

Centre for Research on Settlements and Urbanism

Journal of Settlements and Spatial Planning

Journal homepage: http://jssp.reviste.ubbcluj.ro



Internationalisation of a University – "the Secret Weapon" for the Development of the Hungarian Provincial City of Pécs, Hungary

Zsuzsa M. CSÁSZSÁR¹, Gábor CSÜLLÖG², Norbert PAPP¹

¹ University of Pécs, Faculty of Sciences, Department of Political Geography, Development and Regional Studies, Pécs, HUNGARY ² Eötvös Lorand University, Faculty of Sciences, Department of Environmental and Landscape Geography, Budapest, HUNGARY E-mail: g.csullog@gmail.com, cszsuzsa@gamma.ttk.pte.hu, pnorbert@gamma.ttk.pte.hu

Keywords: higher education, internationalisation, student mobility, University of Pécs, Hungary

ABSTRACT

A new age was opened for higher education with the start of the 21st century. The number of students studying abroad increased and the process of the internationalization in higher education began. The best known indicators of these were the student and the teaching staff mobility. In 2011, the number of the foreign students was about 4.1 million. This paper conceptually and contextually reviews the internationalization and examines the characteristics of Hungarian higher education, the network of cities and also the numerical and territorial expansion of the structure of higher education. This paper outlines the competition force nowadays because of the financial problems and of the applying students' declining number. In this context, the institutions of higher education try to create and form their trainings to build on international relations. Nevertheless, in this they can only be effective in cooperation with the cities and there are some cities which have recognized the advantages of this process, for example, Pécs, the centre of the Transdanubian region in Hungary, along the border with Croatia. The university has a significant role in the life of the city and it can be a major factor in the development of the new function of the former industrial city. The authors examine the role of the foreign students in the University of Pécs through educational statistics and through interviews with leaders of the university, and with experts of foreign affairs. This paper also analyses the national composition of these students, the spatial structure of their origins and the present foreign students influence on the development of the city.

1. INTRODUCTION

1.1. The internationalisation in modern higher education

According to Hungarian and foreign experts in the research of education, a new age was opened for the higher education with the start of the 21st century. In Hungary, Berács J. and his colleagues published the results of their research on this topic in the last years [1], [2], [3]. The main important result in the international bibliography was published in the Project Atlas in 2013 [4]. But the work of R. Brooks, J. Waters and T. Davis had also a great effect on the research of

internationalisation in modern higher education [5], [6]. Primarily, the number of the students studying abroad increased due to globalization and the process of internationalisation in higher education began. According to OECD data [7], in 2010 approximately 3.7 million foreign students were studying in institutions of higher education in various countries of the world. In 2011, the Project Atlas (2011) mentioned about 4.1 million foreign students and that number would continue to grow according to the projections and their number would be up to 6-8 million in the next 10-15 years [4]. Most of these students are learning in the U.S., in the UK and in France, but the reception of students significantly increased in Canada and in China,

too (the number of approx. 250,000 incoming foreign students and the outward travelling mobility of Chinese students are also outstanding).

Hungarian higher education is in a very good position, because it has become more popular among foreign students considering the mid-European relations [3], [4]. Each year there is a 5% increase in the number of foreign arrivals. We may be able to discuss the internationalisation of higher education in so many ways and on many levels which include the cross-border institutional relations and co-operation and also student mobility above the national level as the international academic performance, foreign publications, and research collaborations, the common research projects or educational programs abroad [7].

The best known indicator of internationalisation is student and teaching staff mobility [1]. Studies supported through scholarships, self-financed training, and the variety of international participation in exchange programs can be classified as student mobility. The latter method's most popular form is the Erasmus program in Europe. In Hungary, most of the research on the topic of internationalisation focuses on student mobility [8], [9], [10].

1.2. The spatial structure of Hungarian higher education

A strong growth in the number of cities connected to the economic and social changes started to begin in Hungary after the Regime Change. Every year, more and more municipalities received a city status, their number increasing from 162 (in 1989) to 346 (in 2013) [11]. However, the hierarchy system of municipalities formed until the 20th century has not changed. Most of the industrial centres, which were developed in the socialist era, started to decline. The transformation of the economic spatial structure brought about a serious crisis and sometimes a significant rate of unemployment in many areas.

In contrast to the previous, socialist management plan, the investments of foreign companies mainly formed the regional distribution of the economy in the nineties [12]. These investments primarily were built on skilled labour, on geographical location and on the earlier, but not outdated infrastructure. Therefore, these investments strengthened the position and the advantages of Budapest, of Central-Hungary, and of Central and Western Transdanubia.

Competition opened up among cities to diversify their functions and they started to search for a long-term and good position in the rapidly expanding urban network. One of the important means was the expansion of the institutional system of higher education, because the politics promised a major role for the higher education in catching up to Europe and in

quickening economic development [13]. This was reflected in the rapid growth of the number of new students in higher education. The existing universities expanded, in many cases, integrations were created, new (state, church and private) universities and faculties appeared. Institutions of higher education were settled in many other provincial cities; especially the number of colleges increased [14]. In most of the cities where there was a small opportunity for the existence of some level of higher education this was supported by the local politics, because they saw an important strategic fact in the expansion of higher education.

Despite this expansion, the national and regional important ratios of higher education have not changed. The dominance of Budapest is still outstanding in both the number of the institutions and of students. Debrecen and Szeged - that could be considered as the real university cities in the socialist decades because of their science and medical universities - have maintained or even improved their positions [15], [3]. The other three regional centres, Pécs, Győr and Miskolc have made a serious step forward and they have also used the opportunity to build a similar levelled and sized structure of higher education. All three cities started differently. The heavy industrial university was developed at Miskolc, to offset the demography and industry of the city. The process was much more difficult to place at Győr, although this was where industrial and economic development could provide a serious background to the development, but that tradition was missing, which could be a really important factor in this process in Hungary. Pécs could create its multifunctional university from a better position than the other cities because of its medical universities and of other higher educational institutions. So the city of Pécs does build a regional and a national attraction circle. In addition to the above centres, Kaposvár, Sopron and Veszprém also have universities with important functions, for example with a lot of unique faculties.

Nowadays, there are 19 public universities, 10 state colleges, 25 church and 14 private institutions which form this structure [15], [16]. The system of higher education is very fragmented with many distanced places and stations (fig. 1). In this structure, we can examine the strengthening of the centres of higher education of provincial cities (such as Debrecen, Szeged, Pécs, which are intending to fill the regional role in education and we can notice also the strong central character of the capital. The colleges which are operating in the medium-sized towns or a placed unit of another larger institution of higher education can function as the engine of the town and sometimes as the only local economic power.

From this point of view, it can be stated that the operation of an institution of higher education in

Journal of Settlements and Spatial Planning, vol. 4, no. 2 (2013) 215-225

the life of the Hungarian medium and large-sized towns has a great importance for society and economy.

Scientific papers, articles, various analyses on this topic and the in-depth interviews we realized have also confirmed that Hungarian higher education is interested in receiving a larger number of foreign students. Financial and economic factors can play a role in this. Otherwise, there is a competition emerging among institutions for getting international students. The presence of these students can mean serious revenue for universities, especially because of the economic crisis which led to financial contraction or withdrawal of funds. This can give a "life belt" to support the function of the institutions of higher education. Naturally, beside the revenue, it is also

important to increase the reputation of the university and to think about the expansion of international relations. Foreign students living in university cities play a major role in both economic vitality and cultural diversity, and this fact also has to be considered. In addition, because of the unfavourable demographical trends, the number of students getting into the national higher education has decreased [17] and this loss can be balanced by foreign students.

The important result of internationalisation is knowledge transfer ensured by the foreign students between the sending country and Hungary. The process has a strategic importance for the national economy and it can expand and form the basis for the international relationships of Hungary.

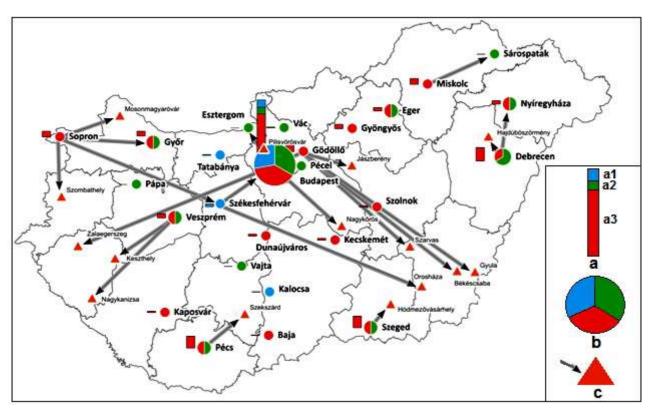


Fig. 1. The spatial structure of the Hungarian higher education: a). No. of students. a_1). Private higher education. a_2). Church higher education. a_3). State higher education. b). No. of universities and colleges. c). Affiliated faculties.

2. THEORY AND METHODOLOGY

2.1. Pécs in the Hungarian urban network

Pécs is the fifth most populous city in Hungary which has diverse cultural characteristics. It lies south of the Mecsek Mountains, 30 km distance to the Croatian - Hungarian border, and 40 km to the Danube. Its population is over 150,000, but it is surrounded also by a ring of urban agglomerations. The city dates back to Roman times. One of the oldest universities in Central Europe was founded here by Louis the Great of Anjou in 1367. The first public library of Hungary was

also established in Pécs. During the Turkish occupation, this was the spiritual centre of this part of the country and it had strong relations to Bosnia. However, its real Golden Age only started in the 19th century, when coal mining began around the city and it was followed by a significant industrial development (leather, porcelain, red granite, musical instruments, and tobacco and food industry). The uranium mining began in the middle of the 20th century and that had a big influence on population's growth and on the structure of the city. So the city benefited by these economic sections and it reached its demographical peak. After the Regime Change in Hungary, mines were closed and industrial

activity largely ceased or dropped off. Currently, the city is looking for a way to the future. The urban institution which has the largest budget and which is the biggest employer is its university. Pécs (fig. 2) lies in a transitional area between the defining spatial structural lines. Its regional role is evident due to its demographical, institutional, cultural, and political weight. But its role was questioned for several reasons by the disappearance and the transformation of the mining and energetic sector, which during the last decades indicated its development. The switching function (it became a modern service-industrial centre from the earlier mining-industrial centre) was partly spontaneous and partly organized because of the economic difficulties after the Regime Change. However, the loss of its industrial jobs and its top functions could not be fully compensated, which was probably the main reason of the current crisis and sense of crisis there. The city is represented by its state administrative health, social, educational, cultural, and commercial functions. The evolved retail capacity has a very important and decisive significance for the entire geographical region. The educational functions are mainly related to the university, as well as to some of its high schools.

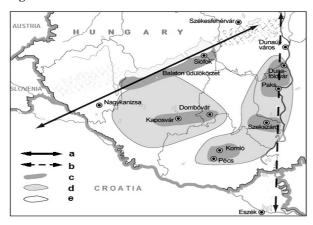


Fig. 2. The spatial structure of the South Transdanubian region of Hungary: a). Trieste — Budapest Axis. b). Danube Axis. c). Urban Areas. d). Transitional Areas. e). Peripheries.

The 11 national minorities of the 13 recognized minorities in Hungary have a minority government in Pécs, supplemented by a number of cultural institutions. The city is primarily the cultural centre of the Hungarian Germans and Croats. It is also one of the reasons why Pécs is considered to be one of the most exciting multicultural centres with southern features, characteristics that may create a possibility for the integration of foreign students.

2.2. Foreign students in Hungarian higher education

For Hungarian higher education, which undergoes considerable transition nowadays, the

internationalisation has a major competitiveness factor. The process of internationalisation is revalorized due to three factors. Firstly, there is a greater chance than ever for Hungarian students to study abroad. Another factor is the deferred studying by Hungarian students because of financial factors.

The last factor is the declining number of Hungarian students because of demographical reasons. This trend can be examined in the developed regions of the world, after the second half of the 20th century [17]. The United Stated have become the goal country of the international learning mobility, and then, at the turn of the millennium, the European universities (primarily the Western European universities) seemed to be more attractive due to the Bologna reform. Even nowadays, the emerging institutions of higher education of the Asian Region are also wanted [18].

The Hungarian government planned the transformation of higher education as part of reforming the major social distribution systems in 2012 [19]. One of the objectives of this reform program was increasing international students' number and after there was a governmental decision about that in April 2013 [20]. According to that decision, the government intended to make bilateral scholarship-cooperation agreements along the foreign policy priorities and to measure the other international needs. The preferred countries and regions were defined by the principle of taking into account the policy of global opening for eastern governments [21]. Therefore, for example Azerbaijani, Georgian, the Armenian students or pupils from Africa, South Sudan, China, or from Vietnam as well may get Hungarian scholarships.

The presence of foreign students in Hungary is not a new phenomenon. A fair number of students also arrived in Hungarian universities from the developing world in the time of socialism, primarily for the medical and engineering courses. After the Regime Change, some new initiatives has been introduced for starting foreign language courses, especially in the medical and economic fields. In addition, an increasing number of scholarship seats opened for young Hungarians living in neighbouring countries, which provided for their further studies in Hungary. At the beginning of the 21st century, the accelerated migration with studying goals also reached Hungary and it increased the number of arrivals of finance for educational programs [8]. An important element of international student mobility was the international exchange program and its best known form was the Erasmus program, which as a European "commitment" was used by all institutions of higher education in Europe. In 1997, Hungary joined the exchange program [22]; the number of participants continued to rise. In 2012, the number of incoming and outgoing students reached 8,000 people, of which the incoming students were 3,000 people [23]. Most of these students came from Germany, France, Spain, Italy

Journal of Settlements and Spatial Planning, vol. 4, no. 2 (2013) 215-225

and Turkey. The largest group of the student mobility was represented by the foreign students participating in graduate courses. Their number was constantly growing, in 2012 it was over 20 thousands, and their majority were involved in daily training (17,112 persons) [23]. We could conclude from the statistics that the number of the students who were involved into the full-time training continued to increase. This number was only 11,783 persons in 2001, 18,154 people in 2011, while in 2012 it was 20,146 people.

In addition to the growing number of share, their rate of symmetry also showed an emerging trend beside a decreasing number of national students. The rate of symmetry in 2012 was over 7%, while in 2001 it was just 3.4%. According to statistics [23], more than a third of them matriculated to medical faculties, but they appeared in the economic courses and also in engineering faculties. They were also present in the humanities or in teacher training as well as in the social sciences and in law, especially in the case of through students from without the borders of Hungary. Analyzing the geographical distribution of the foreign students' origin, more than 72% of them come from European countries. Taking into account the European sending countries, Germany, Norway, and Sweden were the most important; the students from these usually choose medical universities. Arrivals from other continents showed that Asian students' number increased, too. There were especially students from Iran and Turkey, but the number of Chinese students also increased. From the other continents, Israel, Nigeria and the U.S. are the major sending states.

A significant proportion of foreign students (45%) came from neighbouring countries and with negligible exceptions their mother tongue was Hungarian. Most of them arrived from Romania (their number was over three thousand) and from Slovakia, Ukraine, and from Serbia. Their number was constantly increasing, but their symmetry was decreasing relative to the other foreign students.

According to the examination of Takács and Kincses (2013) [24], the dominant part of the Hungarian students from the four cross-border countries mainly chose Budapest and Pest county as a place for their studies, while a smaller proportion got accepted to institutions of higher education of microregions such as Szeged, Pécs, Győr, Sopron, Miskolc, Debrecen and Nyíregyháza. The authors indicated that for the students coming further the capital, Budapest, was the primary goal [17]. Several studies showed that the majority of cross-border Hungarian students did not return to their home town after graduating in Hungary, but settled down in Hungary, though nowadays the Western countries had also an increasing attractiveness among them. Most of the foreign students studied at those universities which had a medical faculty, and we underline the example of the University of Debrecen [1]. If we compare the rates of foreign students enrolled in the Medical School of Budapest and in other universities with all the matriculated students, then we conclude that the largest proportion (49.3%) of foreign students was at the Medical School of the University of Pécs.

2.3. Methods of analysis

In this study, the role of the foreign students at the University of Pécs was examined using educational statistics and interviews with leaders of the university, and with foreign affairs experts. This paper also analysed their national composition, the spatial structure of their origins and the present foreign students influence on the development of the provincial city.

3. RESULTS AND DISCUSSION

Today, the University of Pécs has become one of the leading and most famous regional universities in Hungary, with a high-quality training along the full spectrum of the higher education in its ten faculties. It is one of the largest universities of Hungary and the knowledge centre of the South-Transdanubia with its almost 24,000 students, and 2 thousands professors and ten faculties (2012 autumn data) [16]. The strength of one the leading research university of the country appears in its faculties, such as the ones of medicine, of law, of economics, of humanities, of natural sciences, and of unique fine arts and music education.

3.1. Student and teaching staff mobility at University of Pécs

The University of Pécs provides a colourful training structure among the national enrolled student, and it has an active participation in the most important European mobility programs (Erasmus, CEEPUS, Leonardo da Vinci, and Erasmus Mundus). It has attracted the foreign students participating in foreign-language training programs since more than a decade. The Erasmus program is the most popular exchange program to study abroad with due it intent.

The University of Pécs has currently a bilateral agreement with 27 EU countries and with more than 330 institutions of higher education in subject areas. Similar to the national average, the number of incoming students has been also increasing at Pécs. In the academic year 2012/2013, the university has reached the top with 243 foreign people.

This university gets the 4th place in Hungary, but we have to underline that this means the first place among the institutions of provincial cities. Therefore not only the capital, but this city is very popular among foreign students, too.

During the interview with the coordinators of the Erasmus program in the University of Pécs, we found out that the foreign students had to fill in a questionnaire when they arrived and also before their leaving. The information in this questionnaire could provide many lessons for the international relations of the university.

In the last two years that their choice was mainly attributed to the following: former Erasmus student a family member or a friend or the international/Erasmus Office recommended this university and they were influenced by the seduction of the city of Pécs. Their motivation was effected by the claim of learning about the Hungarian culture, the positive impression of school, the language of instruction, the course offer, the level of education, the city's accessibility, the information about the city, as well as the cost of living.

According to respondents, there were two main elements in their choice to attend the University of Pécs. Firstly, the university offered good education. It had tradition and in fact it was one of the oldest universities in Europe. A significant number of respondents related the institution of higher education to the city in their choice. They usually related to the city through the title of 2010 European Cultural Capital, when they chose their education at Pécs. The most outstanding students' positive experiences during their stay were the city and its people. They mentioned the new relationships, and acquaintances with Hungarian and other ethnic students among their positive experiences. A statistical analysis of the data showed that most of the students came from Spain, Germany, France and Turkey (fig. 3).

The majority of them chose the courses of the Faculty of Humanities (BTK) and of the Faculty of Economics (KTK). This was possible because of the good relations between the foreign partners and the professors of these departments. Otherwise these students could easily latch on to the foreign language specialist trainings. Finally the special fields of foreign language training (Polish, Latvian, Lithuanian, and Slavic Studies) might be attractive to the arrivals from Poland, Lithuania, etc. In contrast, there was a very low participation of them in full-time education at the Faculty of Medicine (ÁOK), which was the most beloved faculty among other foreign students, but we could see this example in the entire country.

The number of incoming professors was continually growing after 2000. There were 530 teachers at Pécs. But this amount is less than the number of the other three knowledge universities (ELTE, the University of Szeged and the University of Debrecen). In the case of the teaching staff's mobility professors came from Germany, Finland and Poland. The Faculty of Humanities and of Law was the most attractive for them.

We have to also mention the CEEPUS connections: there are six operating networks at Pécs, but the number of incoming persons is very low. In 2010, there were 10 students and 9 professors from the Czech Republic, Austria, Poland, Slovenia, from and Romania.

3.2. Undergraduate foreign students at the University of Pécs

The University of Pécs (PTE) has a tradition of educating foreign students. The general medical training may make a boast of its almost three decades of English-speaking and one decade of German-speaking full-time training. Some courses on foreign languages of the Faculty of Economics (KTK), of the Faculty of Law (ÁJK), and of the Faculty of Humanities (BTK) date back to the 1990s. The university has had continually cross-border students for more than two decades.

The national data showed that the presence of students studying in foreign languages focused on a specific field [23]. In particular, their participation was outstanding in medical training considering the whole country, but they were best represented in economic courses (in the capital, at the Corvine University). So this was a big question for the leadership of the University of Pécs: for which disciplines there was a demand and which high-level foreign language courses would be presented to the international demand?

Table 1. Countries sending more than 10 students to the University of Pécs during the 2011/2012 academic year.

Country	No. of students
The United States	29
Austria	20
Greece	14
Croatia	53
Iran	135
Ireland	11
Israel	26
Japan	39
Canada	28
China	19
Korean Republic	85
Poland	10
United Kingdom	13
Germany	571
Nigeria	19
Norway	225
Italy	11
Romania	44
Spain	59
Sweden	59
Serbia	82
Slovakia	52
Turkey	14
Ukraine	22

Edited by Zsuzsa M. Császár according to the data of the Educational Directorate of the University of Pécs.

Journal of Settlements and Spatial Planning, vol. 4, no. 2 (2013) 215-225

The number of international students at the University of Pécs showed a slight growth compared to previous years, it reached 1,764 persons in the academic year of 2011-2012. Students from abroad could be divided into two groups. First, there was a group of students from cross-border neighbouring countries, from the Hungarian-speaking areas and, on the other hand, the others were the foreign-speaking arrivals. The number of candidate students from the former group (from Romania, Serbia, Slovakia, Ukraine and from Croatia) was of 253 persons according to the data from October 2011. This was 14.4% of all foreign students. Understandably, most of them came from Serbia (82 persons) and from Croatia (53 persons) because of their geographical proximity. Most of them studied at the Faculty of Humanities (BTK) (there were 106 students), the others at the Faculty of Economics, at the Faculty of Engineering and Information (PMMIK), and the Faculty of Natural Sciences (TTK).

We compared the cross-border areas attracted by the University of Pécs and the number of the arrivals with the number to the University of Debrecen and to the University of Szeged and we noticed an arrearage in some of the countries. It is clear in the case of Romania and Serbia: students from both countries chose the other two universities due to their relatively better geographical positions. Although the proportion of students at Budapest from both areas was high, but in the case of Serbia, the University of Szeged successfully took up the competition with a high attraction of the capital and its three major universities (Corvinus University of Budapest, Eötvös Loránd University, Budapest University of Technology). We believe that some of the young Hungarians from Vojvodina, especially those living in the western part of the region could be attracted by Pécs with a more effective enrollment policy as this could be achieved in the case of Croatian Hungarian young people. For many, it may be a surprise that the University of Pécs only wins the one-third of the students studying in Hungarian higher education from Croatia and the majority chooses the capital, when Pécs, the city of the university is the closest town to the country. The factor that the direct rail connection between Eszék and Pécs is eliminated, also plays a role in that, while Eszék is the centre of this Hungarian habited region where there is the only Hungarian secondary school in Croatia.

According to 2011-2012 data, the other larger proportion (85.6%) of incoming students for full-time language training came from Europe and from outside of Europe (fig. 4). Germany (571), Norway (225 people), Iran (135 people), Korea (85 persons) stood out among the sending countries. The number of incoming students of the named countries was increasing considering the last 4 years, especially obvious in the case of Iran, from where the students started to come in

large numbers probably because of a well-prepared recruitment for the first time in 2008, as a result, students presence has tripled during the period. Concerning the geographical distribution of incoming students, Europe was the winner by far. The two countries mentioned with the largest numbers, in addition, Sweden, Spain, Italy, Austria, Greece, Great Britain and Poland were sending more than ten students (table 1). Except for the latter, where the majority of new arrivals studied at the Faculty of Humanities, while the other students in medical training. It was clear that the main reason of this choice was the high level and the recognition of Hungarian medical education level, but we could not forget the cheap cost of living and the relatively safe environment.

The second biggest interest was from Asia. Not only the Iranian and Korean students had a large number, but also the Japanese, Chinese, Israeli, and Turkish students. The expansion of the latter was really spectacular not only in Hungary, but also in other European countries. They were interested in four different training fields and the city was one of the important strategic directions during the recruiting. From the American continent, the biggest interest came from Canada and from some American states, but it was low (28 persons) and only in medical training. The African continent was the least affected, there were only some Nigerian students in medical training.

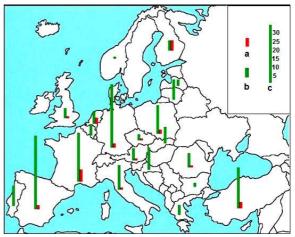


Fig. 3. The distribution of students and professors coming in the Erasmus program by countries, in the academic year of 2011-2012: a). Professors; b). Students; c). Professors' and Students' Number. *Edited by Zsuzsa M. Császár according to the database of the Erasmus Office of University of Pécs for the academic year 2011/2012.*

93.2% of the 1,513 foreign speaking students attended medical training, and only 18 people of the foreign students arriving with the biggest national representation in the city chose a different specialty than medical training. Considering all the students learning in foreign-language training, most of them studied at General Medical Sciences (Faculty of

Medicine), the others studied at the Faculty of Humanities (63), at Faculty of Economics (30), and at other faculties (1-2). The traditional Faculty of Economics successfully operated Bachelor and Master courses in foreign languages. A considerable number of the students were Hungarians who wanted to get a degree in a foreign language. So the existing capacity could be expanded with foreigners. Giving common degrees among the faculties, started to be popular and intense and especially the Faculty of Humanities, the Faculty of Law and the Faculty of Economics initiated this kind of cooperation. We can also set an example that the education has been placed abroad by a concrete faculty, such as the Faculty of Medicine and Health Sciences did in Norway and in Germany (PTE IFT 2012).

The leadership of the University of Pécs gives a major role to the education of foreign students in its development plans in the academic year 2013/14. It would like to balance the decreasing number of students because of demographical and other reasons. All faculties work and focus on this question, and the medical training is the pattern. The new accepted strategy is to open to Asia, especially to Turkey and to China.

Table 2. The distribution of Erasmus students at the University of Pécs by faculties, between 2006 and 2013.

Faculty	2006	2007	2008	2009	2010	2011	2012
	2007	2008	2009	2010	2011	2012	2013
ÁJK	6	5	9	11	11	22	22
ÁOK	1	10	10	7	13	9	9
BTK	31	24	36	38	50	68	80
ETK	8	11	10	9	7	7	8
FEEK	4	4	2	14	10	11	3
IGYFK	10	10	3	3	1	4	9
KTK	38	40	55	52	40	59	64
MK	9	9	13	7	8	8	4
PMMK	10	9	13	16	13	22	21
TTK	13	24	9	17	21	13	23
Altogether	130	146	160	174	174	223	243

Edited by Zsuzsa M. Császár according to the database of Erasmus Office of University of Pécs

The important effect of foreign students' presence was that the international reputation of the institution could strengthen and their international relations also could expand. We can find examples that real cooperation can take place between two partners in the Erasmus program and this can result in common research projects. In fact, it happened when the reputation of the university was taken to the home countries of the Erasmus students and thus contributed to the growth of the number of participating foreign students in full-time training in Hungary. Student mobility which played a major role in the internationalisation of higher education could support the renewal of a concrete institution and the

"awakening" of the teaching department towards the quality of education. Of course, it is important to develop the linguistic competence training. For getting professors' interest, medical training can show a pattern, where they attend to a professional foreign language preparation and they hold their high quality courses for high wages.

3.3. The city and the university

It can be demonstrated in the case of Pécs, like in other university cities, that the institution of higher education has a great socio-economic influence on the city. A large number of students generates positive processes (recovery of economy and cultural diversity), but also causes some tasks for the university and for the city, too, like the organisation of transportation, or the building of bike paths, etc. The last one seems to be resolved in the future in relatively short time. This development has begun between the Eastern and Western Campus of the city and the centre, particularly for the safety of cyclist transportation which is favoured by the Western Europeans, especially by German students. For the foreign student studying in Hungary, we can not only count on the income of school fee, but significant national economic revenue. The increasing number of consuming international students can be the true secret weapon against the economic difficulties with which the city is struggling.

In 2011, the research at the Medical Faculty of the University of Pécs, coordinated by the sociologists Zsuzsa Füzesi and Laszlo Tistyán [25] made a very important discovery about the presence of foreign students, namely, that the considerable school income increases the revenue of the state and thus it is a major contribution to the operation of the university. The research found that a fifth of these students had a local job. The students of the Faculty of Medicine spent 3.8-4.1 billion forints (13 million euros) over the school fee in Hungary, and mainly in Pécs. This amount is 400 million forints per month (their presence in the city with the hospital practice is approx. 10-11 months in a year). This money was spent for education. In addition, they spent a significant amount on consumer goods, on appearance and on fashion (clothing, body care, hair stylist etc.), on safeguarding their health, on recreation (sports), on entertainment, on travelling (going home, excursions), on transport in Hungary and on communication (internet, phone).

The fact that the city centre and the part of the city next to the Medical School expanded with some clubs, sport facilities and services as cosmetics, etc. could be interpreted as the effect of foreign students' presence [18]. The university campus, the city centre and the frequented Mecsek Mountains were the only areas of the city where recently some new constructions and buildings appeared. The apartments and the villas

Journal of Settlements and Spatial Planning, vol. 4, no. 2 (2013) 215-225

served the increasing and exacting demand. Foreign students bought the equipment for these apartments, primarily the technical articles in the commercial units of the city.

The foreign students became some of the most important customers of the biggest shopping centre of

Pécs. The taxi-services benefited seriously from these students (around 2,000 persons).

Finally, we cannot forget that the GDP growth is not only an advantage for the city but for the state, too, because, for example, every fifth student has and keeps a national workplace [19].

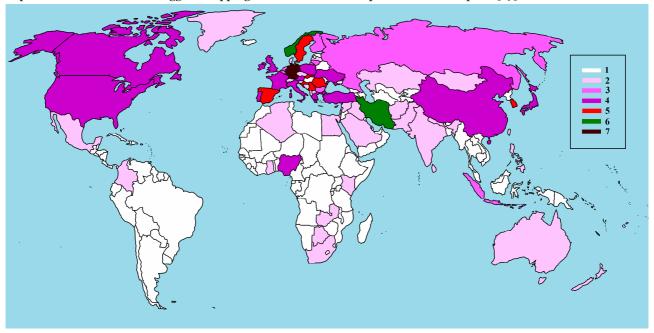


Fig 4. The foreign student's distribution according to countries at PTE (2011/2012). 1: Students are not from these countries; 2: 1-5; 3: 6-10; 4: 11-50; 5: 51-100; 6: 101-500; 7: Above 500; Edited by Zsuzsa M. Császár according to the data of the Educational Directorate of the University of Pécs.

4. CONCLUSION

The foundations and building of institutions of higher education, which are not always rationally implemented because of local interests and political forces, cost a lot and sometimes cannot be realized only with private investors in Hungary. Nevertheless, this was less of a burden for the country, than to finance continuously and on a long-term the operation of these institutions and the paying back of the credits. Because of the economic crisis, after 2008, the rationalization of the structure became a more relevant question, but it seemed hardly feasible because of the diversified political and social consequences of the terminations of institutions. Most institutions and local policy together tried to find a way out of this situation. The major universities of bigger cities have a better chance, because their attraction is wider, their training is based on long-term, on traditions which are more durable and they have a greater proportion of qualified professors than other universities [19]. Therefore, these are more suitable for extending the foreign language trainings and for attracting the solvent foreign student, consequently, also for the force of competition by the external international factors and political leadership. Finally, higher education really needs this, because the

decline of the number of the Hungarian students can be balanced by the growth in the number of foreign students. The leadership of bigger cities is also interested in this, because the foreign students' presence might cause economic and social development and vitalization, which can help to get a central function in the competition among cities and also to avoid decline. The case of Pécs might be a really good example where the university, which can keep a larger number of students, consciously builds that kind of training which focuses on foreign students. All this is well illustrated in the case of Pécs, where the relatively large-sized university consciously builds up this kind of training.

We can conclude that the foreign students' presence at the University of Pécs in Hungary can be considered a serious factor. Their number has intensively increased in recent years, and with the participants of the exchange program has reached 2,000 persons. If we study the world map we notice the large geographical area from which students come. Most of them arrive from Europe, and particularly from Germany, due to the historical and economic relations and traditions among these countries. There is a large number of foreign students who are Hungarians living in neighbouring countries, even though there is a lot of unused items in their case like to relating and attracting

them to Pécs. Finally, we can see the Asian presence of foreign students in Hungary, especially from Iran, and this area has large reserves for Hungarian higher education, including for the University of Pécs. The greatest winner of the foreign students' presence is the city itself, which can hope of a certain financial source, approximately 4 billion forints per year. In addition, their presence has also an influence on the estate business, on trade, on services and on the development of transport.

5. ACKNOWLEDGEMENTS

Interviews with Gyula Zeller DR, the strategic Vice Dean of the University of Pécs; with Attila Lengvárszki, the Educational Director of University of Pécs; with Judit Németh, a Coordinator of the Educational Direction of PTE; with Gyöngyi Pozsgai, the Director of the Department of International Relations of PTE, and with Ella Kajdy Álmosné, the Director of the International Studies Centre.

REFERENCES

- [1] **Berács**, **J**. (2012), *Nemzetköziesedés:egy lehetséges kitörési pont a felsőoktatásban*, In: Nemzetközi Felsőoktatási Kutatások Központja Füzetek vol. 9. (Internationalisation: a Possible Break Point in the Centre of Research of International Higher Education), Budapest, pp. 110-132. Available at: http://unicorvinus.hu/fileadmin/user_upload/hu/kuta tokozpontok/NFKK/NFKK_sorozat/NFKK_9.pdf. Last accessed: December, 28, 2012.
- [2] **Berács**, **J.**, **Malota**, **E.**, **Zsótér**, **B.** (2010), *A magyar felsőoktatás nemzetköziesedésének folyamata* In: Bologna füzetek vol. 8. Tempus Közalapítvány (The Process of Internationalisation of Hungarian Higher Education In: Bologna Papers vol. 8. Tempus Foundation), Budapest, Hungary, 143 p.
- [3] **Berács J.** Tudásexport a felsőoktatásban: egy hierarchikus megközelítés, Competitio, 7. évfolyam 2. szám 35-38.old.
- [4] **Project Atlas 2011.** Available at: http://www.iie.org/en/Research-and Publications/Project -Atlas/About. Last accessed: July, 28, 2013.
- [5] **Brooks**, **R.**, **Waters**, **J.** (2011), *Student Mobility*, *Migration and the Internationalisation of Higher Education*, Palgrave Macmillan, New York.
- [6] **Davis**, **Todd** (2003), Atlas of Student Mobility. Institute of International Education. New York.
- [7] OECDhttp://unipub.lib.uni-corvinus.hu/1191/1/NFKK_9.pdf
- [8] **Rédei, L. M**. (2009), *A tanulmány célú mozgás* (Movement in Order to Study), Reg-Info Kiadó, Budapest, Hungary.
- [9] **Császár, M. Zs.** (2013), Nemzetköziesedés a felsőoktatásban In: M Császár Zsuzsa, Kuráth G, Mayer L, Farkas Gy, Pálfi M (ed.): A felsőoktatás

- területi dimenziói, avagy oktatásföldrajzi vizsgálatok a hazai és a nemzetközi térben (Internationalisation in Higher Edcation In: Pécsi Tudományegyetem, M. Császár Zsuzsa, Kuráth G, Mayer L, Farkas Gy, Pálfi M (ed.): The Areal Dimension of Higher Education, Analysis of Education Geography on International and National Area), Pécs, pp. 25-34.
- [10] **Berács**, **J.** (2008), *Tudásexport a felsőoktatásban: egy hierarchikus megközelítés* (Knowledge Export in Higher Education: A Hierarchic Approach), In: Competitio, vol. 7, issue 1. 2. Budapest, pp. 35-38.
- [11] Magyarország közigazgatási helynévkönyve 2013. január 1. KSH, Budapest 2013 (Gazetteer of Hungary 1st January, 2013. Hungarian Central Statistical Office Budapest, 2013), Available at: http://www.ksh.hu/docs/hun/hnk/hnk_2013.pdf, Last accessed: December, 12, 2013.
- [12] **Hrubi**, **L.** (1999), *Transitions of the Spatial Structure of the Economy in Hungary*, In: Hajdú, Z. (ed.) Regional Processes and Spatial Structures in Hungary in the 1990s, Centre for Regional Studies, Hungarian Academy of Sciences, Pécs, pp. 288-315.
- [13] **Rechnitzer, J., Csizmadia Z. Grosz, A.** (2005), A Knowledge-based Innovation Potential of the Hungarian Urban Network at the Turn of the Millennium, In: Barta, Gy., Fekete G., É Kukkorelli I., Timár, J. (eds.) Hungarian Spaces and Places: Patterns of Transition, Centre for Regional Studies, Hungarian Academy of Science, Pécs, pp. 397-415.
- [14] **Fehérvári, A., Kocsis, M., Szemerszki, M.** (2011), *Facts & Figures Higher Education in Hungary 2011*, Hungarian Institute for Educational Research and Development, Budapest.
- [15] A felsőoktatási rendszer változásai Statisztikai tükör. 2009/15. KSH 4 p. (*Changes in the System of Higher Education*. Statistical Mirror 2009/15 Hungarian Central Statistical Office Budapest, 2009) Available at: http://www.ksh.hu/docs/hun/xftp/gyor/jel/jel30812. pdf, Last accessed: December, 12, 2013.
- [16] **Oktatási adatok 2012/2013** Statisztikai tükör. 2013/32. KSH 4 p. (*Educational Data 2012/2013*, Statistical Mirror 2013/32 Hungarian Central Statistical Office Budapest, 2013), Available at: http://www.ksh.hu/docs/hun/xftp/idoszaki/oktat/okta tas1213.pdf, Last accessed: December, 12, 2013.
- [17] Demográfiai adatok (Demographical Data), Available at: http://www.ksh.hu/docs/hun/xftp/idoszaki/mo/mo2011.pdf, Last accessed: December, 12, 2013.
- [18] **Hrubos, I.** (2006), *A 21. század egyeteme Egy új társadalmi szerződés felé.* In: Education, vol. 15. issue 4. Oktatáskutató és Fejlesztő Intézet (The University in the 21st Century Toward s a New Social Contract Education, vol. 15. issue 4, Institute of Research of Education and Developing), Budapest, pp. 665-681.

Journal of Settlements and Spatial Planning, vol. 4, no. 2 (2013) 215-225

- [19] A felsőoktatás átalakítása (Changes in Higher Eeducation), Available at: http://eduline.hu/ felsoo ktatas/2012/4/24/Igy_alakitjak_at_a_felsooktatast_12 _helyett_M1E7HW, Last accessed: December, 12, 2013. [20] A felsőoktatás átalakítás stratégiai irányai vitanyag- (Discussion on the Strategic Directions of the Transformation in Higher Education), Available at: https://docs.google.com/file/d/oB-bRb8Wxe4bXdW R2WTNxX19Vd2M/edit, Last accessed: December, 12, 2013.
- [21] Azerbajdzsánban folytatódik a Campus Hungary roadshow Campus Hungary Programme in Baku, Azerbaijan. Available at: http://www.campushungary.hu/rolunk/sajtoszoba/284#.UrRY3dLuJDV In english: Campus Hungary Programme in Baku, Azerbaijan. Available at: http://www.campushungary.org/news/179-campus-hungary-program-in-bakuazerbaijan#.Ur Ra2NLuJDU Last accessed 2013, 12, 20.
- [22] Erasmus sikertörténet 20. születésnapja (The 20th Anniversary of the Success of the Erasmus) Available at: http://www.tpf.hu/pages/subpage/index. php?id=936&page_id=. Last accessed 2013. 12. 20.
- [23] Oktatási Statisztika Évkönyv 2011/2012 (Yearbook of Education 2011/2012), Available at: http://www.kormany.hu/download/8/f9/b0000/Oktat %C3%A1si_%C3%89vk%C3%B6nyv_2011_2012.pdf.-last accessed 2013. 05.14, Last accessed: September, 20, 2013.

- [24] **Takács**, **Z.**, **Kincses**, **Á**. (2013), *A Magyarországra érkező külföldi hallgatók területi jellegzetességei*, In: Területi Statisztika vol. 53. issue 1. (The Areal Characteristics of the Foreign Student Coming to Hungary In: Areal Statistics vol. 53. Issue 1.) KSH, Budapest, Hungary, pp. 38-54.
- [25] **Füzesi, Zs., Tistyán, L.** (2013), *Az egészségügyi felsőoktatásban tanuló külföldi diákok az egyetem és a város életében*, In: M. Császár Zsuzsa, Kuráth G, Mayer L, Farkas Gy, Pálfi M (ed.): A felsőoktatás területi dimenziói, avagy oktatásföldrajzi vizsgálatok a hazai és a nemzetközi térben (Foreign Students in Medical Higher Education in the Life of the City and the University, In: M. Császár Zsuzsa, Kuráth G, Mayer L, Farkas Gy, Pálfi M (ed.): The Areal Dimension of Higher Education, Analysis of Education Geography in the International and in the National Area), Pécsi Tudományegyetem, pp. 18-24.
- [26] **Makkai, B., Gyüre, J.** (2012), *Coexistence of Different Social Groups around One of the Campuses of the University of Pécs*, Revija za geografijo, Vol. 7, Issue 2, University of Maribor, Slovenia, pp. 99-111.