

UNIVERSITY – VECTOR OF GLOBAL DEVELOPMENT

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Abstract

The economic higher education system must be viewed as a competitive market where different players meet, interacting, each with a desire to achieve an efficient result - a successful and performant graduate. In this sense, the higher economic school must be approached as one of the main engines of society in sustainable development, in increasing the standard of living and the quality of life, respectively of human well-being. In this sense, the economic school must be continuously supported, developed and adapted.

Keywords: *higher education system, sustainable development, economic studies*

DOI: 10.24818/CAFEE/2019/8/02

Introduction

The great universities of the world, during the interwar period and especially after the Second World War (when they were the beginning of the transition from elitist education to the massification of the education system), have massively oriented their academic offer towards two major fields: the economic and the technological field. For example, the British and French systems mainly focused on the economic sciences (business administration¹ and the financial-banking system), and the American, Japanese, German and Soviet systems, towards the technological one. In Romania, during the interwar period the university environment was highly developed/oriented towards the French system. The French university system, compared to the German or English, did not have an equally strong economic school. Thus, the draft law² establishing the Academy of High Commercial and Industrial Studies in Bucharest (the first institution of higher economic education in Romania) generated big controversial discussions in the two Houses of the Parliament of Romania, its opponents invoking different arguments: lack of qualified teaching staff, covering the need for economists by the existing middle and high schools and the Law Faculties. The first proposal was to integrate this faculty within the University of Bucharest, having as main argument that only universities can "profess science". During time the higher economic school in Romania was not favored too much from the social, political and "specific feature" of the nation, as follows:

¹ London has for many decades held the status of the world capital of politics, finance and trade

² On April 6, 1913, M. S. King Carol I of Romania promulgated the Law establishing the Academy of High Commercial and Industrial Studies, through the Decree Law no. 2978

In the period between the two wars, historians asserted that Romanians decided to focus more on the theoretical and not practical education. “The ratio of those attending the two types of schools was opposed to the general situation in Europe, which shows a certain discrepancy related to the modern world; most young people wanted to attend colleges, because the faculty provided them the opportunity to reach administrative positions; all wanted to reach the state administration, to be civil servants, but only a small proportion of young people wanted to do practical education, become mechanics, installers, etc., to have a job as the modern world demanded. The Romanians wanted a position in the state and less to have a financial security, respectively a business. The Romanians, often, financially invested from his own wealth to obtain a position in the state. Probably that function offered recognition, from here and the education that followed the same pattern, which tried to provide functions for the state, and the State, through its policy, encouraged this orientation, leaving the space of modernity for other ethnic groups, which were heading for the necessary functions from the point. socially”³.

During the respective period, the administrative structures of the state were formed/reformed and there was an increased demand for administrative staff, teachers, lawyers, notaries, etc. For example, in that period the higher economic school was represented by the Academy of High Commercial and Industrial Studies in Bucharest and Cluj, in which only 11.2% of the total students were enrolled, and at the Law School - 28.7%, the Faculty of Letters and Philosophy -13.8% (in the academic year 1937/38).

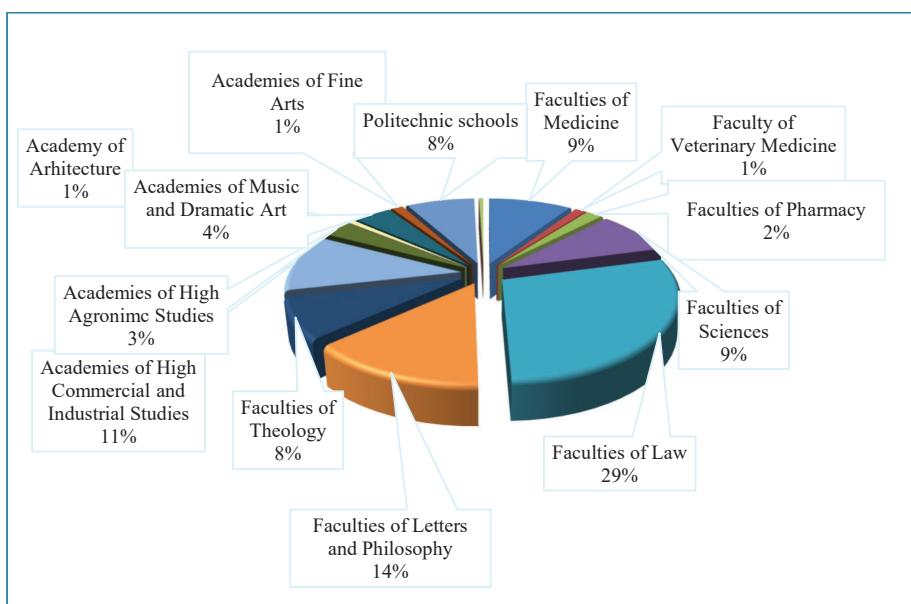


Figure 1. The structure of the students enrolled with faculties and special schools in the academic year 1937-1938

The share of the number of the teachers from the Academy of High Commercial and Industrial Studies in Bucharest and Cluj, in total university average was only 4%, compared

³ <http://ziarullumina.ro/pe-holurile-scolii-interbelice-48295.html>, Ovidiu Buruiană, *The Faculty of History of the University "A.I. Cuza" from Iasi*

to the Faculty of Sciences of 21.4% (equal to the Faculty of Medicine), the Polytechnic School - 11.9%. As a result, there was a great lack of teachers, specialists in the field.

Table 1. Students registered at faculties and special schools distributed by faculties in 1933-1937

Faculty/Specialization	1933/34	1937/38	Share 1937/38%
Faculty of Medicine	2763	3844	9,2
University of Veterinary Medicine	432	374	1,2
Pharmaceutical University	1294	559	1,8
Science College	4686	2642	8,6
Law School	14998	8836	28,7
Faculty of Letters and Philosophy	5467	4250	13,8
Faculty of Theology	2561	2480	8,1
Academy of High Commercial and Industrial Studies	4260	3447	11,2
Academi of High Agronomic Studies	759	978	3,2
The Academy of Architecture	302	217	0,7
Academy of Music and Dramatic Art	1480	1280	4,2
Academi of Fine Arts	476	381	1,2
Polytechnic school	1146	2335	7,6
School of drivers, Designers And Arhitecture	78	0	0,0
Higher Institute of Physical Education	201	148	0,5
Total	40903	30771	100,00

Source: Calculations according to the Statistical Yearbooks 1935-1940

Period 1948-1989. In this period the efforts of the universities were to educate in the administrative and economic field, as it was necessary by the State. For 40 years after the Soviet model, the academic environment was oriented to massively train specialists in technical sciences, so that in the 1988/89 academic year the share of engineers represented 65.5% in the total graduates at national level, and in the economic field only 10, 26%. It should be mentioned that, according to the model of the Soviet school, the Romanian economic school has developed mainly operational specialists (accountants, business financiers, merchants, etc.), from the sphere of the executive staff and not the managerial or theoretical ones.

Table 2. Number of graduates by specialization groups between 1950-1989

University year	1950/51	1960/61	1970/71	1980/81	1988/89
Technical sciences	3673	4114	10434	22620	18119
Medico-pharmaceutical	1665	1796	1569	3822	2912
Economic sciences	1411	967	4408	4779	2835
Legal	567	893	1072	1270	472
Pedagogical universities	2066	2273	10783	5265	3182
Arts	128	253	574	859	183
Total graduates	9510	10296	28840	38615	27620
<i>Share of technical Sciences %</i>	<i>38,6</i>	<i>40,0</i>	<i>36,2</i>	<i>58,6</i>	<i>65,6</i>
<i>Share of economic Sciences %</i>	<i>14,8</i>	<i>9,4</i>	<i>13,3</i>	<i>12,38</i>	<i>10,26</i>

Source: Calculations according to the Statistical Yearbook of the Socialist Republic of Romania 1981, pages 605-609 and the Statistical Yearbook of Romania 1990, pages 164-169.

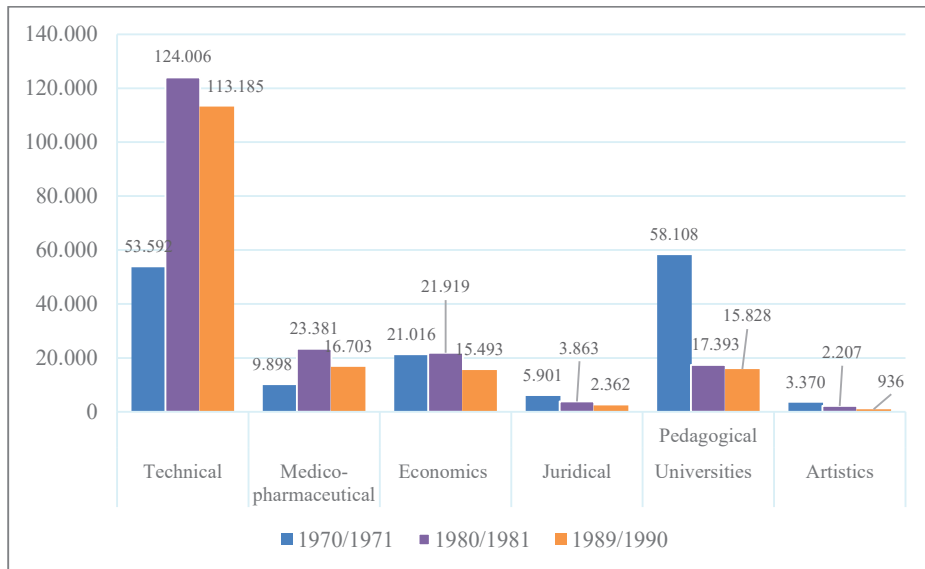


Figure 2. The number of students by groups of specialization during the academic years 1970-1971, 1980-1981 and 1989-1990

In Romania in 1988/1989, 65.5% of the total number of students were enrolled in the engineering sciences, not talking about the technological classes in the theoretical high schools.

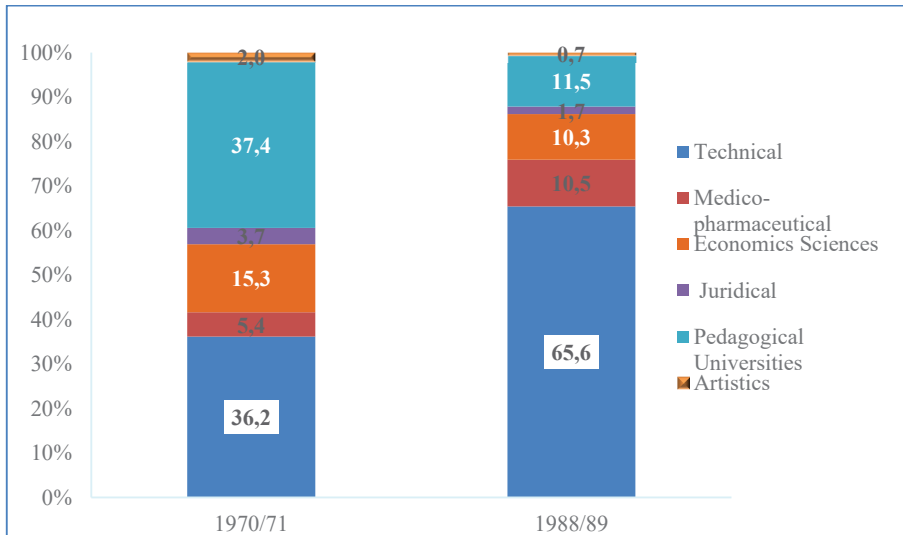


Figure 3. The share of the enrolled students by groups of specialization in the years 1970s and 1988s

After the 1990s, the academic system tried to take the western forms and adapt them to the concrete situation by creating a market-oriented curriculum. For almost 29 years, high school graduates have mainly focused on specializations such as law, administrative science, communication and journalism. This aspect is due on the one hand to the fact that the state's administrative structures are constantly being reformed, and on the other hand the financial, political and economic insecurity no longer encourages the graduates to grow their own business. To which we added the lack of entrepreneurial education, so that the good graduates of the economic school turned to multinational companies. The economic education system must pay attention to the phenomenon of internationalization, that of globalization, by stimulating the orientation of young people towards innovative specializations and cultivating to the students the courage and initiative to develop entrepreneurship.

Even today, the economic higher education in us in the country is not offered the proper support through the role and place it plays in increasing human well-being, economic development and sustainability. This statement also derives from the comparison of the weights of the budgeted students in economic education compared to other fundamental fields. According to the national nomenclature, the branch of Economic Sciences is part of the Fundamental Field of Social Sciences, in which only 35.9% of the students are on budget, compared to the national average of 53.5%. Table 3 details the structure of the students from the first year to the budget by fundamental areas.

Table 3. Structure of budget students by areas in 2017-2018

Fundamental domain		Total number of budgeted students – I year	Share in Fundamental domain %	The share of students graduates year I to the budget (%)
1	Mathematics and natural sciences	5.634	8,83	67,1
2	Engineering sciences	24.195	37,91	76,5
3	Biological and biomedical sciences	6.424	10,06	50,5
4	Social Sciences (including Economic Sciences)	18.002	28,20	35,9
5	Humanities and Arts	8.079	12,66	65,1
6	Science of sport and physical education	1.492	2,34	37,4
Total		63.826	100,0	53,5

Source: Ministry of National Education, April 2018

Note: Statistical data reported by universities in the ANS platform (reference date 1 October 2017)

The dynamics of the number of students registered at Economic Sciences and their weight in the total number of students enrolled in Romania can be traced in table no.4 and figure 3. The maximum values for the whole analyzed period (2000-2018) were recorded in 2007-2009, which coincides with the period of the economic crisis.

Table 4. Number of students (bachelor's, master's and doctoral students) registered at the Economic Sciences Branch and their share in total higher education system, between 2000-2017

Year	Total students enrolled	Economic Sciences ⁴	From which students in the state system	Share in Economic Sciences %
2000/2001	533.152	132.332	71.134	24,8
2001/2002	582.221	146.110	83.457	25,1
2002/2003	596.297	158.185	92.578	26,5
2003/2004	620.785	172.409	101.553	27,8
2004/2005	650.335	188.505	109.918	29,0
2005/2006	716.464	221.619	118.781	30,9
2006/2007	785.506	242.330	126.517	30,9
2007/2008	907.353	294.417	125.795	32,4
2008/2009	891.098	281.421	102.405	31,6
2009/2010	775.319	223.961	93.505	28,9
2010/2011	673.001	170.217	81.340	25,3
2011/2012	539.852	114.703	66.878	21,2
2012/2013	618.157	98.107	63.814	15,9
2013/2014	578.706	83.380	55.944	14,4
2014/2015	541.653	96.879	75.674	17,9

⁴ After 2013 according to ISCED 2013 with the name Business Administration

2015/2016	535.218	88.234	70.343	16,5
2016/2017	531.586	87.383	70.780	16,4
2017/2018	538.871	86.531	71.215	16,1

Source: Calculations according to EUROSTAT, <http://ec.europa.eu/eurostat/data/database>, and INS online tempo, accessed March 2019

After 2014, the values of the number of students enrolled, both on the total education system and in the economic field, registered a relative stability.

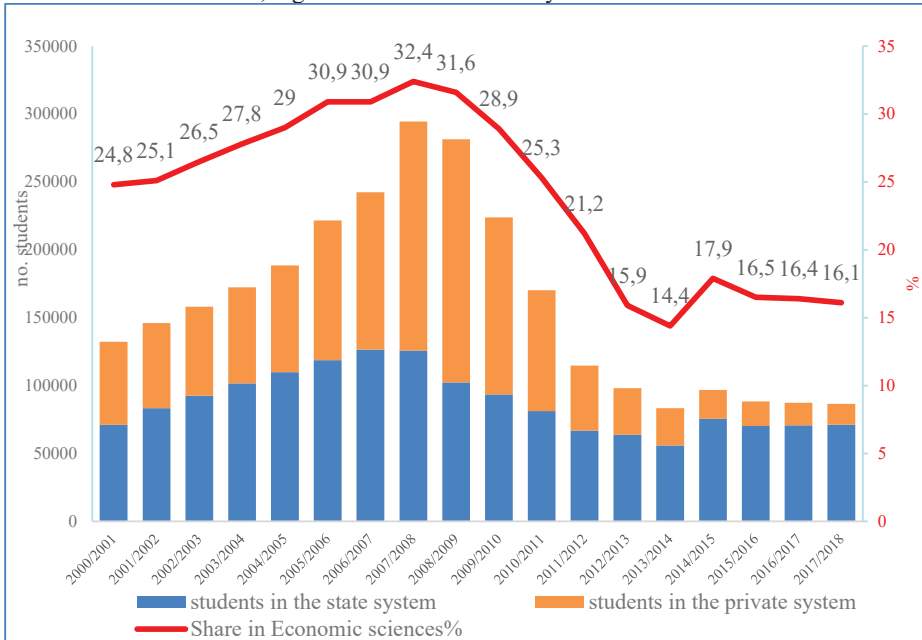


Figure 4. Evolution of the students registered at the license Economic Branch Sciences, by forms of ownership, weight in total students, between 2000-2017

It is worth noting the reduction of the number of students in private education, to 15,316 students, compared to 179,016 students in the 2008/2009 academic year.

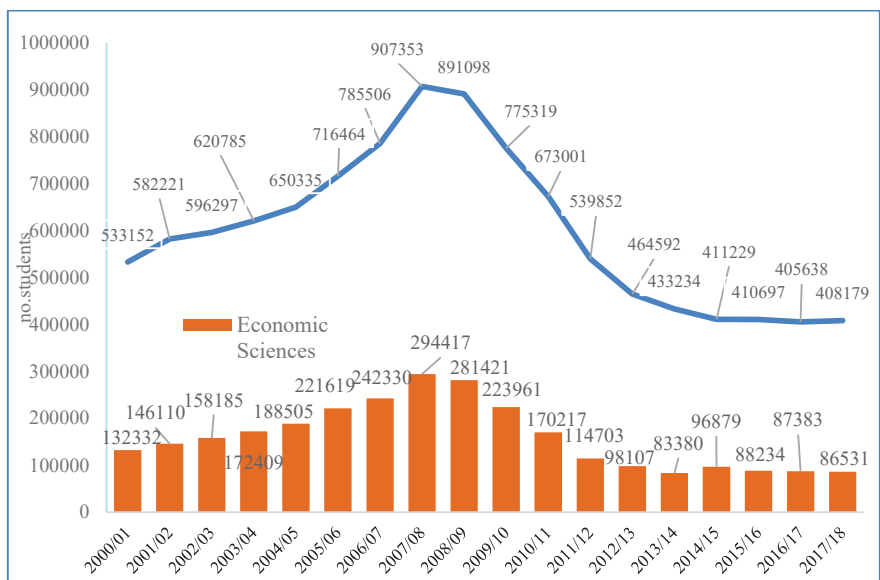


Figure 5. Dynamics of students enrolled in total educational higher system and the economic field between 2000-2016

Source: Processing after <http://statistici.insse.ro/shop/INS>

The share of students enrolled in the degree programs in the Economic Sciences Branch in 2015 was only 15.36% of the total existing students, (in 2007, 2008 the share was over 30% in total SNIS).

Table 5. Students registered at the bachelor's degree programs, in the branch of Economic Sciences, in the academic year 2017-2018

Domain	First year		Second year		Third year		Total	Share of budgeted students %
	Budget	Taxis	Budget	Taxis	Budget	Taxis		
Business Administration	1789	1653	1731	886	1754	1115	8.928	59,07
Cybernetics, statistics and economic informatics	1017	667	909	422	872	604	4.491	62,30
Accountancy	1133	1240	1210	696	1278	936	6.493	55,77
Economy	425	370	439	50	444	113	1.841	71,05
Economics and international affairs	743	557	704	317	687	399	3.407	62,64
Finance	1146	926	1206	511	1224	723	5.736	62,34
Management	1090	1237	1103	584	1067	680	5.761	56,59
Marketing	764	796	770	409	753	455	3.947	47,94
Total	8.107	7.446	8.072	3.875	8.079	5.025	40.604	59,74

Source: Ministry of National Education

Note: Statistical data reported by universities in the ANS platform (reference date October 1, 2017)

In the academic year 2017-2018, at the level of the state institutions in the first year were 62,523 students, out of which 15,553 students in the branch of Economic Sciences, representing a weight of 24.87% of the total students, and the share of students budgeted in The branch of Economic Sciences in total students registered at the first year is 19.03%, compared with the national average 59.7%

2. Potential demand of applicants for bachelor studies for the period 2020-2030

In this part of the paper, we propose to estimate for the period 2020-2030 the potential demand of the candidates for admission to the undergraduate degree programs. Romania is facing a phenomenon that is more than worrying, even dramatically due to the medium and long term consequences: the decrease in the number of population, generated by both the drop in birth and the migration. The population of Romania has reached the lowest level since 1968. Not so much the numerical decrease is serious but in particular the alteration of the age structure, the decrease of the weight of the young people. The reduction of the weight of the young population will have a major impact on the social processes in the future decades in areas such as: education, employment insurance in economy, health care, pension and social assistance system, etc.

The age pyramid reflects the long-term trends in fertility and mortality, but also the short-term effects of migration, demographic policies or changes in a century of demographic history. The effects of Decree 770/1966 on abortions or the effects of post-1990 abortion are visible. The age group structure of the population on residential areas confirms that the process of demographic aging is more pronounced in the rural area. The index of demographic aging and the ratio of demographic dependence were directly influenced by the decrease of the number of children (mainly) and by the growth of the elderly population.

The process of demographic aging deepened in 2018, compared to January 1, 2017, noting a slight decrease in the share of young people (0-14 years) and an increase by 0.3 percentage points of the share of the elderly population (65 and over). All regions and counties of the country are affected by the decrease of the resident population, but with different intensities. In the last years have been established and consolidated in a series of true urban agglomerations "poles of economic development", fact that can attract young people through the more generous job offer, but one of the negative consequences of this process will consist in depopulation of rural areas and accentuation of developmental discrepancies, diminishing in this way the chances of children from these areas to higher education. As a result of the significant drop in birth after 1989, the number of educational establishments has steadily decreased. From the demographic point of view, during the last 25 years, the population in the 0-24 age segment decreased by 3.8 million people, respectively by -42.7%, faster than the whole population which decreased by 3.6 million people (-15.44%). Detailed information in table no. 6.

Table 6. Population volume and weight of age group 0-24 years

Group of age	Years			2018 compared with 1993	
	1993	2010	2018	Absolute (persons)	Relative (%)
Total population	23.098.108	20.294.683	19.530.631	-3.567.477	-15,44
Population in the age group 0-24 years	8.956.367	5.721.599	5.132.265	-3.824.102	-42,70
Group weight 0-24 years in total (%)	38,8	28,2	26,3	X	X

Note: in 1993 - Population residing on January 1 by age and sex, and in the years 2010 and 2018 - population residing on January 1 by age and gender.

Source: Processing according to the data provided by INS, tempo-online, accessed March 2019.

In 2018, the share of the segment 0-24 years in total population was 26.3%, while in 1993 the share was 38.8%. Suggestive for the displacements of the population structure by age categories is the image in figure 5.

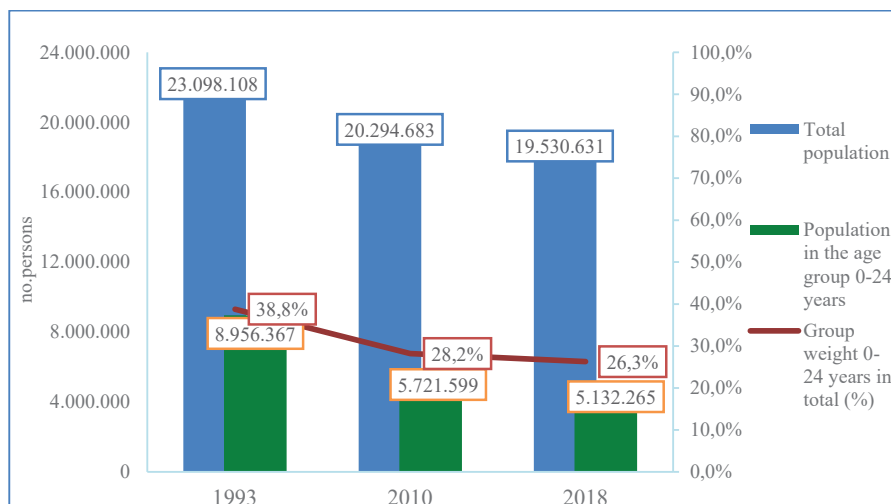


Figure 6. Population volume and share of the age group 0-24 years in the total population of Romania, in 1993, 2010 and 2018

After analyzing the demographic aspects mentioned above, in the sizing of the number of potential young candidates for higher education, the promotion rate of the baccalaureate examination must be considered. It is obvious that the most significant segment of the young students from the first year, is represented by the recent graduates of the baccalaureate current promotion - the weight being 75-80%. The reasoning for the estimation, starts obviously from the demographic factor, respectively from the level of the resident population. In this respect, the segment of potential students for the period 2020-2030, are the young people born in the period 2002-2012. The calculation algorithm starts from the segment of young people born between 2002-2012 and from the hypothesis that in the following school years the primary influence factors will have the same weight as at present, respectively:

- a) (-) the non-classification of the resident children in the educational system - about 1%,
- b) (-) early school leaving (range 7 years - 16 years) - 12.41%,
- c) (-) emigration of families with children / students (approx. 2.5%),
- d) (-) baccalaureate promotion rate (64.44%),
- e) (-) the rate of departures of recent graduates of BAC abroad (approx. 10%),
- f) (-) the interest / disinterestedness of enrolling in the universities of the country of the high school freshmen (approx. 2.5%),
- g) (+) candidates from previous promotions/candidates at the second faculty (15-20%), this weight is increasing due to the development of the European principle of lifelong learning.

In this respect, by assigning the indicator rates listed above, we obtain the following numerical picture, illustrated in figure 6.

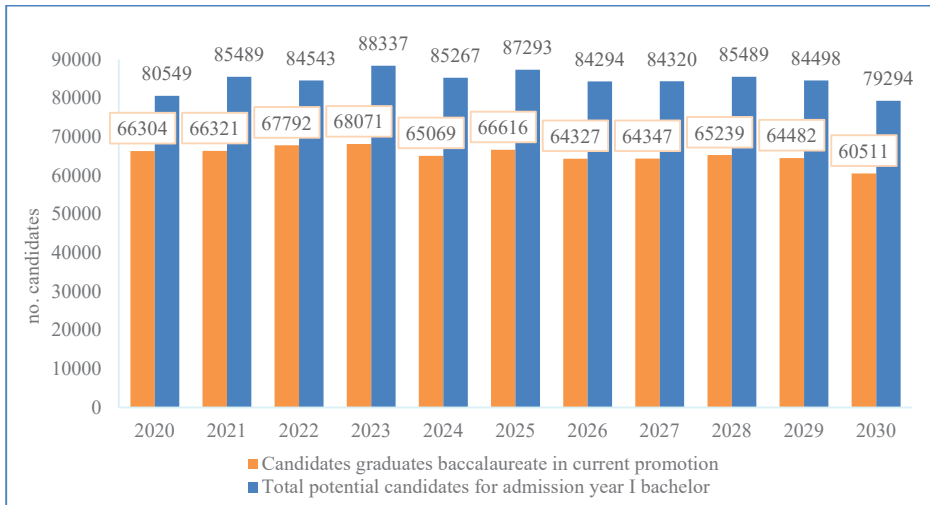


Figure 7. Estimating the number of candidates for admission to the bachelor in the period 2020-2030

Conclusions

The complexity of the development of the specializations makes it impossible to accurately quantify the value contribution of the graduates / specialists in a certain graduated field, but it can be stated with certainty that as much as contribution, size and role in the society, the graduates from the economic field and IT represent pillars of the development. and the sustainability of a modern economy.

Against the background of the current labor crisis, if we take into account the level of alienation of specialized human capital, respectively, if we consider the rate / level of graduates' departures by fields, abroad, then the number of economists and ITs is well below the level emigration of medical or engineering graduates, which means that the financial effort made by our country in training economists and IT compared to other specializations is more sustainable.

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