

## IMPACT OF GLOBALIZATION ON THE HIGHER EDUCATION – CHALLENGES AND OPPORTUNITIES

Péter Miklós Kómíves<sup>1</sup>, Mária Héder<sup>2</sup>, Krisztina Dajnoki<sup>3</sup>

<sup>1</sup>Department of Human Resource Management, Institute of Management and Organization Sciences, Faculty of Economics and Business, University of Debrecen, Hungary

<sup>2</sup>Károly Ihrig Doctoral School of Management and Business, University of Debrecen, Hungary

<sup>3</sup>Department of Human Resource Management, Institute of Management and Organization Sciences, Faculty of Economics and Business, University of Debrecen, Hungary

*komives.peter.miklos@econ.unideb.hu*

*heder.maria@econ.unideb.hu*

*dajnoki.krisztina@econ.unideb.hu*

**Abstract:** *As a consequence of the continuously evolving environmental impacts, most of the previous systems need to be improved. The Hungarian higher education system is no exception to this either; this system is mostly influenced by the local peculiarities, demographic changes and the globalization. The Hungarian education system takes on an express challenge that is caused by the fact according to which the number of schoolable students decreases as a consequence of the decreasing population which is nowadays perceptible in the field of higher education institutions as well. However, the development in economy does not take it account and the demand on the qualified employees is progressively increasing. This contrast results in the fact that the education system shall discover those opportunities which are suitable for managing this anomaly, even if not completely but approximately. Striving for internationalization is increasingly emerging in the domestic education system which can be interpreted as an alternative solution for the difficulty outlined. The continuous growth in the rate of foreign students in the Hungarian education system can help to manage the continuous demand on the employees with appropriate skills. It is therefore important to place emphasis on attracting and keeping the foreign students as well as recognizing their demands and, along this line, serving them as far as possible. Aims of the treatise are to expound the evolution of demographic situation in this context by means of analyzing related Hungarian and international surveys and to outline those possible solutions and approaches which can contribute to the elaboration of a future educational strategy. As a result of the research, it can be concretely determined what countries the largest percentage of students comes to Hungary from, what educational levels the foreign students most commonly learn at as well as the most popular universities and courses for the foreign students. Consequently, the awareness becomes predictable in view of attracting the foreign students by means of which the whole process can be made more effective. The final aim of this article is to summarize the challenges and opportunities of the higher education that need to be faced and managed.*

**Keywords:** *higher education strategy; university; foreign school enrolment; demography; education system; questionnaire.*

**JEL Classification:** *I24; I25.*

## 1. Introduction

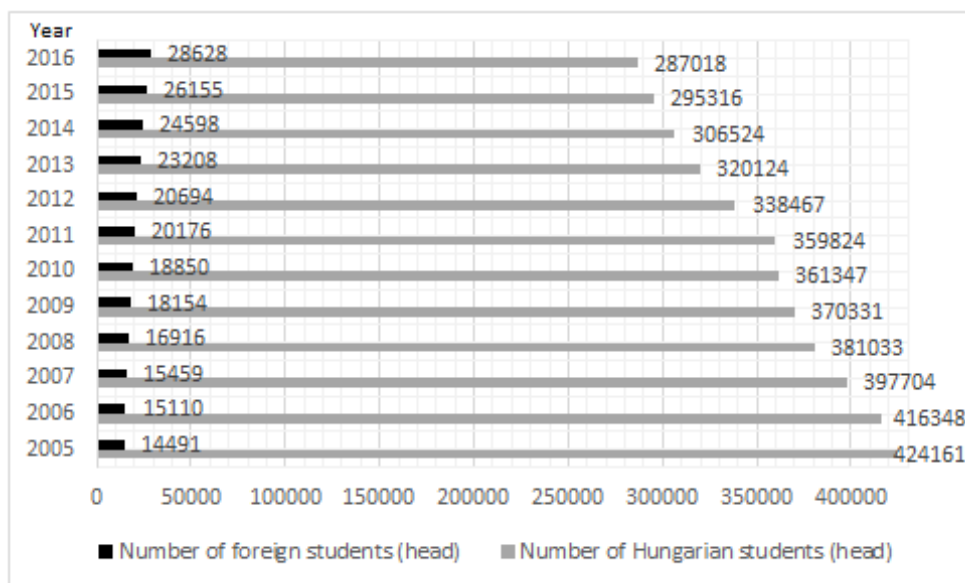
The higher education system has become mainstreamed in the social and political discourse over the past years. The spotlight, which has been – many times not too luckily – put on the universities and colleges, has sparked a broad debate. As a result, the rethink of social role and function of the higher education has begun; this process has not ended to the present day. The higher education-related developments are of prominent importance in the strategy of every country since the human capital is presented as a principal condition of competitiveness (Matkó – Szűcs, 2012) in the modern interpretations. Insofar as the educated human ratio of a country is unsatisfying then it may have an impact on the entire social and economic development. Taking the demographic changes into account, the continuously decreasing population ratio is not favourable to the economic circumstances in Hungary. Growth in the extent of labour shortage can be increasingly observed beside the decline in rate of participants in the higher education systems (Csehné et al., 2018) which is further enhanced by the drop-out of the students participating in training (Fenyves et al., 2017). By means of a purposeful and prepared action plan, the education system is able to counteract against the challenge. In that sense, the fact should be grasped as a potential opportunity according to which the presence of foreign students is progressively increasing in the Hungarian education system. Among the available opportunities, an approach to the situation from the point of view of internationalization can be forward-looking, along which Hungarian and international statistics will be now used in order to reveal the possible relations and from the point of view of collecting the optional solutions.

## 2. Statistical outlook – foreign students in Hungary

The Hungarian higher education will have to face up to extremely serious demographic challenges within a few years. Now, after different systems of the public education, the ever lower number of children born in the country will also adversely affect the higher education as a whole. According to the publication of data of the Hungarian Central Statistical Office, population of the country has been actually increasing since 1980 (KSH, 2017a). This fact is particularly worrying because a labour shortage can be explicitly experienced considering the current labour demand of economic. In many cases, it means not only quantitative but quality lack of those employees who are mentioned as talents in the private sector (Manpower, 2016). However, when examining the Hungarian higher education, it is interesting to consider the presence of foreign citizens as well.

Although the presence of foreign citizens cannot be described as outstanding in Hungary (1.6% of the country's current population) but, having regard to their increasing ratio (Oláh et al., 2017), they should be considered as a significant opportunity in relation to both the declining population and the number of students. In the publication of the Hungarian Central Statistical Office (KSH) in 2017, a detailed picture can be obtained about the number of foreign citizens living in Hungary and their data of origin. The overwhelming majority (65%) of foreigners living in the country come from Europe, in particular mainly from the surrounding countries, inter alia, from Romania (16%), Germany (12%), Slovakia (6.2%) and Ukraine (3.8%).

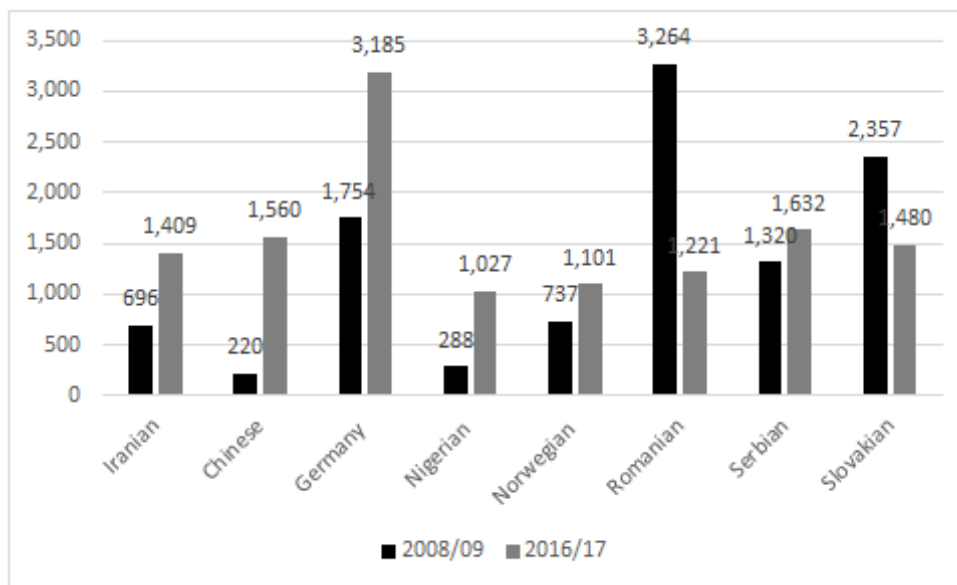
Their further 27% originate from Asia, Africa (3.9%) and the American continent (3.5%). Based on the age structure, the foreigners living in Hungary are younger than the native population – with regard to the women (44%) and men (56%) as well, headcount of the age group between 20 and 39 is determinative; their rate was 45% among the foreigners living here. Thinking about the strong presence of the age group between 20 and 39, it can be supposed that there is a relation between the foreign citizens living in Hungary and the foreign students coming to Hungary. Several competent bodies (for instance, the Hungarian Central Statistical Office, Educational Authority) are examining the presence of foreign citizens in Hungary in the field of education and preparing current surveys. The different organizations supposedly reach their conclusions by means of not exactly the same methods thus there is no full consistency with regard to the numbers but approximately the same results are obtained by means of which the tendencies are harmonizing in the order. Generally speaking, the expansion, which had started in the field of education in the 1990s, slowed down in 2004 and then has started to decline. And nowadays, the statistical data show that, although the total number of students is decreasing, the number of foreign students shows a continuous increasing within that (Figure 1) (KSH 2016).



**Figure 1:** Participation of the Hungarian and foreign students in the higher education  
*Source: KSH (2016)*

According to the publication of KSH in 2017, the number of foreign students increased by 10000 persons among the full-time students between 2010 and 2016; this fact is also evidenced by the Hungarian Educational Authority. Based on the data, it can be stated that a high degree of growth can be observed in the presence of foreign students in the education system. Based on the statistics prepared by the Educational Authority, it can be also established what form of training is the most popular for the foreign students. Distribution within the training fields shows an

unequivocal and considerable growth over the last 8 years in most areas. The high rate of persons undergoing undivided trainings leads to further conclusions with regard to the most interesting courses. Based on the statistics of the Educational Authority (2016), the courses of general practitioner, dentist and veterinarian are the most popular, together with the courses of pharmacist and architect which present themselves to a lesser extent but dominantly. And in relation to the universities, the most popular ones are Semmelweis University, University of Pécs, University of Debrecen as well as University of Szeged from the point of view of the foreign students. Based on the data of the Educational Authority in 2016, most of the students (more than 3000 persons) came from Germany but relatively a lot of Chinese, Slovakian, Serbian, Iranian, Norwegian and Nigerian people find their account in Hungary (Figure 2).



**Figure 2:** Distribution of foreign students coming in the largest number, by their nationality

Source: Educational Authority (2016)

Comparing the presence of foreign students participating in the school year 2016/2017 with the largest percentage (headcount above 1000) to the school year 2008/2009, it can be established that the rate of foreign students coming from the affected areas, with the exception of two countries, has grown in the Hungarian education system over the years. In case of two exception countries (Romania, Slovakia) in this ranking list, it may be interesting to examine the change in participation rate in the local education systems since the decline in number of students can be caused by the growing participation in the education system of the motherland.

### 3. Responses to reduction in the number of students – globalization in the higher education

Based on the statistical data, it can be stated that the total number of students in the Hungarian higher education is declining. This tendency opens up several opportunities for the higher education management and the higher education institutions. One of them is to improve the quality under a greater educator attention paid to a smaller number of students. Reappearance of the classic master-disciple relationship is a desirable goal and the higher education management also prefers to reach it (Changing degrees in the higher education, 2014:8). Of course, the improvement of quality cannot be accomplished without an appropriate quality assurance system, an adequate and objective control on the courses and training places based on described rules since this is the only way the candidates can make substantiated decisions when they choose courses or training places (Csiszár, 2013).

Other responses can be also provided to the decline in number of students, ideally in parallel with the improvement of quality. Although the developed western countries are further advanced in the field of internationalization, an enlargement in the rate of inward student mobility is not necessarily a national economic interest in their cases. In contrast, in Hungary, it can be regarded as a national economic interest anyway since the tuition fees paid by the students are significant income for the universities. In addition, the presence of the international students has an increasingly impact on the social and economic development, cultural life and vitality of the host cities of institutions thus the internationalization is also the interest of the city authorities in case of the big university cities (M. Császár et al. 2013).

The internationalization or internationalizing has more approaches and conditions which cannot be disregarded when exploring the topic. On the one hand, having regard to its aim, it can be stated that the claim linked to the internationalization in the higher education can be also resulted from financial reasons since the realization of modern researches in the universities are subject to material issues in many cases, for which the required financial resources are often not available through the central government budgetary. Consequence of this is that the higher education institutions are forced to increase their own revenues (Németh, 2012). However, it has further limitations because the natures of topics and study materials, i.e. the research areas, are further aspects of internationalizing. While the task can be easily solved in the natural sciences and medical sciences, this can be an insurmountable obstacle, in many cases, in the fields of humanities and social sciences due to the strong international character (Fézer, 2013). Social attitudes can be another viewpoint in the field of internationalization which applies to the admission of foreigners interested in new results and the acceptance of diversity (Changing degrees in the higher education, 2014:36). As well, in this context, there is a focus on that the output of competitive professionals also emerges as a central objective, not attaching the business sector (Berács, 2012).

However, strengthening the international character of the teaching activity is an unequivocal condition for the feasibility of internationalization since only those educators are able to hand over competitive and modern knowledge to their students who are actively linked to the international researchers' life. However, the realization of this condition requires such an extent of the general high-level terminological

knowledge which makes the representatives of the area suitable for an authentic teaching activity in foreign languages as well. In order to accomplish these internationalizing conditions, a target system has been formed in Hungary which supports the achievement of the aims outlined (Changing degrees in the higher education, 2014:48-49):

- Positioning the domestic institutions in the international competition.
- Enhancing the international mobility of students and educators-researchers.
- Strengthening the international relations with partner states of strategic importance at institutional level.

Insofar as the internationalization is overall approached from the staying of foreign students in Hungary, based on the treatise of Berács – Malota (2011), it can be said that Hungary was already attractive for foreign students in previous periods as well. And this attractiveness can be even enhanced further, especially in that case if the residence of students is supported by both the sending and host states (i.e. Hungary). Students come from more than 120 countries to our home country in order to pursue their education. In the school year 2009/2010, there were 27 countries from where more than 100 students came to Hungary.

#### **4. Success of internationalization in Hungary based on the foreign students' assessment**

In order to enhance the promotion of internationalization, Hungary should place great emphasis on attracting the foreign students which can be also interpreted as a kind of brand building. In order that this activity of the country can be assessed, a survey (Malota, 2017) has been prepared, commissioned by Tempus Public Foundation, about what the foreign students think of Hungary's image, how satisfied they are with the quality of the universities chosen and the student services as well as what experiences they have gained during their presence here.

In the questionnaires, the answers were given by 1566 foreign students originating from 72 different countries, studying at 27 domestic higher education institutions. Distribution of the respondents' gender was almost similar: 54% men and 46% women were interviewed. Their average age is 24.1 years, two-thirds of the persons questioned (73%) are aged between 19 and 25. This data is harmonising with the former data according to which 45% of the foreign citizens living in Hungary are in the age group 20-39 (KSH, 2017) – id est the group of foreigners living in Hungary consists of students participating in higher education, in a decisive proportion.

During the survey in 2017 (Malota), Hungary's general image was examined in the framework of open questions. The persons questioned had to answer to the question what were the first three *positive* and the first three *negative* words that came to their mind when they were thinking of Hungary and the Hungarians. Most of them associated the beauty, kindness and amicability with positive things. In addition, the following words were mentioned most frequently among the positive expressions: peaceful, helpful, cheap/affordable, Budapest, culture, secure, calm. It is encouraging that "negative aspects" was the most frequent answer to the question what were the first three negative words that came to the mind of persons questioned when thinking of our country and the Hungarians. Thereafter, the following negative words can be mentioned in order: language/language difficulties, homeless people, small country, unfriendly, poor, smoking, expensive, racist, cold, slow, rude, lazy, and pessimistic. It is striking that there are greater consensus and higher mentioning

percentages in case of positive words while the rates are lower in case of negative expressions but several kinds of words appear. This leads to the conclusion that the positive opinion yet presents itself more dominantly in the overall opinion although there are also negative characteristics which are linked to the country on the basis of foreign estimation.

With regard to the foreign students, it may be a particularly important information how they obtain information about the country beforehand. 85% of students hardly knew anything (55%) or had little previous knowledge (30%) about Hungary before they have begun their studies. Among the countries represented in large numbers, the Turkish students had more previous knowledge: 36% of them marked the answer "yes, I knew a lot" (this is 15% in the entire sample). Significantly in greater proportion, the Nigerian, Japanese and Algerian students had a very little knowledge about us. By examining the regional rates, it can be seen that the Eastern European and Western Balkan students had more knowledge than the students of other regions. However, the same cannot be said about the respondents originating from the EU; there were no significant differences in their cases. This information leads to the conclusion that the communication about the Hungarian education opportunities is not powerful enough in those countries from where the potentially interested parties come in large numbers – this could be improved by conscious development and, based on the study, the emphasis should be placed, using targeted instruments, on those countries from where Hungary accommodates students in large numbers. Further pronounced information is what decision-making factors play roles in choosing a Hungarian institution. The three most common reasons of making decision about the studies in a Hungarian higher education institution are as follows: education at high level (46%), desire to get to know another culture (46%) and affordable prices (43%). In addition, among the possible answers, students (15-20%) have frequently chosen that they came to Hungary to study because the country has a good reputation, because their friends suggested our country who had studied here previously, because it was easy to get in to the chosen institution, because there is a partner agreement between two universities as well as because the discrimination is low here, because the given student wanted to live here and because the chosen institution provides unique programmes. Among other reasons (mentioned by 5%), such special interests are reflected that e.g. a student likes the music of Franz Liszt and Bartók or a student can study nuclear electronics, maybe a student wanted to come due to a certain professor or a certain reputable laboratory. Data arriving from students' feedbacks serve as a headstone for building the brand; its conscious utilization can make the attraction of foreign students more effective.

The most popular information sources are the scholarship portals on the internet (with a 35-percent mentioning). Furthermore, a quarter of the respondents denoted that they had obtained information about the chosen university from their friends (26%). The family members, the homepage "Study in Hungary" and the embassies/cultural institutions are also at the beginning of the ranking order related to the collection of information, with 15-15-14 percent. Among the information materials of the chosen higher education institution, the online advertisements are more popular (10%); the offline sources have been forced back. The rate of students obtaining information from the mainland educators and departments is 11%.

Almost a level 4 satisfaction was peculiar to the general factors of the higher education institutions (academic program, selection of courses, scientific prestige). In case of these questions, rate of the medium-satisfied persons is between 33 and

50%; distribution of the discontented persons (who gave grade 1 and 2) is between 10 and 17%. This result leads to the conclusion that those who have chosen Hungary are satisfied with their decisions rather than dissatisfied.

An experience coming from outside the education system can be also decisive in relation to the estimation of a host country. It can be said that the students are nearly satisfied with the quality of those services that we asked about in connection with their cities. The students are mostly satisfied with the traffic conditions (average 4.26 measured on a 5-scale), 82% of them has given grade 4 or 5 for the quality of traffic. 69% of the respondents are very or quite satisfied with the shopping facilities – 13% of them asked that they were less satisfied than the medium. In case of the satisfaction indicators of the entertainment possibilities, it can be said that 63% of the respondents are more satisfied than the medium (marked grade 4 or 5) and 22% of them are medium-satisfied (ranked this factor with grade 3). The opportunities for accommodation and sporting are the most problematic among the possibilities listed. In case of the sports opportunities, 28% of the respondents have given grade 3 only, 57% of them have ranked with grade 4 or 5 and 15% with grade 1 or 2. One fifth of the respondents have ranked the accommodation opportunities with grade 1 or 2, other 17% are medium-satisfied only. Based on this information, the development guidelines can be established in the light of strategy to be evolved in the future.

The most favourable opinions are about the restaurants and shops, roughly half of the respondents (52 and 48% of them) have primarily experienced friendly treatment in this situation and only 6-7% of them have experienced inimical attitudes. The rate is almost similar in the traffic as well as on the streets: 37-38% of the persons questioned have met with helpful and 47-47% with indifferent behaviours but 10-12% with negative attitudes. Among the official situations, the attitudes experienced at the university administration have the most favourable adjudication. 63% of the respondents have met with positive and helpful behaviour, a quarter of them have experienced indifferent treatments. In addition, 8% have felt that there were hostile attitudes toward us. In most official situations, neutral or helpful attitudes were peculiar. 4-14% of the respondents have experienced inimical, negative behaviours, least in the embassy (4%), mostly in the health and care sector and in the immigrant office (11 and 14%).

At the end of the questionnaire, prior to the demographic questions, a synthesizing question was put: "Would you choose Hungary again if you had opportunity to choose again?" Almost three-quarters of the respondents (70%) would decide to choose our country again (this rate was 73% in the survey of 2013). 26% of them think that they may come here to study again (22% in 2013) and only 4% think that they would not choose our country (5% in 2013).

## Conclusions

Based on the statistics measured in the Hungarian higher education system, the number of students is progressively decreasing but, in addition, it can be observed that there is an average increasing in the participation of foreign students. In the light of preparations for managing the situation, summarizing the challenges and opportunities the higher education is facing, several options are available in order to solve the emerging state:

- Over the next years, the number of higher education candidates may decrease in Hungary in a manner which can be projected from demographic

data. This provides the possibility that the number of students per educator may decrease, namely there would be more opportunities for in-depth workshops.

- The decreasing number of students provides that the workload of educators may be reduced thereby they could publish more publications in periodicals with higher quality than present day. Furthermore, there could be also an opportunity to establish more, clearly researcher jobs.
- One of the utilization methods of the released educator capacity is to increase the present rate and headcount of the foreign school enrolment. To this, it is required to advertise more foreign language courses than nowadays, mainly English language ones.
- Using the previous research results in order to establish the Hungarian education brand-building, an emphasis should be placed on the active communication towards those countries from where potential student headcount may come.
- The Hungarian higher education should be made more attractive for the foreign students since the full-time diploma-mobility will be expectedly promoted against the credit-mobility in the future. To this effect, the domestic higher education institutions' positions should be strengthened in the international ranking lists.
- An emphasis should be placed on the improvement of those areas which were mostly underestimated on the basis of surveys; such as the quality of accommodations, enlargement of the sports and entertainment opportunities and the strengthening of the general acceptance at social level.
- In addition to that the personal attendance needs to be also strengthened in a popularizing process, an enhanced use of the communication channels identified on the basis of survey results is necessary for an effective access.

## References

1. Berács J – Malota E. (2011): Megéri hozzánk jönni tanulni? *Educatio* 2011/2. pp.220-221.
2. Berács J. (2012): *Nemzetköziesedési trendek és intézményi megfelelés*. In: Hrubos I. (szerk.): *Elefántcsonttoronyból világítótorony. A felsőoktatási intézmények misszióinak bővülése, átalakulása*. Aula Kiadó, Budapest, 137.p.
3. Cseh Papp, I. – Veressné Valentinyi, K. – Boda, H. (2018): Veressné Valentinyi K (ed.) *The history of vocational training in secondary and higher education in Hungary with a special focus on economics*. Gödöllő: Szent István Egyetem, 59 p. ISBN:978-963-269-707-9
4. Csiszár I. (2013): *A Doktoranduszok Országos Szövetsége és a Magyar Felsőoktatási Akkreditációs Bizottság közötti kapcsolat*. In: Szabó Sz. – Szántó T. (eds.): *20 éves a Magyar Felsőoktatási Akkreditációs Bizottság*. Magyar Felsőoktatási Akkreditációs Bizottság, Budapest, 49.p.
5. Educational Authority (2016): Felsőoktatási statisztikai adatok, letölthető kimutatások. [https://www.oktatas.hu/felsooktatas/kozerdeku\\_adatok/felsooktatasi\\_a\\_datok\\_kozzetetele/felsooktatasi\\_statisztikak](https://www.oktatas.hu/felsooktatas/kozerdeku_adatok/felsooktatasi_a_datok_kozzetetele/felsooktatasi_statisztikak) last accessed on 10.04.2018.
6. Fenyves V. – Bácsné Bába É. – Szabóné Szőke R. – Kocsis I. – Juhász Cs. – Máté E. – Pusztai G. (2017): *Kísérlet a lemorzsolódás mértékének és okainak*

- megragadására a Debreceni Egyetem Gazdaságtudományi Kar példáján. *Neveléstudomány: Oktatás Kutatás Innováció* (3), pp. 5-14.
7. Fézer T. (2013): *A felsőoktatási intézmények nemzetközi minősítésének szempontjai, anomáliái*. In: Babos T. – Czene G. – Morvai T. (szerk.): *A nemzetközi minősítő, értékelő és véleményalkotó szervezetek háttéréről és nemzeti szuverenítésre gyakorolt hatásáról*. Postgraduates' International Network, Budapest, pp.197-213.
8. Fokozatváltás a felsőoktatásban (2016): *A középtávú szakpolitikai stratégia*. <http://www.kormany.hu/download/3/18/e0000/20161202%20Fokozatv%C3%A1lt%C3%A1s%20a%20fels%C5%91oktat%C3%A1sban%20k%C3%B6z%C3%A9pt%C3%A1v%C3%BA%20strat%C3%A9gia.pdf> last accessed on 24.03.2018.
9. Fokozatváltás a felsőoktatásban. *A teljesítményelvű felsőoktatás fejlesztésének irányvonalai*. Budapest, 2014, pp.8-49. <http://www.kormany.hu/download/d/90/30000/fels%C5%91oktat%C3%A1s%20koncepti%C3%B3.pdf> last accessed on 24.03.2018.
10. Központi Statisztikai Hivatal (2016): *Hallgatók, végzettek a felsőoktatásban* <http://stainfo.ksh.hu/Stainfo/haViewer.jsp> last accessed on 04.04.2018.
11. Központi Statisztikai Hivatal (2017a): *Magyarország 2016*. <http://www.parlament.hu/irom40/15319/15319.pdf> last accessed on 04.04.2018.
12. Központi Statisztikai Hivatal (2017b): *Népesség, népmozgalom* [https://www.ksh.hu/docs/hun/xstadat/xstadat\\_eves/i\\_wnt001a.html](https://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_wnt001a.html) last accessed on 04.04.2018.
13. M. Császár, Zs. – Csüllög, G. – Pap, N. (2013): Internationalisation of a University – „The Secret Weapon” for the Development of the Hungarian Provincial City of Pécs, Hungary. – *Journal of Settlements and Spatial Planning* 4. 2. pp. 215–225.
14. Malota E. (2017): *Hallgatói véleményfelmérés 2016*. Magyarország és a magyar felsőoktatás a külföldi hallgatók szerint. [http://tka.hu/docs/palyazatok/hallgatoi\\_elegedettseg\\_tanulmanykotet.pdf](http://tka.hu/docs/palyazatok/hallgatoi_elegedettseg_tanulmanykotet.pdf), last accessed on 10.04.2018.
15. Manpower Group (2016): *2016-2017 Talent Shortage Survey* <https://www.manpowergroup.com/talent-shortage-2016> last accessed on 10.04.2018.
16. Matkó, A. – Szűcs, E. (2012): The strategic management tools and their relation to competitiveness in higher education. *Analele Universitatii Din Oradea Fasciola Management Si Inginerie Tehnologica / Annals Of The University Of Oradea Fascicle of Management and Technological Engineering* 11 (21):(2) pp. 5.63-5.69.
17. Oláh, J. – Halasi, Gy. – Szakály, Z. – Popp, J. – Balogh, P. (2017): The Impact of International Migration on the Labor Market – A Case Study from Hungary. *Amfiteatru Economic* 19:(46) pp. 790-805.