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## STATISTICAL STUDY OF SUPPLY OF THE GRADUATES WITH THE ECONOMIC PROFILE

Abstract Inquiring the university graduates is topical to assess the teaching quality in order to consider their opinion in the future what at the same time, can be used as a tool to reassess the gained results. The study used the methods of statistical survey, grouping and analysis (mean-value, variation, time series and other methods). The gained data were analyzed by using the computer software, such as MS Excel and SPSS 20. The study focused on the aspects important for the current employment of the university graduates and considered the specific ways of current employment of the graduates, diversity of optional subjects, access to the teaching materials, orientation on teaching practice, teaching quality and other issues. As the results of the study suggest, it is recommended to change the existing teaching system of the Faculty to make it more practice-oriented, use the research tools more intensely, give the students more prospects to participate in the research projects, etc.

**Keywords**: supply, graduate, analysis, methods. Formulas: 0; fig.: 6, tabl.: 0, bibl.: 7. **JEL classification**:A 10, A 13, B 51.

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# СТАТИСТИЧНЕ ДОСЛІДЖЕННЯ ПРОПОЗИЦІЇ ВИПУСКНИКІВ ЕКОНОМІЧНОГО ПРОФІЛЯ

Анотація. Дослідження випускників університетів є актуальним для оцінки якості викладачів з метою врахування їх думки у майбутньому, що, в свою чергу, може бути використаним як інструмент переоцінки отриманих результатів. В процесі дослідження було використано методи статистичного спостереження, групування та аналізу (середнє значення, варіація, часові ряди та інші методи). Отримані дані були аналізовані з використанням комп'ютерних програм, таких як MS Excel, SPSS 20. Дослідження було зосереджено на аспектах, важливих для працевлаштування випускників ВНЗ, різноманітність факультативних занять, доступ до навчальних матеріалів, орієнтація на практику навчання, якість викладання та інше. Результати дослідження свідчать, що рекомендується змінити існуючу педагогічну систему факультету, щоб зробити його більш практико-орієнтованим, використовувати інструменти дослідження більш інтенсивно, дати більше перспектив студентам для участі у дослідницьких проектах.

**Ключові слова:** пропозиція, випускник, аналіз, методи. Формул: 0; рис.: 7, табл.: 0, бібл.: 7. Гелашвили С. Тбилисский государственный университет им. Ивана Джавахишвили, Грузия Маршава К. Тбилисский государственный университет им. Ивана Джавахишвили, Грузия Абезадзе Н. Тбилисский государственный университет им. Ивана Джавахишвили, Грузия Миндорашвили М. Тбилисский государственный университет им. Ивана Джавахишвили, Грузия

# СТАТИСТИЧЕСКОЕ ИССЛЕДОВАНИЕ ПРЕДЛОЖЕНИЯ ВЫПУСКНИКОВ ЭКОНОМИЧЕСКОГО ПРОФИЛЯ

Аннотация. Исследование выпускников университетов является актуальным для оценки качества преподавателей с целью учета их мнения в будущем, что, в свою очередь, может быть использован как инструмент переоценки полученных результатов. В процессе исследования были использованы методы статистического наблюдения, группировки и анализа (среднее значение, вариация, временные ряды и другие методы). Полученные данные были проанализированы с использованием компьютерных программ, таких как MS Excel, SPSS 20. Исследование было сосредоточено на аспектах, важных для трудоустройства выпускников Вузов, разнообразие факультативных занятий, доступ к учебным материалам, ориентация на практику обучения, качество преподавания и прочее. Результаты исследования показывают, что рекомендуется изменить существующую педагогическую систему факультета, чтобы сделать его более практико-ориентированным, использовать инструменты исследования более интенсивно, дать больше перспектив студентам для участия в исследовательских проектах.

Ключевые слова: предложение, выпускник, анализ, методы.

Формул: 0; рис.: 7, табл.: 0, библ.: 7.

### Introduction

Target research project "Statistical research of the demand and supply of the graduates of the Faculty of Economics and Business of TSU" accomplished by the Chair of the Faculty of Economics and Business of Ivane Javakhishvili Tbilisi State University is one of the methods to assess the teaching quality at the University; however, at the same time, it is a tool of reassess the results gained based on the graduates' views employed on the labor market. The results of the study enabled to fix the correlation between the professional activity and degree of education of the University graduates and their competitiveness and consider the list of the necessary requirements for their professional development when necessary.

The subject of the ongoing research was the students of the Faculty of Economics and Business of Ivane Javakhishvili Tbilisi State University graduating in 2010-2015. They were contacted via personal e-mails, and the answers were generated by using software Google Drive.

# The goals of the study of the demand and supply of the University graduates were as follows:

- Evaluation of different aspects of the higher education gained by the graduates based on the experience they gained during their employment, and fixing the correspondence between them.
- Evaluation of the competitiveness of the graduates of the Faculty of Economics and Business of Ivane Javakhishvili Tbilisi State University on the labor market based on different aspects of demand of the public and business sectors.
- Identification of the factors necessitating the development of the education programs and corrections to be further considered in the curricula.

## The objective of the study of the University graduates was as follows:

- Gathering the information about the employed graduates of the Faculty of Economics and Business of Ivane Javakhishvili Tbilisi State University.
- Obtaining the information about the post-graduation employment; its relation with the specialty, conferred qualification, branch proximity, job-seeking tools, job stability, working conditions, prospects for the future professional growth, wage, reasons for labor turnover, job satisfaction, etc.
- Identifying the main job specifics in general (identifying the degree of realizing one's professional skills and knowledge).

Target research project "Statistical research of the demand and supply of the graduates of the Faculty of Economics and Business of TSU" was accomplished in line with the questionnaire developed and approved in advance, with its e-version loaded in Google Drive system. The final version of the questionnaire had 25 questions.

The respondents were informed about the researchers' intention to use their answers in a generalized form for the purposes of the statistical research only to perfect the training of the specialists at the Faculty of Economics and Business of TSU. Consequently, the anonymity of the study was protected, and the gathered data were processed for analytical purposes.

Most of the questions offered the respondents to choose one option according to the assessment scale (points) of the questionnaire.

The population of the graduates of the Faculty of Economics and Business of Ivane Javakhishvili Tbilisi State University in 2010-2015 was 2.347 people. 406 respondents responded positively to the request for contact. However, unfortunately, most of the graduates did not show any interest in the study and many of them could not be contacted because of the changed or invalidated personal e-mail addresses. The gained data were analyzed by using computer software MS Excel and SPSS 20.

The percentage indicators of the valid part of 406 respondents were as follows: 62,3% of women (134) and 37,7% of men (80). The question about the respondents' age was answered by 406 University graduates, with 3 respondents of the youngest age group (20 years old) and 3 respondents of the eldest age group (55 years old). As for the highest validity index (34,7%), it was fixed among 141 University graduates aged 24. 26,1% of the respondents did not name their place of birth. The place of birth of 86,5% of the valid group was urban, while that of 13,5% was rural. Most of the graduates of the Faculty of Economics and Business of TSU (85,7%) had graduated from schools in different cities and towns of Georgia, while only 14,3% had graduated from village schools.

141 of 406 inquired graduates (34,7%) stated that they had graduated from/were students of the sector of economics (macroeconomics, statistics, microeconomics, economic policy, international economics), while 265 respondents (65,3%) stated they had graduated from the business sector (accounting, marketing, international business, management, banking and finances, tourism).

The specialties of the sector of economics were distributed as follows: most of the economic graduates have graduated from (or are studying) the specialty of macroeconomics (40,4%), the specialty of 25,5% of the respondents is international economic relations, the specialty of 23,4% of the respondents is statistics, the specialty of 6,4% of the respondents is economic policy and that of 4,3% of the respondents is microeconomics (See Figure 1).



Fig.1 Classification of respondents from the same sector (economics)

The picture of the students of the business sector with different specialties is as follows: most of the respondents (31,6%) have graduated from/are students of Banking and Finances; accounting - 30,5%; management – 16,8%; marketing – 14,7%; tourism – 5,3% and international business – 1,1% (See Figure 2).



Fig.2 Classification of respondents from the same sector (Business)

We assessed the education system by considering their cumulative percentage ratios. 30,4% of the respondents assessed the educational process as Bad, Unsatisfactory or Satisfactory. It turned out that 37,9% and 28,1% of the respondents assessed the educational process as Good and Very Good, respectively. Their cumulative percentage is 66,0%.

The assessment of the diversity of the subjects gave an undesirable result for 58,6% of the erspondents. In particular, 33,2% of the respondents think that the diversity is Satisfactory, 30,7% think that it is Good and 10,7% think it is Very Good, i.e. the process is assessed positively by 41,4% of the respondents (See Figure 3).



33% of the respondents think that the grading system is either Bad or Unsatisfactory, what may be alarming. However, the absolute majority of the respondents (70,0%) think that the option to select subjects is Good (See Figure 4).



Fig.4 Grading system

The answers were particularly unfavorable in respect of teaching practice orientation. 80,8% of the respondents assess this component as Unsatisfactory (See Figure 5).



Fig.5 Practice-oriented teaching

Similarly, 75,4% of the respondents assess the research-oriented teaching level as Unsatisfactory and only 24,7% (i.e. a quarter) of the respondents are content with this component of the study.

52,4% of the respondents are discontent with teaching quality and 47,5% of the graduates feel positive about it (See Figure 6). 72,2% of the respondents have not participated in research projects and consequently, they feel negative about this aspect (See Figure 7).



Fig.7 Opportunity to participate in research projects

78,3% of the respondents think that there are no problems of free communication with the lecturers; however, the other 21,7% are discontent with this component.

31,2% of the respondents think that their access to the study materials was Unsatisfactory, while 68,8% think it was Good.

The access to the technical equipment was assessed by 72,2% of the respondents only, with 61,4% of them being content and 38,6% of them being discontent with this factor.

Large proportion of the respondents (28,1%) have seen their carrier growth with a single employer, while 27 people have changed their workplaces for 4 times. 28,1% of the population have seen a carrier growth, while 92 of the respondents used to change their workplaces quite often. For 355 people, i.e. 91,5% of the respondents, their most recent jobs are either their first, second or third workplaces in their work history.

89,0% of the respondents have found their jobs by using modern methods, such as filling in the applications, contacting prospective employers or placing their CVs on the internet. Only 1,5% of the respondents had applied to the employment offices and 9,4% of the respondents have found their jobs unofficially.

### **Research results.**

The analysis of the aspects important for graduates' employment evidenced that most respondents think that their personal data, computer literacy, concrete professions and proficiency in foreign languages played a decisive role in their employment. 34,6% of the respondents showed a negative approach to the branch importance, while 65,4% show a positive approach. 34,6% of the respondents think that their specialties are less important for their employment, while 65,4% think their specialties are important. In the opinion of 62,3% of the graduates, the practical work/work experience during their university studies was not optimal, and 37,7% think it is quite favorable. 53% of the respondents think that the reputation of Tbilisi State University is somewhat average, while 46,7% think it is high. 35,4% of the respondents think that the experience gained abroad or in Georgia was important for their current employment, while 64,5% do not consider such experience as important. It should be noted that 63,5% of the respondents think that proficiency in foreign languages played an important role in their current employment, while 36,5% think that it did not.

83,5% of the respondents think that their computer literacy played an important role in their current employment, while 16,5% think that this component did not play any role in their current employment. The letters of recommendation by the third entities were important for the current employment of 49,3% of the respondents, while 50,7% think they were not important. 88,8% of the respondents think that their personal data played an important role in their current employment, while 11,2% think that they did not.

The study showed that the most common positions the University graduates (65%) occupy are: different branch managers, accountant, specialist, officer, probationer, auditor, operator, expert, advisor, consultant, assistant, statistician and other 35% cover some other positions.

It should be noted that the wages of 17,9% of the respondents vary to 500 Gel; that of 21,4% is 500 to 700 Gel; it is 700-1000 Gel for 23,1%, 1000-1200 Gel for 19,7%, 1200-1500 Gel for 8,5% and over 1500 Gel for 9,4% of the respondents. So, 82,1% of the wages vary from 500 to 1200 Gel; only 18% of the respondents have the wages over 1200 Gel. 53,5% of the respondents consider that their specialties correspond to their jobs, while 46,5% think they do not.

21,8% of the respondents could not find relevant jobs, while 10,9% consider their most recent jobs as perspective; 1,4% of the respondents state that the most important for them is the proximity of their workplaces, 5,5% think of high salary as the most important factor and 1,4% would prefer interesting jobs.

#### Conclusion

As a result of the study, some recommendations were developed, which, if considered, can improve the teaching quality. The most important recommendations suggest changing the teaching system of the Faculty to be more practice-oriented, ensuring a more intense use of the research tools and giving the students more opportunities for participation in the research projects.

Among the general job properties, the respondents' preferences were as follows: Opportunity for improving one's qualification and gaining further education; Carrier growth opportunities; Opportunity to harmonize one's job and family requirements;Bringing the benefit to the society.

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Стаття надійшла до редакції 29.08.2015

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Received 29.08.2015

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