of 0.002 between the students of the two departments.

## 5 Discussion and conclusions

This paper dealt with the issue of selecting the higher educational institute for undergraduate studies and, specifically, the factors that determine the selection of accounting and finance department between two institutions of different geographical regions. The decisions of the selection of the department of a specific institution for undergraduate studies are affected by a number of different factors. This analysis tries to identify and rank the key decision parameters for students of one institution located in the metropolitan – capital city of Greece versus the students of an institution of the periphery of the country.

To this end, the methodology presented in Section 4 was applied. At the beginning, a set of key factors was identified based on the literature review and discussions with students of both departments. Based on that, a questionnaire was developed and addressed to two sample groups, one from the Piraeus TEI, located in the metropolitan city of Athens and one from the regional Greece, specifically from the Epirus TEI located in northwest Greece.

The responses were analysed with specialised software using the AHP to determine the key decision factors regarding a higher educational institute selection.

Regarding the criteria, the analysis revealed that the criterion of ‘financial factors’ is the top drive for choosing the undergraduate Department of Accounting and Finance for the Piraeus TEI students, but ‘personal factors’ criterion is the top drive for the Epirus TEI students. The criteria ranking in second place are the same with those of the first place but in opposite order for the two departments. ‘Personal factors’ is second for Piraeus TEI and ‘financial factors’ the second for Epirus TEI. The other two criteria are relatively of the same significance, ranking in the same order among Piraeus TEI and Epirus TEI students. ‘Academic factors’ ranking in third place for both departments, is somewhat more significant for Epirus TEI students, while ‘department information’ ranking in fourth place for both institutions, is of equal significance for both groups.

From the above it might be concluded that the fact that Piraeus TEI students more significantly evaluate the criterion of ‘financial factors’ is an expected result since the TEI is located in the metropolitan city of Athens and therefore is less distant from the hometown of most students due to the demographic structure of the country. The opposite is true as for the ‘personal factors’ being the first criterion for Epirus TEI students, who may select a department in quite a long distance from their hometown. The minor significance of the criterion ‘department information’ for the students of both departments is a sign of the complete information provided through electronic and print media.

The small difference between the two groups of students concerns also the sub-criteria. The highest difference for the Piraeus TEI, which refers to the sub-criterion ‘ability for part time employment’, confirms the greater potentiality of the metropolitan city for earning extra income. Besides, ‘other financial benefits’ and ‘family income’ are more important factors for Piraeus TEI students, may be attributed to the influence of the economic crisis during the last five years on the personal and family income. The sub-criteria ‘sport facilities’, ‘city size – leisure time options’ and ‘admission grade’ are the only with significance difference higher than 0.010 for the Epirus TEI. These differences reveal the disadvantages of a small regional city to attract candidates for tertiary studies, as well as the unavoidable factor for selecting regional institutions, of the lower admission grade required.

The sub-criteria with less notable difference in significance between the two departments are 'quality of program', 'academic staff', 'distance from hometown', 'academic reputation', 'food services', 'information from media', 'library-laboratories', 'residential accommodation', 'cost of living', 'influence of family', 'informal sources of information' and 'information from other people', explaining the indifference of the students for these factors or the non-significant variation between the two departments concerning these sub-criteria.

General conclusions stemming from the comparative study of these two groups of students are the following concept correlations characterising each group of tertiary studies' candidates compared to the other:

The students of the large institution which is located in the metropolitan city of Athens seem to be attracted for their undergraduate studies because of 'financial factors', with 'family income' being the decisive sub-criterion, while the selection of a regional department is more affected by 'personal factors' among which 'life quality' and 'leisure time options' are the most important.

The research aimed to identify and evaluate the factors that influence the decisions of candidates for tertiary education and to contribute to the knowledge of the field. In this context, we make distinct comparisons among the decision criteria of students from the metropolitan city and from a more rural region. This study, as the first attempt to evaluate these criteria, has some limitations. First of them is a relatively small number of participants compared to a number of students currently enrolled in institutions of higher education. Another one is that the metropolitan city students sample was selected only from one city and respectively, the second students sample was selected only from one region, which may not be representative of tertiary student population in Greece.

Future research should address these limitations and include students from other metropolitan cities (e.g. Thessaloniki) and other regions of Greece (e.g. Ionian, Peloponnese, Thrace, Macedonia, etc.).

## References

- Chapman, R. (1984) *Toward a Theory of College Choice: A Model of College Search and Choice Behavior*, University of Alberta Press, Alberta, Canada.
- Diakomihalis, M. (2012) 'Accounting for education: the conceptual framework and empirical assessment of economic flows', *CD-ROM Proceedings of the 4th International Conference Ioannina Meeting on Applied Economics and Finance (IMAEF 2012)*, Ioannina, Greece.
- Diakomihalis, M. (2014) 'Evaluation of high educational institutes economic impact with satellite accounting: an empirical application in Greece', *Business and Economic Research Journal*, Vol. 4, No. 2, pp.1–20, DOI: <http://dx.doi.org/10.5296/ber.v4i2.5852>.
- Forman, E.H. (1993) 'Ideal and distributed synthesis modes for the analytic hierarchy process', Presented at the *International Federation of Operations Research*, Lisbon Portugal.
- Forman, E.H. and Saul, I.G. (2001) 'The analytical hierarchy process – an exposition', *Operations Research*, July, Vol. 49, No. 4, pp.469–487, doi:10.1287/opre.49.4.469.11231.
- Gikas, G. and Hyz, A. (2007) *The Development Role of Higher Education at Topic and Regional Level*, Sblias Co, Athens (in Greek).
- Gikas, G. and Hyz, A. (2010) 'Higher education and regional development', *1st National Conference with International Participation: Local Development & Higher Education Institutions: Coexistence of Sustainable Development*, University of the Aegean, School of Humanities (in Greek), 23 April 2010.

- Gikas, G. and Tangas, P. (2005) 'The role of education in development. The case of Epirus, Greece', *Polska na rynku europejskim. Gospodarka Światowa w XXI wieku*, Międzynarodowa Konferencja, Uniwersytet Łódzki, Polska, Tom II, Łódź, 24–25 października 2005, pp.423–437
- Hanson, K. and Litten, L. (1982) 'Mapping the road to academia: a review of research on women, men, and the college selection process', in Perun, N.P. (Ed.): *The Undergraduate Woman, Issues in Education*, Lexington Books, Lexington, MA.
- Hearn, J. (1984) 'The relative roles of academic ascribed and socioeconomic characteristics in college destinations', *Sociology of Education*, Vol. 57, No. 1, pp.22–30 [online] <http://dx.doi.org/10.2307/2112465> (accessed 9 January 2014).
- Hossler, D.R. and Gallagher, K.S. (1987) 'Studying student college choice. A three-phase model and the implications for policy-makers', *College and University*, Vol. 62, No. 3, pp.207–221.
- Hyz, A. (2001) 'Research and technological development as a factor in the improvement of competitiveness of regions', *Proceedings of the 1st International Conference Prospects for the Development of Less-developed Regions of Europe*.
- Hyz, A. (2011) 'Education and regional development – the case of Greece', *Studia Ekonomiczne i Regionalne. Economic and Regional Studies*, ISSN 2083-3725, Vol. 4, No. 1, pp.47–55.
- Hyz, A. and Gikas, G. (2007) 'Human capital as the main factor of evolution and trends of regional development – case of Greece', *The International Journal of Innovative Higher Education*, Vol. 20, No. 2, pp.34–42.
- Jackson, G. (1982) 'Public efficiency and private choice in higher education', *Educational Evaluation and Policy Analysis*, Vol. 4, No. 2, pp.237–247.
- Joseph, M.B. and Ford, J.B. (1999) 'Importance-performance analysis as a strategic tool for service marketers: the case of service quality perceptions of business students in New Zealand and the USA', *The Journal of Services Marketing*, Vol. 13, No. 2, pp.171–186.
- Kallio, R.E. (1995) 'Factors influencing the college choice decisions of graduate students', *Research in Higher Education*, Vol. 36, No. 1, pp.109–124.
- Lee, S.J. and Chatfield, H.K. (2015) 'The analysis of factors affecting choice of college: a case study of UNLV hotel college students', *Journal of Teaching in Travel & Tourism*, Vol. 15, No. 2, pp.125–149.
- Lipman Hearne (2009) [online] <http://www.lipmanhearne.com/how-do-top-students-pick-a-college-2> (accessed 11 January 2014).
- McCaffrey, J. (2005) 'Test run: the run analytic hierarchy process', *MSDN Magazine* [online] <http://msdn2.microsoft.com/en-us/magazine/cc163785.aspx> (accessed 20 December 2014).
- Miningou, E.W., Vierstraete, V. and Yergeau, E. (2014) 'Financial difficulties and perseverance in postsecondary education: where we stand today', *International Journal of Education and Development*, Vol. 5, No. 2, pp.194–208.
- Niu, S.X. and Tienda, M. (2008) 'Choosing college: identifying and modelling choice sets', *Social Science Research*, Vol. 37, No. 2, pp.416–433.
- Njagi, N.S., Migosi, J.A. and Mwanja, J.M. (2014) 'Parential involvement, parenting style, secondary school student attitude towards schooling and academic performance in Kenya', *International Journal of Education Economics and Development*, Vol. 5, No. 2, pp.152–171.
- Plank, R.E. and Chiagouris, L. (1998) 'Perceptions of quality of higher education: an exploratory study of high school guidance counsellors', *Journal of Marketing for Higher Education*, Vol. 7, No. 1, pp.17–32.
- Saaty, T.L. (1977) 'A scaling method for priorities in hierarchical structures', *Journal of Mathematical Psychology*, Vol. 15, No. 2, pp.234–281.
- Saaty, T.L. (1980a) *Multicriteria Decision Making: The Analytic Hierarchy Process*, McGraw-Hill, New York.
- Saaty, T.L. (1980b) *The Analytic Hierarchy Process*, McGraw-Hill Co., New York.

- Saaty, T.L. (1997) 'That is not the analytic hierarchy process: what the AHP is and what it is not', *Journal of Multicriteria Decision Analysis*, Vol. 6, No. 6, pp.324–335.
- Saaty, T.L. (1999) *The Seven Pillars of the Analytic Hierarchy Process*, ISAHP, Kobe Japan.
- Saaty, T.L. and Vargas, L.G. (1984) 'Inconsistency and rank preservation', *Journal of Mathematical Psychology*, Vol. 28, No. 2, pp.205–214.
- Sidin, S.Md., Hussin, S.R. and Soon, T.H. (2003) 'An exploratory study of factors influencing the college choice decision of undergraduate students in Malaysia', *Asia Pacific Management Review*, Vol. 8, No. 3, pp.259–280.
- Somers, P., Haines, K. and Keene, B. (2006) 'Towards a theory of choice for community college students', *College Journal of Research and Practice*, Vol. 20, No. 1, pp.53–67.
- St. John, E.P. (1990) 'Price response in enrollment decisions: an analysis of the high school and beyond senior cohort', *Research in Higher Education*, Vol. 3, No. 2, pp.161–176.
- St. John, E.P. (1991) 'The impact of student financial aid: a review of recent research', *Journal of Student Financial Aid*, Vol. 21, No. 1, pp.18–32.
- St. John, E.P. and Starkey, J.B. (1995) 'An alternative to net price: assessing the influence of prices and subsidies on within-year persistence', *Journal of Higher Education*, Vol. 66, No. 2, pp.156–186.
- Tierney, M.L. (1983) 'Student college choice sets: toward an empirical characterization', *Research in Higher Education*, Vol. 18, No. 3, pp.271–284.
- Webb, M.S., Coccari, R.L., Lado, A., Allen, L.C. and Reichert, A.K. (1998) 'Selection criteria used by graduate students in considering doctoral business programs offered by private vs. public institutions', *Journal of Marketing for Higher Education*, Vol. 8, No. 1, pp.69–90.
- Yang, M.J. and Tsai, J.H. (1999) 'Speciality choices of students at a college of medicine and relevant factors', *Medical Education*, Vol. 2, No. 2, pp.15–22.
- Yusuff, R.M., Yee, K.P. and Hashmi, M.S.J. (2001) 'A preliminary study on the potential use of the analytical hierarchical process (AHP) to predict advanced manufacturing technology (AMT) implementation', *Robotics and Computer-Integrated Manufacturing*, Vol. 17, No. 5, pp.421–427.