

The 3rd International Conference on Economics and Social Sciences
Innovative models to revive the global economy
October 15-16, 2020
Bucharest University of Economic Studies, Romania

**Developing Economics Students' Research Skills –
A Step Towards Increasing Employability Chances**

Florina MOHANU¹, Viorela-Valentina DIMA^{2*}, Valentin LAZĂR³

DOI: 10.2478/9788395815072-047

Abstract

The present paper aims to show how higher education institutions can contribute to the increased employability of their students by engaging the latter in research activities. We first examine the skills which 21st century employers are looking for in job candidates (as highlighted by leading Romanian and international publications). Next, we show the way in which student research skills are linked to the labour market demands for professional competences. The most extensive part of the paper is dedicated to the examination of the research activities undertaken by Bachelor's and Master's students at the Bucharest University of Economic Studies (ASE), Romania. More specifically, we undertake a descriptive quantitative analysis of the programmes of the Annual Students' Conferences organised by ASE during 2016-2019, focusing on issues such as the number of student papers, the weight of student papers in foreign languages, the choice for single or collaborative authorship, and the financial incentives provided for student research. We show that, at University level, 4.5% of students submitted papers for Annual Students' Conferences editions, with 1st year Bachelor's students and 2nd year Master's students submitting the highest number of papers; student papers were written in a variety of languages (Romanian, English, French, German, as well as Romanian for foreigners, Italian, Russian, Japanese and Spanish); there was a clear preference for single authorship at University level; and the University tries to stimulate student research through a variety of (financial) incentives.

Keywords: student research; higher education; employee skills; labour market demands; Bucharest University of Economic Studies (ASE), Romania.

JEL Classification: A11, A22, A23, I23, I25, J23, J24, J33, O15

1. Introduction

Higher education institutions are widely expected to equip students with the right mix of knowledge and skills that would allow them to find a job quickly and act as outstanding professionals that contribute to their employers' (and country's) development. This expectation is even higher when it comes to economics and business universities. Hence, our interest in analysing the way in which on-campus activities may contribute to meeting this expectation. More specifically, we would like to see how student research activities contribute to increasing graduates'

¹ Bucharest University of Economic Studies, Bucharest, Romania, fmohanu@ase.ro.

² Bucharest University of Economic Studies, Bucharest, Romania, viorela.dima@ase.ro.

* Corresponding author.

³ Bucharest University of Economic Studies, Bucharest, Romania, valentin.lazar@ase.ro.

employability chances⁴. Firstly, we review key publications in Romania and abroad on the professional skills demanded by the 21st century labour market; secondly, we discuss how research activities may contribute to the development of such skills; thirdly, we discuss in detail students' research activities conducted at the Bucharest University of Economic Studies (henceforth ASE), Romania, in the period 2016-2019. Mention should be made that, for reasons of space, this article refers exclusively to research conducted by ASE's students on the occasion of the Annual Students' Conferences.

These scientific events are by no means the only occasions for students to conduct research. In fact, ASE provides various opportunities for student research: starting from the requirements for the successful completion of academic subjects (e.g., written project submission and presentation⁵) and of study cycles (Bachelor's, and Master's graduation papers, Doctoral theses); to the participation in various scientific events (conferences, seminars, workshops) organised for young researchers, which benefit from the participation of keynote speakers from leading world universities and research hubs; to the participation in student conferences such as the Annual Students' Conferences, or the National Olympiad of Students in Economics organised by the Association of Faculties of Economics in Romania (AFER) which ASE is a member of; to the inclusion in student-teacher mixed interdisciplinary research teams working on topics undertaken by ASE' 23 research centres; or to the employment on researcher positions for internationally-funded research projects (according to Istudor 2016, p. 34, Istudor 2017, p. 38, Istudor 2018, p. 48-49, Istudor 2019, p. 53-54)⁶.

2. Problem Statement

This section briefly refers to a few publications that tackle the topic of skills and competences required on the 21st century labour market, both in Romania and globally. We do so in order to shed light on national and international trends and to see how developing students' research skills could help them increase employability chances.

At *national* level, one of the top 10 online recruitment sites in Romania⁷ lists the skills that employers in this country mostly value in young graduates looking for a job: adaptability or "copying with the new", proactive behaviour, complex problem-solving, lifelong learning, emotional intelligence, teamwork and analytical thinking (Hipo.ro, 2020, p. 13ff). Several studies have also addressed the issue under consideration, and here is what they pointed at: Stanciu & Banciu (2012)

⁴ For an analysis on how universities can contribute to the development of the multilingual and multicultural skills demanded by the 21st century labour market, Dima et al. (2018), Pătru et al. (2018), Dima et al. (2019), Mohanu et al. (2019).

⁵ According to, for instance Dima & Panait (2019), for data on the weight of written and oral projects in the evaluation tools used by academics who teach at a Bachelor's programme organised by the Faculty of International Business and Economics within ASE.

⁶ Interestingly, ASE has also been actively involved in stimulating research at pre-university level, by organising and hosting high school pupils' conferences on economic topics, such as the Accounting Contest for Pupils from Economic High-Schools (organised since May 2017 by the Faculty of Accounting and Management Information Systems within ASE), and the Interdisciplinary Olympiad "ASE for High-School Pupils" (organised since 2019 by ASE in partnership with renowned Economic and National Colleges in Bucharest) (according to Istudor 2019, p. 142).

⁷ For Hipo.ro's inclusion among the top 10 recruitment sites in Romania, according to Ziarul financiar (2010), The Wallet (2018).

showed that, when hiring graduates (in general), Romanian employers look for organizational skills, team work, communication skills, punctuality. Deaconu et al. (2014) identified a set of 20 skills that graduates in general and business graduates should possess to meet Romanian employers' expectations, for instance: "promptness and efficient time management; results orientation; communication and interaction skills; effective teamwork skills; computer literacy; the ability to analyse and question things" (p. 867). Foerster-Pastor & Golowko (2017, 2018) grouped the skills Romanian business graduates are expected to possess into three categories: hard skills (such as IT, data analysis etc.), soft skills (e.g., analysis and problem solving, communication, team work, prioritization), and personal attributes (results oriented etc.).

At *international* level, research has pointed to similar graduate skills across continents. Thus, Jackson & Chapman (2009) examined the "profile of competences which [Australian] employers most want in the modern business graduate[s]", based on a set of "20 competence clusters" referring to issues such as "understand, evaluate and apply the business management methods, policy, theory, research and laws; analyse and use numbers and data accurately AND select / use appropriate technology; recognise patterns in documents to see the bigger picture AND evaluate and retain key points in documents / scenarios" etc. (pp. 20-21). All 20 competency clusters are defined at length, with keywords such as "logical reasoning", "creative thinking", "collaboration", oral presentation, public speaking etc. Moreover, Wickam (2015) identified a set of 19 employability skills characterizing US business graduates, among which we find a series of skills enhanced by undertaking research: "ability to assimilate new technology, ability to work in teams, [...], analytical ability, [...] computer word-processing skills, creativity and creative thinking, [...] oral communication, [...] presentation skills, [...] time management, written communication" (pp. 165-166). McMurray et al. (2016) researched on the demands of UK employers from graduates in general (who are supposed to evince "communication skills, team working skills, integrity, intellectual ability, and confidence" (p. 6)), and business school graduates (who are required a list of 14 characteristics, among which "communication skills, team working, numeracy, language skills, technology skills, writing, reading" (p. 16)). Moreover, Tables 1 and 2 below capture the skills identified as essential by the Organization for Economic Cooperation and Development, and by the World Economic Forum, respectively:

Table 1. Indicators of skills use at work

	Indicator	Group of tasks
Information-processing skills	Reading	Reading documents (directions, instructions, letters, memos, e-mails, articles, books, manuals, diagrams, maps)
	Writing	Writing documents (letters, memos, e-mails, reports, forms)
	Numeracy	Calculating prices, costs or budgets; use of fractions, decimals or percentages; use of calculators; preparing graphs or tables; algebra or formulas; use of advanced math or statistics (calculus, trigonometry, regressions)
	ICT skills	Using e-mail, Internet, spreadsheets, word processors, programming languages; conducting transactions on line; participating in online discussions (conferences, chats)
	Problem solving	Facing hard problems (at least 30 minutes of thinking to find a solution)
Other generic skills	Task discretion	Choosing or changing sequence of job tasks, the speed of work; choosing how to do the job
	Learning at work	Learning new things from supervisors or co-workers; learning-by-doing; keeping up-to-date with new products or services
	Influencing skills	Instructing, teaching or training people; making speeches or presentations; advising people; planning others' activities; persuading or influencing others; negotiating.
	Co-operative skills	Co-operating or collaborating with co-workers
	Self-organising skills	Organising one's time and activities
	Dexterity	Using skill or accuracy with one's hands or fingers
	Physical skills (gross)	Working physically for a long period

Source: OECD, Quintini, 2014, p. 21

Table 2. Comparing skills demand, 2018 versus 2022, top ten

Today, 2018	Trending, 2022	Declining, 2022
Analytical thinking and innovation	Analytical thinking and innovation	Manual dexterity, endurance and precision
Complex problem-solving	Active learning and learning strategies	Memory, verbal, auditory and spatial abilities
Critical thinking and analysis	Creativity, originality and initiative	Management of financial, material resources
Active learning and learning strategies	Technology design and programming	Technology installation and maintenance
Creativity, originality and initiative	Critical thinking and analysis	Reading, writing, math and active listening
Attention to detail, trustworthiness	Complex problem-solving	Management of personnel
Emotional intelligence	Leadership and social influence	Quality control and safety awareness
Reasoning, problem-solving and ideation	Emotional intelligence	Coordination and time management
Leadership and social influence	Reasoning, problem-solving and ideation	Visual, auditory and speech abilities
Coordination and time management	Systems analysis and evaluation	Technology use, monitoring and control

Source: Future of Jobs Survey 2018, World Economic Forum, p. 12

By comparing the data briefly referred to above, we notice that employers in Romania and abroad are looking for similar skills, which is to be expected in this increasingly globalized world. We would like to argue that several of these skills can be developed by higher education institutions by encouraging student research activities.

Before we further explain our proposal, we would like to clarify what we mean by ‘research’. The OECD, Frascati Manual (2015: p. 29) refers to three types of research activities: basic research, applied research and experimental development. **Basic research** is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view. **Applied research** is original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific, practical aim or objective. **Experimental development** is systematic work, drawing on knowledge gained from research and practical experience and producing additional knowledge, which is directed to producing new products or processes or to improving existing products or processes.

When conducting basic, applied or experimental research activities, one makes use of several skills from the ones mentioned by Hipo.ro (2020), OECD (2014) and World Economic Forum (2018), as well as by the aforementioned scientific publications. Thus, in Table 3 below we group research steps⁸ with associated skills:

⁸ We have grouped the 7 or 10 research steps found in US Student Research Guides (according to University of Michigan, and University System of Georgia, respectively) into the first 4 steps in our Table 3, and we added step 5, since it is often the case that research findings are disseminated by means of oral presentations during conferences and symposia etc.

Among the numerous publications on research steps and skills, we would like to refer only to Garvin (2009) and Cottrell (2013), who put forth a more or less detailed picture of the model provided in Table 3 below. Thus, Garvin (2009) proposes a 4-step approach to research: “identify the precise question you are trying to answer; map a research strategy; be aware of copyright or other restrictions on re-use; and have a plan for documenting your work research results.” (p. 7).

Cottrell (2013) lists the following “strong core” research skills for students: “finding good quality information at speed, reading selectively and at speed, [...] knowing how to use the information you find in appropriate ways [...], select and interpret [information] with a critical eye [...] at least a basic understanding of, and confidence in, manipulating numbers [...] good basic skills in writing.” (p. 151ff).

Table 3. Research steps and necessary skills

Research steps	Skills
1. Documentation	reading, problem solving, task discretion, self-organizing skills, attention to detail; coordination and time management; active learning
2. Evaluation of sources and materials	reading, problem solving, task discretion, self-organizing skills, analytical thinking, attention to detail; coordination and time management; active learning
3. Writing, proof reading, revising and rewriting the publication version	reading, writing, numeracy, ICT skills, problem solving, task discretion, self-organizing skills, analytical thinking; creativity, originality and initiative; attention to detail; coordination and time management; active learning
4. Citation and references	reading, writing, ICT skills, problem solving, task discretion, self-organizing skills, attention to detail
5. Presenting research findings to audiences (which requires:	reading, writing, numeracy, ICT skills, problem solving, task discretion, influencing skills, self-organizing skills, attention to detail; coordination and time management; active learning
a. writing, proof reading, revising and rewriting the materials for the oral presentation;	
b. delivering the oral presentation)	

As Table 3 above shows, each of the research steps is complex, favouring the use of several highly demanded skills. Moreover, if one considers the fact that research is often undertaken collaboratively, we may safely associate ‘influencing skills’, ‘cooperative skills’, ‘emotional intelligence’ with any given step of the research activity.

Having pointed to the way in which research activities are associated with the skills 21st century employers are looking for in potential employees, we would now like to present the way in which the topmost Romanian economic university fosters the development of such (research) skills in its students.

3. Research Questions / Aims of the Research

The current article aims to shed light on research activities undertaken by economics students enrolled at the Bucharest University of Economic Studies, Romania, on the occasions provided by the Annual Students’ Conferences held in 2016-2019. We examined the programmes of the said student conferences, taking into consideration the panels organised by all the academic departments of ASE’s 11 Faculties⁹ that offer Bachelor’s and Master’s study programmes, hence organizing student conference panels for both types of study cycles. Our research aimed at shedding light on the following aspects: the number of student papers per faculty, cycle of study and year of study, the student papers in foreign languages, the preferred type of authorship – single or collaborative, and the financial incentives that ASE provides for student research.

We examine student research endeavours, as it is our firm belief that such endeavours help prepare them for the labour market in general (for the reasons mentioned in section 2 above) and for working in the business field in particular, as “[t]he business enterprise sector employs more than half of the research population in the OECD area” (OECD, 2011, p. 11).

⁹ The Bucharest University of Economic Studies (ASE) also has a 12th Faculty entitled Bucharest Business School, which only organizes MBAs. It did not organize panels for the Annual Students’ Conferences in 2016-2019, hence this paper makes no reference to its students’ research interests.

4. Research Methods

The article is a *descriptive* (observational) quantitative analysis, in the sense of Mertler (2016: p. 111), as the authors are “simply studying the phenomenon of interest *as it exists naturally*, no attempt is made to manipulate the individuals, conditions, or events”. The analysis examines student research only in terms of papers authored by students for the Annual Students’ Conference editions of 2016-2019. The period of data collection was January to April 2020, and data sources were the Annual Students’ Conference Programmes (2016-2019), ASE’s Board of Trustees’ Newsletters (2016-2019), the Annual Report of the Rector of the Bucharest University of Economic Studies on the State of the University (Istudor, 2016-2019).

5. Findings

The current section provides details on the economics students’ research interests as can be observed in their contribution to the Annual Students’ Conferences organised by the Bucharest University of Economic Studies (ASE), during 2016-2019. As briefly stated in section 4 above, we embark upon a *descriptive* quantitative analysis of the student conference programmes of the Bachelor’s and Master’s panels organised by all the academic departments of ASE’s Faculties that offer Bachelor’s and Master’s study programmes.

We start by referring to the number of student papers per cycle of studies, as shown in Figure 1 below. Out of a total number of 3871 student papers, 3178 (82%) were submitted by Bachelor’s students, whereas 693 (18%) were submitted by Master’s Students:

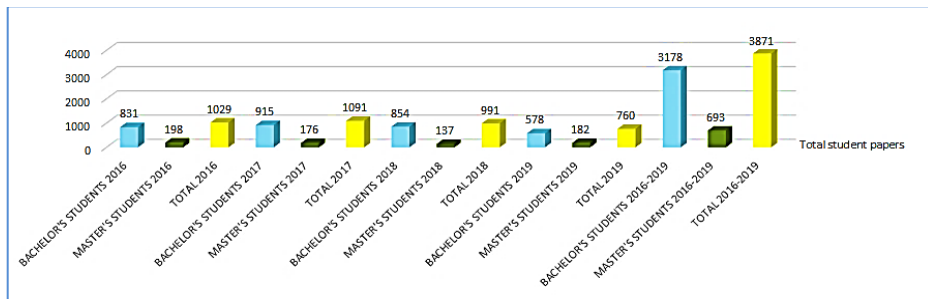


Figure 1. Student papers per cycle of studies, 2016-2019

The numbers in Figure 1 above can be explained if we consider the number of Bachelor’s and Master’s students enrolled in the University’s respective study cycles. Thus, by consulting ASE’s Board of Trustees’ Newsletters (2016-2019), as well as the Annual Report of the Rector of the Bucharest University of Economic Studies on the State of the University (Istudor, 2016-2019), we compiled the data in Table 4 below¹⁰, which shows that Bachelor’s students (and papers) are consistently more numerous each year. Moreover, Table 4 shows that 4.5% of the University’s students present research results on the occasion of the Annual Students’ Conference.

¹⁰ Since MBA and Doctoral students did not present papers in the Annual Students’ Conferences 2016-2019, we did not include such students in Table 4.

Table 4. Student enrolled in Bachelor’s and Master’s studies 2016-2019 and Total student papers at University level 2016-2019

	Number of students enrolled in 2016-2019	Total student papers at University level
Bachelor’s students 2016	15470	831 (5.4%)
Master’s students 2016	5756	198 (3.4%)
TOTAL Students 2016	21226	1029 (4.8%)
Bachelor’s students 2017	15856	915 (5.8%)
Master’s students 2017	5761	176 (3.1%)
TOTAL Students 2017	21617	1091 (5%)
Bachelor’s students 2018	15569	854 (5.5%)
Master’s students 2018	5913	137 (2.3%)
TOTAL Students 2018	21482	991 (4.6%)
Bachelor’s students 2019	16098	578 (3.6%)
Master’s students 2019	5811	182 (3.1%)
TOTAL Students 2019	21909	760 (3.5%)
Bachelor’s students 2016-2019	62993	3178 (5%)
Master’s students 2016-2019	23241	693 (3%)
TOTAL Students 2016-2019	86234	3871 (4.5%)

Figure 2 below depicts the distribution of student papers by years of study. We notice that 1st year Bachelor’s (BA) students and 2nd year Master’s (MA) students submitted consistently the highest number of papers – 45.9% and 68.4% of the respective cycle of studies. The data table contains two rows entitled ‘unspecified year BA’ and ‘unspecified year MA’ to show that the conference programmes also included a series of student papers whose authors were not identified by year of study. It may be the case that such students were first year students in each cycle of study, but since we cannot definitely assert that, we have chosen to represent them separately. However, their numbers are extremely low – 9.3% of the total BA student papers and 1.6% of the total MA student papers.

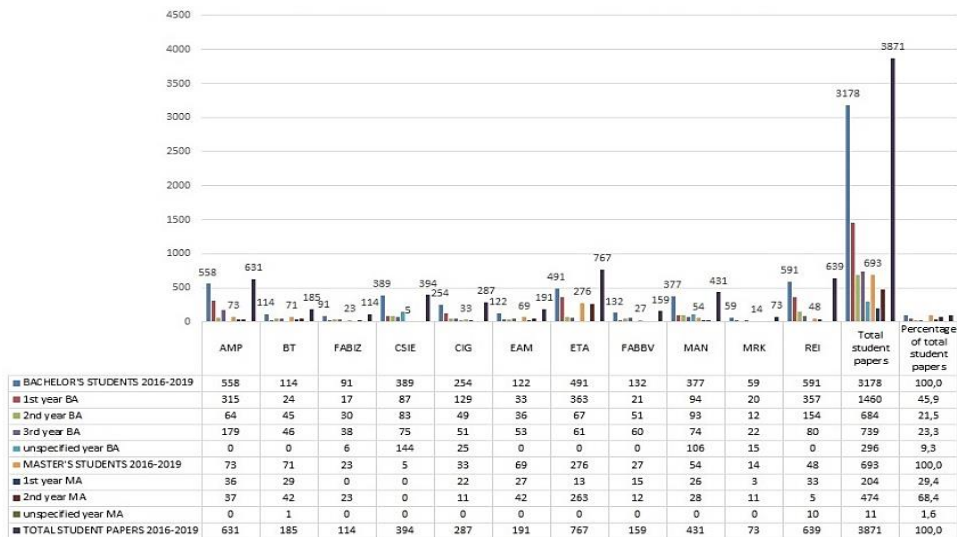


Figure 2. Student papers per year of study, 2016-2019

We now take a closer look at the number of student papers at Faculty level. Figure 3 below shows that most papers were submitted for panels organised by the Faculty of Theoretical and Applied Economics ETA – 20%, the Faculty of International Business and Economics REI – 17% and the Faculty of Administration and Public Management AMP – 16%, whereas the smallest number of papers were submitted for panels organised by the Faculty of Finance and

Banking FABBV – 4%, the Faculty of Business Administration in Foreign Languages FABIZ – 3% and the Faculty of Marketing MRK – 2%.¹¹

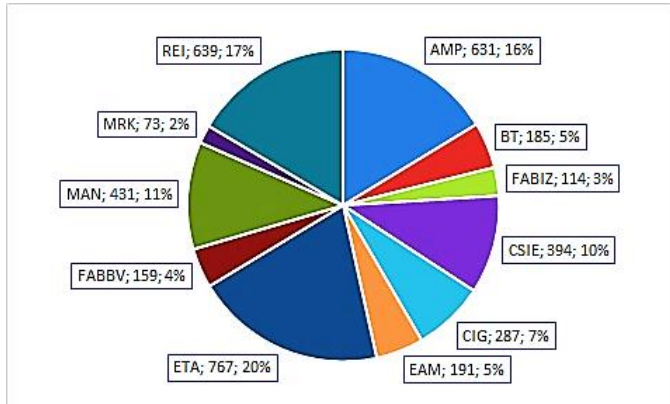


Figure 3. Student papers per Faculty from the total number of papers, 2016-2019

With regard to Figure 3 above, mention should be made that the student papers were grouped depending on the Faculty organizing the panels students chose to attend, and not by the Faculty students originated from. Moreover, students enrolled in one Faculty opted for submitting papers for panels organised by their own Faculty and/or other Faculties. Hence, it is expected (and it is indeed the case) that the number of research papers submitted by the students from each Faculty does not correlate with the number of students enrolled in each Faculty. Thus, the Faculties with the highest number of enrolled students were the Faculty of Economic Cybernetics, Statistics and Informatics CSIE, the Faculty of Management MAN and the Faculty of International Business and Economics REI, whereas the Faculties with the lowest number of enrolled students were the Faculty of Administration and Public Management AMP, the Faculty of Agrifood and Environmental Economics EAM and the Faculty of Theoretical and Applied Economics ETA (according to Istudor, 2016-2019).

Figure 4 below provides details on the students' choice to submit research papers for the panels organised by their own Faculty (identified as 'BA/ MA own students') or by another Faculty (identified by two labels). The latter students are grouped into 'BA/ MA incoming students' – which reflects the number of students who 'come' from a different Faculty to submit papers for the panels organised by a given Faculty, and 'BA/ MA outgoing students' – which reflects the number of students who 'go' from their own faculty to submit papers for a different faculty:

¹¹ The abbreviations in Figure 2 stand for the following Faculties: AMP - Faculty of Administration and Public Management, BT - Business and Tourism, FABIZ - Faculty of Business Administration in Foreign Languages, CSIE - Faculty of Economic Cybernetics, Statistics and Informatics, CIG - Faculty of Accounting and Management Information Systems, EAM - Faculty of Agrifood and Environmental Economics, ETA - Faculty of Theoretical and Applied Economics, FABBV - Faculty of Finance and Banking, MAN - Faculty of Management, MRK - Faculty of Marketing, REI - Faculty of International Business and Economics.

	AMP	BT	FABIZ	CSIE	CIG	EAM	ETA	FABBV	MAN	MRK	REI	Total student papers	Percentage of total student papers
■ 1st year BA - own students	315	22	17	27	105	93	85	21	74	19	203	921	29,0
■ 1st year BA - incoming students	0	2	0	60	24	0	278	0	20	1	154	539	17,0
■ 1st year BA - outgoing students	29	14	181	18	39	8	4	63	34	34	47	471	14,8
■ 2nd year BA - own students	64	45	30	42	41	36	67	43	78	12	102	560	17,6
■ 2nd year BA - incoming students	0	0	0	41	8	0	0	8	15	0	52	124	3,9
■ 2nd year BA - outgoing students	16	1	28	7	21	1	2	29	27	18	13	163	5,1
■ 3rd year BA - own students	179	46	38	52	27	53	59	59	68	22	72	675	21,2
■ 3rd year BA - incoming students	0	0	0	23	24	0	2	1	6	0	8	64	2,0
■ 3rd year BA - outgoing students	0	0	8	23	2	2	1	7	2	0	14	59	1,9
■ 1st year MA - own students	36	29	0	0	22	27	13	15	22	3	33	200	28,9
■ 1st year MA - incoming students	0	0	0	0	0	0	0	0	4	0	0	4	0,6
■ 1st year MA - outgoing students	0	0	0	0	0	0	0	0	0	4	0	4	0,6
■ 2nd year MA - own students	37	42	23	0	11	42	263	12	28	10	5	473	68,3
■ 2nd year MA - incoming students	0	0	0	0	0	0	0	0	0	1	0	1	0,1
■ 2nd year MA - outgoing students	0	0	0	0	0	0	0	0	0	0	0	0	0,0
■ TOTAL STUDENT PAPERS 2016-2019	631	185	114	394	287	191	767	159	431	73	639	3871	100,0
■ total BA - own students	558	113	85	121	173	122	211	123	220	53	377	2156	67,8
■ total BA - incoming students	0	2	0	124	56	0	280	9	41	1	214	727	22,9
■ total BA - outgoing students	45	15	217	48	62	11	7	99	63	52	74	693	21,8
■ total MA - own students	73	71	23	0	33	69	276	27	50	13	38	673	97,1
■ total MA - incoming students	0	0	0	0	0	0	0	0	4	1	0	5	0,7
■ total MA - outgoing students	0	0	0	0	0	0	0	0	0	4	0	4	0,6

Figure 4. Student papers per Faculty of origin, 2016-2019

By analysing Figure 4 above, we notice the following:

- papers authored by ‘BA/MA own students’ are consistently the most numerous, at several levels – at University level, per cycle of studies, and per year of study;
- at Faculty level, papers authored by ‘BA own students’ are surpassed by ‘BA incoming students’ in the case of the Faculty of Economic Cybernetics, Statistics and Informatics CSIE, and the Faculty of Theoretical and Applied Economics ETA, and by ‘BA outgoing students’ in the case of the Faculty of Business Administration in Foreign Languages FABIZ;
- the faculties that attract the most ‘BA incoming students’ are the Faculty of Theoretical and Applied Economics ETA (280 papers), the Faculty of International Business and Economics REI (214 papers), and the Faculty of Economic Cybernetics, Statistics and Informatics CSIE (124 papers);
- the faculties with the most numerous ‘BA outgoing students’ are the Faculty of Business Administration in Foreign Languages FABIZ (217 papers), the Faculty of Finance and Banking FABBV (99 papers), and the Faculty of International Business and Economics REI (74 papers);
- at University level, papers authored by ‘BA own students’ amount to 67.8% of the total amount of BA papers, whereas papers authored by ‘MA own students’ amount to 97.1% of all MA papers;
- papers authored by ‘BA/ MA incoming students’ are slightly more numerous at University level than ‘BA/ MA outgoing students’ – 22.9% BA and 0.7% MA incoming student papers versus 21.8% BA and 0.6% MA outgoing student papers;
- papers authored by ‘MA incoming students’ and by ‘MA outgoing students’ are almost non-existent at University level.

As to the reason for which BA students seem to be more flexible in choosing the panels of their own faculty or those of a different faculty, we may tentatively say that this situation reflects the fact that the Bachelor’s curricula of each Faculty comprises core subjects taught by academic staff from all of the other Faculties. Similarly, it may also be the case that MA students prefer undergoing research for

the panels organised by their own Faculty due to the fact that the Master’s curricula usually comprise subjects taught by academic staff from their own Faculty.

Next, Figure 5 below presents the number of student research papers in foreign languages submitted for the panels organised at Faculty level in the period under consideration. We notice that the highest number of papers in foreign languages were submitted for panels organised by the Faculty of International Business and Economics REI – 62%, the Faculty of Business Administration in Foreign Languages FABIZ – 15% and the Faculty of Theoretical and Applied Economics ETA – 13%, whereas the smallest number of papers in foreign languages were submitted for panels organised by the Faculty of Business and Tourism BT, the Faculty of Administration and Public Management AMP, the Faculty of Agrifood and Environmental Economics EAM, and the Faculty of Management MAN (0% each).

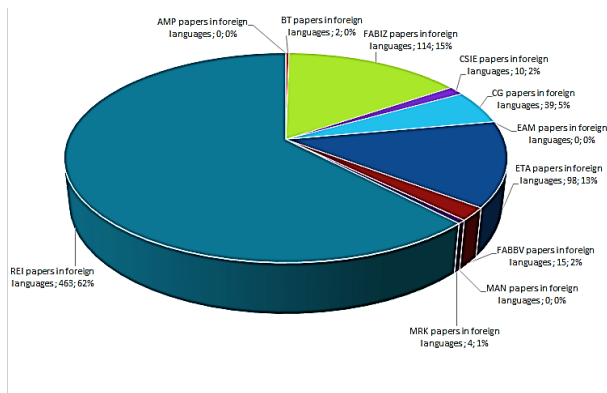


Figure 5. Student papers in foreign languages per Faculty from the total number of papers, 2016-2019

Since eight Faculties (BT, CIG, CSIE, FABBV, FABIZ, MAN, MRK, REI) of the 11 Faculties under consideration offer Bachelor’s and Master’s programmes in foreign languages, it is expected that they also organize panels with student research papers written in foreign languages. However, we noticed that BT and MAN did not organize panels in foreign languages in 2016-2019. This is not to say that the students enrolled in these Faculties did not submit papers written in foreign languages for panels organised by the other Faculties (in fact, Dima & Mohanu, 2020, show that students from BT and MAN each submitted 2% of the papers written in foreign languages for the panels organised by REI’s Department of Modern Languages and Business Communication).

Conversely, since 3 Faculties (AMP, EAM and ETA) of the 11 Faculties under consideration do not offer Bachelor’s and Master’s programmes in foreign languages, it is expected that they do not organize panels with student research papers written in foreign languages. Nonetheless, we noticed that ETA did organize panels in foreign languages on an annual basis in the period 2016-2019. In fact, the foreign language panels organised by ETA benefited from the participation of students who were all enrolled at FABIZ and presented papers in English. (Moreover, Dima & Mohanu, 2020, also show that students from AMP and ETA each submitted 2% of the papers written in foreign languages for the panels organised by REI’s Department of Modern Languages and Business Communication.)

As regards the languages which students wrote and defended their research papers in, Figure 6 below shows that the majority of papers were submitted in Romanian (81%) – which is to be expected since the majority of students are Romanian natives enrolled in study programmes with Romanian as language of instruction, and the majority of panels were organised in Romanian at Faculty level. Papers in foreign languages were written in English (10%), French (4%), German (1%) and other languages (4%). Students from only two Faculties – FABIZ and REI – submitted papers in all the three languages (English, French and German), which is to be expected, since the curricula of only these two Faculties contain obligatory foreign language classes in English, French and/or German (according to Dima et al. 2018).

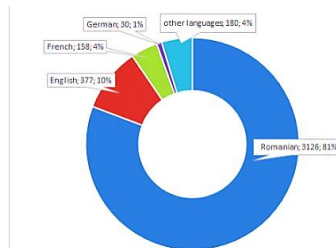


Figure 6. Student papers per language, 2016-2019

In what concerns the ‘other languages’ that students submitted papers in, Dima & Mohanu (2020) show that these papers were all submitted for panels organised by the Faculty of International Business and Economics REI, more specifically by the latter’s Department of Modern Languages and Business Communication. The foreign languages used by students to write papers were: “Romanian for foreigners – 57 papers, Italian – 45 papers, Russian – 40 papers, Japanese – 31 papers, [...] and Spanish – 14 papers”^{12,13}.

We now turn to another criterion used for analysing economics students’ research interests, namely, the preferred type of authorship – single or collaborative. Table 5 below shows a clear preference for single authorship (64.7%) at University level¹⁴. Moreover, students’ preference for working alone is

¹² These papers amount to 187, not 180 as in Figure 4 above. The discrepancy stems from the fact that the analyses are based on slightly different versions of the Annual Students’ Conferences programmes – Dima & Mohanu (2020) analysed the programmes posted on the REI Faculty’s website on the days of the Conferences, whereas the current analysis is based on the programmes announced by the Faculties a few weeks before the Conferences, and used by the managerial team of the Bucharest University of Economic Studies for decision making regarding financing and logistics.

¹³ There were two categories of papers written and presented in Romanian – those authored by Romanian natives and captured in Figure 4 as 81% of the total number of papers, and those authored by foreign natives and counted in Figure 4 among the ‘other languages’. The latter set of papers in Romanian are indeed different from the former in that Romanian is a foreign language for the authors of the latter set.

These papers are not the only papers written by foreign students enrolled at the University; however, this study does not address the issue of foreign students’ research in the Bucharest University of Economic Studies.

¹⁴ In what concerns papers written in foreign languages, Dima & Mohanu (2020) found “a rather balanced distribution of authorship options: 259 student papers in modern languages (56.4%) were written by single authors, with the remaining 200 papers (43.6%) being written by teams of authors”.

even more obvious at Master’s level, where 81.7% of the papers (566 out of 693) had single authors.

Table 5. Student papers by number of authors, 2016-2019

	Single author	More than 2 authors
Bachelor’s students 2016	436	395
Master’s students 2016	135	63
TOTAL 2016	571	458
Bachelor’s students 2017	566	349
Master’s students 2017	149	27
TOTAL 2017	715	376
Bachelor’s students 2018	556	298
Master’s students 2018	126	11
TOTAL 2018	682	309
Bachelor’s students 2019	379	199
Master’s students 2019	156	26
TOTAL 2019	535	225
Bachelor’s students 2016-2019	1937	1241
Master’s students 2016-2019	566	127
TOTAL 2016-2019	2503 (64.7%)	1368 (35.3%)

Source: Authors’ own contribution

The last aspect that our analysis considers is the financial incentives offered by the University so as to encourage student research. Figure 7 below shows the net worth of cash prizes – in RON (the currency of Romania, used in payments per paper, not per author) and in EUR (rendered at the exchange rates from the dates at which the University’s management teams communicated the decisions regarding the number of panels and prizes, as well as prize worth¹⁵).

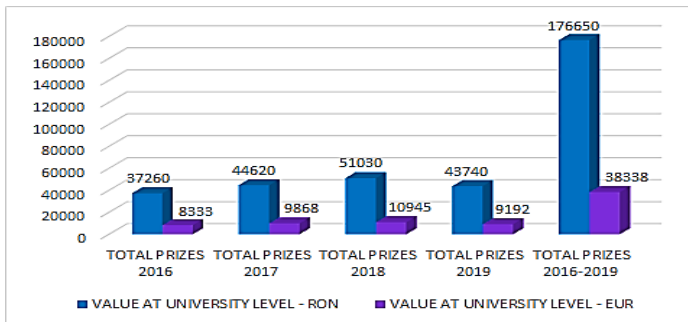


Figure 7. Cash prize worth of award winning student papers, 2016-2019

Source: Authors’ own contribution

Apart from the cash prizes amounting to an average of nearly 9600 euro per year, the University also supported the organization of the Annual Students’ Conferences by bearing the cost of the venue and by offering technical support for each of the students’ conference panels, as well as refreshments for present and attending students and academics who served as members of the scientific boards of the conference panels. Naturally, the University also provided free of charge

¹⁵ The decisions were communicated on April 14, 2016, April 12, 2017, March 14, 2018 and April 3, 2019 (we used internal University documents as sources, namely documents issued by the Division for Research and Innovation Management, and approved on by the Bureau of the Board of Trustees). Hence, we retrieved the exchange rates on the respective days from the Archive of the National Bank of Romania (BNR 2016-2019). On average, the exchange rate was 4.60 RON to the EUR.

access to a wide range of documentation sources, via the University Library, prior to the conferences.

In addition to the financial support provided at University level, students were encouraged to conduct and present research findings by the management teams of each Faculty. More specifically, various companies the representatives of which acted as members in the Faculties' Advisory Boards also awarded student authors with cash prizes, internships, company products or vouchers.

In conclusion, this section has presented the findings of the quantitative analysis of the research interests of economics Bachelor's and Master's students at the Bucharest University of Economic Studies (ASE), Romania, as resulting from the programmes of the Annual Students' Conferences organised by the University during 2016-2019. We have explored issues such as the number of student papers submitted to the panels organised by each of the 11 Faculties the educational offers of which comprise both Bachelor's and Master's study programmes; the weight of student papers in foreign languages; the choice for single or collaborative authorship; and the financial incentives provided for student research.

6. Conclusions

The current paper has addressed the way in which Romania's topmost economics and business oriented higher education institution – the Bucharest University of Economic Studies (ASE) – encourages student research activities. We have placed this investigation against the background of the need for universities to prepare their students for successful insertion on the labour market by equipping them with the skills demanded by the latter.

In Section 2, we reviewed key publications on the skills requested by 21st century employers. Moreover, we tried to highlight how these professional skills can be developed by participating in research activities. We also briefly mentioned the fact that ASE has been trying to foster student research activities, with results disseminated both during scientific events organised and held on its own premises, and during such events organised by higher education networks ASE is a member of.

We then presented the findings of our own quantitative examination of student research activities occasioned by the Annual Students' Conferences held in 2016-2019. We noticed that:

- at University level, 4.5% of students submitted papers for Annual Students' Conferences editions, with 5% of Bachelor's students, and 3% of Master's students choosing to submit papers for these events;
- at Faculty level, the highest number of papers were submitted for panels organised by the Faculty of Theoretical and Applied Economics ETA – 20%, the Faculty of International Business and Economics REI – 17% and the Faculty of Administration and Public Management AMP – 16%, whereas the smallest number of papers were submitted for panels organised by the Faculty of Finance and Banking FABBV – 4%, the Faculty of Business Administration in Foreign Languages FABIZ – 3% and the Faculty of Marketing MRK – 2%;
- at University level, per cycle and year of study, 1st year Bachelor's students and 2nd year Master's students submitted the highest number of papers;
- at Faculty level, the overwhelming majority of papers were submitted by each Faculty's own students;
- the Faculties that attracted the most papers submitted by students from other Faculties were the Faculty of Theoretical and Applied Economics ETA, the

Faculty of International Business and Economics REI, and the Faculty of Economic Cybernetics, Statistics and Informatics CSIE;

- the Faculties whose students submitted the most papers to other Faculties were the Faculty of Business Administration in Foreign Languages FABIZ; the Faculty of Finance and Banking FABBV, and the Faculty of International Business and Economics REI;
- as regards the languages student research papers, the majority of papers were submitted in Romanian (81%), followed by English (10%), French (4%), German (1%) and other languages (4%) – namely, Romanian for foreigners, Italian, Russian, Japanese and Spanish;
- as for students' choice for single or collaborative authorship, our analysis revealed a clear preference for single authorship (64.7%) at University level, a tendency which is even more obvious at Master's level (81.7%);
- considering the financial incentives provided for student research, we noticed a variety of such stimuli: cash prizes, internships, company products or vouchers.

The current study is but a small step in understanding how (economics) students' research skills can best be developed so as to enhance their employability chances. It would, of course, be interesting to pursue this investigation further by considering issues such as:

- adding a longitudinal qualitative perspective – by examining the theoretical versus applied topics chosen by students for research papers, as well as by investigating how students' research interests evolve from Bachelor's to Master's to Doctoral level, and how (or whether) such research interests reflect students' professional experience gained through direct contact with the work environment (i.e. internships, volunteer or paid work);).
- adding a mixed quantitative and qualitative perspective on enhancing economics students' motivation to undertake research throughout their university studies;
- examining the distribution by genders of students involved in research (one of the limitations of this article is that it does not address this issue, since it cannot be placed in the context of the distribution by genders of enrolled students, for lack of publicly available data at university level).

Acknowledgment

The authors would like to express their gratitude towards the staff of the Division for Research and Innovation Management of the Bucharest University of Economic Studies – ASE, Romania, for having provided access to internal University documents such as conference programmes, as well as managerial board's decisions on panels to be organised and prizes to be awarded.

References

- [1] Buletin informativ al Consiliului de Administrație al Academiei de Studii Economice din București. (2016). [ASE's Board of Trustees' Newsletter. April 2016]. Retrieved from <http://ca.ase.ro/Media/Default/Page/BI%20al%20CA%20APRILIE.%202016%20PDF.pdf>.
- [2] ASE's Board of Trustees' Newsletter. (April 2017). Retrieved from https://www.ase.ro/2013_files_en/despre_ase/pdf/Newsletter/BI_aprilie_2017_en.pdf.
- [3] ASE's Board of Trustees' Newsletter. (March 2018). Retrieved from https://www.ase.ro/2013_files_en/despre_ase/pdf/Newsletter/BI_martie_2018_en.pdf.
- [4] ASE's Board of Trustees' Newsletter. (April 2019). Retrieved from https://www.ase.ro/2013_files_en/despre_ase/pdf/Newsletter/BI_aprilie_2019_en.pdf.

- [5] BNR. (2016-2019). Arhiva Curs BNR [Archive of the Exchange Rate. National Bank of Romania. 2016-2019], Retrieved from <https://www.cursbnr.ro/arhiva-curs-bnr>.
- [6] Cottrell, Stella. (2013). *The Study Skills Handbook*. London & New York: Macmillan International Higher Education.
- [7] Deaconu, A., Osoian, C., Zaharie, M., Achim, S. A. (2014). Competences in higher education system: an empirical analysis of employers' perceptions, *Amfiteatrul economic*, Vol. XVI, No. 37, pp. 857-873, https://www.amfiteatruconomic.ro/temp/Journal_no_37.pdf.
- [8] Dima, V. V., Mohanu, F. (2020, forthcoming). Preparing for the Labour Market - Developing Students' Multilingual and Research Skills, to appear in *Synergy*, 16 (2), pp. 117-130, http://www.synergy.ase.ro/issues/2020-vol16-no-2/1%20Dima_Mohanu.pdf.
- [9] Dima, V. V., Mohanu, F., Hurduzeu, R.-E., Lorentz, M.-A, C. Pătru. (2018). Foreign Language Education in ASE Bucharest - A Quantitative Approach, in Dumitrescu, D., Zamfir, A. (coord.). 2018. *Proceedings of the 1st International Conference on Economics and Social Sciences*, Filodiritto Publisher, inFOROmatica srl, Via Castiglione, 81, 40124 Bologna (Italy), pp. 322-333, Retrieved from <http://icess.ase.ro/index.php/icess-2018/icess-2018-proceedings>.
- [10] Dima, V. V., Mohanu, F., Șerban-Opreșcu, A. T., Lorentz, M.-A, Nicolae, R. M. (2019, in print). Multiculturalism in Romanian Economic Higher Education. Part I – Western Cultural Centres, *Proceedings of the 2nd International Conference on Economics and Social Sciences*.
- [11] Dima, V. V., Panait, N. A. (2019), Writing for One's Personal and Professional Development, in Militaru, M. L. (coordinating editor), *8th International Conference Synergies in Communication*, București: Editura ASE, pp. 58-68, Retrieved from https://sic.ase.ro/wp-content/uploads/6.Viorela_Valentina.pdf.
- [12] Foerster-Pastor, U. S., and Golowko, N. (2017), Employability skills for the Romanian Outsourcing Industry, in: 2017 The 11th International Conference on business excellence – Strategy, Complexity, and Energy in changing times, March 30-31, Bucharest, Romania, pp. 1068-1080, doi: <https://doi.org/10.1515/picbe-2017-0110>.
- [13] Foerster-Pastor, U. S., and Golowko, N. (2018). The need for digital and soft skills in the Romanian business service industry, *Management & Marketing. Challenges for the Knowledge Society*, Vol. 13, No. 1, pp. 831-847, DOI: 10.2478/mmcks-2018-0008.
- [14] Garvin, Peggy. (2009). *Real World Research Skills: An Introduction to Factual, International, Judicial, Legislative, and Regulatory Research*. Alexandria: The Capitol Net Inc.
- [15] Hipo.ro (2020). NextGen Career Guide, Retrieved from <https://catalyst.docsend.com/view/7pyuyhv>.
- [16] Istudor, N. (2016). Raportul anual al Rectorului Academiei de Studii Economice din București privind starea universității [Annual Report of the Rector of the Bucharest University of Economic Studies on the State of the University]. Retrieved from <http://ca.ase.ro/Media/Default/raport/rector/RAPORTUL%20RECTORULUI%202016.pdf>.
- [17] Istudor, N. (2017). Raportul anual al Rectorului Academiei de Studii Economice din București privind starea universității. Anul 2017 [Annual Report of the Rector of the Bucharest University of Economic Studies on the State of the University 2017]. Retrieved from http://ca.ase.ro/Media/Default/raport/rector/Raport%20rector_final_senat_2017.pdf.
- [18] Istudor, N. (2018). Raportul anual al Rectorului Academiei de Studii Economice din București privind starea universității pentru anul 2018 [Annual Report of the Rector of the Bucharest University of Economic Studies on the State of the University 2018]. Retrieved from https://www.ase.ro/2013_files/despre_ase/conducere/pdf/Raport_rector_2018.pdf.
- [19] Istudor, N. (2019). Raportul anual al Rectorului Academiei de Studii Economice din București privind starea universității pentru anul 2019 [Annual Report of the Rector of the Bucharest University of Economic Studies on the State of the University 2019]. Retrieved from <http://ca.ase.ro/rapoarte-rector>.

- [20] Mertler, Craig A. (2016). *Introduction to educational research*. Thousand Oaks, California: SAGE Publications, Inc.
- [21] Jackson, Denise, Chapman, Elaine. (2009). Business Graduate Skill Sets – Summary Report, The University of Western Australia, Graduate School of Education, <https://files.eric.ed.gov/fulltext/ED511910.pdf>.
- [22] McMurray, S., Dutton, M., McQuaid, R.W., Richard, A. (2016). Employer Demands from Business Graduates, *Education and Training*, 15, 1, pp. 112-132, doi: 10.1108/ET-02-2014-0017.
- [23] Mohanu, F., Dima, V. V., Nicolae, R. M., Lorentz, M.-A, Șerban-Oprescu, A. T. (2019, in print). Multiculturalism in Romanian Economic Higher Education. Part II – Eastern Cultural Centres, *Proceedings of the 2nd International Conference on Economics and Social Sciences*.
- [24] OECD. (2011). Skills for Innovation and Research, Executive summary, OECD Publishing, Paris, Retrieved from <http://www.oecd.org/sti/inno/47164461.pdf>.
- [25] OECD. Quintini, G. (2014). Skills at Work: How Skills and their Use Matter in the Labour Market, *OECD Social, Employment and Migration Working Papers*, No. 158, OECD Publishing, Retrieved from <http://dx.doi.org/10.1787/5jz44fdjfm7j-en>.
- [26] OECD, Frascati Manual (2015). Guidelines for Collecting and Reporting Data on Research and Experimental Development, The Measurement of Scientific, Technological and Innovation Activities, OECD Publishing, Paris, Retrieved from https://www.oecd-ilibrary.org/science-and-technology/frascati-manual-2015_9789264239012-en.
- [27] Stanciu, S., Banciu, V. (2012). Quality of Higher Education in Romania: are Graduates Prepared for the Labour Market?, *Procedia - Social and Behavioral Sciences*, 69, pp. 821-827.
- [28] Pătru, C., Lorentz, M.-A, Dima, V. V., Mohanu, F., Hurduzeu, R.-E., (2018). Lifelong Learning for the Labour Market, in Dumitrescu, D., Zamfir, A. (coord.). 2018. *Proceedings of the 1st International Conference on Economics and Social Sciences*, Filodiritto Publisher, inFORomatica srl, Via Castiglione, 81, 40124 Bologna (Italy), pp. 334-342, Retrieved from <http://icess.ase.ro/index.php/icess-2018/icess-2018-proceedings>.
- [29] University of Michigan. (not dated). Basic Social Work Research: 7 Steps of the Research Process, University of Michigan Library Research Guides, Retrieved from <http://guides.lib.umich.edu/c.php?g=283022&p=1885747>.
- [30] University System of Georgia. (not dated). Steps in the Research Process, University System of Georgia. Online Library Learning Center, Retrieved from http://www.usg.edu/galileo/skills/unit01/infoage01_04.phtml.
- [31] The Wallet. (2018). Topul celor mai bune site-uri pentru a găsi un loc de muncă [Best websites to find a job on], by Oana Voncick, 2018, Retrieved from <https://thewallet.ro/topul-ceilor-mai-bune-site-uri-pentru-a-gasi-un-loc-de-munca/>.
- [32] Wickam, M. (2015). Enhancing employability skills in graduate business programmes: service-learning in capstone courses, PhD Dissertation, University of Minnesota, https://conservancy.umn.edu/bitstream/handle/11299/177145/Wickam_umn_0130E_16607.pdf?sequence=1&isAllowed=y.
- [33] World Economic Forum. (2018). The Future of Jobs Report 2018, Centre for the New Economy and Society, Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf.
- [34] Ziarul financiar. (2010). Exclusiv online: Topul celor mai vizitate site-uri de job-uri [Exclusively online: Most visited recruitment sites], 21 July 2010, Retrieved from <https://www.zf.ro/business-hi-tech/exclusiv-online-topul-ceilor-mai-vizitate-site-uri-de-job-uri-6652280>.