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# TRENDS IN EDUCATIONAL CHOICES OF STUDENTS OF HIGHER EDUCATION INSTITUTIONS IN MAZOVIA COMPARED TO THE LOCAL LABOUR MARKET NEEDS

2004-2012



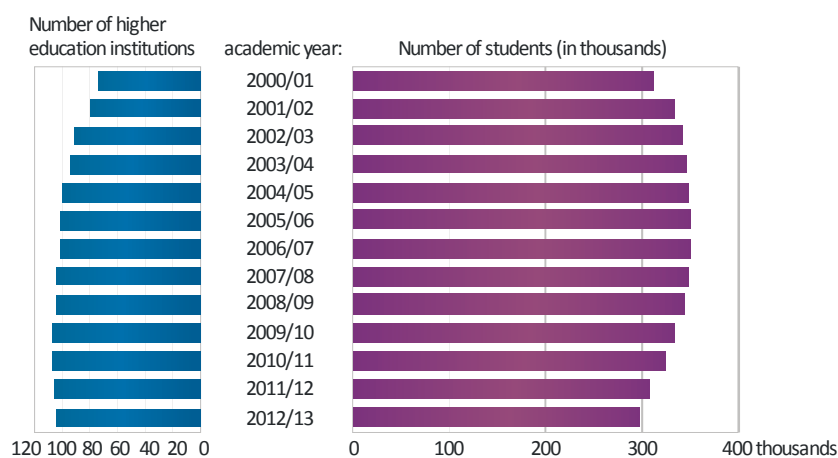
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The importance of employing knowledge for economic progress and the necessity of the development of human capital are among ten biggest challenges Poland faces, according to the strategy *Poland 2030*<sup>1</sup>. As assumed in this strategy, in the next 17 years human capital is to become the main source of competitiveness of the Polish economy.

Changes in the economy, especially in the demands of the labour market have changed the attitude of the youth and adults towards education. Realization of the fact that higher education increases the possibility of getting a better paid job and creates wider perspectives for professional development, resulted in an increased demand for education. This trend is evident in the data on the level of education of the population gathered in the National Census of Population and Housing. According to the 2011 census the proportion of people with tertiary educational attainment in the total population aged 13 and more in Mazowieckie voivodship was 23.6% and increased by 9.8 percentage points in comparison to 2002<sup>2</sup>.

However, the demand for education is based not only on the rising awareness of the need for education; it also depends on demographic conditions shaped by the demographic booms and slumps. A good example is Mazovia, where after the year 2000 thirty higher education institutions have been set up, out of which the most between 2001 and 2004, when the baby boom generation of the early 1980s entered higher education path. Over that period the number of students increased by more than 15 thousand, i.e. by 4.5%. However, after 2007, when students started to be recruited from less numerous birth cohorts, the number of students started to diminish.

**Graph 1. Number of higher education institutions and students<sup>3</sup> in Mazowieckie voivodship**



In Poland only the persons who graduated from secondary school and passed matriculation exam are eligible to start higher studies. According to the data of the Central Examination Commission, in 2012 in Mazowieckie voivodship 46 479 persons took the matriculation exam, which equated to 74.1% of the cohort of 19-year-olds<sup>4</sup>. Although the passing rate of matriculation exam dropped from 87%, registered in 2005, to 81% in 2012, still there is observed high interest of the high school graduates in continuing

<sup>1</sup> *Polska 2030. Wyzwania rozwojowe*, The Chancellery of the Prime Minister, p. 228.

<sup>2</sup> *Narodowy Spis Powszechny Ludności i Mieszkań 2011. Ludność w województwie mazowieckim. Stan i struktura demograficzno-społeczna*, Statistical Office in Warsaw, Warsaw 2012.

<sup>3</sup> According to the actual location of the institution; including students in the branches of higher education institutions from other voivodships, excluding persons studying abroad in branches of the institutions from Mazowieckie voivodship.

<sup>4</sup> According to the population as of 30 June 2012.

education on tertiary level. The number of newly enrolled students<sup>5</sup> of higher education institutions amounted to 69 044, which was more than the number of persons who took the matriculation exam in 2012. It shows that among the newly enrolled students there are also high school graduates from earlier years and, most of all, migrants from other regions.

At the same time, along with the significant improvement of the education level structure of the population, what matters is not the sheer level of education completed, but the field and profession, and their fit to the needs of the local labour market.

Hence, the aim of this report is to present the changes in educational choices of students of higher education institutions in Mazovia with respect to the most often chosen types of higher education institutions, kinds of studies and fields of education, in the light of the needs of the local labour market.

Data on the number of higher education institutions and students exclude institutions run by the national defence and interior ministries. Whereas, due to the changes in data presentation, data of 2012 concerning the number of students by sex, type of institution, kind of studies, form and field of education, include the institutions run by the national defence and interior ministries. The number of students includes foreigners studying in higher education institutions in Mazovia.

Data is presented according to the actual location of the higher education institution; including students in branches of institutions located in other voivodships. In addition, data of 2012 exclude foreign branches of Polish higher education institutions, which earlier had been included according to the location of the main institution (there are three such units: Dublin department of the Local Government College from Żyrardów, London department of the European School of Law and Administration from Warsaw, London teaching unit of Pultusk Academy of Humanities). Total number of students in these organizational units is slightly above 187 persons.

In the report fields of studies have been classified according to the International Standard Classification of Education 1997 (ISCED'97) and systematized into subgroups, as subcategories of ISCED's broad groups. Specialities have been included in relevant fields of studies.

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<sup>5</sup> Including foreigners, including branches of higher education institutions located elsewhere.

In the academic year 2012/2013 in the higher education institutions located in Mazovia there were 293.2 thousand students, i.e. 15.9% less than in 2004. It can be observed that until the academic year 2005/06 the number of students was rising dynamically. One of the reasons of such a situation was the rise in educational aspirations, as evidenced by the increasing proportion of persons taking matriculation exam.

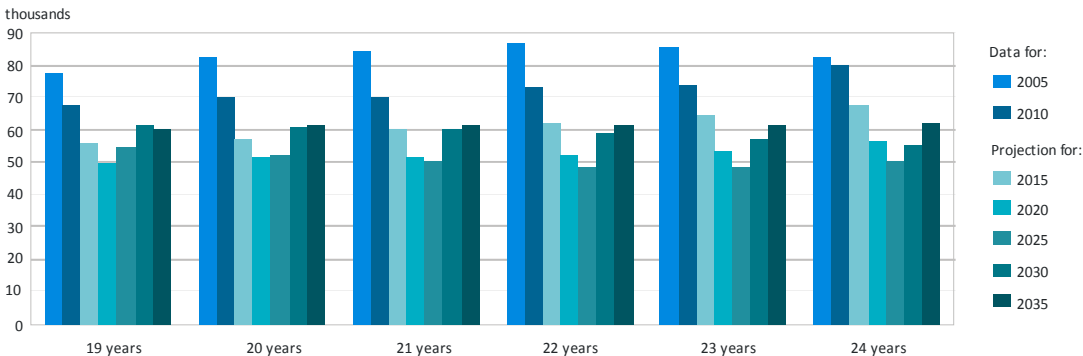
Another factor was the entry on the educational path of the baby boom generation born in the early 1980s. In the academic year 2005/06 the students recruited from this demographic peak cumulated to 349.8 thousand – the highest number of students of all the years covered by this report. However, after 2005 the demographic trend which used to be the driving force of the higher education sector started to reverse dramatically.

It is worth pointing out that demographic changes affect the statistics of higher education institutions located in the largest cities much slower. The decrease in the number of students registered by higher education institutions in the whole Mazovia since the academic year 2006/07, was not observed by the institutions located in Warsaw until three years later, in the academic year 2009/10.

Since 2006 each and every year brought a decrease in the number of 19-year-olds in Mazovia and this decrease resulted in the diminishing demand for higher education.

In addition, according to projected data the subsequent cohorts from which students will be recruited until 2025, will be less and less numerous. As the result of the unfavourable demographic processes in connection with the constantly falling number of births, the total number of persons in the age group 19-24 will be diminishing significantly. In 2020 this group will equate to 316.0 thousand persons, while in 2012 it was 407.7 thousand persons. The drop will amount to 29.0% which means that the group of potential students will diminish by almost one third. According to the projections, only after 2025 growth in the number of candidates for higher education can be expected.

**Graph 2. Number of population in the age group 19-24 in Mazowieckie voivodship in 2005 and 2010 and the projected number of population in this age group in selected years**

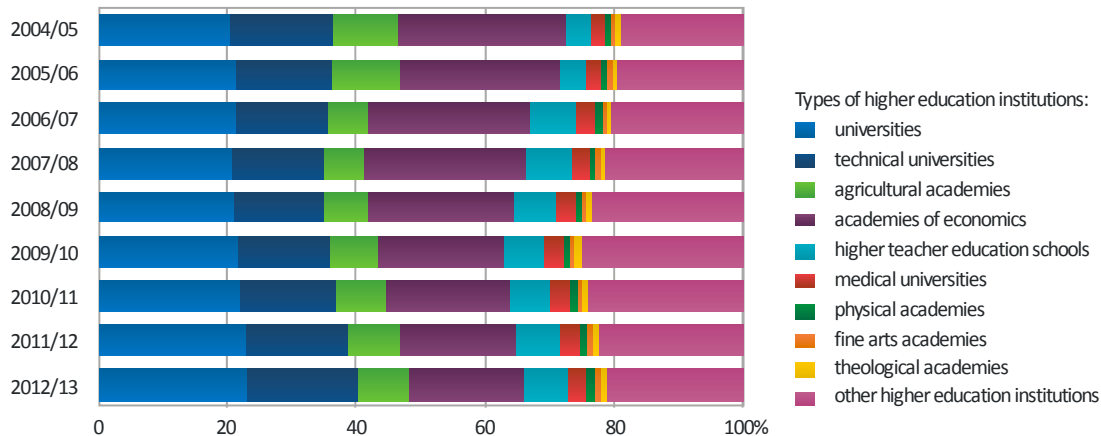


With respect to the percentage of students according to school type interesting changes have occurred over the last 9 years.

As can be seen in the data, each year the number of students diminishes in the academies of economics, higher teachers education schools and universities, which observe steady loss of

popularity – economics throughout the whole analysed period, universities – since 2006/07 and teacher schools – since 2007/08. On the other hand, fine arts and physical academies (both types since academic year 2009/10) and institutes of technology (since 2010/11) observe an increase of demand.

Graph 3. Structure of students by type of school in the period 2004-2012



Another significant change observed in the analysed period has been increasing popularity of the two-cycle system of higher education qualifications. By signing the Bologna Declaration<sup>6</sup> of 1999, Poland obliged itself to actions aimed at convergence of the higher education system with those of other European countries i.a. by adopting a system of comparable degrees and academic titles. Hence, since September 2005 the higher education system is organised into three cycles of education: first-cycle – 3-year-long studies towards a Bachelor (licencjat) or Engineer (inżynier) degree, second-cycle – 2-year-long studies finished with a Master degree (magister), third-cycle – 4-year-long studies that lead to obtaining academic degree of a Doctor or PhD (doktor).

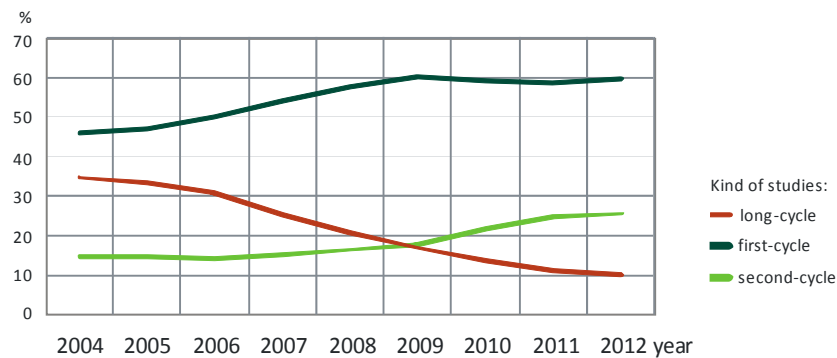
In spite of breaking the studies leading to Master (magister) into two cycles of education (completed with Bachelor and Master degrees), some of the fields of studies<sup>7</sup>, due to their character, have remained in the form of the long-cycle by force of the decision of the Minister of Higher Education. However, as a result of the reduction of the number of faculties offering this type of studies, the percentage of students enrolled in long-cycle studies diminishes steadily – from 34.9% in the academic year 2004/05 to 10.1% in 2012/13. Due to the specific character of medicine, medical universities still offer studies in the form of the long-cycle – in the academic year 2012/13 students of this system formed a majority (54.5%) of all students of medical universities. In comparison, in the academic year 2004/05 this percentage was lower – only 47.0%.

Analysing the number of students in the first- and second-cycles it can be noticed that a large part of them, after obtaining a Bachelor degree do not continue towards a Master. Although the number of students of the first-cycle is a sum of three years and the second-cycle – of two years, the population of students working towards a Bachelor is over twice as large as the population of students continuing towards a Master degree.

<sup>6</sup> On 19 June 1999 ministers of education of 29 countries signed the Bologna Declaration. Its main aim was the creation of the European Higher Education Area by 2010

<sup>7</sup> These fields include: acting, medical analytics, pharmacy, medicine, dentistry, law, canon law, psychology, veterinary medicine, film and tv production, photography, as well as art conservation.

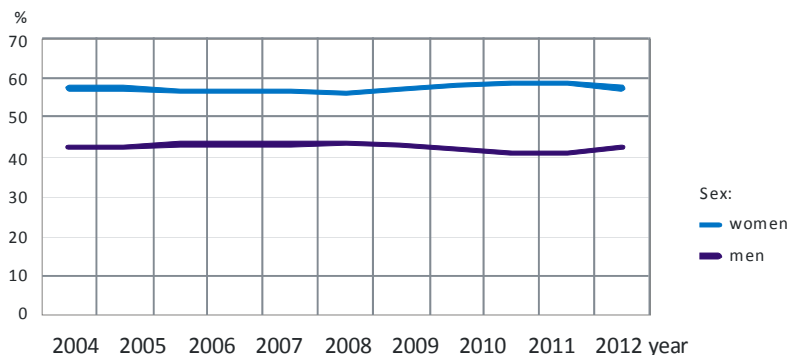
**Graph 4. Percentage of students by kinds of studies between 2004 and 2012**



It is worth pointing out that second-cycle studies are more often chosen by women than men. In the period 2004-2012 the proportion of women among students of this kind of studies was above 60.0%, and the highest one was observed in 2005/06 when women comprised 66.8% of second-cycle students.

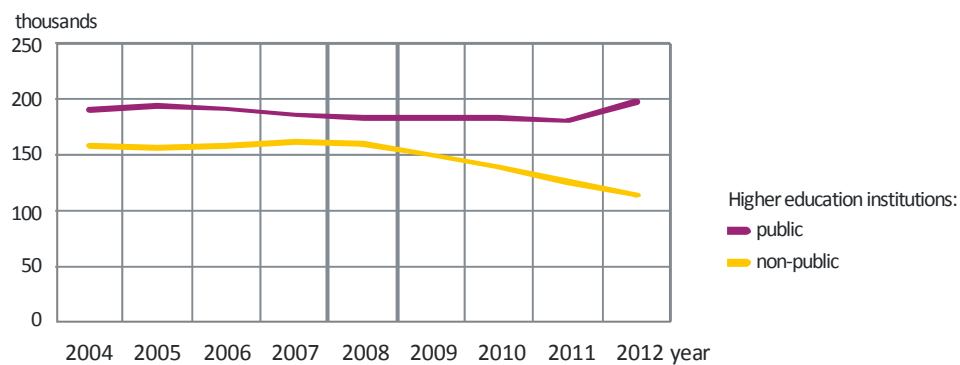
In the whole analysed period women prevailed among students of all higher education institutions. The disproportion was the largest in 2011/12 when the percentage of women equalled 59.0%. According to the latest data for the academic year 2012/13 gender imbalance among students diminished, however this may be a result of a change in methodology as since 2012/13 statistics include the schools run by the national defence and interior ministries, in which men dominate.

**Graph 5. Percentage of students by sex in the period 2004-2012**



Easier access to public higher education institutions with no fee, thanks to the smaller number of candidates, resulted in the increase of the percentage of students in such institutions. The graph below shows that the demographic slump has a smaller impact on the number of students of public higher education institutions that in the case of non-public ones.

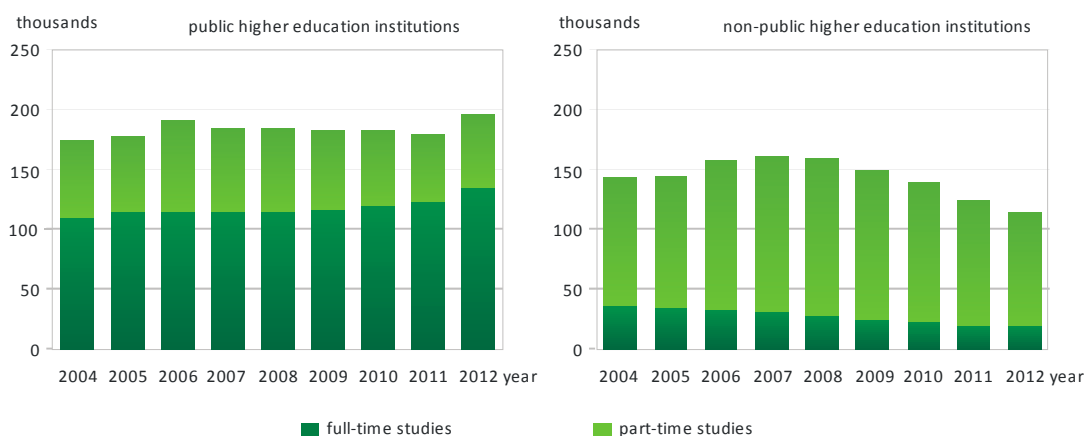
**Graph 6. Students in public and non-public higher education institutions in the period 2004-2012**



Moreover, in public higher education institutions the dominant form are full-time courses. In the academic year 2004/05 the proportion of students in full-time courses was 58.3% and it was increasing over the whole analysed period – in the academic year 2012/13 this form was followed by 68.8% of students of public higher education institutions.

In contrast to the public higher education institutions, in the non-public ones the dominant form are part-time studies. In the academic year 2004/05 68.5% of students of non-public higher education institutions followed this form of studies. With steady increase, this share reached 83.9% by the academic year 2011/12. However, in the last of the analysed academic years the proportion of part-time students in non-public higher education institutions decreased to 82.5% - nevertheless it is still much higher than in the public ones.

**Graph 7. Students by type of higher education institution and form of studies in the period 2004-2012**



In the academic year 2012/13, similarly as 9 years earlier, the most popular fields of studies were the ones belonging to the business and administration subgroup, chosen by 24.1% of students. This subgroup includes i.a.: administration, finance and accounting, international relations, management and marketing. Second rank, according to popularity, belonged to social sciences, with 13.6% of students. This subgroup includes i.a.: economics, political science, psychology and sociology. The third place was taken by teacher training and science of education, with 9.2% of students in the following fields: pedagogy, philology (teacher training colleges and teaching specialization) and

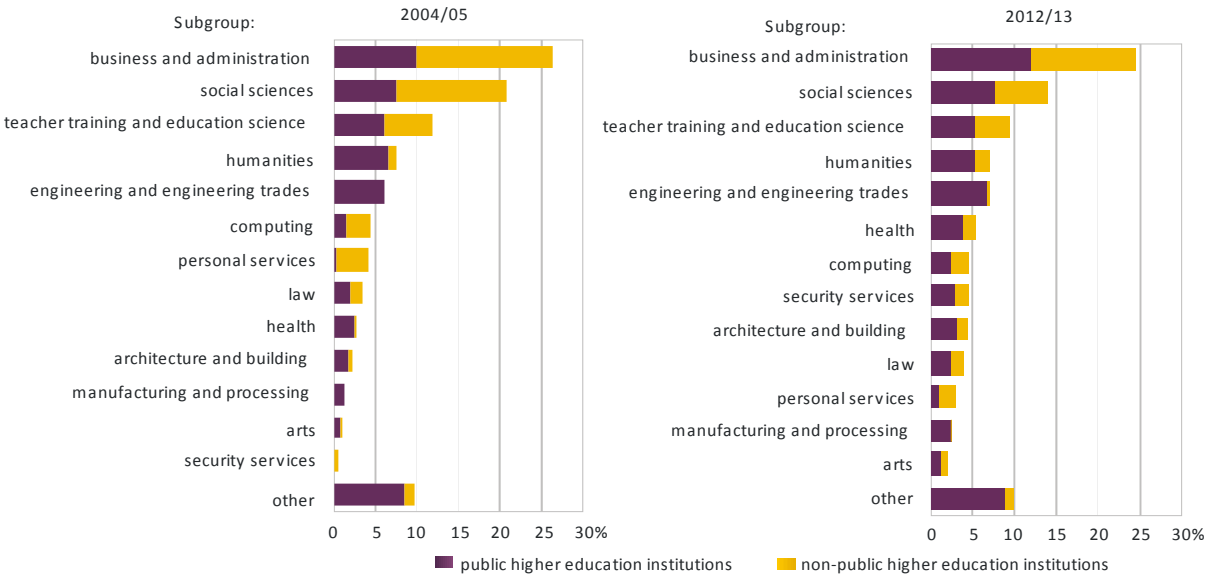


speech therapy. In the academic year 2004/05, compared to 2012/13, the proportion of students in these fields was higher and it equated to: 25.6% in business and administration, 20.3% in social sciences and 11.6% in education.

The least popular fields of studies were the ones belonging to veterinary subgroup, chosen by 0.4% of students. However, such a score is most probably a result of the limited number of places in these courses, and above all lack of this field of studies in the offer of non-public higher education institutions. A similarly low interest was attracted by the subgroups of social services (0.4%) and transport (1.0%). The subgroup social services includes i.a. social work, social prevention and rehabilitation, while the subgroup of transport services includes transport and navigation. Students of all of the above faculties accounted for less than 1% of all students, hence they were included in the category "other"<sup>8</sup>.

In the academic year 2004/05 the smallest proportion of students were enrolled at faculties belonging to the following subgroups: veterinary and biology (both 0.3%), security services (0.6%), mathematics and statistics (0.8%).

**Graph 8. Proportion of students of public and non-public higher education institutions by groups of fields\* of studies in the academic years 2004/05 and 2012/13**



\* in the academic year 2012/13 including schools run by the national defence and interior ministries

In the last 9 years the largest growth of interest was observed in the subgroups health and architecture and building, where the percentage of students increased by 2.8 and 2.0 percentage points, respectively. The increase of the proportion of students in the fields of health could result from introducing this field of studies to non-public higher education institutions. In the beginning of the analysed period 97.9% of students choosing this field enrolled in public higher education

<sup>8</sup> The category *other* includes faculties from the following subgroups: veterinary, social services, transport services, biology, journalism and information, physical science, mathematics and statistics, environmental protection, agriculture, forestry and fishery. The share of the students in these fields was not more than 1.5% in the academic year 2012/13.

institutions, while in 2012/13 this proportion was only 68.9%. The growth of popularity of studies in the group architecture and building could be attributed to including these faculties in the list of so-called ordered specialties. This is a pilot programme<sup>9</sup> with the aim of boosting the number of students of mathematics, technical and natural sciences – the ones which have been selected as their strategically important for the development of the Polish economy. The programme includes i.a. incentives in the form of scholarships for the best students and funding for the higher education institutions offering such specialties, allowing them to improve the attractiveness of such studies by organising e.g. courses giving additional qualifications and professional credentials to their students or study trips to enterprises willing to employ them once they graduate.

In contrast, the biggest loss of the proportion of students was observed among the subgroups of social sciences (drop by 6.6 percentage points), teacher training and education science (2.3 percentage points) as well as business and administration (by 1.5 percentage points).

Considering the trends in education, it can be seen that the choices of students in the public and non-public higher education institutions differ significantly.

Among the students of public higher education institutions there was an increased interest in the subgroups of: architecture and building as well as health, where the percentage of students increased over the analysed period by 1.5 and 1.2 percentage points, respectively. This increase is probably a consequence of the programme of the so-called ordered specialties, described above. On the other hand, there was a decrease of the proportion of students in public higher education institutions studying humanities (drop by 3.8 percentage points), teacher training and education science (by 3.1 percentage points) and social sciences (by 1.7 percentage points).

In non-public higher education institutions the directions of change were different. The largest increase of popularity was observed in fields of health (by 4.3 percentage points) and humanities (by 2.9 percentage points). Decreasing interest of students was observed in social sciences (a drop by 11.6 percentage points), personal services<sup>10</sup> (by 2.5 percentage points) and environmental protection (by 2.1 percentage points).

It is worth underlining that the choice of the field of studies is to a large extent shaped by the availability of the particular studies, which also influences the costs of education. Niche studies are usually more expensive. This factor is probably the root of the fact that throughout the whole analysed period every fourth student in the public higher education institutions and every third in non-public ones chose studies in the subgroup of business and administration, which includes, among others, very popular fields of: management and marketing, international relations or finance and accounting.

Trends regarding the subgroup of social sciences, such as sociology, social policy or political science, are another interesting case. In the academic year 2004/05 they gathered 20.3% of all students, but after years of steady decrease in 2012/13 this proportion was only 13.6%. In the beginning of this period, for the youth born in the demographic boom, an important criterion might have been good availability of these faculties in both public and non-public higher education institutions, which

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<sup>9</sup> Pilot programme *Ordering education in technical, mathematical and natural sciences* began on 1 October 2008 on the basis of the Regulation of the Minister of Science and Higher Education. Its objective is to supply enough well qualified specialists educated in science.

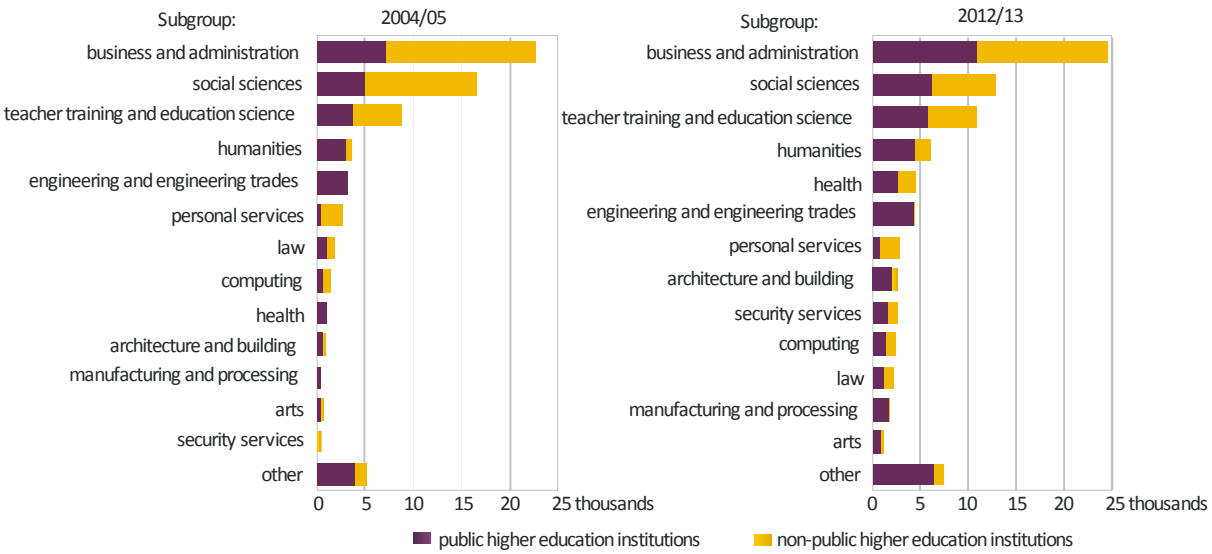
<sup>10</sup> The group of personal services include i.a. tourism and recreation, tourism economy, gastronomy and culinary art, cosmetology.

increased the chances of getting a place. However, when the generation of demographic slump entered the education market and the number of candidates decreased, faculties belonging to social sciences lost popularity; this trend had much more impact on non-public higher education institutions' statistics. In the public higher education institutions the proportion of social sciences students decreased from 13.7% in 2004/05 to 11.9% in 2012/13, while in the non-public higher education institutions the drop was much larger – from 28.2% in 2004/05 to 16.6% in 2012/13.

Trends in education, as students' choices, are affected also by the situation on the regional labour market. Students more and more often choose fields of studies increasing their chances of finding a job, not like earlier, when their decisions were targeted at obtaining a higher education diploma. However, due to the lack of information regarding the demand for particular educational profiles underrepresented on the labour market, there are still too many graduates of certain fields of studies.

Both in 2012/13 as 9 years earlier the largest group of graduates entering the labour market were graduates of studies belonging to the following subgroups: business and administration, social sciences and teacher training and education science – whose total share was over one half of the graduates (in the year 2004/05 their share was 69.2%, in 2012/13 – 56.2%). This proves that in the beginning of the 21<sup>st</sup> century these were the most popular and most frequently chosen fields of studies.

**Graph 9. Graduates of public and non-public higher education institutions in 2004/05 and 2012/13 by subgroups of fields of education\***

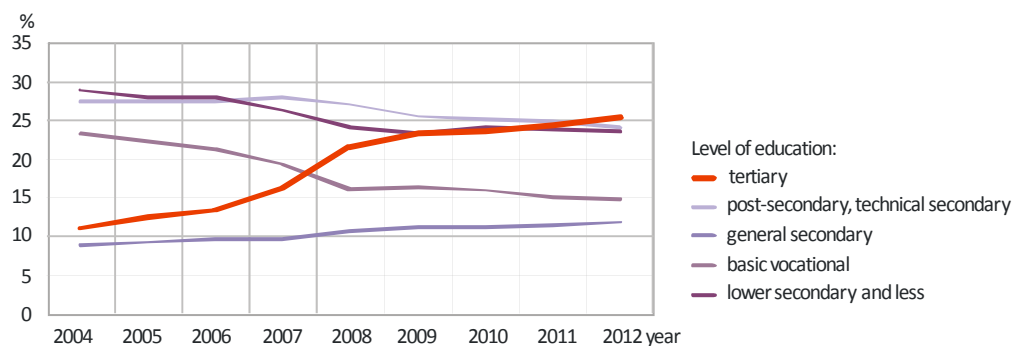


\* in the academic year 2012/13 including schools run by the national defence and interior ministries

Labour market data shows that the increase of the popularity of higher education had impact on unemployment statistics. In comparison with 2004 the number of the unemployed persons with basic vocational and lower secondary or less education decreased by 51.2% and 37.8% respectively, while the number of the unemployed with tertiary educational attainment increased by 73.2%. The proportion of graduates of higher education institutions among the unemployed increased by 14.3 percentage points. A misfit between the structure of supply and demand for work according to the education level has emerged, which means that the labour market for people with tertiary education

is saturated while the demand for workers with vocational education is unsatisfied. However, the increase of the proportion of the unemployed people with tertiary education is a result of the increase of the total number of graduates. The unemployment rate among people with tertiary education is still one of the lowest. According to the Labour Force Survey (BAEL), in the fourth quarter of 2012 the unemployment rate in the group of population with higher education in Mazowieckie voivodship was 3.7%, which was 3.7 percentage points lower than among people with basic vocational education and 15.3 percentage points lower than among people with lower secondary and less education. Hence having higher education diploma does not guarantee employment, but increases chances for getting it. According to the Labour Force Survey the economic activity rate of people with tertiary education in Mazowieckie voivodship increased from 77.3% in the fourth quarter of 2004 to 81.4% in the analogous period of 2012.

**Graph 10. Percentage of the unemployed according to the level of education in the period 2004-2012**



The problem of unemployment among people with tertiary educational attainment stems from the misfit between the most often chosen fields of education and the needs of the regional labour market. Comparing the most frequently chosen fields of studies with the professions of the unemployed registered in Employment Offices shows the lack of coordination between the education system and the dynamically changing needs of the employers. Considering the number of registered unemployed by professions and specialties<sup>11</sup> in Mazowieckie voivodship, high level of unemployment is reported among i.a. economists, public administration specialists, accountants, pedagogues or marketing and sales specialists. It has to be reminded that in the whole analysed period the total number of graduates of fields of studies belonging to the subgroups: business and administration, social sciences and teacher training and education science, was over a half of all graduates. Moreover, these fields of studies have been and still are among the most popular and most often chosen by the youth.

As in the whole analysed period over 70% of students who graduated from a higher education institution were graduates of institutions located in Warsaw, it is worth to refer to the results of a survey conducted in 2008-2009 for the Employment Office of the capital city of Warsaw. This report presents i.a. the demand for professions and projections of supply and demand for work in the Warsaw labour market until 2015<sup>12</sup>.

<sup>11</sup> As of end of December 2012.

<sup>12</sup> *Kompleksowa i prognostyczna informacja o warszawskim rynku pracy*, Urząd Pracy m.st. Warszawy, Warszawa 2009.

According to the survey results, Warsaw entrepreneurs most often sought specialists (requiring higher education) and skilled workers and labourers. Also in these groups an increase of demand until 2015 has been forecasted.

As regards the field of education, according to the report employers most often sought persons with background in: economics, finance, banking, trade, teacher training and education science as well as with diplomas of technical universities. These profiles are the same as the fields of studies of the majority of students and graduates. Therefore the unemployment of graduates of these studies is a result of overproduction, as the supply of graduates with diplomas in these fields exceeds the demand for them.

Furthermore, according to the projection, the demand for persons with the above mentioned educational profiles will remain stable; there will be also demand for graduates of gastronomy, tourism and health related studies. The projections of respondents taking part in the survey almost perfectly reflect their current needs, which may be evidence for certain stability of the Warsaw labour market.

It is worth underlining that according to the employers' expectations the most important criterion in recruitment is professional experience of the candidate. According to the report, for Warsaw employers education is an important factor, decisive for employment for specialist and managerial positions. In recruitment for positions in services and assistants education weighs less and in practice is treated equally with other factors. When stating qualifications considered as the most important in assessment and recruitment of employees, higher educational attainment got the fifth rank (it was chosen by one third of the entrepreneurs), below i.a. professional experience or job specific skills. Therefore education is not a sufficient asset to get a job – the employers put more weight on the actual or potential skills of the candidates.

The data show that increasingly often young people in Mazovia combine work and studies, so that already as students they start gaining professional experience, so appreciated by the employers. The statistics on economic activity rate<sup>13</sup> of among persons aged 15-24 show an increase – from 31.9% observed in the fourth quarter of 2004 to 33.9% in the analogous period of 2012. In a similar vein, employment rate<sup>14</sup> in this age group has increased by 4.2 percentage points over the analysed period.

Last but not least, it is worth assessing if higher education is a profitable investment in financial terms. In order to illustrate this, it is worth to refer to the results of the latest research report *Diagnoza społeczna 2013 (Social diagnosis 2013)*. Authors of this research project have calculated profitability index expressed as rate of return from studies as an investment. They calculated the difference in salaries between a person who has graduated from higher studies and their peer of the same sex who completed education one level below; they subtracted from this difference the cost of further education (fee and alternative cost of not working during the studies – assumed to equate 35

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<sup>13</sup> Economic activity rate is the percentage of the economically active persons in a particular group in the total number of persons aged 15 and more in a given group of people (delimited by age).

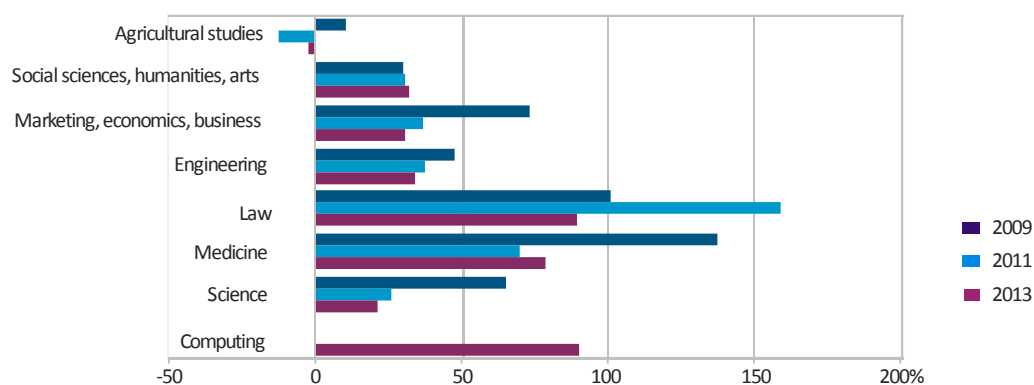
<sup>14</sup> Employment rate is the percentage of the employed persons in a given category in the total number of persons aged 15 and more in the given group (delimited by age).

thousand PLN for Master level studies) spread over the whole period of economic activity. Then they divided that balance by the value of salary of the less educated person and the result was multiplied by 100 in order to express the net gain in salary of a better educated person over the less educated one as a percentage. Persons with higher education diplomas were matched with persons who completed secondary education with the final exam (matura). In addition, persons with higher education were divided into holders of Master and Bachelor diplomas. According to the report, the rate of return from bachelor degree (8% in 2013) was five times lower than from a Master (rate of return equal to 42% in 2013). In comparison with the 2011 results, Master diploma retained its financial significance, while Bachelor degree ceased to be a profitable investment.

It is also worth pointing out that according to *Diagnoza społeczna 2013* not all fields of studies have the same rate of return. The most profitable studies are computing and law, the least – agriculture. According to the 2013 result, yield from studying computing and law was the highest of all fields, while studies in agriculture registered even a negative rate of return. Although law has the highest of all fields rate of return, over the last two years its profitability has dropped – in the current year their rate of return was the same as in the 1990s. However, according to the authors of the report “it cannot be excluded that it is a delayed effect of a certain degree of deregulation of legal professions”<sup>15</sup>. A large drop in profitability was also observed for medical studies, as for them the rate of return over the last four years diminished from 137% in 2009 to 79% in 2013. In a similar vein, studying in the faculties of economics, marketing, management and finance, had the greatest rate of return in the early 1990s, when there were not enough specialists in these fields. Gradually, due to the fulfilment of the labour market demand, the profitability of these studies diminished and according to the latest results it equated 31%, less than a fourth of the return observed in the 1995 survey. As proven by research, the rate of return is relatively low for engineering (in spite of the unmet demand and launching state funding for these studies), humanities, social sciences, arts and science.

However, it has to be noted that despite the growing percentage of persons with higher education in the adult population of Poland, the average rate of return from investing in studies, especially on Master level, remains on very high level, which can explain the continuing educational boom in Poland.

**Graph 11. Rate of return from investing in higher education in selected fields of studies among economically active persons in the years 2009, 2011 and 2013**



<sup>15</sup> *Diagnoza społeczna 2013. Warunki i Jakość Życia Polaków*, eds J. Czapiński, T. Panek, Warszawa 2013, p. 208.

Summing up, in the last 9 years the educational aspirations of youth have increased, which resulted in the increase of the proportion of population with tertiary educational attainment. At the same time the preferred fields of studies have not changed significantly. Both in the academic year 2004/05 and in 2012/13 the most popular fields of studies were the ones belonging to the subgroups: business and administration, social sciences and teacher training and education science. However, over the analysed period increased interest in technical (subgroups security services, architecture and building) and health related studies, which had the highest increase of the percentage of students since the academic year 2004/05.

Over the analysed period the number of students has declined, which was to a large degree consequence of the demographic slump. Since 2004 in the Mazowieckie voivodship there has been a steady decline in the number of population aged 19-24 which resulted in diminishing demand for higher education. However, it has to be noted that the percentage of population with tertiary educational attainment has increased significantly over the last 9 years.

Given the substantially improved structure of the population according to educational attainment, the level of education attained becomes less important than the field of studies and the profession learnt and their fit to the needs of the local labour market. According to the analysis, the most unemployed persons graduated from studies in the fields which both now and 9 years ago have been the most popular among the students. However, according to the research of the Employment Office, graduates of studies in the most popular fields are also the most sought after by employers. Therefore the problem of unemployment among graduates stems from the so-called overproduction, resulting from lack of fit between the structure of supply and demand of the particular fields of studies. It is vital to introduce changes in the fields and programmes of studies offered by higher education institutions, limit the number of students of the fields, in which there is overproduction, and expand the number of students in the fields in which there is shortage in the labour market. Programmes of studies should also take into account emergence of new professions and needs of the labour market.