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Table of Content

Governance and Management 6

Kari Kuoppala 7
The Finnish Management by Results Reform in the Field of Higher Education

Gabriella KECZER 27
Initial Concerns and Experiences Regarding Community Higher Educational Centers in Hungary

Kateryna SUPRUN, Uliana FURIV 45
Governance equalizer: Ukrainian case study

Jan L. CIEŚLIŃSKI 62
Old and new funding formula for Polish universities

Anastassiya LIPOVKA 70
Raising Gender Equality in Kazakhstan through Management Education Modernisation

Valéria CSÉPE, Christina ROZSNYAI 82
Trends and Challenges in Hungarian Higher Education Quality Assurance

Teaching, Learning and Research 90

Nicholas CHANDLER , Gábor KIRÁLY, Zsuzsanna GÉRING, Péter MISKOLCZI, Yvette LOVAS, Kinga KOVÁCS, Sára CSILLAG 91
When two worlds collide: cheating and the culture of academia

Matild SÁGI, Marianna SZEMERSZKI 107
Reforms in Teaching Professions and Changes in Recruitment of Initial Teacher Education in Hungary

Tamás JANCSÓ 129
The role of university identity and students' opinions of each other in the university's operation: through the example of Eötvös Loránd University Budapest

Zsuzsa M. CSÁSZÁR, Tamás Á. WUSCHING 147
Trends and Motivations Behind Foreign Students' Choice of University in Three Hungarian Provincial University Towns

Samir SRAIRI 162
Determinants of student dropout in Tunisian universities

Éva PÁLINKÓ, Zsófia VIDA **182**
How to achieve high scientific impact in SSH research projects?
Findings of a case study

Aleš VLK, Šimon STIBUREK **193**
Diversification, Autonomy and Relevance of Higher Education
in the Czech Republic

Conference Documents **200**

Program **202**

Keynote speakers & Abstracts of keynote speeches **208**

Papers presented at the conference **212**

Conference organizers **229**

Authors/Editors

CHANDLER, Nicholas, Budapest Business School / Corvinus University of Budapest
CIEŚLIŃSKI L. Jan, University of Białystok, Poland
CSÁSZÁR M., Zsuzsa, University of Pécs, Hungary
CSÉPE, Valéria, Hungarian Accreditation Committee, Hungary
CSILLAG, Sára, Budapest Business School / Corvinus University of Budapest
FURIV, Uliana, MARIHE program, Ukraine
GÉRING, Zsuzsanna, Budapest Business School / Corvinus University of Budapest
JANCSÓ, Tamás, Eötvös Loránd University, Hungary
KECZER, Gabriella, University of Szeged, Hungary
KIRÁLY, Gabor, Budapest Business School / Corvinus University of Budapest
KOVÁCS, Kinga, Budapest Business School / Corvinus University of Budapest
KOVÁTS Gergely, Corvinus University of Budapest,
KUOPPOLA, Kari, University of Tampere, Finland
LIPOVKA, Anastassiya, Almaty Management University, Kazakhstan
LOVAS, Yvette, Budapest Business School / Corvinus University of Budapest
MISKOLCZI, Péter, Budapest Business School / Corvinus University of Budapest
PÁLINKÓ, Éva, Pallasz Athéné University, MTA KIK, Hungary
ROZSNYAI, Christina, Hungarian Accreditation Committee, Hungary
SÁGI, Matild, Eszterhazy Károly University, Hungary
SRAIRI, Samir, University of Manouba / École Supérieure de Commerce de Tunis / Ministry of Higher Education and Scientific Research in Tunisia
STIBUREK, Šimon, Tertiary Education & Research Institute, Czech Republic
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VLK, Aleš, Tertiary Education & Research Institute, Czech Republic
WUSCHING Á., Tamás, University of Pécs, Hungary

Governance and Management

Kari KUOPPALA

The Finnish Management by Results Reform in the Field of Higher Education

Abstract

In Finland, all universities were moved to a new state steering system in 1993, called 'management by results,' which has been nominated as a Finnish version of New Public Management (NPM). In a modified form, this steering system still determines the financial position of Finnish universities even if they are nowadays formally private sector organizations and no longer state accounting offices. The period from 1993 to 2013 offers a higher education laboratory to analyze this institutional change. The long-lasting effects of deep institutional change can be empirically underlined through the analysis of HRM (Human Resource Management) in universities. One big reform of Finnish universities took place in 2009 through the new Universities Act, which gave full employer status to Finnish universities for the first time in their history. The effects of profound institutional change of the year 1993 are evaluated through the interviews of chief human resource managers in eight biggest universities in Finland. It seems that the move to the management by results system changed even the HRM of universities more than the later change of employer status. First, I pick up some introductory features of the state level management by results reform in Finland from 1993 on. Next, I review the reforms of the same period in the field of Finnish higher education. Then I introduce basic ideas of institutional change as my theoretical perspective. The final part of the article includes an analysis of the Finnish management by results reform in the field of higher education.

1 Introduction: The Development of Finnish Higher Education System as a Part of the Development of Management by Results in the Finnish State Administration

Discussion about reforming the Finnish public sector started in the middle of the 1980s. Despite the quick growth of the welfare state in Finland, the basic structures of administration had remained almost unchanged. During the 1980s, the Finnish welfare state met financial and bureaucratic problems (Salminen 2003). Other facts listed by Salminen affecting to the public sector "reform industry" were globalization, participation in European integration, and liberalization and deregulation of financial markets. In the next chapters, I give a brief review of the development of public sector reforms and of the connections of these reforms with the Finnish higher education system.

According to Markku Temmes (1998), the Finnish solutions have followed the Nordic line in realizing NPM reform policy. Following the ideas of Salminen (op cit), the nature of Finnish reforms is possible to analyze more closely through main performance efforts in certain areas of public administration. Other indicators for the analysis of public sector reforms are market orientation and personnel policy and management. In general, performance connects to the three e: s of economy, efficiency, and effectiveness.

The first performance area taken up by Salminen is quality strategies in the public sector. Performance efforts connected to this area are an enhancement of quality and customer orientation in the public services, of freedom of choice, of cost-consciousness, and of substitutive and supplementary ways for public service delivery. The second performance area is marketization processes, which includes a decrease of public personnel, privatization, an increase of competition and profit-making, new forms of public entrepreneurship, and new proliferation in public organizations. During the years 2003-2007, government underwent productivity program in state administration with strict targets of personnel cuts (Heikkinen – Tiihonen 2010). The third and final area is new management techniques composed of new management culture of performance management, of administrative cost awareness, of increasing accountability, control, and reporting and finally of new public service ethics.

Salminen (op cit) describes market orientation as a process of change where public agencies were turned into state enterprises, then incorporated, and finally, these companies are partly or fully privatized. Market orientation meant at least partially weakening the political power and control over former public organizations. In the Finnish context, privatizations were a pragmatic process without any particular program behind them. One surprising consequence of privatization in the Finnish public sector has been the establishment of new authority organizations.

Salminen (op cit) concluded that the effect varied between administrative units. Performance management has had positive impacts like increasing decentralization in decision-making and freedom to maneuver within the agencies. Result orientation and

cost awareness have received more attention in organizations, too. Attention paid to effectiveness got a new dimension from 2005 on when financial and personnel services of the different fields of state administration were collected into service centers connected to the State Treasury. In 2010, these service centers were merged together (Heikkinen – Tiihonen 2010).

Following management by results, the power of personnel policy was delegated to the ministries in the first years of the 1990s. A new civil service law entered into force in 1994. It brought normal employment relationship as the main form to the state administration instead of public service employment relationship (Heikkinen – Tiihonen 2010). Management reforms in the Finnish public sector have emphasized managers' personal responsibility and accountability for their own organizations' results. In the field of human resource management cost-effectiveness, customer-orientation, a delegation of power, accountability, and the use of incentives were important mediums for putting the reforms into practice. Problems in this field deal with feelings of being overworked and dissatisfaction with the reward system (Salminen op cit).

Temmes (op cit) paid attention to the importance of managerism in pointing out the development of the profession of public managers as a core feature of the new administrative policy. Temmes labeled the administrative culture produced by the reform wave as 'managerialist'. He highlighted the importance of the managerialist culture by using the expression the logic of managerism. The previous administrative-legalistic culture has opposed it from the inside of the public sector.

Universities in the Finnish context have been an integral part of the public sector, and therefore the most government-wide reforms always have had effects on universities, too (Salminen op cit). Salminen analyzed the impact of NPM on Finnish universities from three different perspectives: evaluation of performance, managerial reform, and organizational culture and values. The steering and development duties belong to the Ministry of Education (and Culture from 2010) in the Finnish central government. It is possible to state that during the first decade of the management by results era the main managerial trend has been the delegation of power authority from the ministerial to university level. The main areas controlled by the Ministry are university degrees and fields of study. Result agreements developed as one of the main instruments in the ministerial steering of universities. During the first years of the reformed funding system, the accountability criteria at universities developed to be the same as in all other public institutions (Salminen op cit).

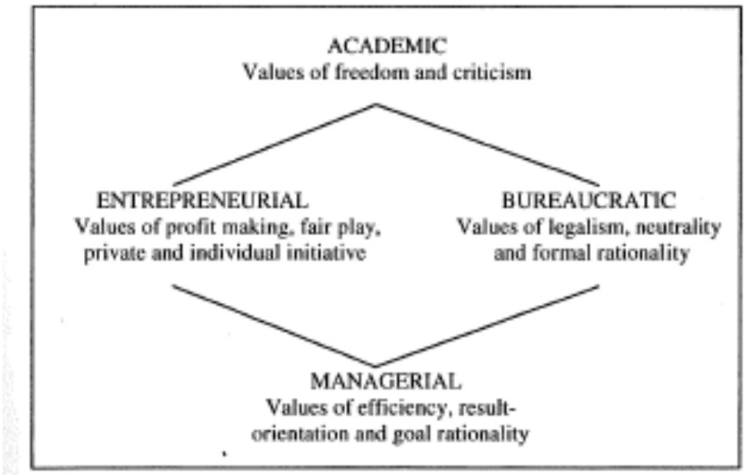
The managerial reform at the universities meant that the power of collegial bodies moved little by little to rectors, deans, department heads and leading administrative officers. Reforms brought the increased use of new performance-related salaries. Through the result agreements, the Ministry started to intensify dialogue with universities

while retaining the more traditional controlling role, too. For instance, project funding increased as well as the old-fashioned steering of each project individually (Salminen op cit). According to Nieminen (2005), the public sector reforms combined with higher education policy reforms together changed the role of universities in Finnish society. This combination made research funding more external and competitive. Changes to the university law during the 1990s increased universities' autonomy and managerial power: they could decide broadly about their internal organization. But the cost of increased autonomy was both accountability and the continuous assessment of operations – and consequently, increasing potential for steering and monitoring by the Ministry.

An interesting perspective on the effects of results-based management at universities chosen by Salminen (op cit) is organizational culture and values (*Figure 1*). He divided the value basis of higher education into four different dimensions. Academic values include academic freedom, criticism, and substantive rationality. It is the historical form of a traditional university mission that is to establish and preserve the cultural identity of a nation. The special function of universities is to interpret, create, and transfer knowledge. Universities contain bureaucratic features, which include the values of legalism, neutrality, and formal rationality. Managerial values at universities include efficiency, result orientation, and goal rationality. The entrepreneurial values of universities include profit-making, fair play, and private and individual initiative. In the studies of academic capitalism, these values are analyzed in detail (see e.g. Slaughter – Rhoades 2004). They connect closely to the interests of politicians and business stakeholders in the form of a transfer of scientific knowledge and the economic exploitation of research and development.

Salminen (op cit) concluded that performance management and control are new forms of state steering. Another key issue in the field of Finnish higher education has been the development of more professional management practices. Reasons for this were among others increasing needs for more external funding, massification of universities, and the tighter integration of performance indicators, personnel policies, and strategic choices into management processes and practices. Consequently, it has been challenging to professionalize management and encourage managers in adopting a new administrative culture. According to Salminen, the development around the third mission of service to society by universities raises demands to reconsider the existing higher education strategy and the relationship between universities and polytechnics.

Figure 1 Four dimensions of the value basis of higher education (Salminen 2003)



2 Management by result as a Development Process of the Finnish Higher Education

According to Välimaa (2001a), the expansion of Finnish higher education towards a mass higher education system began in the late 1950s and, together with welfare state development, was most rapid during next two decades. The rapid expansion led to several reforms of different university practices during the 1970s and 1980s. A heavy economic recession at the beginning of the 1990s interrupted the long growth period of Finnish higher education. At the same time, in 1991, the Government launched a polytechnics experiment that made Finnish higher education system binary. Since 1996, the reform was expanded into a system-wide practice. In 2001 there were 31 polytechnics functioning all over the country (Välimaa op cit). I do not analyze the polytechnics reform in more detail in this article.

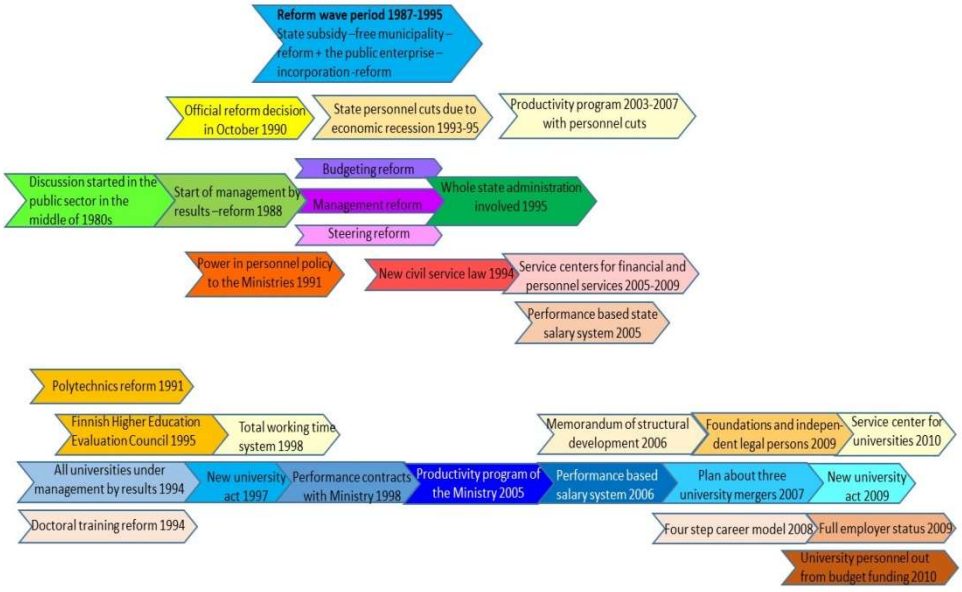
In *Figure 2*, I have summarized the reforms of the Finnish higher education system from the late 1980s to the early 2010s. I have connected to the development of higher education basic steps of the management by results reform in the state administration because Finnish universities have long been part of the state administration and still have tight connections to the state governance principles, despite the fact they no longer belong to the state accounting offices. The upper part of the figure describes the development at the state level as a whole and the lower part describes the main reforms in the field of higher education. I have paid most attention to the changes in state steering of higher education, to the structural reforms on the institutional level, and to the special effects of reforms on the level of academic work. This analysis of management by

results reform covers the levels of higher education policy (steering), organizations (structures) and individuals (academic work).

Economic recession hit higher education as well as other societal sectors during the 1990s. Between 1991 and 1994, the state expenditure on higher education fell by 4.9 percent. At the same time, the structure of financing changed. During the 1990s, the proportion of public budget funding of higher education decreased by 19 percent, while at the same time external funding grew fivefold. This connected directly to the number of researchers on fixed-term contracts because most of them got their funding from external sources. Furthermore, the student-teacher ratio has grown during this period from 14.2 to 20.9 students per teacher. The student number grew steadily while the number of teachers remained the same or fell down. (Välimaa op cit)

The expansion of the higher education system introduced the problematic non-existence of doctoral training. As such, new graduate schools started at the beginning of 1995. According to Välimaa (op cit), it is "more than evident that the establishment of graduate schools has made doctoral studies more systematic and more efficient".

Figure 2 Management by results – timeline for Finnish higher education.



From the year 1994, all universities were officially under the management by results steering and budgeting system. Following Välimaa (op cit), "the policy goal of management by results is to reward performance and effectiveness". The management

by results logic was divided into three practical levels: steering by results, management by results, and budgeting by results. Steering by results refers to the relations between the Ministry of Education and universities. Management by results refers to setting result targets, the objective evaluation of results and the daily management practice of superiors inside the universities. Budgeting by results refers to the fundamental changes in the budgeting process of state organizations. The changing roles of the Parliament and the Council of state in the steering of administration connected to the management by results system. Steering by results has been defined to mean decision-making, coordination, and contract processes orientated on branches of administration. (Rekilä 2003)

The autonomy of universities expanded to cover their internal organization, personnel policy, and exploitation of budget resources. One central aim of steering by results was to increase the interaction between university management and the Ministry of Education. The yearly negotiation process was the most important media of steering and control. Steering by results became concrete in the performance agreements. Targets for the functioning of universities for the next planning period were set in these agreements and connected to the Ministry, which undertook to propose the appropriations to the next year draft of the state budget (Summa – Virtanen 1999, Rekilä 2003).

Quality assessment formed a central part of the management by results. Historically, evaluation came to higher education management in Finland in three rounds with differing emphasis. First, to evaluate the level of scientific research in Finland on the discipline basis. Second, institutional evaluations produced information to be used for the development of institutions evaluated. And third, the establishment of the Finnish Higher Education Evaluation Council in 1995 (Välimaa op cit).

In the new Universities Act of 1997, evaluations became one of the tasks of universities. The new law gave universities broader autonomy financially, organizationally, and in appointing all academic staff. These changes also made a difference in working conditions and terms of service of university personnel. According to Välimaa (op cit), these changes were significant politically, not only symbolically. The Ministry of Education started to allocate university resources based on performance from the year 1998 on (Opetusministeriö 2004:20; Välimaa – Jalkanen 2001).

The principles of management by results were then applied inside the universities, too. One common trend in the Finnish universities was to put into practice structural changes around the end of the 1990s, but it is difficult to say if the new Universities Act was the main reason for them. Increased autonomy obliged universities to adopt strategic management and planning as important managerial tools. The steering of universities emphasized quantitative criteria (e.g. student numbers, number of exams

conferred) but the internal pressure in universities was rather on qualitative criteria. The overall evaluation was that the new Universities Act had decentralized decision-making power to the institutional level of the Finnish higher education system. According to Välimaa and Jalkanen (op cit), performance negotiations gave options to the Ministry of Education to influence the contents of academic work. Autonomy received new priority in institutional policy-making instead of former autonomy of research and teaching.

The working time regulation of academic personnel at universities stepped into a new phase from the year 1988 in the form of free allocation of teaching resources. Finally, in 1998 all universities belonged to this kind of labor market contract. In practice, all academic personnel had 1600 hours per year as their total working time. Consequently, this led to more detailed planning of work on the personal level, and as a negative follow-up, development of suitable control mechanisms (Vanttaja 2010, Rekilä 2003).

The Ministry of Education published a productivity program in 2005. The aim was to increase the productivity of universities by changing the university network towards larger and more internationally competitive university units. Universities should reallocate resources including personnel to support their profiling, to strengthen the focus fields, and to develop new growth fields and top research. One aim was also to release overlaps of the network (Vanttaja 2010, Jauhiainen et al 2011). At the universities, the effects of the productivity program came up in the form of plans concerning support services and organization structures (Kuoppala et al 2010).

Next step was a movement to the new salary system in 2006, which was grounded in personal performance and the complexity of work. Employees negotiated and agreed upon their salary with their closest superior. Based on the managerial needs of new salary system universities had to develop a new system of immediate supervisors for performance appraisal. During the same year started also a digital follow up system of working time planning. (Vanttaja 2010; Jauhiainen et al 2011; Kallio 2014)

The Ministry of Education started three account projects dealing with university mergers. In the same year 2007, the Ministry published a report dealing with the renewal of financial and administrative position of universities. It included the suggestion of changing universities either to corporations under public law (public universities) or to foundation universities. In the middle of 2009, the Parliament finally approved the new Universities Act. (Vanttaja 2010; Kaukonen – Välimaa 2010)

The new Act verified the two university types and separated universities from the state financial administration. It also included the verification of three new universities through planned mergers. Legally universities received a status of independent legal persons. In practice, this meant the incorporation of universities. The board, the rector, and the university collegium make up the decision making power of the university. In the

board, there must be at least 40% of the members outside the university. The employee position of university personnel changed to a normal contract of employment. Universities became full employers and participants of labor market negotiations. The new Universities Act guaranteed academic freedom strongly. The basic funding of universities comes from the budget of the Ministry of Education and Culture (newly named in 2010). In the year 2009, the proportion of basic funding from the total expenditure of universities was 64,5% (Kaukonen – Välimaa 2010).

In the shade of the preparation of the new Universities Act, the Ministry of Education published a report in 2008 dealing with the four-step career model of researchers at the universities. The report included suggestions for changes in the personnel structure of universities. The four-step career model does not include all researchers, with those outside mostly researchers in fixed term positions working on research projects (Pekkola et al 2017). One last feature in the structural development of higher education was the grounding of service center Certia. It was reorganized in 2010 to an incorporated company. Nine Finnish universities own Certia, which offers financial, personnel, and data system services to universities (Kuoppala – Pekkola 2015).

3 Institutional Change as an Organization Theoretical Background

According to Lawrence (2008), institutions are patterns of practice for "which departures from the pattern are counteracted in a regulated fashion, by repetitively activated, socially constructed, controls – that is by some set of rewards and sanctions". condition for the existence of institutions is that they have power. Institutions are powerful if they can affect the behaviors, beliefs, and opportunities of individuals, groups, and organizations.

According to institutional theory, organizational behaviors are responses from market pressures to institutional pressures. Institutional theory operates on the field level that is defined as a community of organizations whose participants interact mostly with each other. On an organizational field socially constructed rules, norms, and beliefs constitute field membership, role identities, and patterns of appropriate conduct. This is called institutional logics and shapes the way actors interpret reality and define the legitimacy of social functioning (Greenwood and Hinings 2006). Environmental jolts, as certain researchers call sudden environmental changes, have many different forms as shifts in technology, regulatory change, or sudden resource scarcity. At least the two latter are typical in the higher education field, too (Haunschild and Chandler 2008).

Greenwood et al (2008) brought up the study of institutional change as the fifth new direction of institutional organization theory. Change is a consequence of precipitating jolts, the type of which can be technological, regulatory, or social. In mature fields, reasons for change might be endogenous, too. There is the possibility of tension between dominant and latent logics in the field. During theorization, organizational failing

becomes specified and a new form gets its justification as a solution. The new idea gets legitimation during theorization and language plays there an important role. In the higher education field, new public funding mechanisms and quality assurance systems give examples of theorization processes. Theorization is followed by diffusion, which includes high mimetic behavior, nascent cognitive legitimacy, and importance of intraorganizational dynamics as describing features (Greenwood - Hinings 2006).

Some of the features of radical organizational change (Greenwood and Hinings 2006) suit the higher education field, too. These are isomorphic practices, developing the infrastructure of regulatory agencies, field stratification and structuration, convergent change, and high cognitive legitimacy. Dacin et al (2002) pay attention to legitimacy during the creation, transformation, and diffusion of institutions. In addition, the description of "deinstitutionalization" is applicable to higher education: the emergence of new players, the ascendance of actors, and institutional entrepreneurship. Dacin et al (2002) define deinstitutionalization as "the processes by which institutions weaken and disappear".

Scott with his associates (2000) defined "…a better understanding of the nature and causes of institutional change…"as their main theoretical issue in studying the transformations of healthcare systems in the San Francisco Bay Area between the years 1945 and 1995. They define the criteria of a profound institutional change. They give altogether nine criteria (op cit)

1) Multi-level
2) Discontinuous
3) New rules and governance mechanisms
4) New logics
5) New actors
6) New meanings
7) New relations among actors
8) Modified population boundaries
9) Modified field boundaries

I review these criteria in more detail in the chapter coming later in the text. There I analyze the development of the Finnish higher education system during the management by results era in the Finnish public sector.

4 Methodology and empirical data

I have written this article in the form of a review dealing with the development of the Finnish higher education field during the last quarter decade. Because of this kind of starting point, it is impossible to connect the article to anything apart from some kind of mixed method perspective combined with a literature review dealing with both theoretical material from the chosen perspective of profound institutional change and empirical material dealing the development of the Finnish higher education system.

I have been involved as a researcher in several research projects dealing with the changes in higher education steering, organizational structures of universities, and academic work in Finland. The main three projects are in time order: The Self Evaluation of Four Comprehensive Finnish Universities (Kuoppala 2004; Halonen et al 2004); The Structural Development, Academic Societies and Change (Aittola – Marttinen 2010); and The Laborer of the Information Society, The Work and Working Environment of the Finnish Project Researcher (Kuoppala et al 2015).

Main methods used in these projects have been a content analysis of documents, survey method and statistical analysis and expert interviews on the theme basis. In the self-evaluation project, we reviewed a broad range of documents from four target universities and the material they produced based on the self-evaluation process. Site visits on the campuses of the outside evaluation group also were reported. In the project dealing with the structural development of universities, we did a broad analysis of strategic documents of all that time Finnish universities. Other main research material consisted of interviews of chief administrative planning officers of the chosen universities as well as interviews of the leaders of chosen top units of research and teaching. The chosen university units included some of the institutions planned to be merged in the near future. The empirical material in the project researcher study consisted of different kinds of statistical material produced to different purposes by the Central Statistical Office of Finland and a labor market organization for the lower level academic staff (The Finnish Union of University Researchers and Teachers, FUURT). We also produced a broad literature review of Finnish studies dealing with academic work and new forms of work. The other empirical material included interviews of important persons participating in the process of organizing the Finnish universities as employers in the labor market based on the Universities Act of 2009. Finally, we made a survey targeted to project researchers in the eight biggest universities in Finland. The empirical ground of this article is based on the analysis of these datasets and the review of relevant higher education and administrative literature dealing with the management by results reform in the Finnish state administration and higher education during the quarter decade period starting in the late 1980s.

5 Management by results reform in the Finnish higher education viewed from the perspective of institutional change

When analyzing the reforms of the Finnish higher education, I take as my basic premise the nine-point criteria list presented by Scott et al (2000). Their first criterion for profound institutional change was multi-level. On the individual level, examples of institutional change in academic work include changes of roles and identities that affect behavior and attitudes of academic employees. The increased number of fixed-term contracts of project researchers produce insecurity and even stress to academic work (Siekkinen et al 2015). On the level of management, the growing managerial decision-making produces impressions of undemocratic procedures and feelings of powerlessness. It also gives impressions of the growth of university bureaucracy (Pekkola 2011; Jauhiainen et al 2011).

On the level of organization, new features and strategies are typical for profound institutional change. In the Finnish higher education context, these kinds of phenomena are the more entrepreneurial conceptualization of university and the massification of higher education (Kuoppala 2005; Välimaa 2001b). On the level of organizational populations, the content of profound institutional change are new types of organizations and the changes of borders between them. The polytechnics reform produced a new organization type into Finnish higher education population and during the last years, the co-operation between universities and polytechnics has started to change their borders. In the higher education field, this development has changed somewhat the nature of the whole field to the direction of co-operation.

The second criterion is discontinuous, which means that the long-term change includes both gradual, incremental change and fundamental, radical change. In the Finnish context, I take the management by results reform as a whole an example of radical change moving universities from state accounting offices to formally private sector corporations. An example of a more incremental change process is the change of HRM in the universities (Kuoppala et al 2015).

As third criteria are new rules and governance mechanisms. The criteria mean that rules governing the behavior of actors in the field are changed. The Finnish context gives two examples of it. The first one comes from the changes of legislation concerning universities. Closely connected to it is the growth of the proportion of competitive research funding. The steering mechanism of higher education has changed from legislation based to financial based (Kaukonen – Välimaa 2010; Nieminen 2005).

New logics as the third criteria means that the basic principles of steering, motivating, and legitimating actors of the field have changed. The form can be changed targets, means-ends chains, or types of justifications of action. This kind of development is the change from the Humboldtian university ideal to the entrepreneurial university

model. Instead of searching for new knowledge and delivering the cultural heritage, universities should support business life and regional development, and what is more, produce commercial innovations. Science policy is oppressed to financial and economic policy. One special feature of the Finnish higher education system is the future development of the dual model meaning the division of higher education field between universities and polytechnics and their co-operation. One broad question is the future orientation between the ideals of international and national university models particularly connected to the personnel policy, recruitment and qualifications (Pekkola et al 2017; Nieminen 2005, Vanttaja 2010).

Next criteria are new social actors in the field. They can be both individuals and collective actors, or new actors functioning as hybrids based on the former actors. Old actors can change their identity and the role of division between them can change. Again, in the Finnish context, one process following this pattern is the changing role division between universities and polytechnics. Perhaps the most concrete group of new actors are new funding organizations with their differing functioning principles and requirements. New merged and bigger university units are an example of hybrids constructed upon the old structures (Aittola – Marttila 2010; Nieminen 2005).

When the meanings of functioning connected to the behavior of actors in the organizational field reform, it produces one symptom of profound institutional change. This criterion can exist also in the form of different kinds of interpretation of old meanings, and furthermore, it can emerge in the form of different effects of meaning interpretation. In the Finnish higher education context, this is expressed via the changing role pointed to universities as supporting the business life development. Closely connected is also the changed meaning of research as a source of commercial innovations. (Aittola – Marttila 2010; Nieminen 2005)

The next criteria are the changed exchange and power relations between the actors of the field. This includes the birth of new connections, but as well the changed relation structure. The main example in the Finnish higher education context is the reduced and changed funding role of the public sector in the field of research funding. The long-term process has taken funding towards ever more competitive processes. The meaning of funding as a steering mechanism has grown all the time both strategically and politically. Strategically the Ministry of Education tries to use funding and directed special appropriations to oblige universities to prioritize and concentrate on their top fields and to cut minor fields by reallocation of resources. Politically this criterion is expressed in the new funding models closely connected to the politically determined research questions aimed to support political decision making. On the overall level, the active steering role of the state gives an impression of withdrawal but on the other hand, political and financial steering has achieved stricter forms (Aittola – Marttila 2010; Nieminen 2005).

The eighth criteria of profound institutional change is the blurring and mixing boundaries of organization populations. In the Finnish context, there are two recent examples of this kind. Over a longer time, the co-operative modes between universities and polytechnics have acquired new forms meaning also tighter co-operation between the units on the regional level. A more recent example is the pressure from the government to merge or closely connect several state research organizations both with each other and with universities. This development is closely connected to the diminishing state funding and reallocation of research funding resources. (http://vnk.fi/tula; https://tutkimuslaitosuudistus.wordpress.com/; http://minedu.fi/artikkeli/-/asset_publisher/tampereen-uusi-yliopisto-aloittaa-2019-korkeakoulujen-opetusyhteistyo-laajenee)

The final ninth criterion is modified field boundaries. The content is that the boundaries of the organizational field are broadened, cut back, or reorganized. New definitions of legitimized action and actors affect the mutual relations of actors. Examples in the Finnish higher education are the future development of the dual structure of the Finnish higher education, the new division between the main funding organizations, changes in the political steering of higher education, and the reorganization of state research institutions.

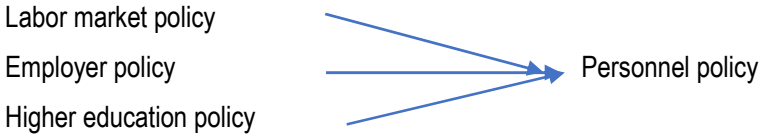
6 Discussion

In this article, I have reviewed the development of the Finnish higher education system under new logics of the management by results as a version of NPM in Finland. Theoretically, I have introduced the idea of profound institutional change drawing its origin from the institutional organization theory. In the following paragraphs, I try to verify the suitability of institutional conceptualization to the analysis of the development of higher education. I have described the new logics, management by results, as a fundamental, radical change. Next, I try to show that the HRM at universities has changed incrementally, and despite the fact that the new Universities Act brought radical reform to many basic features like corporatization, stakeholder representation, full employer status, and normal employment contract, it did not bring radical changes to the personnel policy of universities.

Personnel policy in the field of higher education has special features not existing in other societal sectors. In the Finnish context, labor market policy, employer policy, and higher education policy affect and form personnel policy together. *Figure 3* below illustrates this. The main content of labor market policy is the negotiations of salaries and other working conditions between the employee and employer organizations. Employer policy covers the concrete organization of academic work and management of work. Higher education policy includes steering by the Ministry of Education and Culture that

affects the career system of universities and financial steering through the funding system. Both labor market policy and employer policy are conditioned by the higher education policy.

Figure 3 Personnel policy in universities



Profound institutional change often has external factors as its starting point. In institutional theory, they are called environmental jolts: meaning sudden environmental changes. In the Finnish higher education, one example was the severe economic recession at the beginning of the 1990s. Because of it, state funding declined and the new logics of management by results affected the funding system of higher education. Also, quick massification of higher education and global reform suggestions of international organizations (OECD) affected the field of higher education. (Välimaa 2001b; Kallo 2011)

In the Scandinavian institutionalism, change and stability together are considered as an organizational norm. The logic of appropriateness was seen as complementary to the logic of consequentiality in the Scandinavian institutionalism, too (Czarniawska 2008). This idea seems to be suitable in the context of the development of personnel administration in the Finnish higher education field. When doing the project researcher study (Kuoppala – Pekkola 2015) we interviewed eight chief personnel officers from the biggest Finnish universities. We asked them how the new Universities Act (2009) had changed personnel administration and HRM in their universities. According to interviewees, the biggest change was the cooperation between universities based on the full employer status and an active position in the labor market negotiations.

Changes in the personnel policy practice seemed to be incremental. We got an impression that the development in the HRM was more incremental than radical. Main changes seemed to be caused by the environmental jolts, but they have proceeded more stepwise way than dramatically. This development speaks to the idea of the Scandinavian institutionalism. In the field of Finnish higher education, there has existed both radical change processes connected to the new logics and incremental slower change processes as those processes of HRM in the universities. Therefore, change and stability seem to co-exist in the same organizational field and the pace of change processes describes the discontinuous nature of profound institutional change.

7 Conclusion

In this article, I have reviewed the changing processes going on in the field of the Finnish higher education for around a quarter decade based on the concepts from the institutional organization theory. I have shown that the idea of profound institutional change offers suitable tools to analyze the change processes of a national higher education system. In this part of the discussion, I showed that institutional organization theory offers tools also to analyze more incremental higher education change processes. These analyzes are needed when the societal connections of changes to higher education are analyzed. They are particularly useful when the changes in higher education are considered in connection with broader societal development. They also clarify the developing and changing position of higher education as an important factor in the innovation system of a country.

Changes in the societal systems either follow paths of radical change or incremental processes. My analysis shows how both types of change processes can take place at the same time in the national higher education system. It also shows that changes in higher education are long-term processes and even the radical changes take decades to give permanent results. The study gives an impression how change processes often have environmental jolts as their starting point. This article leaves untouched the variation that for sure exists between different organizations in the same field. Universities are not total copies of each other. What is more, they use their autonomy, at least in some amount, to choose deviant paths compared to their neighboring units.

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Gabriella KECZER

Initial Concerns and Experiences Regarding Community Higher Educational Centers in Hungary

Abstract

The Hungarian government decided to establish a new type of higher education organization, the so-called "community higher education center" (CHEC): theoretically the Hungarian version of the American community college. However, practically speaking, CHECs are not new and independent institutions, only training locations of already existing universities. In 2016 four CHECs were established, and three more locations received permission from the ministry to be opened in September 2017, while two locations were rejected. The following chapters deal with the initial concerns and experiences of this new organizational type and the already established centers, drawing some conclusions concerning the raison d'etre and sustainability of the new organizations. Our research methodology includes the analysis of literature, documents (acts, regulations, governmental concepts, press releases) and statistical data, and interviews with the representatives of CHECs and gestor institutions.

1 Evolution of the institutional setting of Hungarian higher education

For a grounded judgment of the CHEC-idea, one must have an overview of the Hungarian higher education institutional setting the new organization type was introduced into. Thus, by evaluating laws, statistical data and literature we present the last decades' evolution of the types and numbers of higher education institutions (HEIs) and training locations.

1.1 Number of institutions and training locations

In 1990, post-communist Hungary inherited a fragmented institutional setting from the Soviet period (1945-1990). After the Second World War, Hungary had to adopt the Soviet model; universities were broken up into small, specialized institutions with three faculties at most, therefore 32 state HEIs were formed. In the 1960s, due to the overambitious

economic development plans of the Communist Party, there was a quantitative expansion in Hungarian higher education, and the number of HEIs reached 92. In the 1980s, both political decision-makers and experts emphasized that the oversized and fragmented institutional setting is not sustainable, but the attempts for rationalization were not successful. (Ladányi, 1991, 1986) At the time of the change of the political system in 1990, there were 60 state HEIs (1/3 university and 2/3 college), and 40 off-site training locations. (FTB, 1991)

Ideological liberation was accompanied by an evident growth in Hungarian higher education. In the expansive period of 1990-2005, there was an increase in the number of institutions on one hand, and an intra-institutional diversification on the other hand. Not only the number of institutions but also the number of faculties and departments grew. By the normative (per student number) funding, institutions were driven to widen their training portfolio, start new training programs and consequently establish faculties and departments. To attract more students, several institutions established off-site training in both smaller cities and in the capital. (Veres, 2016, Temesi, 2016, Ladányi, 2003, Derényi, 2012, Bazsa, 2012) Thus, the post-communist era has not brought a rationalization in the institutional setting but increased its fragmentation in certain aspects.

From the beginning of the expansion period, there was an intention for establishing a rationally concentrated institutional setting. Several concepts were elaborated for regional-based institutional mergers, and for the resurrection of the 'universitas' idea. This led to the centrally implemented integration of state HEIs in 2000. The aim was to establish a system that is more efficient, both in professional and financial terms. The higher education act of 1999 drastically modified the institutional setting. In large provincial cities including their 50 kilometers' agglomeration, individual institutions were merged into one large, multi-disciplinary university. The former, small institutions became faculties inside the new 'giants.' More than 20 institutions lost their independence, and the number of state HEIs was reduced to 30 (17 universities and 13 colleges). However, in some cases the integration was ambiguous: it gave independence to some off-site departments, and in the capital, several institutions were left intact. (Veres, 2016, Temesi, 2016, Ladányi, 2003, Derényi, 2012, Bazsa, 2012, KSH, 2005)

However, the integration has not impeded the further expansion of the higher education institution system. Although the number of institutions decreased, the number of faculties and off-site training increased, and training programs proliferated. Thus, at the end of the expansion, after 2005, the Hungarian higher education system turned out to be oversized (Forrai, Híves 2009, Bazsa 2010). Training program supply reflects the resources and competencies of the institutions or student preferences rather than labour market demand. Launching off-site trainings is motivated primarily by financial

aspirations, and the quality of teaching is rather dubious, because of the lack of human resources (Bazsa, 2010:14-15). The phenomenon of travelling faculty – the so-called 'intercity professors' – led multi-employment in more than one institution to become a general practice, so it had to be prohibited by the Hungarian Accreditation Committee.

In 2011, reforming the institutional setting got on the agenda of the new government. An analysis stated that HEIs are scattered in the country, and there are a lot of redundant parallelisms in the training portfolios of the institutions (Expanzió, 2011:37). The government published a concept for intervention, but it soon died away. There were some modifications in the integrated universities (some faculties were seceded or transferred), but the number of institutions has not changed significantly, and rather small HEIs kept the status of university (Veres, 2016, Temesi, 2016, Ladányi, 2003, Derényi, 2012, Bazsa, 2010). By and large, the quantitative drive led to fragmentation. The number of training programs, specializations, off-site trainings and 'intercity professors' proliferated and endangered the quality of higher education (Bazsa, 2012:92).

A new governmental strategy for higher education was issued in 2014. Concerning the institutional setting, the strategy stated two principles:

- each HEI should have a clear profile: there should be a distinction between the missions of the different types of institutions,
- instead of the irrational and uneconomical local competition, there should be a division of tasks, cooperation and unification of resources. (EMMI, 2014)

After the strategy came about, the institutional setting was retailored in 2015-2016. New mergers, secedes and transfers were initiated by the government, and new, specialized institutions were established. Some of the actions were in line with the above-mentioned principles of the strategy, but others were contradictory. The training portfolio of some institutions became more complex or wider, and the restoration of some specialized institutions increased fragmentation: contradicting with the requirement of the economies of scale. With this retailoring, the institutional structure of Hungarian higher education that was earlier criticized of being fragmented and redundant has not shrunk, but rather grown even larger (Berács et al., 2017:12).

1.2 Types of institutions in Hungarian higher education

In the Soviet era, there was a clear distinction between universities and colleges. This dual system stayed after the change of the political system; the two types of institutions were allowed to provide different types and levels of training programs. There was no passageway between the two types of institutions. The distinction between universities and colleges was reflected even in the career paths of their faculty ('university professors' versus 'college professors' on adjunct, assistant and full professor level). The

integration of the institutions in 2000 had not influenced the dual character of Hungarian higher education and the legal differentiation of colleges and universities remained. The distinction was loosened by the Act of 1996, allowing colleges to engage in university training programs if the conditions comply, and vice-versa (Derényi, 2012). Consequently, more and more colleges started to provide university training, while those universities that absorbed earlier colleges carried on the college-type training portfolio. The Act of 2005 abolished the remaining distinction, saying that both colleges and universities may run training programs in each training cycles. The Act of 2011 has not brought change, but kept the dual system of colleges and universities with the opportunity for both to run training programs on each level.

In the new governmental higher education strategy of 2014, a new institution type appears: the university of applied sciences (UAS). A UAS is "a professional training institution, focusing primarily on the satisfaction of economic and social needs, the application of knowledge. This is true even if some of these institutions is officially called 'college'" (EMMI, 2014:8). The text suggests that the strategy visions colleges as UASs in the future, although nominally they may remain colleges, and the strategy does not speak about a distinct college mission or institutional profile.

Nevertheless, the Act of 2015 declares not two, but three types of institutions:

- University: at least 8 bachelor and 6 master programs and a doctoral program, some of its programs in a foreign language, at least 60% of its faculty have Ph.D.
- University of applied sciences: at least 4 bachelor and 2 master programs and 2 dual training, some of its programs in a foreign language, at least 45% of its faculty have Ph.D.
- College: at least 2/3 of its faculty has Ph.D.

As Berács et al state, although the strategy emphasizes that a UAS is not a smaller or weaker university, the qualifying parameters of the law suggest just this, as all the institutions are qualified by the same set of criteria, and a UAS must perform less than a university. (Berács et al, 2017:22). At the same time, the fact that the marker 'of applied sciences' does not have to appear in the name of the institution weakens the distinction between universities and UASs. After the new Act, 5 former colleges were turned into UAS and 1 college remained (*Table 1*.)

Table 1 Types and number of state HEIs

	1996	1999	2001	2005	2007	2011	2015	2017[1]
State university	25	26	17	18	18	19	20	22
State college	31	28	13	13	13	10	10	2
State UAS	-	-	-	-	-	-	-	5
TOTAL	56	54	30	31	31	29	30	29

Source: Own compilation based on higher education Acts and database of Oktatási Hivatal

It is not yet obvious what the difference between former colleges and new UASs would be in practice, and whether UASs would get closer to universities, or pursue a special 'applied' mission or – despite their new appellation – stay closer to colleges.

2 The evolution of the concept of community higher education centers

In this chapter, the evolution of the concept of CHEC will be discussed, covering shifts and contradictions in the ideas concerning this new type of higher education organization.

The idea of establishing community colleges in Hungary first appeared in a document called Strategic directions and next steps of higher education elaborated in 2013 by the Higher Education Roundtable, which incorporated the most important actors of higher education, and was coordinated by the government. The document states that several small provincial colleges should function as community colleges in the future, after a profile change where necessary. Their role would primarily be fostering regional development. They would:

- Train professionals for local labour market; run primarily vocational training programs, and in some cases, perhaps bachelors.
- Find and manage talents in their proximity; foster their ambitions and abilities to enter higher education. (Because of this second role, the document suggests that community colleges should operate primarily in the field of lower level teacher training.)

The document touches an important issue: it calls the attention to the conflicting interests of regional development and higher education policies. Namely, from a higher educational point of view, the aim is to enroll each student to the best training available for them. It may be a problem if one does not get the best available training just because small provincial colleges – whose existence is important from a regional point of view –

[1] As of May 2017. www.oktatas.hu/felsooktatas/felsooktatasi_intezmenyek/allamilag_elismert_felsookt_int

also need to fill up their capacities. According to the document, this contradiction may be solved by finding an individual role for community colleges, different from that of the other types of HEIs. (EMMI, 2013:24-29)

In the governmental higher education strategy of 2014, the notion of community college plays a rather important role. In the following, we summarize some ideas concerning the new type of organization that are significant for our further analysis.

- Community college is an entirely new organizational type in Hungarian higher education.
- The best model for Hungary is the community colleges of the USA.
- The reason for establishing community colleges is to provide higher education everywhere in the country, especially in underdeveloped, disadvantaged regions, to strengthen competitiveness, foster social mobility and economic development. Establishing community colleges will save these regions from falling behind completely.
- Community colleges are to be established where there is no higher education "in accessible proximity", and where it is reasonable to establish higher education "due to the size and significance of the city".
- Since in these locations no higher education could be established in an economically sustainable way, a new, different type of organizational solution must be developed that builds on the contribution of all stakeholders. Corporations, private and public employers must take part in the financing of training and research.
- The aim of providing knowledge locally is to give people the chance to succeed locally, keep well-trained workforce in the underdeveloped regions. Thus, training programs of community colleges must serve the demands of the local labour market and be practice-oriented. Community colleges must participate in non-formal education as well.
- With the infrastructure of the community colleges, quality higher education may be provided in new locations, community colleges may become intellectual centers and important factors of economic development. So, higher education policy must prompt HEIs to start training off-site. Launching training programs in community colleges get extra funding from the state.
- The owner and operator of a community college is a non-profit organization founded by the local government, possibly with a church or a private company. It provides the infrastructure for the training and personnel to operate the infrastructure.

- Community colleges do not have faculty of their own, teaching staff is provided by the HEIs, since in those areas there is a lack of professionals, and the quality of teaching could not be guaranteed in any other way.
- A community college is not an institution, just the training location of an already existing HEI or HEIs. Students enroll in the HEI and graduate there. (EMMI, 2014)

It is prominent that the strategy does not deal with the question that was in the focus of the 2013 document, namely: what kinds and levels of training community colleges should run, and what their special role would be in relation to the other types of HEIs. Instead, it suggests that community colleges would do the same as other HEIs: provide higher education training, the only special aspect being the adaptation to local labour market demands. The strategy defines the mission and possible effect of community colleges more from a regional developmental point of view, and less from a higher educational aspect. (It is odd that other chapters of the strategy deal a lot with the 'third role' of higher education, but never mention community colleges in this context, although the 'third role' is central for community college-type institutions all over the world.) It is also a crucial difference from the 2013 document that the new strategy does not speak about turning existing provincial colleges into community colleges, but suggests establishing new organizations in areas where there is no higher education provision. It is a serious contradiction of the strategy that it speaks about the US community college as a model, but visions the new Hungarian organizations as only training locations without faculty and students of their own, not as higher education institutions.

In the 2015 amendment of the higher education Act, it is declared that the name for the new type of institutions is "community higher education center". The detailed regulation says that the French model would be followed instead of the American one, emphasizing again that CHECs are not higher education institutions, just training locations of one or more universities. As far as the establishment of CHECs is concerned, local government(s) and/or local corporations and/or churches found a non-profit organization that operates the CHEC. It is the owner's responsibility to provide the infrastructure and assets for the training. CHECs should have staff only for facility management, no faculty. Faculty, administrative staff, IT network, library services should be provided by the gestor HEI. A long-term financial coverage is a precondition of the minister's consent to establish a CHEC. (Gov. reg. 2015)

We may conclude that the new legislation deals with the new organizational form from a technical point of view, providing a regulatory frame for what is outlined in the strategy. The act or the regulation does not provide any details about the exact conditions of establishing CHECs, neither concerning the 'where' (what the "size and the

significance" of a city should be to host a CHEC, how far it should be from an existing HEI to say that there is no higher education provision nearby), nor the 'what' (what training programs should be launched, based on what evidence of demand), or the 'how' (how to choose a gestor institution, who should teach in the CHEC, what student services and quality measurements should be provided etc.). Instead, each application is judged individually by the minister and the authority.

In 2016, the government issued a revised strategy for higher education and two related government regulations. The only new element directly related to the CHECs is that negative effects of the lack of higher education provisions are discussed in detail: stating that the distance from a HEI influences both one's motivation and chances to study. (The text defines 60 minutes at most as an acceptable commuting time to reach a HEI.) It suggests that CHECs will solve this problem by providing competitive knowledge throughout the country in high quality (EMMI, 2016:18). Although the revised strategy does not have too much novel information directly about the CHECs yet, there is an important new idea that is related: parallel, geographically overlapping institutional profiles must be checked, potential rationalizations and cooperation must be considered (EMMI, 2016:58).

3 Coherence of concept and realization concerning community higher educational centers

In 2016, four CHECs were established and three more locations received permission from the ministry to be opened in September 2017, while two locations were rejected. (*Table 2*).

Table 2 Consented, rejected and planned community higher education centers

	LOCATION	GESTOR HEI	TRAINING PROGRAM
OPENED IN SEPT. 2016	Hatvan	Budapest University of Technology and Economics	electrical engineering B
		Budapest Business School	international business administrator V
	Siófok	Gábor Dénes College (Budapest)	business informatics B, business administration and management B+V, computer engineering B+V
	Kisvárda	University of Debrecen	turism and catering management B, agricultural engineer B
	Sümeg	Wekerle Sándor Business School (Budapest) → Edutus College (Tatabánya)	business administration and management B
TO BE STRATED IN SEPT. 2017	Sátoraljaújhely	University of Miskolc	mechanical engineer B, health care and prevention B
	Kisvárda	University of Óbuda (Budapest)	technical V
		Szent István University (Gödöllő)	food engineer B
	Tata	University of West Hungary	Infant and child care
NOT CONSENTED	Ózd	Eszterházy Károly University	informatics , television broadcaster , social pedagogy
		University of Miskolc	material engineer, social worker, cultural anthropology
	Kisvárda	University of Nyíregyháza	mechanical engineer
	Salgótarján	University of Óbuda (Budapest), Semmelweis University (Budapest)	technical and social training

Source: Own compilation based on data provided by Oktatási Hivatal

3.1 The "why" issue

According to the governmental concept, the main reason for establishing CHECs to foster the development of disadvantageous regions and, by deploying a HEI to their vicinity, encourage the youth of these regions to enter higher education.

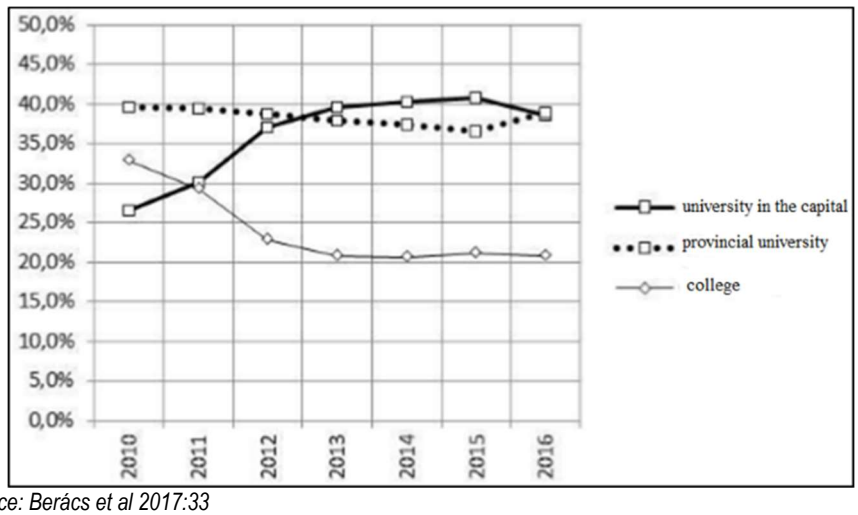
As far as the regional effects of the CHECs is concerned, there is a contradiction between the applied organizational solution (i. e. CHECs being just training locations) and their expected impact on the region and its competitiveness. Literature clearly suggests that provincial HEIs, including the US community colleges, serve their region in several ways through a wide range of activities. Since CHECs are only premises where commuting faculty visit to give lectures, we obviously cannot speak about CHECs as "crucial (f)actors of local economic development". (See Keczer, 2017 for details.)

As far as the social mobility issue is concerned, a significant part of the literature emphasizes how the lack of higher education provision diminish the willingness to study. Forray and Hives (2008) for example state that poor, uneducated social groups with no HEI nearby are the most sensitive to education access, since disadvantaged families do not let their children go to faraway institutions. The rate of full-time bachelor students coming from the 30 most disadvantaged areas is 3,2%, while from the 30 most developed areas 45,6% (even without the capital 16,3%). What's more, the difference is increasing. (Berács et al 2015:12)

However, we think that establishing a CHEC nearby with a meagre training offer would not necessary solve this problem. Children of disadvantaged families start to fall behind much earlier than the age of 18. It is not the intention most of them lack, but chances or competencies to enter higher education. Most of them do not get into a secondary school. And even if they wanted to study in a CHEC, they would have to apply to a HEI (since CHECs are not individual entities) in the standard application procedure to a standard training program (since CHECs are running the same programs as universities and colleges); thus, their chances to study do not increase by simply locating a CHEC to their neighbourhood. Literature also suggests that youngsters' decision on study is a more complex issue and influenced by several other factors than the distance from HEIs. Vágó (2011) says that bringing higher education to potential students is not a determinative factor in the decisions. She found that higher education applications and enrolments are higher in the population of the south-eastern region of Hungary with less higher education provisions than in the better covered Transdanubian counties. It is another important question whether capable potential students would choose the local HEI or go to the capital or to a larger university city instead. According to Forrai, only three provincial universities (Szeged, Pécs, Debrecen) are appealing to local youth, while in several counties, 80% want to study outside the region (Forrai, 2000:138). "We must admit that the complex reasons behind the individuals' decisions regarding going to university cannot be cured by one presumptive therapy, namely, by the idea of full coverage of higher education provision" (Vágó, 2011). Because of the complexity and the controversial nature of the issue, we must differentiate between establishing a CHEC in a city on a well-grounded basis (decisions confirmed by evidence of labour market demand and the pool and intentions of potential students, by the financial and professional support and participation of local employees) and the decisions that are based rather on wishful thinking, identifying with the 'why not' attitude.

The impact of introducing this new type of organization on small, provincial colleges must also be considered. Some of these institutions are permanently on the threshold of being sustainable, and in 2012, after the drop of student numbers, their situation became critical. *(Figure 1*)

Figure 1 Enrolment rates



Source: Berács et al 2017:33

According to Temesi et al, small colleges could survive by changing their mission, launching short-cycle programs and entering adult education (Temesi et al., 2013:3) – typical community college activities. But these provincial colleges were not turned into CHECs. Community centers are newly established organizations in new training locations, and consequently, CHECs may lure away students just from those colleges that already run under the economies of scale.

3.2 The "where" issue

According to the governmental strategy, CHECs should be established in regions where there is no higher education provision. In some cases, the approved locations do not meet this criterion. In the case of the Sümeg CHEC, there are three higher education institutions nearby. What's more, two of them provide the same business training programs that has been approved in Sümeg. And this approval was given despite the fact that even the governmental strategy declares that a rationalization of locations and training programs is necessary in this region. (EMMI, 2014:48) We doubt that establishing another higher education organization in the region with the same training portfolio can be considered 'rationalization'. The situation of the Siófok CHEC is similar: there is a university nearby (45 kilometers) having business and informatics training programs – the same with the ones launched in Siófok. Although the governmental strategy exclaims "irrational and uneconomical local competition must be replaced by the division of tasks and cooperation" (EMMI, 2014:39), all these parallel programs were consented.

In other cases, there is a HEI nearby the CHEC, but without the same training programs. (The Hatvan CHEC is 30 kilometers, the Sátoraljaújhely CHEC is 13 kilometers, the Tata CHEC is 12 kilometers from an already existing HEI). In these cases, the reason for establishing a CHEC is definitely not the lack of higher education provision, but possibly the need for a special training program. Nevertheless, we may conclude that from the six approved locations only one, Kisvárda, meets the criterion of being in a region without higher education provision – although it is the most stressed reasoning of the governmental strategic document.

Since neither the strategy nor the regulations define the expected size and the parameters of significance of a CHEC-hosting city, it is hard to evaluate whether the approved locations meet the "size and significance" criterion or not. But it is evident that at least one of the CHECs was established in a small town, even by Hungarian standards. Sümeg has a population less than 7000 and only one secondary school, which does not seem to be enough to provide a pool for a higher education organization in the long run. Kisvárda and Sátoraljaújhely have a population of about 16.000, thus, neither of them may be said large. Siófok, Hatvan and Tata have more than 20.000 inhabitants and more than one secondary school. Plus, Hatvan has a strong industry, and Siófok is undoubtedly the touristic center of the region, so they may be considered of proper size and significance.

3 The "organizational solution" issue

Although the strategy emphasizes that in the given regions traditional higher educational organizations could not be sustained and a new organizational solution had to be developed, CHECs do not differ significantly from the long-existent off-site training of HEIs. The only considerable difference would be that in the case of CHECs, a nonprofit organization is to be set up by the local government, but in practice, this is not necessarily so. In the case of Siófok, no such organization was founded and the CHEC is operated simply by the gestor institution. Thus, we may say that CHEC is a novel version of off-site training, and it raises the question whether it is consistent with higher education policy or not.

The attitude of the governments and higher education experts to off-site training has been controversial. On one hand, they emphasize the role of training in regional development and social mobility. On the other hand, they have concerns about the quality of teaching, the fragmentation of higher education, redundancies and the lack of economies of scale. Due to these concerns, there was a shift in the regulation some years ago to hamper the recurring attempts to locate higher education in different cities. The regulation specified that a HEI must obtain an official off-site location in the given city to launch a training program there, after getting permission from the educational authority. The idea of CHEC seems to be inconsistent with this intention. As Berács et al

exclaims, CHECs further increase the fragmentation of the institutional setting and decrease the economies of scale, although these principles were central in the higher education reforms (Berács et al, 2017:22).

Some recent factors suggest that the government may turn away from the CHEC idea and back to the off-site location concept. The minister rejected the foundation of a CHEC in Salgótarján, and supported the establishment of an off-site location instead. In the case of Ózd, the situation is the same: the establishment of a CHEC was rejected by the minister, and according to the updated strategy of 2016, an off-site location should be set up there (EMMI, 2014:48-49); so in two recent cases, the ministry decided on establishing an off-site location instead of a CHEC. It may also be an important factor that in the recently opened EFOP (Human Resources Operative Program) tender for infrastructure development in higher education, only the founding of off-site locations may get central funding, and the establishment of CHECs should be funded from local and corporate resources (EFOP-4.2.1-16 Call for applications:6). Four off-site locations already got more than 1 billion HUF each in the EFOP (Gov. reg. 1429/2017. VI. 29.). Preferring off-site locations to CHECs in the funding policy will probably motivate HEIs to establish off-site locations rather than to participate in CHECs.

3.4 The "what" issue

One condition of the long-term success of CHECs is offering the right training programs. The governmental strategy emphasizes that training programs in the CHECs must be adjusted to local labour market demands. To meet this expectation, labour market needs must be surveyed. In Hatvan, the two running training programs were initiated by the largest local corporation, the Bosch Ltd, so the present training portfolio undoubtedly reflects labour market demand. Before the CHEC started its operation, some local employees were also asked by telephone about their training needs, but a widespread and professional survey will be carried out only later, when the extension of the training portfolio got on agenda. In Siófok, we were told that both potential students and local employees were asked, but the information we got is rather vague about the methodology and extent of the surveys. We have the impression that it was more the potential students' preferences that counted in starting business and informatics training than evidence-based labour market prognoses.

It is interesting anyway, that in three of the CHECs, business training has been or will be launched. It is in sharp contrast with the earlier policy of the same government. In 2012, state-funded student admissions were cut back significantly, in some cases to nil, and later the admission scores to business training were raised rather high. The government argued that training should follow labour market demands, and the country needs more engineers, IT professionals, life scientists etc., not economists. This led to the concentration of business training in the capital and some large provincial universities

(Temesi et al, 2013, Berács et al, 2014). It seemed to be in line with the strategic document of 2012, saying that 'higher education poles' should be evolved, and a certain teaching profile should not be present in more than 3-6 places in the country. The intention was to get rid of parallel training profiles in the regions, and off-site locations were to be reconsidered along these lines (EMMI, 2012). Even the strategy of 2014 exclaims that business training supply must be optimized and rationalized in the entire institutional system (EMMI, 2014:73). Consenting business training in several CHECs is obviously in contrast with this concept.

In some cases, there seem to be too many training programs offered, considering the pool of the potential students. In Siófok, for example, there are training programs in 4 disciplines, on 2 levels (bachelor and vocational training), in two forms (full-time and distant). In Kisvárda, one of the 2 original training programs could not start, but they initiated 3 more (2 with consent, 1 without). Offering so many different types of training may work against the sustainability of the programs. This is not just a dystopian idea, but a familiar phenomenon. The strategic document of 2013 says that the fragmentation of the institutional setting leads to the fragmentation of resources and to the fact that many institutions run small-scale, uneconomic training programs. Several institutions follow the "providing everything on each level" strategy, and it leads to low-quality, unsustainable programs and irrational operation. The document suggests abolishing those programs that do not have enough students (EMMI, 2013:24).

4 Concluding remarks

Introducing this new organizational solution, the CHEC, returns attention to old and enduring debates. As we saw in the first chapter, Hungarian higher education has been suffering from fragmentation for a long time, governments have been struggling to hamper the proliferation of training programs and locations, and there have been consequent redundancies and problems with the economies of scale. The institutional setting was centrally modified several times, institutions were merged, separated, transformed, new types of institutions have been introduced, the status of HEIs was changed, training locations were established and shut down. It would be vital to elaborate a professionally grounded, evidence-based concept about the optimal number, type, mission, location of higher education institutions, and a rational division of tasks among them, backed with sufficient funding and reasonable quality regulations.

As far as CHECs are concerned, more questions than answers arise from first experiences. A closer examination of the already operating CHECs shows that they differ from each other in the motive of their establishment, the faculty and organizational solution they use and the partnerships they made. If it is due to the flexible adaptation to local conditions, it may be an advantage. But if it is a symptom of the systemic lack of

deliberation and prudence, or is the result of the immature introduction of a new organizational form, it may be harmful. In certain cases, the location and/or the gestor HEI and/or the training portfolio raises doubts. Student numbers were low in the first year, but the actors are satisfied and optimistic. For the evolution of CHECs, financial background and quality management must be solid, and all the actors, including the government, must be committed. But there are signs that are not in line with it.

Although it is not directly about the CHECs, Temesi's general observation concerning the evolution of the initiatives in Hungarian higher education may turn to be true for the community higher education centers as well. "In the last 25 years, we experienced a sequence of upswings and slowdowns in Hungarian higher education. Motivated by the intent to modernize, or by external pressure, or by a financial opportunity, the preparation of a change starts. There are supporters and opponents, and at last, supporters win. Then the change got incorporated in a regulation, and execution begins. But after a while the implementation starts to falter... opponents get louder, implementers get uncertain. The motivation dies away, money runs out, power is lost, anyway, execution slows down, then stops. New concepts are born, perhaps the process gets a new zest (consuming a lot of energy), and the cycle starts again. In other cases, the initiative ceases and a new experiment, that is generally the total opposite of the previous one, starts" (Temesi, 2016:66).

Some experts say that it is not worth to deal with the CHECs, because they do not have a significant impact on Hungarian higher education. In some respects, it may be true. Up to now six centers were consented, and student numbers are rather small. But from a conceptual point of view, it has a significance. Elaborating, establishing and introducing a new organizational form in a higher education system is a serious issue and cannot be taken as an experiment. Local governments spent money, provided infrastructure and took long-term liability in relation to the CHECs, concepts and contracts were made, training programs elaborated and students enrolled. At this point, based on the initial experiences, two scenarios are possible. Either CHECs are necessary and sustainable on the long run. In this case it is important to analyse their operation, draw conclusions and find the best organizational solution, location, training program, etc. for them. Or it turns out that it is a dead end. In this case, conclusions must be drawn to escape a similar fiasco next time, and the lessons learnt by scrutinizing the CHEC initiative right from the beginning, is to be ascertained. Trial and error sequences are not the right way of reforming higher education.

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Kateryna SUPRUN, Uliana FURIV

Governance equalizer: Ukrainian case study

Abstract

Despite the vast research on the new public management concept as a new managerial model in Anglo-Saxon socio-cultural context, little is known about its application in post-Soviet countries. This study attempts to obtain a holistic picture of the higher education system in Ukraine from 1991 to the present and to determine whether this concept is applicable within the scope of existing socio-productive relationships. The investigation has a qualitative research design and is based on deploying an analytical tool of governance equalizer. By comparing its various dimensions, such as state regulation, external guidance, academic self-governance, managerial self-governance, and competition, the key factors stipulating transformational characteristics of the Ukrainian higher education system have been identified.

1 Introduction: a historical overview

Ukrainian higher education (HE) development started in 1991 with gaining independence from the Soviet Union. After the collapse of the USSR, the newly democratic country had to immediately rethink its priorities in order to boost economic growth. One of them was to bring the HE system in line with knowledge-based economy values (UNESCO-CEPES, 2006).

A number of laws were enacted that have profoundly shaped the legal ground of the present-day HE system. The greatest steering power was exerted by the Constitution of Ukraine (1996), which enabled the state decision-making process to be controlled and guaranteed equal and free access to HE (ibid.). The Constitution, alongside the Law of Ukraine on Education (1996) and the Law on Higher Education (2002), has prescribed 'the main directions of Ukrainian state policy for higher education' (Stepko, 2004, p. 1). Shortly after, a new concept of democratic HE emerged, with the state overseeing universities to a slightly lesser degree and many public higher education institutions

(HEIs) enjoying increased autonomy and academic freedom. Another legislative change that had a significant impact on Ukrainian HE system was the adoption of the Law on Privatization (1995) that has promoted widened access to HE by allowing private ownership of HEIs.

A turning point came in 2005 when the country signed the Bologna Declaration and contracted liabilities to enter the European Higher Education Area. In particular, the Action Plan on Quality Assurance for Higher Education of Ukraine and the Integration into the European and World Educational Community Plan were soon approved. In the same year, Ukraine became a member of the European Quality Assurance Register and drafted a Diploma Supplement in 2005, although the majority of HEIs internally adopted the document only in 2015. Finally, implementation of the European Credit Transfer System (ECTS) approximated the Ukrainian HE to the European standards and promoted further opportunities for academic mobility (Nikolayenko, 2007).

From 2005 to 2014, Ukraine HE mostly remained in stagnation, with the country's priorities being predominantly focused on foreign affairs. It was not until the Revolution of Dignity, or Maidan Revolution, broke out in December 2013 – stipulated by the former President of Ukraine, Viktor Yanukovych, halting the European Integration process by signing a bilateral agreement with the Russian Federation – that a 'revolution' in HE has commenced. A newly elected Minister of Education and Science set about reshaping the HE landscape, which culminated in the adoption of the Law on Higher Education in 2014 (British Council, 2015).

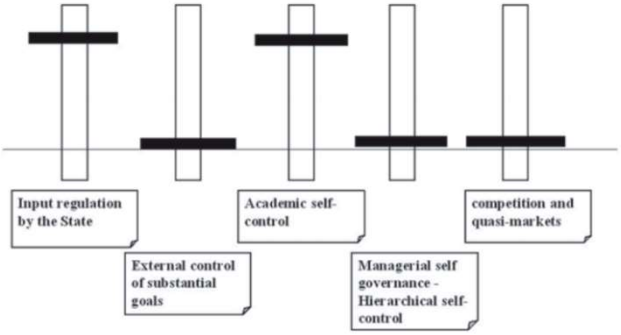
For the time being, the Ukrainian HE sector is severely affected by the war in the East and annexation of the Crimea in the South. Around 40 000 students and 3 500 research and teaching staff from 20 universities were forced to leave the occupied territories. According to the National Institute for Strategic Studies total losses of educational infrastructure by Donetsk and Luhansk regions amount to 4.9 billion dollars (Euromaidan Press, 2017). Ukraine is still trying and failing in many ways to combat the post-Soviet legacy, with the main hardships remaining basically unchanged: ineffective and inefficient state regulation, outdated teaching materials, lack of human and financial resources, weak links with the corporate world, and poor national and international cooperation.

2 Analytical framework

The analytical framework utilized in the paper is based on a concept of new public management (NPM) first adopted in Anglo-Saxon societies during the 1980s. It emerged due to rising skepticism of hierarchical decision making in the public sector and aims to improve operational efficiency by using private sector management models (Boer et al., 2007). The concept challenges the ideas of top-down steering and favors a bottom-up

decision-making process, with the public becoming a 'new manager.' The key NPM tool in HE studies, a governance equalizer, is widely used to compare changes in the HE governance within the following five dimensions: state governance, external governance, academic self-governance, managerial self-governance, and competition (*Figure 1*).

Figure 1 Governance equalizer: five dimensions for analysing changes in HE systems



Source: de Boer et al., 2007, p. 138

Little is known about the application of the NPM concept in post-Soviet countries due to a long-lasting history of strong state regulation there. At the same time, recent reforms in Ukraine following the 2014 Law have sparkled significant changes in the public sector that are in line with neoliberal policy lines. These include: (1) decreasing government regulation of HEIs' autonomy; (2) sharing administrative responsibilities between the stakeholders; (3) increasing competition at national and international levels; (4) endorsing cooperation between public and private sectors, etc. Therefore, it is considered appropriate to trace the Ukrainian HE system developments throughout the past 26 years by employing the governance equalizer tool.

Therefore, this study aims to study the application of NPM in Ukraine by answering the following research questions: (*1) What useful insights does the governance equalizer model offer to understand the governance of higher education system in Ukraine? (2) To what extent can a governance equalizer tool be applied to Ukrainian higher education system?*

3 Methodology

The paper deploys a methodology of desktop research on secondary sources (policy documents, decrees, protocols, literature reviews, analytics) found in the list of references. They encompass valuable data not only on distinct policy developments such

as the Bologna Process, European Higher Education Area, Horizon 2020, etc., but also a general overview of the government's agenda for HE. While these individual documents and reports have been collected from government websites, information portals and scientific databases (e.g., Springer, ResearchGate and Google Scholar), their analysis is interwoven with the body of the paper. From these sources, we develop an analysis of the Ukrainian HE system that is both descriptive and analytical.

The main limitation of the study is a lack of empirical evidence collected by the authors themselves. In addition, the data used at the time of writing may be slightly outdated by the time the research is published due to a fast pace of reforms taking place in Ukrainian HE recently. For these reasons, future research would definitely benefit from first-hand data collection in the field, which should involve interviews with key stakeholders. In the longer term, both qualitative and quantitative studies looking at the impact of the neoliberal policy on Ukrainian HE system are necessary.

4 Governance equalizer analysis

4.1 State regulation

The first dimension, *state regulation,* constitutes a 'top-down authority vested in the state' (Boer et al., 2007, p. 3) and is widely represented in the Ukrainian HE context, primarily due to a long past of the Soviet rule in the country.

The USSR left a legacy of a command economy, where decisions related to social well-being were taken solely by the government. Despite gradual reorganization of government bodies in charge of HE, primary stakeholders remained the same. HE used to be governed by 'the Ministry of Education and Science of Ukraine [MESU], the State Inspectorate of Higher Education Institutions, and a joint state and public body - the State Accreditation Commission (SAC)' (Stepko, 2004, p.4). The administrative role of HE was performed by the Cabinet of Ministers (Government) of Ukraine, which defines the research track for HEIs and oversees the implementation of educational programs. It also issues legislative acts and oversees their execution; can establish, reorganize and terminate HEIs (ibid.).

The MESU performs an executive role and is responsible for defining clear strategies for the HE sector in Ukraine (OECD, 2017; UNESCO-CEPES, 2004). Upon joining the Bologna process in 2005 such targets have been set for reinforcing the construction of the knowledge-based economy and European integration of Ukraine as:

- harmonizing the HE system and quality assurance according to the European and global HE standards;

- creating a legal basis for HE sector and securing the implementation of the law by the institutions;
- modifying the HE laws according to the Bologna Declaration requirements and developing the National Qualifications Framework;
- creating space for talented Ukrainian youth to initiate their projects, ideas, and inventions;
- designing legal framework for increasing employability of university graduates;
- enabling HEIs' autonomy, students' self-governance, the involvement of private and public sectors in the university management, etc. (Vakarchuk et al., 2010).

That said, the MESU used to also have a lot of power in regard to institutional governance by means of setting benchmarks for HEIs, developing national qualifications, designing qualification requirements, defining admission criteria, issuing licenses and accreditations, monitoring policies' implementation, etc. Consequently, it is no surprise that pervasive state regulation has for a long time been limiting the Ukrainian HE sector's ability to innovate and transform.

The 2014 Law became a turning point for increasing institutional autonomy. According to its provisions, HEIs are to award postgraduate degrees, decide on thesis and dissertation topics, and employ academic staff from foreign universities without the Ministry's approval. Another major improvement concerns students' discretion over their thesis topics and defining of their educational profiles (British Council, 2015; Knutson & Kushnarenko, 2015). Roles and responsibilities of all HEIs' internal stakeholders (rectors, deans, academic staff, and students) are clearly defined as well.

Implementing autonomy at Ukrainian HEIs is rather a complicated process since this notion is not well understood by the MESU and HEIs themselves. According to the National Academy of Pedagogical Sciences, 'a paradigm shift is required … [and] … [s]ome rectors may resist this' (British Council, 2015). There are some success stories when autonomy has been handled by HEIs responsibly. For instance, Kyiv Taras Shevchenko National University, Yaroslav the Wise National Law Academy, Lviv National Ivan Franko University of Kyiv-Mohyla Academy and Ostroz'ka Academy have used the new reform to modernise and develop of their research centers. These universities have shown great participation in the decision-making process, especially in regard to improving teaching materials (CEDOS, 2015).

Overall, the new 2014 Law on Higher Education stipulates greater financial autonomy and self-governance, although the prime challenge is to handle the responsibility and initiative granted along with this autonomy. The Ministry also faces a

challenging task to create mechanisms allowing for a smooth transition from total control to guidance and steering. All in all, the state needs to find paths for making universities more accountable and efficient in utilizing their resources.

4.2 External guidance

One of the most contentious issues within the Ukrainian HE system has always been *external guidance,* or 'activities that direct universities through goal setting and advice … [and] may delegate certain powers to guide to other actors, such as intermediary bodies or representatives of industry in university boards' (de Boer et al., 2007, p. 137). The 2005-2012 reports from Ukraine as a new member of the Bologna Process indicate the participation of such others as the government stakeholders as Ukrainian Association of Student Self-Governance (UASS), the Ministry of Economic Development and Trade of Ukraine and the Confederation of Employers of Ukraine.

First, students' stakeholder organizations in Ukraine have a long history, starting with the UASS establishment in 2003 as an official social partner of the MESU and a full member of European Students' Union. Supposedly high students' authorities stand, however, in contrast to their real impact, as evident from a 2004 survey on students' self-governance. Only one-third of respondents indicated that student boards have a substantial influence in HE sector ('European dimension', 2004). The majority of interviewees have shared a view on student bodies as HEIs' adjuncts, which can be attributed to a paternalistic model of the ultimate governmental control inherited from the Soviet Union, and lack of a culture of participation.

Second, the Ministry of Economic Development and Trade of Ukraine is held accountable for HE state order formation. The latter is to be estimated on the basis of medium-range labour demand forecasts: taking into consideration recent years' statistics and quantitative characteristics for current personnel replacement. Based on that, lump sums are appointed for every educational level, branch of study and qualification, presumably on a competitive basis according to the Law of Ukraine 'On Government Budget' (Stadny, 2016a). These provisions, however, lack distinct criteria of input-oriented ex-ante state order allocation, so it is, in fact, political lobbying that plays a key role in budget appropriations.

Third, the Confederation of Employers of Ukraine undertakes its activities on the basis of the social dialogue approach and ensures cooperation among the state, public organizations, and industry. One should note, however, that vocational education and training (VET) in Ukraine is currently going through hard times. Due to economic stagnation, the national budget is no longer able to finance VET alone. With that in mind, the Ukrainian Parliament has carried a resolution in 2016 to change the VET budget allocation through two subventions: state grants for pursuing a complete general

education at VET institutions, and state and regional orders for regular labour forces (Ukrainska Pravda, 2016). Still, due to the absence of a clear reform roadmap, one cannot identify the exact outcome of negotiations and the transition period needed.

Overall, external stakeholders used to have merely a declarative role to play in shaping Ukrainian HE landscape over a period of almost 10 years since joining the Bologna Convention in 2005. It was the Law 'On Higher Education' enacted in 2014 that introduced a remarkable shift from centralized planning to increasing institutional autonomy and laid the groundwork for real student self-government.

The most prominent novel stakeholder is National Quality Assurance Agency (NQAA) that, in accordance with Article 19, is to ensure the system of checks and balances as well as increasing institutional accountability. The Agency was supposed to start its operation till the end of 2016: however, at the time of writing the article, it is still the MESU that performs the functions of accreditation, conferring academic degrees, formatting the qualifications framework, etc. Alongside a number of corruptive delinquencies of the NQAA members, such a significant delay has to do with the political lobbying. In particular, the MESU is highly cautious about the revocation of its authorities and loss of corresponding financial incentives.

Second, Article 70 aims at promoting quality culture and strengthening academic integrity. These action lines are highly relevant for Ukrainian HE since 90% of the subjects in a recent survey indicated that they had resorted to plagiarism at some point while obtaining a degree (East-Ukrainian Foundation for Social Research, 2015). The two key external stakeholders in this regard are Strengthening Academic Integrity in Ukraine Project (SAIUP) and the National Repository of Academic Texts. The former body is primarily in charge of conducting public awareness campaigns and the formation of a qualitatively new academic culture, while the latter is to eradicate intellectual infringement through 'creation of the repository [that] will allow … [to] automate the search of the plagiary' in dissertations, research articles and, eventually, bachelor's and master's thesis through the application of the most advanced cloud storage technology (Ukraine Today, 2016).

To sum up, the participation of external stakeholders is gradually increasing in the Ukrainian HE policymaking. However, ambiguous discrepancies between their legislative functions on one hand, and rather a limited influence exerted on the other, can still be observed on a broad scale. Possible implications of these contradictions encompass strong centralized state regulation and resistance of the HE system to change.

4.3 Academic self-governance

Decision-making within academic communities is embedded in the notion of *academic self-governance* or 'professional communities within the university system' (de Boer et

al., 2007, p. 137). According to the 2002 Law on Higher Education, academic organizations (academic councils, the board of academics, etc.) define and regulate 30-35% of their workload. The prime academic stakeholder during 1992-2010 was the Supreme Attestation Commission (SAC), a central executive authority subordinated to the Cabinet of Ministers of Ukraine. Headed by a chairman, who was appointed to office and dismissed by the President of Ukraine, its main objectives were as follows:

- forming and operating the system of academic and pedagogical staff certification;
- formulating and implementing state policy regarding the development of science and technology, human resource capacity of the country on the basis of world-class scientific and technological progress;
- awarding candidate and doctorate degrees;
- developing international cooperation in the field of accreditation of academic and pedagogical staff, etc. (Yuryeva, 2011).

Academic councils, collective bodies in the HEIs of III-IV accreditation levels and research institutions, is another academic stakeholder. They consist (Stepko, 2004) of research and teaching staff (75%), and student representatives (25%). The competences of academic councils encompass:

- submissions of the government proposals or amendments to specific scientific matters;
- approval of financial plans and reports;
- approval of training programs and curricula;
- assessment of scientific and educational activities of structural subdivisions, etc. (Ministry of Education and Science, 2015).

Academic staff, in their capacity of academic councils' members, frequently conduct research activities alongside supervising students in their research endeavors (ibid.) Their academic integrity has, however, hardly been on the research agenda until 2016, when the launching of the National Repository was announced.

Still, academic self-governance in Ukraine is rather weak, with research programs typically assigned top-down in line with current political agenda, thus entailing high financial dependence of Ukrainian HE research on the state. It remains, however, to be seen if according to the 2014 Law academic staff are to receive greater administrative and financial autonomy for conducting independent research.

4.4 Managerial self-governance

While the New Public Management theory apparently stipulates the importance of human capital, the former is reflected in the *managerial self-governance* dimension, or 'hierarchy within internal goal setting, regulation, and decision-making' (Boer et al., 2007, p. 139).

In accordance with such an approach, in 2014 the Ukrainian HE system set a course for promoting deregulation among universities as independent legal entities. The main historically inherent predicaments in regard to this are the absence of a managerialism concept as such, the reluctance of employees in adjusting to changing conditions, and a lack of institutional transparency.

No degrees or programmes on HE management have been offered in Ukraine at any time (Cabinet of Ministers of Ukraine, 2015). Rectors and heads of departments or research units are, however, 'accountable for the development of educational activities, financial management, and maintenance…' which implies their proficiency in policy analysis, economy, human resources management, strategic development, etc. (Kremen et al., 2006). In fact, universities' principals are chosen from among academics who are hardly trained specifically for administering HEIs. The same poor steering mechanism can be observed in case of deans and lecturers, who lack financial autonomy and administrative expertise. Even though professional development of HE staff is represented as one of the central action lines in the 2014 Law, it concentrates on pedagogy exclusively (British Council, 2015). Therefore, legislatively formalized targets of increased efficiency and effectiveness can hardly be achieved unless underpinned by respectively qualified, competent personnel. On the other hand, however, since a high level of bureaucracy is characteristic of Ukrainian HE sector anyway, introducing another layer may have a detrimental effect on the system's efficiency. Thus, due to the national budget deficit, much tension is expected in terms of funding allocations.

Another cogent argument for low institutional autonomy is an unwillingness to implement reforms on both individual and departmental levels. In our opinion, a reason for that could be longstanding paternalistic values of communist social order and an inadequate development of civic society. The concept of social responsibility has not yet been introduced in the country on a large scale so that Ukrainian mentality 'resists anything revolutionary being imposed on and favors only evolutionary irreversible changes' (Gershunskiy, 1998, p. 410). For example, despite signing the Bologna Declaration in 2005, Ukrainian HE steering documents as of 2012 still do not include such key notions as National Qualification Framework (NQF), joint degrees, learning outcomes, National Standards and Guidelines (NSG), lifelong learning concept (LLL), or Quality Assurance (QA) System (National Report regarding the Bologna process implementation, 2012).

Finally, the abovementioned prerequisites of poor managerial self-governance are reinforced with insufficient institutional accountability. For one thing, until the enactment of the 2014 Law, there has been almost no internal university data publicly available. In addition, a recent survey proves a robust corruption pattern in the Ukrainian HE sector, with almost half of the respondents regarding bribery a key issue on the way towards

systemic improvements (Dzerkalo tyzhnya, 2014). Consequently, '… [democratization] of institutional management and governance [which] envisages devolved and distributed leadership' (British Council, 2015) is widely recognized to be a matter of considerable controversy and depends upon restoring confidence in the validity and transparency of HE actors.

All things considered, our investigation of the managerial self-governance dimension clearly reveals the lack of the HE managerial approach adapted to the regional context. Not only would its introducing promote better alignment between institutional autonomy and accountability, but also allow the HE system to function more effectively and efficiently.

4.5 Competition

A *competitive* dimension of the governance equalizer refers to '[a] quasi-market where performance evaluations by peers substitute the demand pull from customers' (Boer et al., 2007, p. 139). Researching this dimension in the context of Ukrainian HE is rather a challenge since for decades it was the state rather than the market or global academic community in charge of it. During the Soviet era, a competitive nature of HE was been eliminated by introducing common performance measures for all HEIs, irrespective of their strategic profiling and the resources available. Thus, the concept of competition entered the spotlight upon the shift from communistic ideology to neo-liberalism in the early 1990s.

The key predicament for establishing a modern HE system at a time was the lack of qualified personnel, stipulated by a steady increase in the number of HEIs throughout 1990-2013. Uncompetitive wages and the low prestige of academic careers has only intensified the gap between academic demand and supply as well as staff's unwillingness to deliver high-quality education. The apparent non-readiness of Ukrainian HE to compete on the world arena has made the country's educational market rather vulnerable to external influences (Zakharin et al., 2014), yet stimulated learning from the best. As a result, Ukraine has soon been acknowledged a world's leading distributor of HE with 38% of its citizens aged 25 and higher as HEIs' graduates (Chuzhykov et al., 2012). Still, despite being in the top one-third of international competitiveness (World Economic Forum, 2013), Ukrainian HE is still far behind most European states, not to mention the USA, Canada, or Australia. This can be further illustrated with a striking dominance of outward students' mobility over the inward one, with 5000 to 10000 Ukrainian students annually going to pursue their degree abroad (Finikov & Sharov, 2014).

The main present-day accomplishments in regard to institutional competitiveness are introducing a voucher system, increasing cooperation between academia and industry, and giving consideration to HE rankings.

First, a historically developed former procedure of state budget appropriation run by the Ministry of Economic Development and Trade lacks a clear mechanism of education cost estimation per capita and, thus, entails a high degree of obscurity and unaccountability. For that reason, a system of individual grants for undergraduate studies was introduced in 2016. It has marked a significant transition from centralized state funding with poorly and inappropriately allocated resources to an automatic order formation. Prospective students decide on both a field of study and a HEI offering education programmes in this field. After applying, they compete for being exempt from tuition fees within the all-Ukrainian ranking. Those students who are ranked the highest are entitled to a voucher for a HEI of their own discretion (Sovsun et al., 2013).

However, alongside limiting government intervention and increasing equal access to the best HE providers, the voucher concept implicates irrational selection. While prospective students are supposed to be able to reason critically, customer's requirements are commonly 'mediated by marketization-advertisement technologies before becoming his or her specification' (Harvey et al., 1993, p. 17). A recent study by CEDOS and 'Gesellschaft für Konsumforschung' (Gfk Ukraine) has identified that 59% of the respondents lacked relevant information and skills at the time of enrollment (Stadny, 2016b). Second of all, due to distorted students' preferences, vouchers go to few HEIs, with, for instance, 13% of all the prospective students applying to only 5 universities in 2016 (Dzerkalo tyzhnya, 2016). This tendency of fund accumulation in few centers of excellence puts less competitive regional HEIs at threat.

Thirdly, the Ukrainian legislative system has not been fully updated for the introduction of a voucher model. For one thing, since the mechanism of educating cost estimation per capita does not exist, the market value of vouchers is calculated by HEIs themselves. Moreover, the government budget does not even include an item of voucher order for the undergraduate studies, which leads to growing complexity and favouring of political lobbying.

Close attention to the knowledge triangle in Ukrainian HE is evident from the country's fostered engagement into European Research Area (ERA), namely within the scope of the Horizon 2020 Strategy and Euratom Research and Training programme. Having obtained the right '…[to] host European Research Council (ERC) grants, apply for financial support to innovative SMEs, benefit from support for scientific excellence and other research policies and participate in the governance structures of the programme…' (Dzerkalo tyzhnya, 2015), Ukraine is now capable of unleashing its research potential as an associate member of the Eights Framework Programme. Within

only 4 months after signing the agreement Ukrainian researchers have won more than 60 action projects for an overall amount of 7.4 million euros (ibid.).

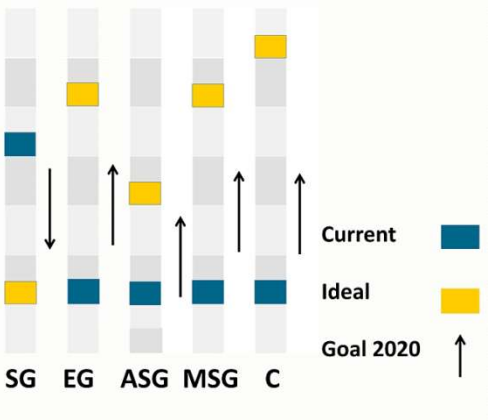
Finally, national HEIs have become consistently present in various international league tables. For instance, while QS World University Rankings 2013/2014 included only 4 universities (Taras Shevchenko National University of Kyiv, Igor Sikorsky Kyiv Polytechnic University, Kharkiv Polytechnic Institute, and Donetsk National University) (QS World University Rankings, 2013/14), two more (Karazin Kharkiv National University and Sumi State University) joined the ranking in 2015/2016 (QS World University Rankings, 2015-2016).

All in all, Ukraine has put significant efforts to establish itself in the global knowledge market. The country's HE system has worked its way up from borrowing best world practices to multimillion bilateral research projects. Still much is to be done to signify the importance of international engagement and ensure full commitment to knowledge society values.

5 Conclusions

The study has set out to determine the characteristics and changing patterns of Ukrainian HE system from 1991 to 2020 by deploying a NPM analytical tool of governance equalizer. The undertaken analysis allows presenting the following useful insights about the HE system in Ukraine in accordance with the first research question (*Figure 2*).

Figure 2 Governance equalizer of Ukrainian higher education system*



**Current indicator stands for the year 2017*

The Ukrainian HE sector has undergone radical changes while transitioning from command to market economy in the aftermath of the USSR. These involve, for instance, signing the Bologna Declaration in 2005, joining European Higher Education Area, changing mechanisms of state order allocation, etc. Still, significant challenges exist on the way towards large-scale implementation of NPM in the country.

First, our findings clearly support numerous disparities between the legal framework and incongruous reforms implementation. That can be attributed to policymakers' intrinsic attempts to seize the unseizable with limited resources and lack of expertise. In our view, one possible solution would be decreasing the number of action lines while increasing their scope. Introducing clear key performance indicators would be another feasible option in promoting institutional accountability.

Second, institutional autonomy is hard to implement with no highly-qualified managerial human capital available. The analysis proves that the concept of manager has never existed in Ukrainian HE system, with either academia or general administrative staff performing managerial duties. Adding one more layer of bureaucracy could, on the other hand, pose a serious financial threat to the majority of public HEIs. Thus, a reasonable multifaceted approach in exploring the idea of the 'third space' and its operationalization is required.

Third, serious consideration should be given to a neoliberal 'value for money' principle. Inherited from the Soviet past view on HE as a public good has led to massification: with on average 85% of high school leavers pursuing a degree. Despite the high socio-economic environmental instability, most HEIs are still delivering free of charge services to growing student numbers, irrespective of their academic potential. That said, little added value is generated from GDP allocations for higher education and research activities due to non-competitive budget allocation and imbalance between HE supply and demand. Thus, serious measures should be taken by all stakeholders to ensure reasonable decision-making in providing financial incentives.

In regard to the second research question, the application of a governance equalizer to the Ukrainian HE context has revealed a few limitations of the analytical tool. The governance equalizer does not offer other important to HE dimensions, such as culture, transparency or corruption. In our view, a broader range of indicators would enable a more comprehensive and in-depth analysis of the HE system. In addition, the tool is based on incommensurable quantities, so that determining a dimension's weight is highly subjective and is based on the researcher's personal experience with the system, rather than empirical evidence. Consequently, more methodological work is needed to increase the reliability of an analytical tool.

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Jan L. CIEŚLIŃSKI

Old and new funding formula for Polish universities

Abstract

We present funding formulas for the block grant which is the main source of the revenue for public universities in Poland. Theoretically, the block grant is "for teaching purposes" but in practice, it covers the full salaries of academic staff. Usually, the funding formula is considered as a "black box" producing a distribution of block grants for higher education institutions. However, we show that it has enormous influence on the Polish higher education system. Until 2016 only one incentive was clear and widely known: the total enrollment. This had a deteriorating impact on the quality of higher education in Poland. Since 2017 the funding formula has been changed. The new formula is a very strong incentive for improving the student-staff ratio at Polish universities (in order to obtain the desired value of 13). We present an analysis of both funding formulas (old and new), discussing to what extent the rewarded objectives are consistent with the mission of public universities.

1 Introduction

Funding formulas for distributing block grants for public higher education institutions have many advantages that recommend them over other forms of funding, namely good formulas are visibly equitable, predictable, reduce political interference and lobbying, and provide a common and comprehensible foundation for decision making (Lang, 2005). Funding formulas can serve as an effective mechanism to steer universities from a distance without infringing their autonomy.

The changes in the Polish system of higher education in the last 25 years show the very high effectiveness of the funding formula mechanism as far as the main goal (a fast increase of the gross enrollment ratio for tertiary education) is concerned. This goal was very important at the beginning of the political system transformation in Poland. Actually, it seems still important for the European Union (Agasisti, Haegemans, 2016), but in

Poland, the competition for students resulted in a serious decline in the quality of research and education. There were 3 attempts, by 3 successive governments, to stop this tendency: in 2007, in 2013, and, recently, in 2017. The old funding formula, introduced in 2007, contained a number of motivating or performance-based components but all these incentives failed. Changes in 2013 were in fact rather minor with one great mistake (a new component rewarding universities for low quality instead of high). The new funding formula is also not perfect but, at least, seems to be quite effective.

Unfortunately, in Poland, most attention is paid to aggregate allocations, without entering into details. As a result, Polish funding formulas contain a lot of unintended impacts which are sometimes good but more frequently rather bad. In the paper, we focus on different consequences of the old and new funding formula. It turns out that in many cases the maximization of the current economic result hampers the implementation of natural academic goals, like the high quality of research and teaching. In other words, funding formulas often reward goals conflicting with the mission of the university. Therefore, theoretical studies of various funding formulas, now rather scarce, seem to be of considerable importance.

2 General characteristics of the financing of Polish universities

The main component of the public funding for public universities in Poland is the block grant "for teaching purposes". The next source of money (seriously decreasing in the last years) are tuition fees. It has to be stressed that the Polish system is not a cost-sharing system. Some students have to pay all, the rest pays nothing. The research money comes through a block grant for research and individual grants. Theoretically, this is a perfect balance between teaching and research but in practice, the salaries of staff almost exclusively come from the block grant for teaching, although academic staff has research work among their duties. This is because the block grant for research (distributed directly to departments or faculties) is much lower (about 10-20 times lower) and practically no salaries are covered from this source. Individual research grants allow the financing of a number of unstable positions. Research grants are an important component of the budget of several of the largest universities but at most universities their contribution to the total funding is negligible.

The Polish funding formula for allocation of the block grant for teaching has always been input-based but, at the same time, highly competitive. The original funding formula, dating back to middle 1990-ties, was very simple. It consisted of two equal components: students (total enrollment weighted by disciplines) and staff (weighted by degrees: doctorate, habilitation, professorship), and a third component proportional to previous year's allocations ("historical component"). The weight of this component, known as a "transfer constant", varied in different years, usually between 0,2 and 0,4. This funding

formula was a very strong incentive for increasing enrollment. Between 1995 and 2005 the total number of students in Poland increased by 150%, while the number of academic positions increased only by 50% (the actual number of academic staff was even less because a lot of academics had more than one job). Thus, the major political goal was achieved at the expense of decreased quality.

3 Old funding formula

The old funding formula (used with minor modifications in the period 2007-2016), aimed at improving the quality of research and teaching, was characterized by the high transfer constant (0,65 or 0,7) and consisted of 6 components:

1. Staff (35%)
2. Enrollment (35%)
3. Research component (10%)
4. International student exchange (5%)
5. Authorization component (5%)
6. Nonlinear component (10%)

The staff was weighted by academic positions or degrees (M.Sc., Ph.D., habilitation, professorship) rated, respectively, as 1 – 1,5 – 2 and 2,5. The coefficients were roughly proportional to the corresponding salaries but, in any case, the actual salaries were usually higher (by 50-100%) than money generated by the funding formula (not to mention the delay caused by the transfer constant). Therefore, the marginal cost associated with increasing the employment of the academic staff was much higher than the marginal revenue resulting from the staff component of the funding formula. There was one very important exception: foreign visiting professors. The corresponding revenue was (and still is) much higher than the average cost of such position. However, the exact amount of generated revenue has been calculated just recently, see Cieśliński (2016), so this incentive acted in a rather limited way. The enrollment was weighted by arbitrary coefficients related (at least in theory) to the average cost of the disciplinary sector (or program). The coefficients vary in the range between 1 and 3. Unfortunately, the funding formula did not contain any metric related to the actual cost of the studies. The weight of Ph.D. students was multiplied by the factor 5, which made this kind of studies extremely profitable (for universities). Only from 2013 universities have to share this profit with Ph.D. students, because this high weight is associated with an obligation to grant a special scholarship to a student.

The research component was proportional to the number of grants (national and, with higher weight, international) awarded in the previous year. The size of the grant was not taken into account. The student exchange component took into account students participating in international exchange programs (like Erasmus) for at least 3 months. The authorization component was proportional to the number of authorizations for awarding doctoral degrees (and, with higher weight, habilitations). The last component, here referred to as a "nonlinear component,'' was the most complicated and never well understood even by the creators of the funding formula. The most curious example is the component of "the availability of staff'' (introduced in 2013 and withdrawn in 2015) which was intended as an incentive for decreasing the student-staff ratio. It turned out that the very complicated formula concealed the fact that this component acted exactly in the opposite way, rewarding universities with a high student-staff ratio (Cieśliński, 2016).

Historical component („transfer constant")

The above 6 components were responsible for the distribution of only 30% of the block grant (before 2013). The rest (70%) was distributed according to the proportions of the previous year (this "historical" component was defined by the "transfer constant" given, in this case, by 0,7). It is very important to remember that the historical component depends on enrollment, staff, grants etc. (based on the data from previous years), in the way very similar to the rest of the block grant. In my analysis, I interpret the transfer constant as a delayed payment (a kind of diminishing installments). For instance, students enrolled in 2006 generated subsidy in all subsequent years. Thus revenue generated by them is close to 35% of the total block grant. Namely,

$$35\% = 10{,}50\% + 7{,}35\% + 5{,}15\% + 3{,}60\% + 2{,}52\% + \ldots.$$

where the components of this sum correspond to subsidy generated by those students in 2007, 2008, 2009, etc., respectively. On the other hand, about 35% of the total block grant in 2010 is generated by students (10,50% by students enrolled in 2009, 7,35% by students enrolled in 2008, etc.).

Usually, this component is treated as a passive and stabilizing element of the formula. However, the above argument shows that in the Polish system of higher education this is not necessarily the case. Low transfer constant weakens and delays the impact of incentives of the funding formula. Increasing the number of students is not directly followed by a sufficient increase in funding. Any development is very difficult. It seems that the high transfer constant is of advantage for poorly managed universities and *vice versa*.

Why is the student component so powerful?

Although the enrollment component seems to be rather small (as compared to other countries, see Rosa et al (2009), Ecker et al (2012), Koucký (2012), Agasisti and Haegemans (2016) and Kettunen (2016)) but the old formula was a very strong incentive for increasing enrollment and lowering examination requirements. The main problem is the lack of direct connection between the cost of studies and the revenue granted by the funding formula. Actually, the marginal cost of increasing the enrollment is close to zero because, in order to keep the cost of teaching unchanged, the university can enlarge the size of student groups or change the curricula by reducing the share of small classes. Therefore the marginal revenue due to enrollment (although not very high due to the high transfer constant) was always economically profitable to the university.

Paradox

One paradox has to be explained. The present demographic decline has obvious negative consequences for the private sector in the Polish higher education system because all its revenue comes from tuition fees, and so directly depends on enrollment. However, the funding for public higher education institutions does not depend on the total enrollment (only the relative differences between universities count). Why does the demographic decline have such a deteriorating impact on the Polish system of public higher education?

The answer is simple. Polish public universities can offer both free education (financed by the state via the core grant for teaching) and paid studies (mainly for those who did not succeed in enrolling for free studies). The tuition fees from the paid studies are an important source of the revenue for public universities. The demographic decline and increasing number of students enrolled for free studies caused a severe decline in enrollment for paid studies, and, as a consequence, financial problems for most public universities.

4 New funding formula

The new funding formula, announced rather abruptly at the end of 2016, consists of 4 components:

1. Staff (45%)
2. Enrollment (40%)
3. Research component (10%)
4. International exchange (5%)

The transfer constant is lower (0,5). At first glance the new formula looks simpler than the old one but, as usual, the devil is in the detail. In the new formula, the staff component is multiplied by the average scientific category of the university while the enrollment component is multiplied by a factor depending on the student-staff ratio (calculated for the entire university). If the student-staff ratio m is greater than 13, then this factor equals $(13/m)^2$. For $m<13$ this factor is 1.

Three strategies

Most of Polish universities have a student-staff ratio greater than 13. Roughly saying, they have 3 options. The most natural option is to decrease the number of students by increasing the exam requirements for students and candidates. This is a "survival strategy" which is sufficient to balance the university budget in the short term but in the long run, the university obviously will lose a part of the block grant generated by these missing students. The second option is to increase employment of academic staff (especially staff with low salaries, like young assistants). This is a "strategy of development". One can show that the new funding formula will reward generously (and without much delay) any investment in the staff. However, such investment may be considered as risky by most university administrators (all the more so that in Poland, since many years, the funding formula has been regarded just as a "black box" for distributing money). Moreover, rather few universities have sufficient resources possible to be invested in the academic staff (and I do not believe that they will risk a commercial loan for that purpose). The third option ("to do nothing") is the worst one. A university ignoring the new funding formula will get into financial troubles immediately.

5 Conclusion

Any funding formula, regardless of conscious intentions of its authors or executors, defines a specific state policy in the field of higher education and science. It is important to recognize correctly incentives and rewards of the funding formula. They should be consistent with the academic mission of the university. Otherwise, we have a very frustrating situation where higher education institutions that act against their mission (e.g., lowering academic standards) are financially rewarded. Until 2016 only one incentive of the Polish funding formula was clear and widely recognized: the total enrollment. This had an unintended deteriorating impact on the quality of higher education in Poland. The second important deficiency of the Polish system of financing higher education institutions was a missing reward for research output produced outside of the grant system (all the more so that grants are increasingly cumulated in several largest universities and the success ratio in the grant competition is, in general, very low).

The new funding formula has some disadvantages and methodological errors but, in my opinion, its general impact will be positive. First, it will stop immediately the tendency for increasing enrollment without marginal costs. Second, the staff component now depends on the average scientific category. However, the Polish research evaluation system, described in detail by Kulczycki et al (2017), is far from being perfect. It is oriented rather on quantity than quality and gives no motivation for improving the average quality of the academic staff. For universities, the block research funding is rather small and has almost no influence on staff salaries. Now the research evaluation will have a strong impact on the core grant for teaching. I hope that this will be a motivation for improving the research evaluation system.

The following citation may serve an excellent conclusion. "The choice of the funding model, its parameters and indicators are of utmost importance. They should be transparent and easily understood by both HEIs and the general public, they should closely correspond to the aims of the long-term development of higher education, and they should be applied systematically, without interruption, and unsubstantiated doubts about main principles. Only indicators can be discussed, and they have to be applied with great sensitivity, as they will significantly affect the behavior of individual HEIs." (Koucký, 2012).

In Poland, the funding formulas have never satisfied those requirements. The formulas have not been well understood even by experts, not saying about ``general public'', and they have too many unintended impacts. The construction of really good funding formula for our system of higher education is still an open problem. Fundamental for further studies is the exact determination of the marginal revenue generated by particular elements of the funding formula (staff members, students, grants, etc.) (Cieśliński, 2016). This knowledge allows a quantitative analysis of the economic viability of individual decisions of university authorities, for example: hiring teachers, granting scholarships for Ph.D. students or increasing the enrollment. In some cases, the results are highly non-trivial because they depend on exact numbers and cannot be guessed by qualitative considerations or rough estimations.

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Anastassiya LIPOVKA

Raising Gender Equality in Kazakhstan through Management Education Modernisation

Abstract

Female students represent the majority of the student population worldwide owing to continuous growth in recent decades. Women graduates face challenges of professional employment, career development and labour remuneration due to the gender inequality rooted in gender stereotypes. A study of students' gender stereotypes about managers was conducted in one of the business schools in Central Asia. The study has identified the highest level of gender stereotypes among management students and the lowest among information systems students. Additionally, male students have demonstrated a rather higher gender bias towards women managers compared to their female counterparts. The drawbacks of the current preparation of management students have been defined and the recommendations for teaching and training modernisation have been suggested.

1 Introduction

1.1 The system of higher education in Kazakhstan

Kazakhstan is the only country from Central Asia to join the Bologna Declaration and become a full member of the European higher education area. Since 2010, a three-level system of education has been adopted. The number of Kazakhstani HEIs totals 130 including 47 public, 78 private and 5 branch offices of foreign universities. At the end of 2016, a number of students in Kazakhstan amounted to 477074. For the last ten years, the share of female students in the overall student pool in Kazakhstan has constituted 58% on average (Statcol, 2017). This proportion is equal to the statistics of the OECD countries (OECD, 2012) and the US, where women hold the same percent of bachelor's and master 's degrees (Tarr-Whelan, 2011, p.50). Since 2009, a number of women PhDs in Kazakhstan has grown by 300% due to the attraction of an academic career for

women. Female students represent about 65% amid economics and business students: 66% bachelor, 64% master's and 60% doctorate (Statgov, 2016).

The challenges of economic higher education are reflected in local and international surveys. Thus, the Almaty officials' study revealed that only 54% graduates with major in economics had found a professional job that was 1.5 times lower than for graduates with technical major (Graduate poll, 2013). In accordance with the UNDP Human Development Report (2016), Kazakhstan population's satisfaction with education quality constituted only 46%, whereas the average satisfaction in Europe and Central Asia and High Human Development group amounted to 57% and 64% respectively. Female graduates with economic majors, along with the above-mentioned difficulties, face higher long-term unemployment and more frequently appeal to employment agencies than males.

1.2 Gender challenges in Kazakhstan

International experts consider gender equality in Kazakhstan progressive in terms of accessibility to public health and education but requiring serious corrections towards the women's inclusion in decision making positions in public and private sectors. Kazakhstan has occupied the 51st place of 144 countries by the UNDP Gender Inequality Index (HDR, 2016). Meanwhile, the World Economic Forum has ranked Kazakhstan 42nd place out of 159 countries by the Gender Gap Index due to the high level of equality in education and public health, middle level in economic activity, and low in politics (Global Gender Gap, 2016).

The population of Kazakhstan amounts to over 18 million people: the share of males and females is 51.8% and 48.2% respectively. Having the education coverage rate higher by 12.5%, women are paid less by 30% on average in all industries. The gender pay gap increases with a business scale: the larger the business, the bigger the gap. Those few companies with the lowest gender pay gap are small and led by women. Exceeding the male population and living 9 years longer but having the lower employment rate by 27%, women make their contribution to GDP at the amount of 39%. (Statcol, 2017) Females constitute a half of the individual entrepreneurs in Kazakhstan and 44% of small- and medium-scale business owners, lead 18.8% of all firms and only 4.2% of large corporations (World Bank, 2014).

The disparity in men and women's labor remuneration, occupied positions and employment rates is reinforced by gender stereotypes in Kazakhstan society about women's roles as a wife and a mother and men's roles as a breadwinner and economic producer. The common stereotype that women are not good for leadership furthers the limiting of women's appointments to higher political and economic posts (ADB, 2013).

Thus, Kazakhstan faces challenges in attaining the UN sustainable development goals on achieving gender equality and empowering women and girls.

Despite the extensive research revealing no significant differences in women and men's management effectiveness (Eagly et al.,1995; Powell, 2011; Vinkenburg et al., 2000), the steady stereotypes continuing to make a sensitive contribution to gender inequality resulted in women's insufficient salaries, advancements, and status. The numerous studies in the US concluded that the visual image of a leader for almost everyone was still a man (Tarr-Whelan, 2011, p.31). Even people in leading countries in terms of gender equality still see females as aliens to leadership: the recent Gallup poll identified that 33% of US respondents want to have a male manager, 20% – a female manager and 46% have no preference. (Riffcin, 2014) The "think manager-think male" is an international phenomenon. (Schein et al.,1996, p.40)

However, the youngest respondents of the Gallup poll demonstrated a slightly stronger inclination to work under a female manager's supervision. (Riffcin, 2014) Students are considered the most progressive part of any country's population, and generally, they have more advanced views on subjects. But even among students, gender stereotypes are considerable. In cross-cultural studies in the U.K., Germany, US, Japan and China (Schein et al.,1996), management students perceived successful middle managers as having features and characteristics commonly ascribed to men in general than to women. This view was more strongly expressed by the male management students. Powell (2011, p.132) studied the samples of bachelor business students and MBA students and identified that men and women depicted a good manager with preponderantly masculine characteristics.

Notwithstanding the many studies have examined the students' opinions on women and men managers, a deficit of comparative research of students' views with different majors exists. It is rather complicated to make deeper conclusions if only management, business and economics students participate in a survey. Management students are future leaders who will supervise people and companies, their opinions will directly influence their subordinates' conduct, internal and external relations and strategy in their organisations. Those managers' gender stereotypes will limit their employees' potential and narrow horizons of their business development. The present study was implemented with the purpose of filling in the knowledge gap about the influence of gender stereotypes on students with different majors.

2 Study of students' gender stereotypes

The study of the influence of gender stereotypes on undergraduate students has been conducted in the Almaty Management University (AlmaU), Kazakhstan. The study objectives were to identify the level to which students with different majors are influenced

by gender stereotypes and to define their views of an effective manager. The hypothesis 1 stated that management students had a lower level of gender stereotypes about managers in comparison to students with other majors: it was based on the fact that management students studied above 10 special management courses and possessed a wider knowledge of management. The hypothesis 2 proclaimed: the majority of students' visual image of an effective manager was a man engendered by the Kazakhstan strong gender stereotypes and the international "think manager-think male" phenomenon.

The mixed method of research included the two mono methods: quantitative (a questionnaire) and qualitative (a focus group). The questionnaire structure consisted of two parts: the first asked for respondent's socio-demographic details and the second contained the statement with a 6-point Likert scale that provided an equidistant presentation reducing an acquiescence bias. The questionnaire statement was adopted from the study *Can Central and Eastern European Management Compete?* (Sanyova et al., 2015) by the TARGET Executive Search, Gfk and CEU Business School investigating management culture in Bulgaria, the Czech Republic, Hungary, Poland, Romania, and Slovakia.

The survey sample consisted of 162 undergraduate full-time students with majors in management (50 people), marketing (28 people), accounting and audit (20 people), restaurant and hotel business (32 people) and information systems (32 people). 81 males and 81 females were second-, third-, and fourth-year students at the age of 19-25. For this type of gender research, it was critical to obtain an equal number of males and females for reducing a possible gender bias and to gain more objective outcomes. 33% of the respondents were fourth-year, 35% – third-year and 32% – second-year students. 50% of respondents were part-time employed in sales, construction, ecology, city administration, production, IT, logistics, catering and hotel business, tourism, education and other services. The focus group embraced 10 full-time third-year students of management: 5 females and 5 males.

The procedure started with providing the AlmaU faculty with the blank form of the questionnaires (*Figure 1*) along with the accurate instructions on how to consult students if they would have questions about filling in the forms. The students were not informed about the objectives of the survey, and everyone was given only one sheet. The questionnaires were completed at the beginning of a class and given back to the faculty at once upon filling in.

Figure 1 Questionnaire sample

Your major:

Year of study: second third fourth (underline)

Your sex: male female (underline)

If you are employed, specify industry in which your employing company operates:

Express a level of your agreement with the statement below circling a number from 1 to 6 (1-strongly disagree…6 – strongly agree):

On the whole women in Kazakhstan tend to be more effective managers than their male counterparts.

1	2	3	4	5	6
strongly disagree					strongly agree

Source: compiled by the author

The second part of the study – a focus group – was conducted to further explore the survey results. 10 students who had not participated in any focus groups before were invited in advance for 1.5-hour interview. An interviewer posed questions, observed participants reactions and fixed their answers with a voice recorder. 5 questions constituted the content of interviewing:

- Please close your eyes. Imagine an effective manager. How does this manager look like?
- What are effective managers' features?
- What characteristics do men managers have?
- What characteristics do women managers have?
- How effective are women managers comparatively to men?

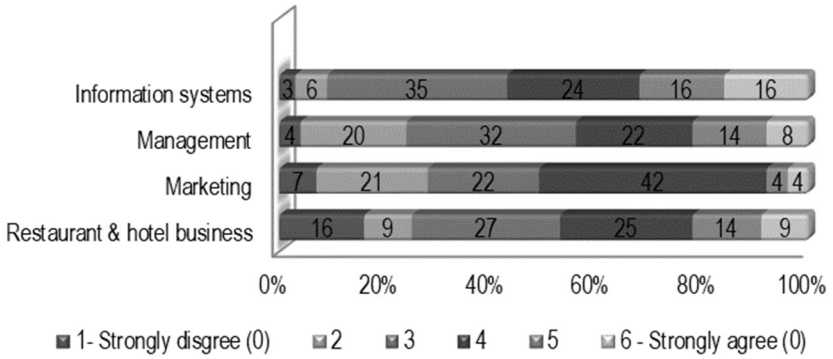
3 Findings

Agreement with the questionnaire statement by the Kazakhstan students constituted 49% out of 100%. Meanwhile, the average agreement of the Central and Eastern European countries by the TARGET, Gfk and CEU study equaled to 64%, including Romania – 77%, Bulgaria – 76%, Hungary – 62%, Slovakia – 58%, Poland – 55% and the Czech Republic – 53%. (Sanyova et al., 2015, p.52) The difference between Kazakhstan and Europe of 15% represents a serious discrepancy in opinions about

women managers: generally, all countries of the TARGET, Gfk and CEU study agreed with the statement, while Kazakhstan respondents disagreed. Consequently, the present study has confirmed the preceding findings on the existence of strong gender stereotypes in Kazakhstan society.

Additionally, the survey has revealed the strong correlation between the level of gender stereotypes with the respondents' sex and major and no correlation with their field of employment and year of study. The survey has identified that management students have the highest level of stereotypes (44% of agreement) and IS students have the lowest level (56% of agreement). The results did not only attest to the hypothesis 1 but appeared to be rather an unpredictable finding. Those students who are prepared for the future managerial positions and study a lot of management modules are the most prejudiced towards women managers, while IS students taking no management courses at all were the least prejudiced (*Figure 2*).

Figure 2 Distribution of responses by major



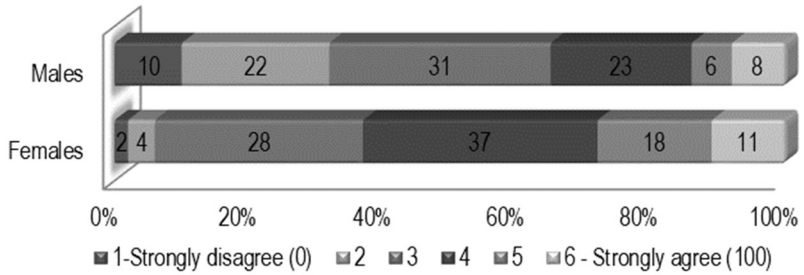
Source: compiled from the survey results by the author

Other students of the economic field including marketing (50% agreement) and restaurant and hotel business (48% agreement) have occupied the intermediate positions between the management students and IS students. Accounting and audit students were not considered in this range as only females presented them. It should be emphasised that marketing, restaurant and hotel business, accounting and audit students study only one management module: fundamentals of management.

A significant disparity in opinions has manifested between women and men's responses: on average, female students expressed 66% agreement, while males expressed 37% (*Figure 3*). Consequently, the females considered women managers'

effectiveness more positively, while the males expressed a doubt in women managers' effectiveness.

Figure 3 Distribution of females and males' responses



Source: compiled from the survey results by the author

The female students' responses across majors were distributed in the following way: accounting and audit – 60%, management, and restaurant and hotel business – 62%, marketing – 64%, and IS – 80%. The male students expressed their lower confidence in women managers in the given order: management – 27%, restaurant and hotel – 35%, marketing – 41%, and IS – 45%. Both male and female students with IS major demonstrated the lowest level of gender stereotypes about managers. Meanwhile, the female students with accounting and audit major and male students with management major indicated the highest level.

Upon interpretation of the survey results, the focus group had been conducted. The findings of the focus group testified hypothesis 2: almost every participant imagined an effective manager as a man. The effective manager's features called by participants were a strategic vision, leadership, decisiveness, intelligence, good knowledge of industry, persistence, self-confidence, charisma, and drive. Such characteristics as goal-orientation, aggressiveness, stamina, rapid decision making, rationality, strategic planning, and leadership ability were mentioned in regards to male managers. Reporting on male managers' characteristics, the students referred to Henry Ford, Steve Jobs, Bill Gates, Konosuke Matsushita and also to the Kazakhstan historical characters: khans, batyrs (heroes), biys (high titled judges), all of who were men.

The participants listed emotionality, multi-tasking, diligence, attentiveness, good communication skills, empathy, relationship-orientation, good organisational skills as women managers' features. The characteristic called almost by every participant with negative connotations was emotionality. While listing and describing women managers' characteristics, some male and female participants drew a parallel between their

mothers' features and women managers' characteristics. Having talked about their mothers-managers, the students accentuated their multitasking: working, taking care of children, making housework, organizing family leisure, shopping, dealing with household service providers, etc. The participants shared an opinion that female managers could not be equally effective as men because of their multitask orientation: it was impossible to do well at many tasks at once.

A few female students expressed their conviction in women managers' equal effectiveness with their male counterparts. Their opinion raised one male participant's indignation who considered this view on women's higher effectiveness provocative. The rest of the male and female participants concluded that women managers could be effective enough, while men had more inclination to be better managers. In these students' opinions, the male managers' propensity for management as a natural bent was expressed by their higher aggression, domination, competitiveness, physical strength, and stamina.

The study has identified a significant level of gender stereotypes: the students believe males had more inclination to be better managers and visualize a manager as a man. The strongest influence of gender stereotypes has been defined among economics and particularly management students and the lowest - upon the IS students.

4 Conclusions and recommendations

Surprisingly, the students who have studied management showed a higher level of gender stereotypes about managers. Management students take a great range of special management courses, while IS students do not have any management courses in their curriculum. Generally, the male students' level of stereotypes appeared to be sensitively higher and namely it contributed to the lowest agreement of management students with the survey statement. These findings support the earlier research. (Powell, 2011; Schein et al., 1996) The lowest level of agreement between management male students could be explained by a double psychological burden: the loyalty to their gender group and commitment to a professional managers' group. Obviously, they associate themselves with managers and consider their female counterparts as competitors for prospective managerial jobs. (Dennehy, 2012; Powell, 2011, p.134) The limitation of the present study is it was only conducted only in one country. Cross-cultural research may extend the understanding of the revealed issue.

The study has identified that the students lack a role model of women managers as they referred mainly to male manager examples. The only mentioned women managers were their mothers criticized for their multitasking activities. Additionally, it has been revealed that students have an obsolete vision of an effective manager as an autocrat leading subordinates via aggressiveness and domination. Evidently, the students have a

knowledge gap in contemporary leadership theories, recent research and women leaders contributed to management, politics and civil society**.** Supposedly, the content of management module and a way of teaching favour stereotypes about women and men managers. The majority of the existing textbooks enhance gender stereotypes along with teachers' expectation about male and female students. (Siemienska, Zimmer, 2007) The majority of management textbooks do not embrace the businesswomen's experience and lack a real recognition of women contributing to management science. (Pearson et al., 2015) The respondents were students with Russian and Kazakh language of instruction, where the majority of textbooks and supplementary materials used contained zero or few examples of women managers, entrepreneurs or leaders and narrated managers with a "he" pronoun throughout their content. Additionally, mostly male managers conduct master-classes, guest and binary lectures at the business school contributing to the students' "one-gender management" view.

The findings have justified an essential character of management education modernisation. The essence of gender schemas and execution of gender-typed behaviours can be changed through learning. (Karsten, 2006) The management for economics students must be amended from the gender equality view. Faculty should be aware of how their own gender stereotypes influence the students' perception of a manager's image. The impact of an educational establishment on students' stereotypes through the options of modules and quality of teaching is rather critical. (Xie, Shauman, 2003) Universities should not form gender stereotypes but decrease those cultivated in students at home, school, and society.

Thus, faculty who teach management students should take a special course focused on raising awareness and boosting knowledge of gender biases, discrimination, equality, politics and female leaders. The mentioned training will have two main aims: to reduce the level of gender stereotypes among faculty and provide them with guidance on how to teach management in which the presence of genders is harmonised. This type of preparation allows universities to be in alignment with the government gender policy, international standards of gender equality and provide more quality education.

Another recommendation is to design and teach the new module - Gender management - for management and economics students. Initially, a series of pilot lectures was conducted for the undergraduate students at AlmaU. This action helped to define the insufficient level of bachelors' psychological readiness to comprehend the essence and content of this module. Then the AlmaU management decided to introduce this special module for master's students with broader views and work experience. Thus, Gender management has been included in the curriculum of the master's management students. During this module, the master's students are taught to identify their gender biases, decrease their gender stereotypes, identify and develop their gender potential,

deal with possible difficulties awaiting them on the labour market, overcome gender obstacles basing on legislation, governmental policies and civil rights and sustain a work-life balance. The module has included the most recent Kazakhstan and international research on gender and management, cutting-edge leadership theories, women theorists' contribution to the development of management theory, female and male managers' examples and biographies, video interviews with women managers and a master class of a gender and management expert.

The new form of training has been introduced in the Gender management module: a lecturer and a practitioner conducted a binary lecture-drama. Giving a lecture about female and male management effectiveness, the teacher was sharing the findings of her recent research on Kazakhstan women and men managers, when all of a sudden a man entered the auditorium and introduced himself as an entrepreneur. He expressed his disagreement with the findings on women managers' higher effectiveness and listed a range of arguments and examples of men's higher effectiveness. First master's students had been very surprised by the stranger's appearance but soon joined the debate on gender, management, and effectiveness. Some students supported the lecturer's arguments but others agreed with some practitioner's ideas. In the climax of the lecture, the teacher and the stranger came to the mutual understanding and concluded that gender was not a critical factor of manager's effectiveness, as managers of one gender might differ from each other more than managers of the same gender. At the end of the class, they shook their hands and confessed to performance for teaching purposes. During the following debriefing session, the students reflected on the binary lecture. Owing to the students' high emotional inclusion in the lecture, they memorized the lecture content better and reconsidered their initial vision of women and men managers.

The teaching tool successfully implemented in *Gender management* was a special case study written under the supervision of Dr. Zoltan Buzady, Professor of Leadership at the Corvinus University of Budapest. The protagonist of this case study is a female having faced a career-family dilemma under conditions of a newly emerging and transitional economy. This case study meets the two essential needs: boosting of the scarce teaching materials on gender and management and focusing on the female protagonist (the majority of case studies worldwide narrate about the male protagonists). The case study *Napoleon in the Hamster Wheel: in the Labyrinth of Gendered Career Trajectories* was taught to the students at the end of the module and embraced a range of topics: gender and careers, advising and mentoring, work-life balance, career-family conflicts, gender, and entrepreneurship. Recently this case study has been submitted to the international Emerald-CEEMAN case writing competition and to the Journal of Emerald Emerging Markets Case Studies. In a case of the positive decision by the competition committee, the case will shortly be at the disposal of international faculty.

The female students' higher confidence in women managers' effectiveness indicates their assurance in themselves as prospective managers. However, the focus group findings strengthened and extended the survey results about female students' opinion on men as more effective managers. The women graduates' challenges with management major must be not solely their problem. As a rule, female students do not know what employment and career challenges they will face upon graduation. Universities providing their services to young women are responsible before the students, prospective employers, and society. The proposed recommendations will assist higher education institutions in preparing more competitive graduates for the labour market, able to establish and implement policies of gender equality at their workplaces.

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Valéria CSÉPE, Christina ROZSNYAI

Trends and Challenges in Hungarian Higher Education Quality Assurance

Abstract

After 23 years since the Hungarian Accreditation Committee's establishment and the 2016 completion of its third full cycle of institutional accreditation, a *HAC Strategy for 2017-2018* has been prepared by the new president. The Strategy stresses the HAC's readiness to assist higher education institutions in fully exploiting their responsibility for their internal quality assurance and will offer workshops to offer its expertise and to exchange ideas on approaches and methodologies.

The Strategy extends to the revision of the HAC's evaluation criteria in light of the ESG 2015, a variety of approaches to accreditation depending on institutions' degree of maturity in quality assurance, and considering institutional profiles. Program accreditation will evaluate the full student life-cycle, with a shift from input to process and output criteria. Internal restructuring of the secretariat, the hiring of young staff with language proficiency and the streamlined administration of committee work has begun. Additional funding has been secured; a new IT system is being planned.

1 Introduction

The Hungarian Accreditation Committee (HAC) is currently undergoing fundamental changes. After 23 years since the Committee's establishment and the 2016 completion of the third full cycle of institutional accreditation, the HAC needs to move on. The new president, who started her work at HAC on 1 September 2016, has prepared a strategy to meet the challenge.

A number of factors drive the need for change at the HAC. They include the issue of the new *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)* in 2015 that should have been implemented by national higher education institutions and national agencies by spring 2016. The deadline coincided with

the final phase of the third cycle of institutional accreditation in Hungary and the recognized need to design a new approach to both institutional and program accreditation at this point. At the same time the HAC president appointed in 2012 resigned due to other commitments and the new president took office with some months delay. But other issues that demand change were recommended by the HAC's International Advisory Board. They recommended in 2016 "that HAC broaden its concept of what constitutes quality" and point to a previous year's recommendation to "…focus on the role of the HAC in helping to enhance the internal quality assurance of higher education institutions in a holistic way that goes beyond curricular and resource aspects but looks at the quality of the student life-cycle and involves governance and managerial aspects, all of which must be seen as a continuous institutional process." They go on to advise "to focus decisively on the overarching educational objectives and the development of students` competencies aligned to these". Further, they refer again to the previous year's recommendation that "HAC's fourth institutional accreditation cycle should and can be tailored to the various levels of maturity of individual institutions in their internal quality assurance of their study programs. A varied external quality assurance approach could encompass institutional accreditation or audit …" (HAC International Advisory Board 2016).

These and other recommendations are reflected in the *HAC Strategy 2017-2018.* A new higher education strategy by the government also requires changes in quality assurance in order to steer higher education towards greater efficiency, broader inclusiveness and a greater focus on quality.

While the main impetus for developing the ESG back in 2005 was to have a common understanding about quality assurance in higher education within the European Higher Education Area (EHEA) in order to ensure the conditions for a smooth mobility between educational systems for students and staff. It set down the common spirit of quality assurance for what are now 48 signatory states to the Bologna Declaration. "At the heart of all quality assurance activities are the twin purposes of accountability and enhancement" (ESG 2015, p.7). And further, "The ESG are based on the following four principles for quality assurance in the EHEA:

- Higher education institutions have primary responsibility for the quality of their provision and its assurance;
- Quality assurance responds to the diversity of higher education systems, institutions, programmes and students;
- Quality assurance supports the development of a quality culture; Quality assurance takes into account the needs and expectations of students, all other stakeholders and society" (ESG 2015, p. 8).

2 Trends

The *HAC Strategy 2017-2018* was developed with the four principles set for the ESG in mind. As noted, the ESG provide the impetus for the changes in the HAC's approach, but it is the HAC's conviction that they are necessary for enhancing Hungarian higher education, and that external quality assurance is well placed to drive the broader implementation of a quality culture at Hungarian higher education institutions. A guideline to ESG 1.2 refers to study programs being expected to "reflect the four purposes of higher education of the Council of Europe" (ESG 2015, p. 12), namely:

- preparation for sustainable employment;
- preparation for life as active citizens in democratic societies;
- personal development;
- the development and maintenance, through teaching, learning and research, of a broad, advanced knowledge base." (CoE Rec, 2007(6))

Higher education has a responsibility to generate and convey advanced knowledge as well as endow students with the skills to find work throughout their lifetime and – importantly – with a sense of responsibility for active citizenship. These are values the HAC shares and promotes. Gender issues and provisions for dealing with disadvantaged and disabled students will constitute quality assurance criteria.

While the current strategy covers only two years until the end of the present term of committee members, it does envision a successor document that would extend to 2022 to build on this one's concept. The cornerstones of the strategy are

- determining the tasks needed to further develop the quality assurance system in Hungarian higher education;
- the re-evaluation of the HAC's operations and role;
- introducing a new approach in how the HAC carries out its work;
- updating the methodology;
- inviting an external review of HAC in accordance with the ESG 2015;
- renewing cooperation and partnerships within the Hungarian and international higher education structure.

The government higher education strategy emphasizes quality assurance. That calls for unambiguously substantiated expert evaluations whether in accreditation, monitor, re-accreditation or audit procedures. It also calls for new sets of criteria and

processes for these activities that are in line with the ESG 2015. They will include criteria for evaluating the achievement of output factors for the attainable skills, competences and learning outcomes of students on the various educational levels. Input and training indicators will assign equal weight to processes as to input factors (such as teaching and learning processes, program design, talent support, teacher-student relations, student evaluations, actions to raise attainment levels of underperforming incoming students, attrition rate analyses, etc.), and output aspects (attainable and attained educational achievements and competences, career placements of students, employer feedback, research output, etc.).

The ESG 2015, like the original 2005 edition, consists of three parts, the first of which sets standards for higher education institutions for controlling its internal quality. Colleges and universities must have a policy for quality assurance that is part of the institutional strategy (1.1); design and approve its programs to meet the institution's objectives and be in line with its profile (1.2); student-centred learning, teaching and assessment are at the institution's core (1.3); student admission, progression, recognition and certification must be in place throughout the student "life cycle" (1.4); teaching staff must be competent for the set teaching goals and the institution must regulate and implement fairly their recruitment and career development (1.5); students must be provided appropriate learning resources and support (1.6). In addition, the institution must collect information and apply them in its management (1.7); it has to provide appropriate information to the public on its activities and programs (1.8); must monitor its programs systematically to keep the up-to-date (1.9), and must undergo cyclical quality assessment by an external, independent organization (1.10). These standards are each provided with guidelines that elaborate what to look for in evaluating the institution's practices.

The new HAC criteria will incorporate the various elements set down in the ESG 2015 with common ones for all institutions as well as specific ones for different types of institutions and for both institutional and program accreditation. Evaluation criteria will need to be expanded to include different learning paths and methods, including independent learning, electronically accessible teaching material, and various modes of delivery that encourage student participation.

The new HAC evaluation methodology should support the ongoing quality enhancement of institutions and programs and entrench viable and reliable internal quality assurance and a quality assurance culture across the board, with the responsibility and accountability for quality expected of all institutional stakeholders. The possibilities for introducing instruments of external quality evaluation such as random sampling and spot checking information on site need to be explored. The quality criteria for teaching staff, and prominently so on the level of university professors, will have to be

evaluated consistently. Criteria for evaluating the competence of guest lecturers teaching at universities and colleges, at universities of applied sciences and in dual vocational training, will extend to teaching and practical placement sites. Moreover, HAC has to further develop its methodology in avoiding the competitive disadvantage of women in evaluation (see Rosen, 2017).

As far as doctoral training is concerned, the government has issued a renewed regulation in 2016 in line with its higher education strategy that promotes the expansion in the quantity and quality of the next generation of scientists, including a new structure for the study years (2+2 years and additional examination). The HAC has in the past and will continue to focus on the evaluation of doctoral schools with a view to their training programs, core teaching staff and PhD supervisors but will expand into new rating procedures to promote the synergy between the EHEA and the European Research Area. Moreover, external experts from other countries are to be invited for doctoral school evaluations (just as for university professor evaluations).

For the HAC's fourth institutional accreditation cycle, different procedures will be worked out and applied for accreditation, reaccreditation (encompassing all quality aspects relating to institutional governance and management) and audit (evaluating the internal quality assurance system) in consideration of the institution's maturity in quality assurance. It is imperative that the new procedure encourage institutions to emphasize and build up specific profiles. Not only is this international good practice but it contributes to the quality of the higher education sector in that it promotes each institution to develop specific strengths, making them competitive and holding a stake in the success of quality assurance. The maturity of an institution's internal quality assurance will be based on the previous accreditation results and will lead to variously complex procedures. Mature institutions will be audited, while those that underwent monitoring procedures or were denied accreditation will undergo reaccreditation or full accreditation.

In program reaccreditation, the possibility for introducing a risk-based system needs to be explored, preferably in collaboration with partner agencies in Europe. The elements of risk-based analyses (e.g. student surveys; indicators on student progression; program curricula, structure and coherence; student complaints) may involve also random site visits if preliminary analysis deems it feasible.

A legal mandate for the HAC is to provide its opinion on the quality of individual higher education institutions for the purpose of reviewing operating licenses by the Educational Authority every five years, a process that is to begin in 2017. A methodology and guidelines for this procedure have been developed by a HAC working group. Their implementation begins in summer 2017 with a pilot procedure of a handful of institutions of various types.

The HAC, in line with ESG 2015 (p. 23), needs to conduct thematic analyses. The upcoming ones will begin with the evaluation of the outcomes of recent changes in higher education. Working groups will focus on quality-related issues and provide summaries of their findings to be used by HAC in its subsequent work.

3 Challenges

A key element in the strategy is the re-evaluation of how the HAC sees itself as a stakeholder within the higher education community. Within the scope of its legal mandate to evaluate the quality of teaching, research, development and innovation and activity in arts as well as the internal quality assurance systems at higher education institutions, the HAC must focus on quality enhancement and supporting the embedding of a quality culture in colleges and universities. It must take a proactive role to interact with the higher education community by organizing forums and workshops for internal quality assurance staff and others, where quality assurance issues are discussed. It must offer more in-depth training than it has done in the past for its experts to ensure that evaluation reports are enhancement-led and that the articulation of their expertise is maximized in the process. Institutions should look on the HAC as an expert organisation in quality assurance to whom they can turn for advice in building up and conducting their quality assurance activities. The HAC will continue to foster its relationships with the national higher education stakeholders, the Ministry, Rectors' Conference, student organizations, and others.

Specific challenges facing the HAC include the sensitising of the sector to gender equality, social inclusion, student-centred learning and services for students throughout their student-life cycle, all of which are not widely ingrained.

The delegation of HAC members by separate entities, predominantly the Ministry of Human Capacities, the Academy of Sciences and the Art Academy, in addition to students and other stakeholders, results in a highly imbalanced body as far as gender and scientific and professional backgrounds are concerned. The gender issue has been among the recurring recommendations of the HAC's International Advisory Board. Of twenty HAC members only two are women, including the president. With the term of the current body ending in February 2018, consultations with the delegating bodies need to be held in order to balance the HAC composition.

With its status as a national organization and through its quality assurance activities, ranging from setting criteria to providing advice to institutions, the HAC hopes to expand the sector's sensitivities toward social inclusion, student-centred teaching and learning, the spread of a range of non-traditional teaching methods, etc. There are many individual initiatives at various institutions, but the ad hoc activities have to be

mainstreamed. Collecting and disseminating good practice cases via workshops and thematic analyses will prove a valuable instrument in this mission.

An additional challenge for HAC is time. With the ESG 2015 in force and the HAC's external review for renewal of ENQA membership, which checks for ESG 2015 compliance, upcoming, as well as the new legal mandate to contribute to the licencing procedure of higher education institutions by the Educational Authority, there is pressure on the HAC to immediately implement the new criteria and methodology developed by its dedicated working group. At the same time, the procedure introduced in spring 2017 can only be regarded as a pilot exercise, which must be followed by an analysis of the outcomes and the adaptation to the needs identified in practice. Benchmark studies have to be a valuable part of the HAC's self-reflection.

The employment of foreign experts in the HAC's evaluations has to be solved. Hungarians are generally not comfortable with foreign languages[2], which may be one cause for the delay in introducing experts from other countries to work with the HAC. Again, the HAC may serve a national mission by spreading the acceptance of foreign language communication in higher education via the implementation of evaluations in English.

The international recognition the HAC has enjoyed since the mid-1990s is seen as an asset that must be regenerated. The HAC has been a member in ENQA, INQAAHE, and carried the secretariat of CEENQA since the beginning of these international networks, and it has participated in international projects. HAC staff and members are regularly taking part in international evaluations. These activities must be extended to links with partner organizations, and greater staff participation in international events in order to feedback their experience into the work of the HAC.

These are ambitious goals, if only by sheer volume. However, it is the new attitude within and toward the HAC that may prove even more challenging – and more rewarding for higher education in Hungary. The HAC has obtained additional funding on top of its annual budget and has boosted its human resources in the secretariat. Internal restructuring of the staff work processes has taken place and a new expert commission structure is foreseen. An up-to-date IT system is also on the drawing board to support these developments.

[2] According to Eurostat, in 2011 63.2 % of the adult working-age population reported that they did not know any foreign language.

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Teaching, Learning and Research

Nicholas CHANDLER , Gábor KIRÁLY, Zsuzsanna GÉRING,
Péter MISKOLCZI, Yvette LOVAS, Kinga KOVÁCS,
Sára CSILLAG

When two worlds collide: cheating and the culture of academia

Abstract

The culture of academia in higher education has been described as tribes with their territories whereas cheating seems to traverse boundaries as not only students, but teaching staff may also have a role to play in regard to their tolerance or even compliance with cheating.

Our paper considers teaching staff as a functional subculture and we explore cheating as perceived by these staff as we attempt to piece together the factors that link perceived cheating with the culture of academia through the use of Causal Loop Diagrams.

We found that academic culture is characterized by conflict and cultural clashes which is further exasperated by cheating. Massification has an effect on academic staff and cheating, potentially leading to a sense of powerlessness, despite apparent autonomy. This sense of powerlessness and uncertainty is argued as leading to a stronger academic culture. The link is made between organizational culture type (hierarchy), with values based on stability and control, and the importance of control as a perceived causal factor of cheating.

1 Cheating in higher education

Student cheating is prevalent in higher education institutions (Davis et al., 1992; Lang, 2013). Cheating casts a shadow on the validity of the degrees issued by these institutions, leading to long-term effects of cheating on the operation of these institutions. Despite being widespread, some countries have more incidences of cheating than

others. In Hungary and other CEE countries student cheating seems to be more rampant compared to Scandinavian countries (Orosz and Farkas, 2011).

Perceptions of what constitutes cheating vary greatly amongst both lecturer and teachers alike and this presents a particular problem for the researcher in ensuring that common understandings of cheating are held, as a means of building a comparable data set. The list of potential types and perceptions of the incidence or relative severity of the failure of a moral compass can vary greatly. The following table shows the incidence of various types of cheating amongst nursing students in South Africa and the number of times these acts were committed:

Table 1 Incidence of cheating behaviours

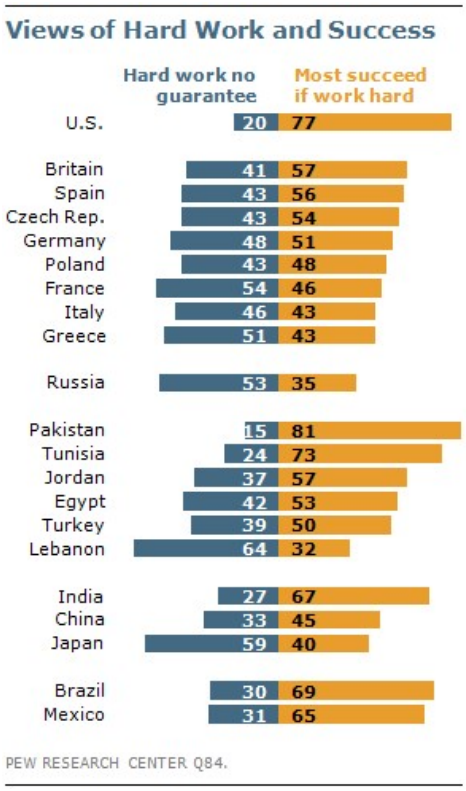
Items	*f*	%
Copying ideas from any sources without acknowledging the original author	237	60
Copying word for word from any original sources and not using quotation marks	224	57
Working together with other students on a homework assignment that was supposed to be done individually	159	45
Dishonesty in any way with completing one's practical workbook	134	34
Using material from another student's paper without acknowledging the original author	103	27
Writing an assignment for someone else	74	20
Allowing another student to copy from one's work during a test or examination	53	14
Giving another student answers in a test or examination with the help of signals	57	14
Submitting a paper written by someone else as one's own	23	8
Lying about medical or other circumstances to defer a test or examination in order to have more time to study for it	29	7
Copying from another student during a test or examination	18	6
Submitting another student's work as one's own	10	4
Bringing unauthorised crib notes into a test or examination venue	9	4
Using unauthorised crib notes during a test or examination	12	3

f, frequency.

Source: Theart and Smit (2012)

Cheating prevalence may vary from one country to another and this brings into questions the relevance of findings from other countries for the researcher. For example, from a national culture perspective, cheating in CEE countries may be linked to the belief that it is not possible to get wealthy from 'honest' work (Tóth, 2009; Csepeli and Prazsák 2011). However, recent statistics go against these findings and indicate that countries with emerging economies are more hopeful about hard work bringing success:

Figure 1 Global perspectives of success and hard work



Source: Pew Research Center (2012)

Figure 1 shows that emerging economies from Central Eastern Europe such as Poland and Czech Republic may see less success from hard work compared to developed countries, such as US and UK, but they still have a more positive view than Japan, Russia and Italy, and the notable extreme of Pakistan. National cultural differences were also considered in Magnus et al.'s (2002) study of attitudes to cheating in Russia, the US, the Netherlands and Israel. They suggested the most important

distinctive factors are whether competition is part of the educational system and the attitude towards officials (such as civil servants, police officers and teachers). If competition is an intrinsic element in the system (like in the US), cheating is viewed as an unfair advantage. Moreover, if officials are regarded with hostility and suspicion (like in Russia), then cheating is more likely to be tolerated and the act of reporting on others is considered unacceptable.

Beyond national perspectives, there are more general characteristics of students who engage in cheating behaviour, such as age (Smith et al., 1998) and gender (Ward and Beck, 1990) highlight a lack of time and the need to avoid failure. Although these dimensions appear controversial and are often debated by scholars, there are a number of studies that confirm certain dimensions. Umaru (2013) also identified these factors, such as the pressure to achieve good grades, not having enough time for (or spending enough time on) school work and parents' lack of reproach regarding their children's cheating activities. Likewise, Jones (2011) claimed that generally students wish for good or better grades, however due to difficulties with understanding course materials or time limitations, they tended to cheat.

The authors contrasted the view held by the millennial generation of students with those of 'academia' and suggested that perceptions indicated an understanding of the meaning of academic dishonesty. However, this understanding was superseded by, for example, the belief that right and wrong is a matter of personal opinion. Furthermore, ideas were perceived as not belonging to anyone and all information is accessible and free. They suggest that this conflicts with the values and perceptions held by academic staff.

Somewhat surprisingly, there are relatively few studies of teachers' perceptions of cheating prior to this work by Zyl and Thomas (2015) – and even their work makes suggestions as to how academia perceives cheated based upon espoused values and norms by the institution. Craig and Evans (1990) compared the perceptions of the cheating by students and teachers. The responses of 170 teachers were compared the responses of 1,736 of their students. Whilst there were notable differences, both samples identified parental pressure as a contributing factor for cheating, that copying material word for word constituted cheating. It was also found that students who take longer to complete assignments (due to poor study skills) were more likely to cheat on bigger assignments. Williams (2001) found the perception among teachers that the combination of informational technologies and increased coursework increased the likelihood of cheating. The different in gender for students cheating mentioned earlier it his paper, may also be applied to perceptions of teachers: Jendrek (1989) found that male teachers were much more likely to admit to observing cheating than their female counterparts.

Table 2 Perceptions of cheating in 2011 and 2012

Statement	2011			2012		
	%			%		
	Agree	Unsure	Disagree	Agree	Unsure	Disagree
1. Something is wrong only if you get caught	15.9	9.1	75.0	16.8	8.3	74.9
2. Right and wrong is only a matter of personal opinion	43.0	9.7	47.2	43.7	11.2	45.0
3. Ideas do not belong to individuals or companies, anyone should be able to access and use them	39.6	21.6	38.9	41.9	22.1	35.2
4. Paying my fees entitles me to a qualification	58.6	13.9	27.5	60.4	12.9	26.7
5. I understand clearly how to reference and quote appropriately	68.3	19.5	12.2	66.6	21.5	11.9
6. I know what the word "plagiarism" means	92.9	2.9	4.2	92.2	2.7	5.1
7. I know what to do to avoid using other people's ideas incorrectly	71.3	21.4	7.2	72.8	20.4	6.8
8. I know what the punishment will be if I am caught copying someone else's work	81.7	11.8	6.5	83.9	9.9	6.3
9. I always reference when using other people's ideas	81.3	9.8	9.0	84.9	8.2	6.9
10. Lecturers are too strict about copying	58.3	9.4	32.2	61.8	8.1	30.2
11. I know people who have cheated in a test at the institution	16.2	12.3	71.4	16.9	12.9	70.2
12. I know people who have copied others' assignments at the institution	31.9	15.0	53.1	34.0	13.6	51.4

Source: Zyl and Thomas (2015)

The motivation that lies behind the act of cheating may be distinguished as intrinsic (mastery) goals, extrinsic and performance goals. Jordan (2001) claims that intrinsic goals influence the engagement of academic dishonesty in a negative way, while other factors like witnessing peers' cheating behaviour have a positive correlation. With higher levels of self-efficacy, students are less likely to cheat (Murdock and Anderman, 2006). Kücüktepe (2014) undertook a qualitative study conducted in Turkey and found that 26% of respondents cheated when they were unsure that they had the right answer, but also when they had no idea about the question, let alone the answer. In some cases, they felt compelled to look at someone else's test. This may not be the overwhelming majority but it does provide insight into the range of possible motivations to cheat.

Although not in a higher education setting, Orosz and Farkas (2011) found situational and interpersonal factors such as the conduct of peers and the willingness of peers to cooperate increased the likelihood of cheating. This was also found in an earlier study by McCabe et al.(2006), but with a notable difference: the fear of being reported by other students had a strong (negative) effect. Thus, a perception of peers' attitudes to cheating seems to potentially have a reinforcing or negating effect the propensity to cheat. Palazzo et al. (2010) found that tight deadlines, the level of difficulty and a lack of interest to be contributing factors for cheating. On the other hand, Jordan (2001) found a strict institutional policy and a permissive system may provoke cheating. This finding of causes on an organisational level was also suggested by Gallant and Drinan (2006) in that academic integrity and coherence need to be communicated to the students with a particular focus in the consequence of cheating, if cheating is to be reduced.

If we consider the organisational level further then one particular aspect of organisational culture stands out in the literature: institutional norms. McCabe et al. (2003) suggest that honour codes support academic integrity. Honour codes are upheld by lecturers, and steps are taken to reduce cheating, whereas no honour code was introduced for students in that particular study.

Cultural norms and belief systems of both teachers and students provide frames for giving interpretations to cheating and if we consider our sample of lecturers of economics or business as the instructors and mentors of future business leaders then it may be said that the unethical behaviour of business students of today might be linked to unethical business practices of tomorrow.

2 Culture in Hungarian higher education

Our sample is taken from lecturers at a higher educational institution (HEI) in Hungary. Therefore, in this section we will first consider higher education in Hungary in general, then narrow our focus with a look at HEI culture and, finally, consider the values and perceptions of lecturers (academic staff) in particular.

As Hungary has transformed into a more consumerist society and away from the budget-commanded regime, HEIs appear to have taken on a more consumerist approach, especially as more students have become fee-paying and reductions in state funding and greater need for self-sufficiency have been drivers for a consumerist perspective.

From a cultural perspective, these drivers have led to a 'cultural clash' between the traditional HEI and commercial cultures (Fisher and Atkinson-Grosjean, 2002). The theme of conflict and uncertainty in higher education run throughout the literature: even back in the 1970s Freedman et al. (1979: 8) described academic culture as "a set of

shared ways and views designed to make their ills bearable and to contain their anxieties and uncertainties".

There are certain common aspects that characterize HEI culture. Tierney (2008: 35) described HEIs as follows: "…on the one hand, they are organizations with highly autonomous workers….and yet, on the other hand these autonomous workers assume a great deal of voluntary work in their organizational and professional lives, a fact which binds them together". Thus, we see another element of duality (and potential conflict) in a simultaneous need for autonomy and binding with other groups.

Within the topic of continuous conflict, dualities and tension, Bourdieu's work (1988) (cited by Naidoo, 2008: 47) pinpoints the defensive nature of HEI staff as: "the field of higher education is in fact not a product of total consensus but the product of a permanent conflict…with agents and institutions improving or defending their positions in relation to others". Researchers such as Silver (2003; 161) points to conflict as being an engrained part of academic culture as it may be seen by members as a culture of research, a culture of tension or conflict and cites the work of Taylor (1999) as highlighting the conflicting nature of HEIs.

Defensiveness may be seen in a negative sense, but our findings indicate the contrary: literature on the culture of cheating and academic culture often point to the emergence of a culture of integrity. This aspect of HEI culture is seen by Clark (1987) in four core values in higher education: justice, competence, liberty and loyalty. This theme of justice and a sense of integrity is also held by Bila and Miller (1997) when lecturers perceived themselves to be isolated from the general public, under-appreciated, and true and honest.

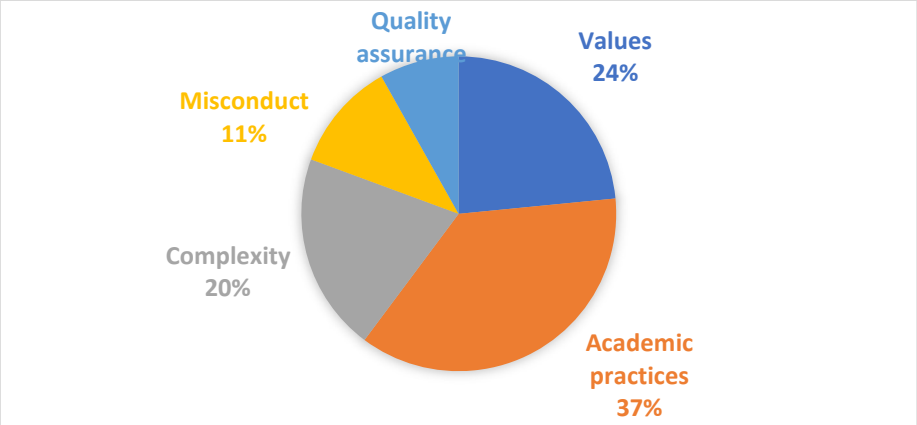
The issue of integrity and its link to values was also studied in the Academic Integrity Standards Project (2012), which found that, from six Australian universities, academic integrity was most closely linked to either academic practices or values, as can be seen in the following figure:

With the above findings in mind, Bretag (2012) suggested five key elements that require consideration for any topic concerning academic integrity. Namely that,

"Academic integrity is:

1. grounded in action;
2. underpinned by values;
3. multifaceted and applicable to multiple stakeholders;
4. understood by many in terms of what is not (misconduct); and
5. important as a means of assuring the quality and credibility of the educational process."

Figure 3 Understandings of academic integrity



Source: Academic Integrity Standards Project (2012)

Our study will focus on the second and fourth of the 'big five' as values and perceptions are related to the basis through which cheating is understood, acted upon and has an impact upon the quality and credibility of the education process. Whilst we are not examining the integrity of staff, it is through their perceptions will consider the common factors that are perceived as affecting cheating and held as values by lecturers. The perceptions of cheating were covered in the previous section and we will now consider in this section the values that studies have found to be typical of lecturers (academic staff) in higher education.

Tierney (1988) points out that as HEIs are highly complex organisations, there may be numerous subcultures in a university or college and the basis could be: managerial; discipline-based lecturer groups; professional staff; social groups of lecturers and students; peer groups (by special interest or physical proximity); and location (offices arranged by discipline). Becher (1989) asserts that disciplinary cultures are the key to HEI cultures. Valimaa (1998) reinforces this with findings that disciplinary differences affect many areas of academic life such as modes of interaction, lifestyle, career paths, publishing patterns, and so on. Thomas et al. (1990) even asserts that disciplinary differences outweigh gender differences.

Disciplinary cultures were first examined by Becher (1989) and have been use as a basis for research in many cases since that time (e.g. Snow, 1993). Kuh and Whitt (1988: 76) claimed that the core value was the pursuit and dissemination of knowledge. Bila and Miller (1997) discovered that lecturers perceived themselves to be isolated from the general public, under-appreciated, and true and honest. Junior lecturers felt overwhelmed with responsibilities, and exploited, whereas senior lecturers saw

themselves to be survivors, with a certain degree of radicalism and seeing too high an emphasis placed on external activities.

Some studies have highlighted the characteristics, norms and values of lecturers as a means of grasping an understanding of their impact upon education in general and the organisation in particular:

"*The scholar wants to be left alone in the conduct of the academic enterprise. He does not welcome innovation in instructional procedures, in instructional arrangements, or in the organization and operation of a college or university … The scholar is a conservative in his attitude towards and appreciation of the academic process*." Millett (1962; 104)

"*We cannot help but be struck by the virtual right so many academics seem to possess to go their own way, simply assuming they can do largely as they please a good share of the time, all in the nature of rational behaviour*." Clark (1987; 148).

As a final note, this section has found that academic culture has been and is characterized by conflicts, high autonomy and cultural clashes, characterized by struggles, such as with the impact of massification and pushes towards consumerism. Our study seeks to explore how cheating fits into this picture.

3 Method

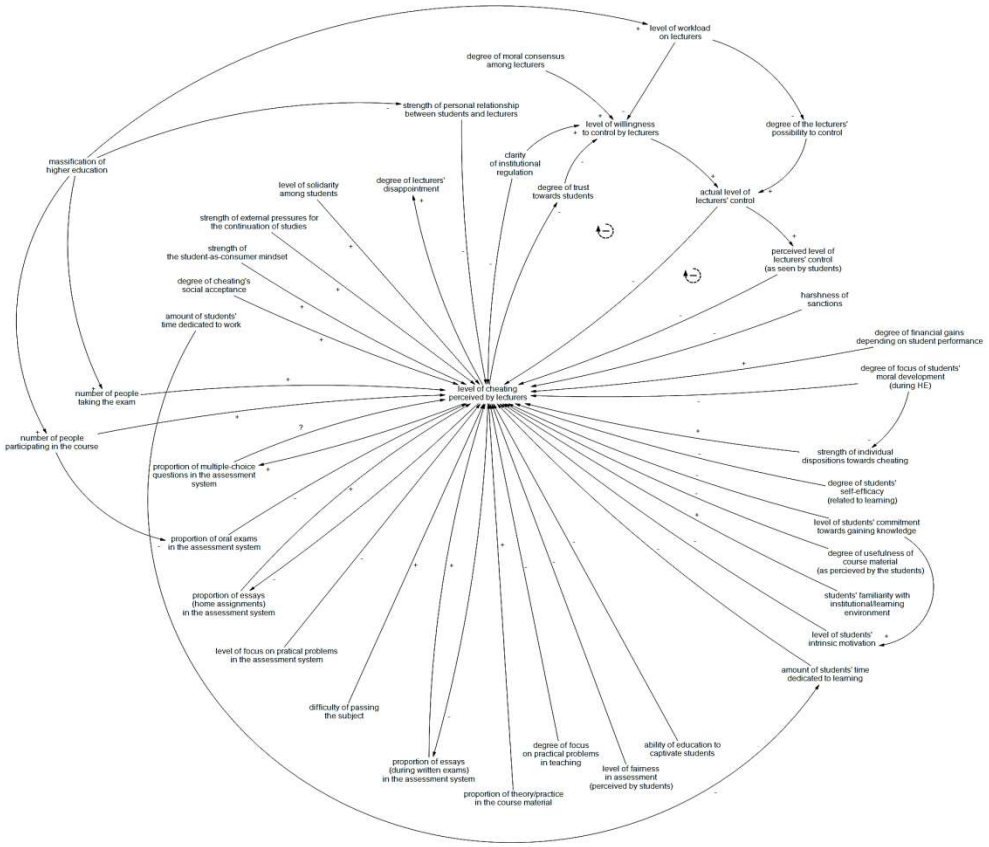
Our sample is taken from a business school in Hungary. Our choice of a case-study approach was based on the literature that institutions within each country may "draw on different publics" and have "quite different flavors" Riesman and Jencks (1961; 132). A business school was chosen in light of the unethical behavior of business organizations (Pitesa, 2015) combined with the fact that the students in business schools will become the future members of the business world.

We conducted semi-structured interviews with lecturers. For the analysis we applied causal loop diagrams. Causal loop diagrams are graphical tools that are used to visualize the causal components and linkages within a dynamic system. Causal arrows point from the cause towards the effect and have a single sign. A positive sign (+) means that the effect changes in the same direction as the cause, i.e. if the amount of the cause increases, that of the effect also does (and vice versa). A negative connection (-) means an inverse relationship i.e. when the cause increases, the effect will decrease. These relationships can form two types of causal loops: self-reinforcing ones, in which the initial change runs through the system so that it returns to reinforce its initial impulse (similar to 'vicious' and 'virtuous' circles); and balancing ones, where the initial change runs through the system and returns to 'mitigate' itself (Sterman, 2000: 138-153).

4 Findings

Through the analysis of the interviews with lecturers, the causes and effects were groups and perceived interrelationships by lecturers were noted. Furthermore, the causes and effects were considered with as having a reinforcing or negating affect on the level of cheating. As shown in *Figure 4*, the causes and effects regarding the level of cheating highlighted a number of groupings: institutional elements; external effects (i.e. factors at a social level); assessment and teaching practice; personal and group characteristics of students; and personal characteristics of lecturers. Naturally, there is some overlap between these areas.

Figure 4 Causal loop diagram of lecturers' perspectives of cheating



In relation to massification there are two variables which have a direct (and positive) effect on cheating: 'number of people taking the exam' and 'number of people participating in the course'. Both of them (the high number of them) were mentioned by the lecturers as one of the dominant causes of high level of student cheating, but we placed them at the intersection of the institutional field and the assessment and teaching field. The reason for this is that the (high) number of students is a result of decisions and the strategy of the given institution, yet at the same time, it is also affected by teaching and assessment practices.

One part of the related items addresses the question of control ('level of willingness to control' and 'actual level of lecturers' control'), the other part refers to the emotional effects of students' cheating ('degree of lecturers' disappointment' and 'degree of trust towards students'). We should emphasize that this emotional effect was mentioned by most of the interviewees, as the consequence of student cheating. Furthermore, this is the only field where feedback loops emerged as raising the 'level of cheating' leads to a lower 'degree of trust towards students'. This moves the 'level of willingness to control by lecturers' in the reverse direction, i.e. it will rise (further). This, in turn, leads to a higher 'actual level of lecturers' control', with the consequence of a lower 'level of cheating'. Hence, this is a self-restraining loop, which will mitigate the effect of the starting variable (here, the level of cheating).

Additionally, another feedback loop could be detected because the 'actual level of lecturers' control' has a positive effect on the 'perceived level of lecturers control' (as seen by students), which will decrease the 'level of cheating'. This means, that this feedback loop is a self-restraining loop, as well.

5 Discussion

Our review of the literature found that the massification of higher education had a significant impact on academic culture and it is also a causal factor in the perceived level of cheating. Despite the high levels of autonomy described in the literature, there seems to be a potential for a strong sense of powerlessness as staff are obliged to deal with high student numbers, whilst perceiving that the higher number of students leads to a higher workload, coupled with a greater likelihood of cheating, as exam rooms are filled, there is less personalization and less control over large classes.

If academic culture involves "shared ways and views … to make their ills bearable and to contain their anxieties and uncertainties', then a sense of powerlessness and an accentuated struggle to manage classes and cheating may in fact lead to greater sharing of values and norms, which potentially could lead to a stronger academic culture, as the behavioral rules, rituals, beliefs and traditions develop in the way cheating is handled and are more widely shared across academic staff.

The issue of control came across as an important causal factor in the lecturers' CLD. If we look at control through cultural lenses on an organizational level, control and stability relate to the hierarchical culture type (Cameron and Quinn, 2006). Empirical research has found that this type of organisational culture is characteristic of higher education institutions in general (Trivellas and Gerdenidou, 2009), and the organisation at the focus of this study (Heidrich et al., 2016) in particular has been found to have a hierarchical culture. This seems to indicate a need for tight control, and conversely the absence thereof may be perceived as a certain degree of weakness, leading to the perceived opportunity to cheat.

6 Conclusions

Our findings highlight commonalities between external impacts on both academic culture and cheating. Massification has an impact on both, especially with regard to the need for control or, at the very least, the lecturers' perceived ability to control. Staff indicated a certain sense of powerlessness, in contrast to the autonomy that seems inherent in academic culture. The lack of control and powerlessness combine to present a situation similar to that experienced in change processes such as mergers. In these instances, staff tend to bind more strongly together, leading to the potential for a stronger academic culture as a result of (perceived) cheating behaviour.

As a final note, we would like to consider the methodology employed. We used a CLD as a means of facilitating our comprehension of the workings of cheating within academic culture. The resulting causal chains and causal loops have certainly aided in the visualization of key areas. However, some of the richness of the data is 'lost in translation'. Our diagrams could be improved by distinguishing between perceived major and minor causes and effects. Some form of rating system, similar to that used in Lewin's (1951) forcefield analysis would certainly aid in visualising holistically the strength of each perceived cause and its effect. The CLDs are certainly a good starting point in creating models and simulating the knock-on effects of certain actions.

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Matild SÁGI, Marianna SZEMERSZKI

Reforms in Teaching Professions and Changes in Recruitment of Initial Teacher Education in Hungary

Abstract

In our analysis, we explore changes in the (self-)selection of applications for the teacher track of higher education in Hungary between 2013 and 2016. For this analysis, the official database of higher education entry register was used. Data show that since 2013 a somewhat larger proportion of young people have applied for entrance to teacher education than previously: widening the selection base of higher education. Besides descriptive analysis, multinomial logistic regression models were applied to disclose the potential effects of time elapsed since the introduction of massive educational reforms. The year of application for higher education was included as an explanatory dummy variable (with the reference category of 2013), while our dependent variable refers to the combination of the main application tracks for tertiary education. Our main result is that the time elapsed since the introduction of educational reforms seems to have a significant positive effect on admission to both long-cycle and BA level initial teacher education relative to the straightforward path of the non-teacher track of HE application and admission.

1 Conceptual framework

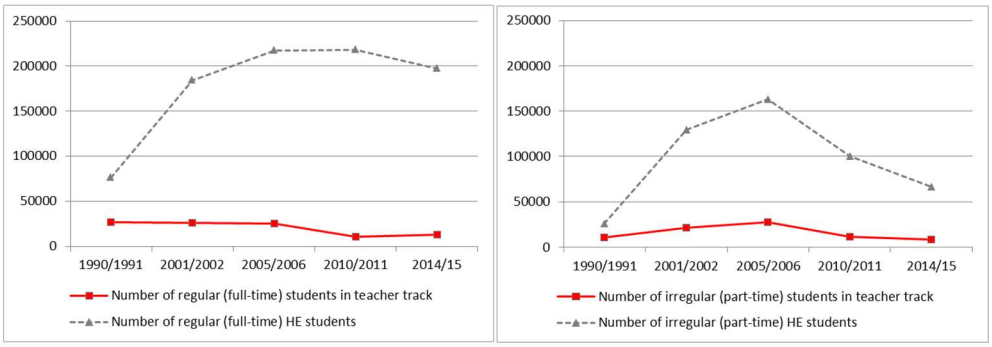
During the last decades, improving school effectiveness has become an emerging objective of education reform strategies around the world. Cross-national comparative studies pointed out that besides family background, the educational performance of students is mainly determined by the quality of the teachers, so good performance of the educational system requires the joint realization of three factors: (1) the right people should become teachers; (2) they should be trained to become effective teachers, and (3) the system should ensure every child the highest quality education possible

(Mourshed et al., 2010). Thus, recruiting capable and motivated students into the initial teacher education is essential for quality teaching.

Attracting appropriate and talented candidates to this career and keeping them on this track has become more difficult, and it is possible to observe an increasing teacher shortage in many countries. Teacher education programs are often considered by candidates as a second or third option, especially in the case of candidates with weaker performances. This, in turn, leads to the fact that the number of graduates who start teaching falls short of the expectations. Countries with successful and unsuccessful programs differ in their selection strategies and opportunities. Successful countries are selective in admitting applicants (one in six applicants are admitted to teacher training programs in Singapore and one in ten in Finland) while less successful systems allow great numbers of candidate teachers to obtain their academic degrees leaving the selection process to schools. (Eurostat, 2012; European Commission/EACEA/Eurydice, 2013; European Commission 2014; OECD, 2016).

Although the number of HE students increased dynamically in Hungary after 1990, the expansion in teacher education was very moderate. Even during the period of largest growth the number of students in regular (full-time) initial teacher education decreased slightly, while the enlargement in irregular (part-time, often post-graduate) teacher training was restrained. This higher education expansion reached its peak around 2004-2005, when the total number of full-time students remained almost steady, while the number of part-time students decreased (*Figure 1*).

Figure 1 Changes in the number of full-time and part-time students in Hungarian HE overall and in initial teacher education, 1990-2015



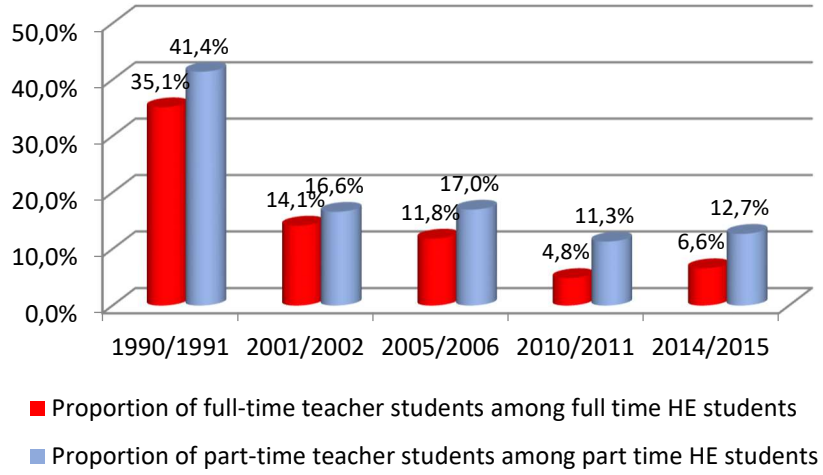
Source: Official register of HE students (www. oktatas.hu)

The proportion of students studying in the field of teacher training declined after 1990. The proportion of teacher trainees dropped dramatically even among part-time

students during the period of expansion, while enormous deterioration occurred in full-time initial teacher education (*Figure 2*).

The changes can be explained by the cumulative effect of two factors: (1) the expansion affected the different fields of studies differently, there was a greater demand for non-teacher fields (e.g. economics, information technology or social sciences), (2) the structure of degree programs changed: until 1990 it was only possible to study in the field of 'arts and humanities' or 'sciences' in the framework of teacher training.

Figure 2 Changes in the proportion of students in teacher education among Hungarian HE students, 1990-2015



Source: Official register of HE students (www. oktatas.hu)

Research on this period showed that teacher training was often chosen as a "reserve" higher educational track, the number of people opting for teacher training as their first choice decreased, the entrance scores of 'second-option' applicants were below the national average, and these applicants were less motivated and committed to the teacher profession. (Nagy, 2001; Nagy, Varga, 2006; Kárpáti, 2009) Among the young people showing interest in teacher education one was more likely to find candidates with poorer secondary school performance, especially those willing to study at college level. (Varga, 2007)

In September 2006, a three-cycle degree structure was introduced in teacher training as part of the Bologna process, as was the case in most other study fields in Hungary. A three-year-long BA or BSc course in arts or sciences was followed by a two-

year-long MA program in teacher training. As a result, the number of students in teacher training decreased further and so did the weight of teacher training in higher education (Veroszta, 2012; Kállai, Szemerszki, 2016; Szemerszki, 2016). This decrease in numbers since the early 2000's has led to a teacher shortage, especially for science subjects (Sági, Varga, 2011). After completing bachelor's level education, choosing the teacher track at master's level was strongly affected by negative self-selection mechanisms: students with good educational achievements were typically oriented towards non-teacher education at master's level, while students with poorer grades were almost equally likely to apply for a teacher training program, or else they end their higher education at a lower level. (Ercsei, 2011; Sági, Ercsei, 2014)

Detecting the problem of a huge teacher shortage (especially in some fields) led to further discussion of teacher training and university admission policies. Recently, several major reforms have been introduced in Hungary with the intention of making teaching professionmore attractive:

- The new Higher Education Act, which came into force in 2011, provides for the initial education of lower and upper secondary school teachers to be supplemented by a two-semester traineeship.
- Since September 2013, the training of pre-primary and primary school teachers has remained at BA level (six or eight semesters), but the education of lower secondary school teachers and upper secondary school teachers has become an undivided long-cycle program ending in a master's degree.
- In addition, students entering long-cycle teacher programs have also had to take a verbal admission exam to check their motivation since 2013.
- Teacher training in its undivided form commenced in the 2013/14 academic year and will run, based on an outgoing scheme, parallel with the Bologna "consecutive" training until September 2017. The admission procedure and admission requirements are identical with those of the programs in the three-cycle system. Applicants follow the same procedure and they can apply for more programs at the same time. The calculation of the scores needed for admission, regulations on extra scores and other rules are also identical.
- A teacher promotion scheme (teacher career model) was introduced in September 2013, which (as opposed to the earlier remuneration system) links teacher salaries not only to qualifications (degrees) and the number of years spent in the profession but also to the evaluation of the teacher's work. Qualification procedures assessing teacher performance started in 2014. The new scheme is accompanied by a gradual pay rise for teachers between 2013

and 2017. The measure aims to remedy the long-standing problems of low remuneration and social standing for teachers.

- Teacher students are the target group of the Klebelsberg Scholarship, which was also introduced in 2013. The explicit aim of this scholarship is to steer highly talented secondary school students into initial teacher education. The additional aim of the scholarship is to ensure teacher supply for less developed regions and/or less frequented subjects in initial teacher education. The amount of the scholarship depends on the applicant's major and the region they are ready to work in after finishing higher education.
- At the same time, a centralized external pedagogical evaluation of teachers, pre-primary school teachers, school and pre-primary school heads and institutions (pre-schools, primary and upper secondary schools) was introduced in 2014. Each school/kindergarten (public, private and denominational) is inspected every five years. The inspection is supportive; no sanctions follow it in case of weaknesses. (See details: European Commission, 2015)

2 Research question

In summary, three fundamental acts in 2011 – the Act on Public Education (Act CXC of 2011), the Act on Higher Education (Act CCIV of 2011) and the Act on Vocational Training (Act CLXXXVII of 2011) – significantly transformed the organization, maintenance, financing and governance of the Hungarian education system. This includes both public and higher education, especially the social condition of teachers and students in initial teacher education. 2013 was a milestone with the introduction of these changes.

An obvious research question would be whether implementing these numerous educational reforms resulted in attracting the best qualified, motivated and committed young boys and girls to teacher education. At the same time, there are several well-known reasons why it is impossible to analyze the real effect of reforms on the recruitment process – so we do not aim to find any causal effect of them on it. Our research question is simpler: we would like to reveal whether there was any systematic change in the (self-)selection process of initial teacher education among new secondary school leavers between 2013 and 2016: when, besides several other changes in the social environment, the education reform started to operate.

Our main hypothesis is that, during the examined period, the (self)-selection gap between teacher and non-teacher tracks of higher education narrowed slightly but still exists.

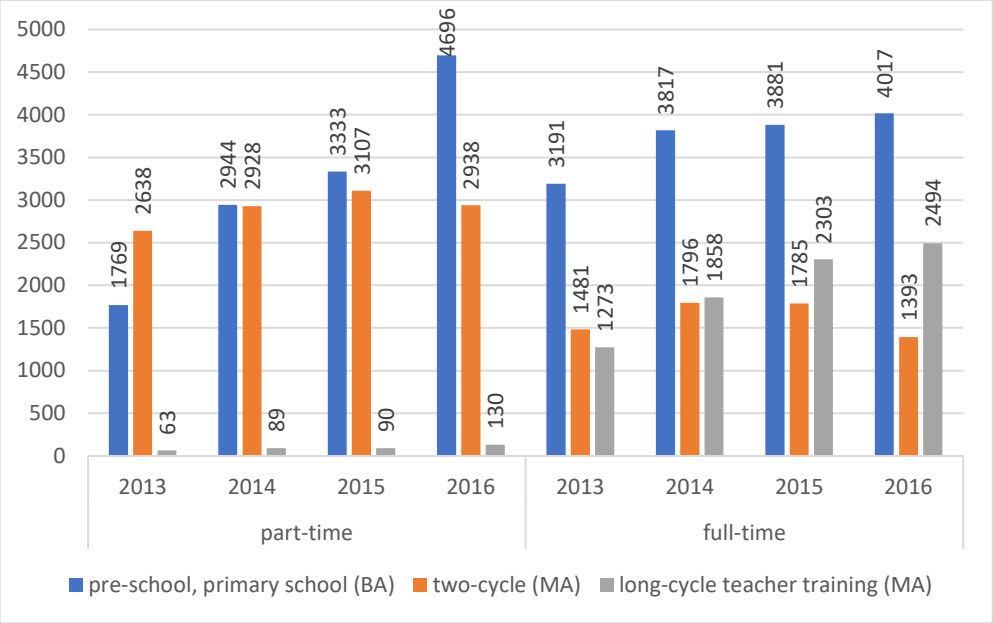
3 Data

In our analysis, we try to recover changes in the (self-)selection of applications for the teacher track of higher education in Hungary between 2013 and 2016. For this analysis, the integrated official database of the higher education entry register (official big database "FELVI") from 2013, 2014, 2015 and 2016 was used. The Hungarian higher education system applies a nationwide centralized online admission system. Applications can be submitted twice a year by designated deadlines in the framework of a central admission procedure. This central procedure makes it possible for researchers to access data from this procedure in an anonymized database. It includes some personal data of the applicants, basic information about their previous school results, secondary school leaving examination results, foreign language proficiency certificate (if any), special disadvantaged status (if any) and, last but not least, the full list of their higher education applications and the description of the applicant's final admission.

In Hungary, a secondary school leaving examination is a general requirement for admission to higher education. The examination criteria are defined differently for each bachelor and long-cycle programs. The law ensures equal opportunities for disadvantaged students, for persons with disabilities and for those nursing their children by awarding extra points in the admission procedure. The government annually publishes the capacity of each institution broken down by fields and the minimum scores required for admission to that field. A central computerised algorithm ranks the applicants of each programme and provides a list of successful applicants. Each applicant can apply to a maximum of 12 places, but some applicants mark only one to three places on the application form.

Since 2013, when the long-cycle teacher training was introduced, there has been a constant increase in the number of first-place applicants in new teacher training programs and a decrease in terminated MA-programs of the former two-cycle teacher training. After 2013, the number of applicants at BA level teacher education (which is mainly for pre-school and primary school teachers) also increased and has remained almost steady since then. This increase can also be connected to recent reforms. The increase in application for BA level teacher education in 2016 seems to be definitely connected to the introduction of the teacher career model: since January 2016, infant educators working in nurseries have also been involved in the career model system, therefore those working on this field are interested in obtaining a higher education degree. That is the reason why the number of applicants of BA level teacher education soared this year, especially in part-time training (*Figure 3*).

Figure 3 Number of first-place applicants in initial teacher training



Source: FELVI database, Educational Authority

Data and several studies show huge differences between full-time and part-time students/programs and there are differences according to first-cycle and second-cycle programs (Veroszta, 2010; Szemerszki, 2012). Therefore, we restricted our analysis only to the first-cycle (either BA level or undivided long-cycle) teacher programs of higher education and to those who finished their secondary school studies the same year as applying for higher education.

4 Method

Besides the usual descriptive analyses, three multinomial logistic regression models were applied for disclosing the potential effects of time spent since the introduction of a batch of educational reforms:

- **Model 1:** First placed application for HE in the year of finishing secondary education;
- **Model 2:** Final result of application procedure in the year of finishing secondary education;

- **Model 3:** Tracks and results of application procedure in the year of finishing secondary education.[3]

In all three models the **date of student application for higher education (year)** was involved as a **main explanatory dummy variable** (with the reference category of 2013), while gender (male), type of secondary school (grammar school, with the reference category of secondary vocational school), size of locality (town, village, with reference category of city), special disadvantaged status and maximum value of entrance score[4] were also involved in our models as explanatory variables **(control variables).**

5 First placed applications for HE in the year of finishing secondary education - results from Model 1

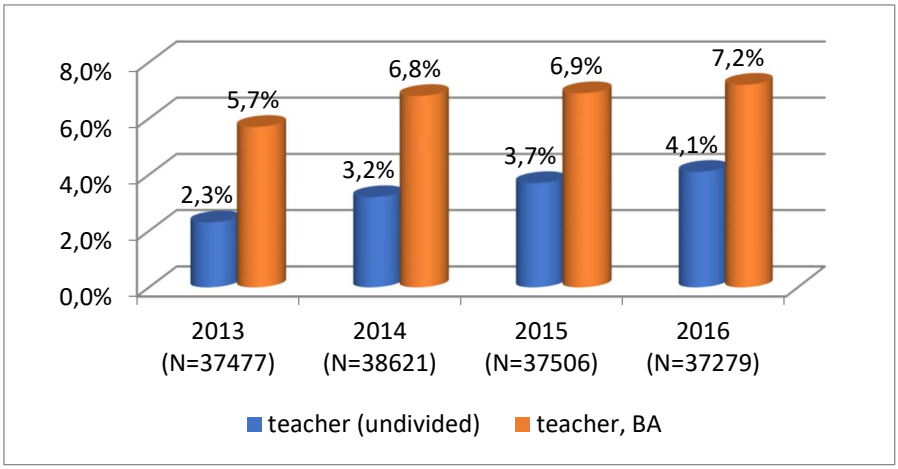
5.1 Descriptives

Our data revealed that the proportion of students who applied first in the application ranking for teacher tracks of higher education (both BA level and undivided long-cycle level) among the applicants in the year of finishing secondary education has been increasing over time since the introduction of the educational reform concerning teacher education and of the teacher professional career model. Consequently, since 2013 the recruitment base of initial teacher education seems to be widening (*Figure 4*). At the same time, entrance scores of those applicants have trendless changes over time (*Figure 5*). Based on these results we cannot conclude either that an increasing mass of talented students decide to choose teacher education instead of other high-demanded HE education tracks (that would lead to an increase in entrance scores), or that a growing number of less successful students decided to apply for teacher education instead of keeping themselves out of HE application (that would lead to a decrease in entrance scores).

[3] See detailed in Appendix.

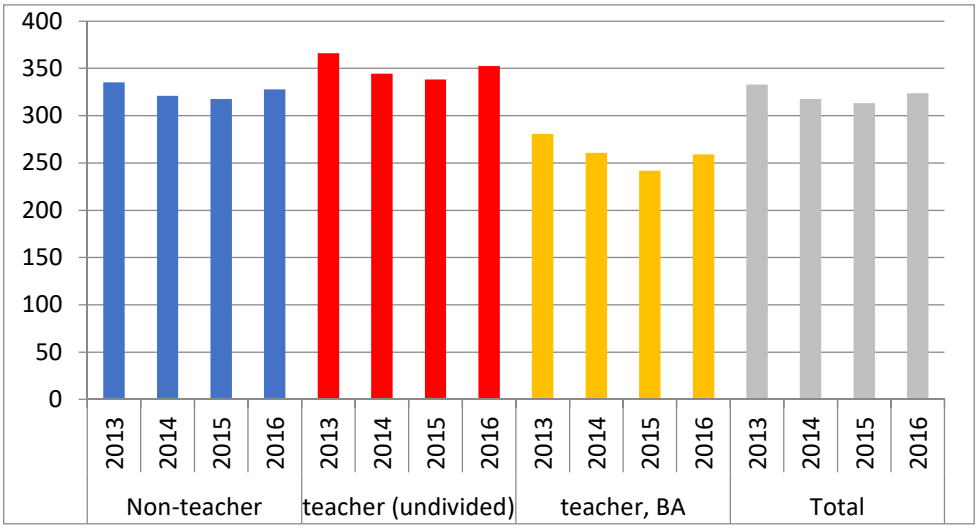
[4] As an applicant may apply for several programs where the minimum requirements are different, we used the maximum points scored by each applicant.

Figure 4 Changes in the proportion of teacher tracks among first placed applications to HE, 2013-2016



Source: FELVI database, Educational Authority

Figure 5 Changes in mean entrance scores (max) by type of first placed application, 2013-2016



Source: FELVI database, Educational Authority

5.2 Results of multinomial logistic regression Model 1

The coefficients of control variables in the first multinomial regression model built to explore the possible effects of education reforms on choosing undivided (long-cycle) initial teacher education at the first place of HE application ranking rather than other HE studies reveals that teacher education is more attractive for the new secondary school leaver girls who have a less advantageous social position. A boy is about half as likely as a girl to apply for undivided teacher HE instead of a non-teacher track; it is somewhat more likely for someone who graduated from a secondary grammar school rather than secondary vocational school to apply for undivided teacher HE instead of a non-teacher track; inhabitants of smaller localities are more likely to apply for a teacher track of HE rather than for a non-teacher track than those of larger cities; officially registered disadvantaged students are more likely than others to apply for a teacher track of HE rather than for a non-teacher track. Applications for HE undivided teacher tracks seems not to be affected seriously by the (maximum value of) entrance scores: although the effect is significant, the odds ratio is very close to the neutral value of 1. Concerning our main research question, the time elapsed since the introduction of educational reforms seems to have a significant effect: The probability of application for long-cycle (undivided) teacher tracks of HE rather than for non-teacher tracks is increasing over time, compared to 2013. It is almost two times more (1.925) likely that a youth fresh out of secondary school applies for undivided teacher HE studies relative to non-teacher tracks in 2016 than in 2013 (Appendix, Table A2).

Concerning the case of first-place BA level applications, the general trend of our results seems to be about the same as for applications for undivided teacher tracks. However, applications from less advantageous social position (girls rather than boys, from little villages rather than cities, officially registered disadvantaged family background) are more marked, while the effect of time elapsed since the introduction of educational reforms is significant but more moderate than in the case of undivided teacher tracks (Appendix, Table A2).

To sum up, the time elapsed since the introduction of educational reforms in Hungary is a significant 'per se' effect on the increasing probability of choosing initial teacher education at the first place of HE application ranking rather than other HE studies.

6 Final results of application procedure in the year of finishing secondary education – results from Model 2

In the second round of the present analysis, we examined possible determinants of the final results of new secondary school leavers' application for Hungarian higher education, with special focus on the effect of time elapsed since the introduction of

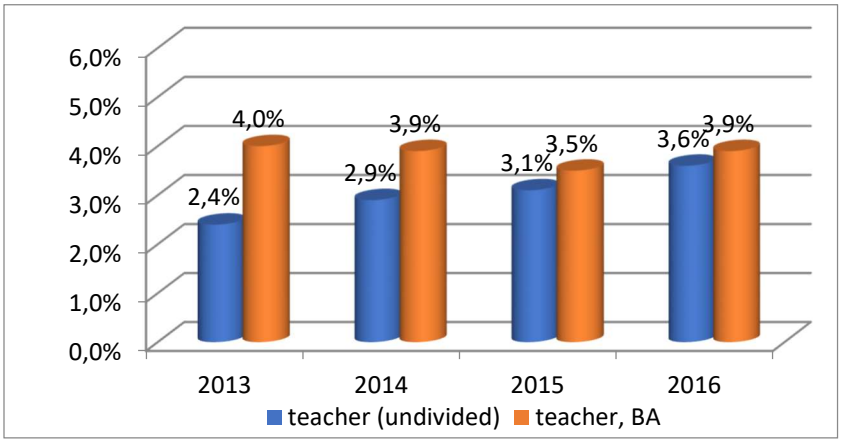
educational reforms on the successful application for teacher tracks. The dependent variable of our second model contains four categories of 1) applicants admitted to undivided teacher track; 2) applicants admitted to BA level teacher track; 3) not admitted anywhere; with the reference category of 4) applicants admitted to non-teacher track. The explanatory variables were the same as in the case of Model 1.

6.1 Descriptives

Concerning the final results of HE application of the new secondary school leavers, our data reveal that the results of finally admitted applicants to undivided (long-cycle) teacher education are increasing since the introduction of education reforms while they stay steady over time for the BA level track of teacher education, both among all applicants and admitted applicants (*Figure 6* and *Figure 7*).

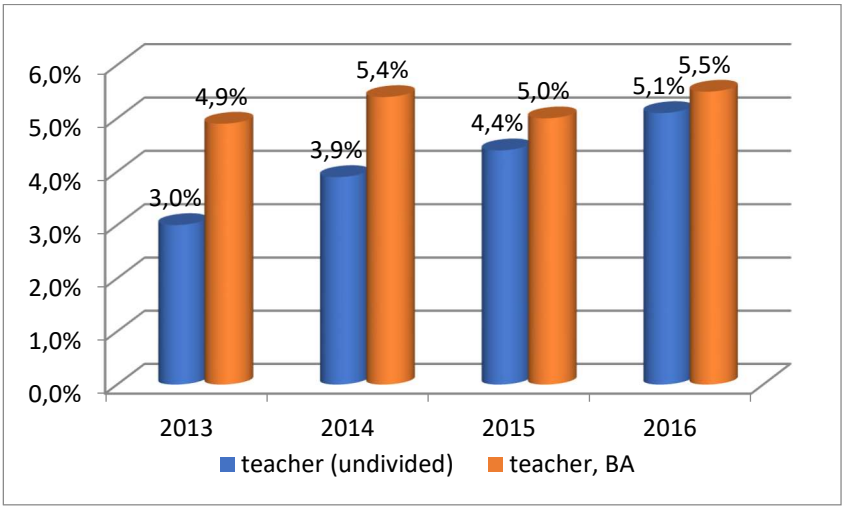
The mean entrance scores of admitted applicants increased somewhat – but only because of changes in the minimum required scores specified by law. The mean entrance scores of youths admitted to undivided teacher tracks is somewhat above not only the average of admitted students but even above the average of students who were admitted to the non-teacher tracks of HE in every examined year. At the same time, the mean entrance score of admitted applicants to BA level teacher education is below the average of admitted students in every year, but the trend also seems to be increasing (Figure 8). Consequently, our data reveal that parallel to the widening recruitment base of initial teacher education (see *Figure 4*) and the increase in the admission rate of initial teacher education, competition is becoming somewhat stronger both in long-cycle and BA level teacher education entrance.

Figure 6 Changes in the proportion of finally admitted applicants to teacher tracks among all applicants, 2013-2016



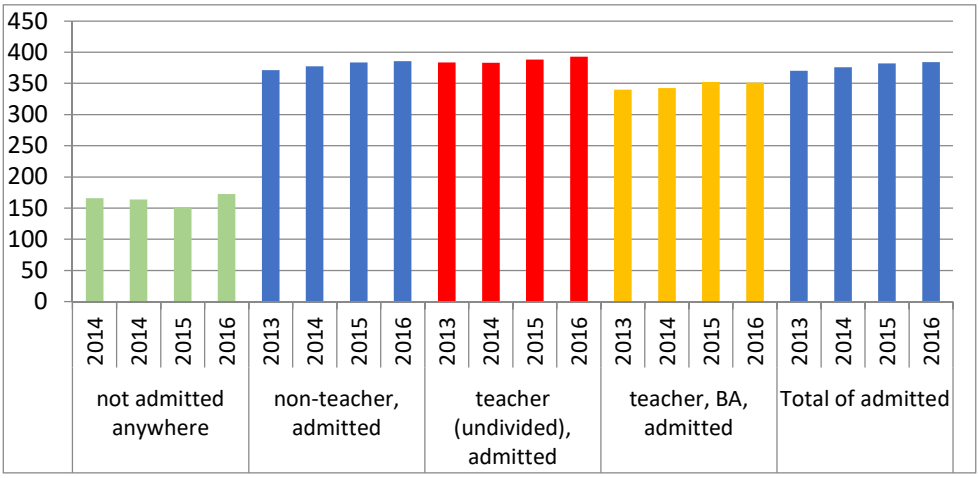
Data source: FELVI database, Educational Authority.

Figure 7 Proportion of finally admitted applicants to teacher tracks among admitted applicants, 2013-2016



Data source: FELVI database, Educational Authority.

Figure 8 Changes in mean entrance scores (max) by final admission, 2013-2016



Data source: FELVI database, Educational Authority.

6.2 Results of multinomial logistic regression Model 2

The multinomial logistic regression model of final admission of new secondary school leaver applicants to HE reveals similar causal relationships that we found in Model 1, which was built for first-placed applications. Girls, the inhabitants of villages, and disadvantaged students are more likely to be admitted to the teacher tracks of HE than to non-teacher tracks; students who graduated from secondary grammar schools are in a more favourable entry position than secondary vocational school students, and the causal relationship between social-demographic status and final admission to the teacher track of HE is stronger in the case of admission to BA level than in long-cycle (undivided) teacher tracks relative to admission to the non-teacher tracks of higher education. There is not a huge difference between the effect of entrance scores of students who were admitted to the undivided or to the BA level of teacher tracks relative to students who were admitted to the non-teacher tracks of higher education. Although the effects are significant, the odds ratios are very close to 1 (Appendix, Table A3). At the same time, living in smaller localities (which are far from the seats of universities) is less likely to lead to an unsuccessful application for HE than to a successful one – probably because students living far from the cities and having less chance of being admitted are less likely to apply for higher education compared to others who live in the seat of universities. (Appendix, Table A3).

Concerning our main research question**, the time elapsed since the introduction of educational reforms seems to have a significant effect both on admission to long-cycle and to BA level initial teacher education.** The probability of application for long-cycle (undivided) teacher tracks of HE rather than for non-teacher tracks is increasing over time, compared to 2013. It is 1.7 times more likely that a fresh secondary school leaving applicant was admitted to undivided teacher HE studies relative to admission to non-teacher tracks in 2016 than in 2013 (Appendix, Table A3), while the proper odds ratio is about one and a half (1.428) in the case of admission to BA level teacher education (Appendix, Table A3). At the same time, the effect of time is increasing, and it seems to be much stronger in the case of non-admission (relative to the admission of applicants to non-teacher tracks of HE).

All in all, the selection gap between admissions to non-teacher and long-cycle teacher tracks of higher education seems to dissolve while it tends to be narrowing in the case of BA level initial teacher education in the period of 2013 and 2016.

7 Tracks and results of the application procedure in the year of finishing secondary education – results from Model 3

Finally, we have built a multinomial logistic regression model for the dependent variable which covers the whole application process. This model focuses on cases where the

teacher track is considered by applicants as a reserve option. Because of a large number of possible combinations of application and admission tracks, merged variables of long-cycle and BA level education tracks were used for this analysis as dependent variables (see Appendix, Table A1).

In *'teacher-ended trajectories*' (where the first ranked application was either teacher education or not, but finally the applicants were admitted to initial teacher education) our analysis reveals similar causal effects of explanatory variables on teacher-related tracks to previous models of application or admission: Girls, the inhabitants of small villages and disadvantaged students are more likely to be admitted to the teacher tracks of HE than to non-teacher tracks; students of secondary grammar schools are in a more favourable position than secondary vocational school students. The effect of a less advantageous social-demographic status seems to be slightly stronger in the case of *'first chosen-first admitted'* paths than in the case when prior to the final admission to teacher education non-teacher application(s) had occurred. These two different paths of the teacher-ended admission process are hardly affected by the entrance scores of applicants, and the probability of admission to teacher-ended tracks of HE (relative to that of a straightforward path when the first-place application for a non-teacher track of HE was accepted) is increasing over time (compared to 2013). **Practically, only minor differences are revealed between the causal effects of the 'straightforward teacher track' and the 'substitutional teacher-ended HE path'** (Appendix, Table A4).

The *'teacher–another teacher–yet another teacher–finally teacher'* trajectory forms a special subgroup of teacher-ended trajectories. This path seems not to be affected by the type of locality, entrance score, disadvantaged social status, and not even by the time elapsed since educational reforms (Appendix, Table A4). Our hypothesis is that strongly committed applicants – a group well-known from previous research with the characteristics of very early commitment as well as several teachers among parents, grandparents and strong-tied relatives (Nagy 2001; Paksi et al 2015) – form the members of this special group. Unfortunately, the official administrative data do not contain information about either the commitment or family background of applicants, so we are not able to test this hypothesis at present.

The results concerning *'successful non-teacher-ended trajectories'* (where the first ranked application was either teacher education or not, but finally the applicants were admitted not to the initial teacher education of HE) differs a lot from teacher-ended trajectories. Among them, the *'teacher–non-teacher path'* (as opposed to the straightforward non-teacher track) seems to be affected mainly by a disadvantaged background, villages and poorer educational achievement in secondary school, and the trendless effect of years. (Appendix, Table A4.). The other group named *'non-teacher-non-teacher path'* (relative to the straightforward non-teacher track) is affected negatively

by small localities (compared to cities) and also by registered disadvantaged family background; the effect of years is steadily strong; and the odds ratio of entrance scores is significantly below 1 (Appendix, Table A4).

Finally, the newly secondary school leavers who applied but were not accepted anywhere show the same characteristics as we have found previously (at Model 2): living in cities (close to the seat of universities), being disadvantaged and having lower entrance scores is more typical of this unsuccessful group than of the straightforward non-teacher track. The effect of time elapsed since 2013 is also increasing in this group, which can be explained by the decreasing number of generally admitted applicants in HE compared to 2013 (Appendix, Table A4).

8 Summary

In the last two decades, several changes took place in Hungary concerning initial teacher education. Beside this, since 2013 several major reforms have been introduced in Hungary with the purpose of making the teaching profession more attractive. In our analysis, we tried to reveal changes in (self-)selection of applications to the teacher track of higher education in Hungary between 2013 and 2016. For this analysis, the official database of higher education admissions register was used.

Besides the usual descriptive analysis, we applied multinomial logistic regression models to the different application and admission trajectories for teacher and non-teacher related tracks of higher education entrance to disclose the potential effects of time passed since the introduction of several educational reforms. Our main results are as follows:

- The proportion of first placed application for teacher tracks of HE has been increasing since 2013.
- The probability of admission to teacher tracks of HE (rather than to non-teacher tracks) is increasing over time (comparing to 2013).
- Average entrance scores of students admitted either to teacher-tracks or to non-teacher track of HE have increased slightly since 2013, which is consistent with the changes in minimum required scores.
- Between 2013 and 2016 the (self-)selection gap between teacher and non-teacher tracks of higher education narrowed slightly, but it still exists.
- There is a huge “per se” period effect (the effect of time since educational reforms were introduced) both on teacher-related and non-teacher-related HE application and admission paths, with the exception of the cases of unsuccessful applicants.

- The time elapsed since the introduction of educational reforms seems to have a significant positive effect on admission to both long-cycle and BA level initial teacher education (relative to the straightforward path of the non-teacher track of HE application and admission).

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Appendix

Table A1 Dependent variables of the causal models

Dependent variables of the causal models

Model 1 ***First placed application for HE in the year of finishing secondary education:***

- Not teacher *(reference category)*
- Teacher, long-cycle undivided program[5]
- Teacher, BA level[6]

Model 2 ***Final result of application procedure in the year of finishing secondary education:***

- Not accepted anywhere
- Accepted to non-teacher program *(reference category)*
- Accepted to long-cycle undivided teacher program[7]
- Accepted to BA level teacher program[8]

Model 3 ***Tracks and results of application procedure in the year of finishing secondary education:***

- First application: teacher (either BA or undivided level); accepted
- First application: non-teacher; accepted *(reference category)*
- First application: non-teacher; non-accepted, Final: teacher (either BA or undivided level); accepted
- First application: non-teacher; non-accepted, Final: non-teacher; accepted
- First application: teacher (either BA or undivided level); non-accepted, Final: teacher (either BA or undivided level); accepted
- First application: teacher (either BA or undivided level); non-accepted, Final: non-teacher; accepted
- Not accepted anywhere

[5] Program that leads directly to a master's degree for ISCED 2 and ISCED3 level teachers
[6] For ISCED0 and ISCED1 level teacher training as well as for some non-teacher staff in education
[7] Program that leads directly to master's degree for ISCED 2 and ISCED3 level teachers
[8] For ISCED0 and ISCED1 level teacher training as well as for some non-teacher staff in education

Table A2 Parameter estimates of a multinomial logistic regression model for first placed application for HE. Only the significant coefficients are shown.

		B	Std. Error	Exp(B)
Teacher, undivided (ref: non-teacher)	Intercept	-4.536	0.069	
	male	-0.383	0.03	0.682
	grammar school	0.143	0.037	1.154
	town	0.277	0.035	1.319
	village	0.412	0.036	1.510
	disadvantaged	0.259	0.058	1.296
	entrance score (max)	0.002	0	1.002
	yr 2014	0.387	0.045	1.472
	yr 2015	0.536	0.044	1.708
	yr 2016	0.654	0.044	1.923
Teacher, BA (ref: non-teacher)	Intercept	-1.148	0.04	
	male	-3.085	0.05	0.046
	grammar school	0.035	0.025	1.036
	town	0.402	0.027	1.494
	village	0.547	0.027	1.728
	disadvantaged	0.392	0.04	1.480
	entrance score (max)	-0.005	0	0.995
	yr2014	0.131	0.032	1.140
	yr2015	0.156	0.032	1.169
	yr2016	0.262	0.032	1.299

Data source: FELVI database, Educational Authority.

Table A3 Parameter estimates of a multinomial logistic regression model for final admission to HE. Only the significant coefficients are shown.

		B	Std. Error	Exp(B)
not admitted anywhere (ref: non-teacher)	Intercept	7.072	0.058	
	male	-0.464	0.023	0.629
	grammar school	0.24	0.025	1.271
	town	-0.243	0.026	0.784
	village	-0.315	0.027	0.73
	disadvantaged	0.306	0.053	1.358
	entrance score (max)	-0.029	0	0.972
	yr 2014	0.732	0.031	2.08
	yr 2015	0.867	0.033	2.379
	yr 2016	0.948	0.032	2.58
teacher, undivided (ref: non-teacher)	Intercept	-4.478	0.117	
	male	-0.473	0.032	0.623
	grammar school	0.201	0.042	1.222
	town	0.29	0.037	1.337
	village	0.429	0.038	1.536
	disadvantaged	0.256	0.06	1.292
	entrance score (max)	0.002	0	1.002
	yr 2014	0.291	0.046	1.338
	yr 2015	0.414	0.045	1.513
	yr 2016	0.572	0.044	1.772
teacher, BA (ref: non-teacher)	Intercept	0.466	0.082	
	male	-3.233	0.072	0.039
	grammar school	0.201	0.035	1.223
	town	0.307	0.035	1.359
	village	0.467	0.035	1.596
	disadvantaged	0.477	0.049	1.611
	entrance score (max)	-0.009	0	0.991
	yr 2014	0.209	0.039	1.233
	yr 2015	0.229	0.04	1.257
	yr 2016	0.356	0.039	1.428

Table A4 Parameter estimates of a multinomial logistic regression model for application and admission process to HE.

In. this model "teacher" refers to the fused category of long-cycle (undivided) and BA level initial teacher education. Reference category of dependent variable: First application: non-teacher; accepted. Only the significant coefficients are shown

		B	Std. Error	Exp(B)
First application: teacher (ped); accepted	Intercept	0.673	0.084	
	male	-1.646	0.03	0.193
	grammar school	0.198	0.031	1.219
	town	0.248	0.03	1.281
	village	0.385	0.03	1.47
	disadvantaged	0.394	0.044	1.484
	entrance score (max)	-0.008	0	0.993
	yr 2014	0.314	0.035	1.369
	yr 2015	0.406	0.035	1.5
	yr 2016	0.561	0.034	1.752
First application: non-teacher (non-ped); non-accepted, Final: teacher (ped) accepted	Intercept	-1.321	0.203	
	male	-1.574	0.075	0.207
	grammar school	0.365	0.081	1.44
	town	0.298	0.072	1.347
	village	0.307	0.074	1.359
	disadvantaged			
	entrance score (max)	-0.007	0.001	0.993
	yr 2014			
	yr 2015	0.306	0.085	1.358
	yr 2016	0.441	0.083	1.554
First application: teacher (ped); non-accepted, Final: teacher (ped) accepted	Intercept	1.374	0.176	
	male	-2.398	0.105	0.091
	grammar school	0.476	0.085	1.609
	town			
	village			
	disadvantaged			
	entrance score (max)	-0.016	0	0.985
	yr 2014	0.581	0.09	1.788
	yr 2015	0.542	0.095	1.719

		B	Std. Error	Exp(B)
	yr 2016	0.553	0.095	1.739
First application: non-teacher (non-ped); non-accepted, Final: non-teacher (non-ped) accepted	Intercept	2.425	0.048	
	male	-0.576	0.013	0.562
	grammar school	0.073	0.017	1.075
	town	-0.135	0.016	0.874
	village	-0.225	0.017	0.798
	disadvantaged	-0.129	0.03	0.879
	entrance score (max)	-0.007	0	0.993
	yr 2014	0.191	0.018	1.211
	yr 2015	0.202	0.019	1.223
	yr 2016	0.186	0.019	1.205
First application: teacher (ped); non-accepted, Final: non-teacher (non-ped) accepted	Intercept	2.557	0.145	
	male	-2.194	0.088	0.111
	grammar school			
	town	0.33	0.075	1.391
	village	0.288	0.076	1.334
	disadvantaged	0.559	0.106	1.749
	entrance score (max)	-0.019	0	0.981
	yr 2014	0.562	0.087	1.754
	yr 2015	0.852	0.086	2.345
	yr 2016	0.722	0.089	2.059
Not accepted anywhere	Intercept	9.271	0.067	
	male	-0.765	0.024	0.465
	grammar school	0.287	0.026	1.332
	town	-0.307	0.027	0.736
	village	-0.428	0.029	0.652
	disadvantaged	0.272	0.055	1.312
	entrance score (max)	-0.033	0	0.967
	yr 2014	0.856	0.033	2.354
	yr 2015	1.015	0.034	2.76
	yr 2016	1.083	0.034	2.954

Data source: FELVI database, Educational Authority.

Tamás JANCSÓ

The role of university identity and students' opinions of each other in the university's operation: through the example of Eötvös Loránd University Budapest

Abstract

There are many elements to relations within universities. In the case of a multi-campus university, the geographical space has importance in the connections between faculties. In addition, many other factors can play a role as well, such as the distance between disciplines, institution history, communication within the institution, or personal experiences. In this study, the focus will be on the university's identity and its students' opinions of each other. The question could arise: is the community of the Eötvös Loránd University more than just a single sum of its eight independent faculties?

University identity is powerful in the Eötvös Loránd University: the academic program identity is the strongest, followed by the faculty and university identity. Students' opinions of each other from different faculties may have an effect on the internal operation of the university. If there are negative stereotypes among students against students of another discipline, it may reduce the efficiency of the university through limiting the development of interdisciplinary relationships. The results show that this is an existing phenomenon in the Eötvös Loránd University.

1 Introduction

Higher education institutions can be distinguished by whether they are operating in one or many locations (single-campus universities and multi-campus universities).

A multi-campus university may have campuses in one settlement, in many settlements within one country, or even in many countries or on different continents. As part of the globalization of higher education, international branch campuses became more common - now this is an actively researched field of the higher education (Garrett, R. et al 2016).

A multi-campus university can be formed basically in two ways. Version one is when an existing institution is joined or attached to another higher education institute. In another variation, an institute for some reason – usually entering a new market – creates a new establishment (a branch campus or a satellite campus) in a different location from the home campus. In both cases, we can speak of voluntary action – in this case, the organizational merger is a result of an internal decision of the existing institution(s), hoping for different benefits. Alternatively, an internal motivation leads to create a branch campus in a different settlement or even in a different country. These events may be the results of external (typically governmental) initiatives as well. Of course, the question arises, what kind of relationships develop within an institution that operates in many locations. Based on international studies in the operation of a multi-campus university, the different organizational culture and the geographical distance can also be an obstacle (Harman, K. 2002; Norgård, J. D. – Skodvin, O-J. 2002).

Eötvös Loránd University (ELTE) is a multi-campus university and its faculty operates in many parts of Budapest. In the early 2000s, its institutional structure underwent many changes: new faculties have been established and two previously independent colleges became part of the university as faculties (Bárczi Gusztáv Faculty of Special Education and the Faculty of Primary and Pre-School Education). Now the Eötvös University has eight faculties (ÁJK – Faculty of Law, BGGyK – Bárczi Gusztáv Faculty of Special Education, BTK – Faculty of Humanities, IK – Faculty of Informatics, PPK – Faculty of Education and Psychology, TÓK - Faculty of Primary and Pre-School Education, TÁTK – Faculty of Social Sciences, TTK – Faculty of Science). Moreover, since the empirical research that we have processed in this paper, the higher education training sites in Szombathely have also become part of the Eötvös University – this settlement is about 220 kilometres from Budapest.

ELTE – a community of knowledge. This is the motto of Eötvös University, it has been used a lot in recent years. The question could arise: is the ELTE community more than just a single sum of its eight independent faculties? What kind of connections do they have between faculties with different historical pasts? How often do the students explore the opportunities of a great science university? We are looking for answers to these questions in this research.

We shall attempt to explore the wide range of factors of the internal operation and the internal network of a university. Some results have already been published (Jancsó T. 2016). Because of the geographer's research background, geographical space has a particular significance. After all, knowledge of our environment fundamentally determines our daily lives and our decisions. This is true to our movement or our behavior in a country or in a settlement, but this can be true also for an institute with considerable spatial extent.

2 Data and Sample

This research is based on a questionnaire that has been filled out by students from 7 to 22 May 2015 by face-to-face interviews at the university campuses. The survey contained basic demographic and training questions and a mental mapping task as well. Furthermore, we queried the knowledge and opinions about the university and faculties using closed-ended and open-ended questions during the interview.

A total of 677 full-time students filled out the questionnaire that has been shaped to a 600 person sample. During the sampling, the primary consideration was the faculty and gender, but the sample is broadly representative in other aspects (programs, degree levels, years) as well.

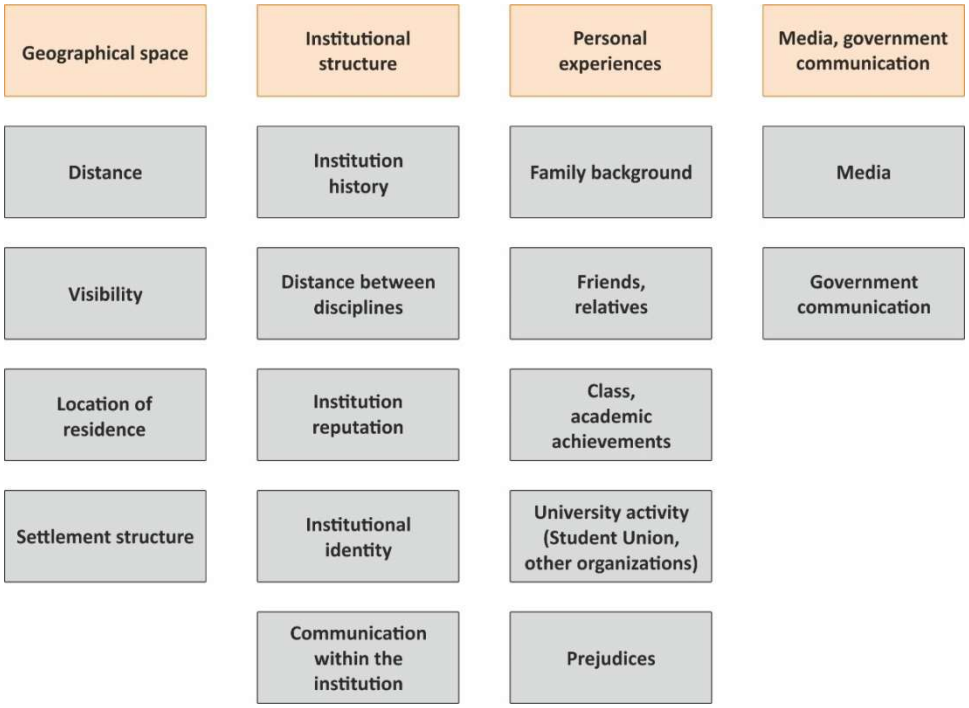
Table 1 Sample size by faculties and gender

	Number of students (October 2014)			Sample size (number of students)			Sample Proportion		
Faculty	**total**	**female**	**male**	**total**	**female**	**male**	**total**	**female**	**male**
of Law (ÁJK)	2 507	1 410	1 097	69	39	30	2,75%	2,77%	2,73%
of Special Education (BGGYK)	764	741	23	21	20	1	2,75%	2,70%	4,35%
of Humanities (BTK)	6 803	4805	1998	189	134	55	2,78%	2,79%	2,75%
of Informatics (IK)	1 972	277	1695	55	8	47	2,79%	2,89%	2,77%
of Education and Psychology (PPK)	1 860	1425	435	51	39	12	2,74%	2,74%	2,76%
of Primary and Pre-School Edu. (TÓK)	1 420	1356	64	39	37	2	2,75%	2,73%	3,13%
of Social Sciences (TÁTK)	1 908	1255	653	52	34	18	2,73%	2,71%	2,76%
of Science (TTK)	4 470	2218	2252	124	61	63	2,77%	2,75%	2,80%
ELTE Total	**21 704**	**13 487**	**8 217**	**600**	**372**	**228**	**2,76%**	**2,76%**	**2,77%**

3 Elements of the inside relations in the universities

In connection with the local milieu of a university, it is not an aim to create a general explanatory model, but rather to illuminate the elements of the general mechanism that define the behavior of the actors, the institutions and their environment (Meusburger, 2014). In the same spirit, we constituted the next figure that shows these key elements.

Figure 1 Key elements of the internal relations of universities



Source: Jancsó T. 2016

Mental mapping has not been used before to examine relations inside a multi-campus university, but there is a study that researches a single-campus university form using mental maps based on alumni students' drawings (Gieseking, J. J. 2013). Therefore the results are interesting, suggesting that the geographical space has importance in the connections between faculties. In addition, many other factors can play a role as well, such as the distance between disciplines, institution history, communication within the institution, personal experiences, university activity and government communication (Jancsó T. 2016).

In this study, the focus will be on the university identity and the students' opinion of each other.

4 University and lower-level identities

The students' university-, faculty- and discipline loyalty can play a role in the relationships inside the university and also in learning outcomes. The strengthening of competition

between universities helped to increase the importance of institutional reputation and identity. This issue is widely known in Hungary as well: the annual Education exhibition or the university open days are evidence of this. At these events, prospective students can acquire knowledge not just about the university studies but also about the other opportunities offered by these institutions. They receive gifts with the university brand on them, and the identity of the university can also play a role in the decision of the candidates, besides the reputation of the institution. It is worth clarifying the relationship between the concept of university identity and institutional reputation because research shows that there is a strong correlation between the two phenomena. Institutional identity creates the image of the institution, and over time this image has an impact on the organization's reputation as well (Alessandri, S. W. et al 2006). University reputation has basically three dimensions: academic performance (e.g. education quality, student quality, faculty quality), external performance (e.g. media reputation, media visibility, community responsibility) and emotional engagement (Alessandri, S. W. et al 2006).

Institutional image and identity have an important role in the functioning of organizations for two reasons. On one hand, this picture provides information about the operation and the spirit of the organization, which can be used to place the institute in the education market. Through the institutional image, the characteristics of the organization are preserved in the long term, because the university will be chosen by those who can identify with their image. On the other hand, institutional image plays an important role in the proper functioning of organizations. In an optimal case, the participants think similarly about their organization's task and are committed to the university. They might have different knowledge and opinions about its operation, but different images can be an obstacle to achieve the institution's goals (Treadwell, D.F. – Harrison, T.M. 1994).

Our survey contains some questions related to the identity of students with different communities. In addition to the university-related identities, other identities were also surveyed. Information about these other identities could help to judge the strength of university identities, because the students were likely to compare the strength of identities. Based on the responses, in the case of all faculties among the university identities, academic program identity is the strongest, followed by the identity of the faculty and ELTE. The only exception is the Faculty of Informatics, where the faculty and the program identity were practically the same, because most of the students there study the same program: computer science. Based on the results, the ELTE identity is strongest in the case of the Faculty of Education and Psychology. Here it is possible that students undertaking teacher training are studying in several faculties, and in these faculties they are broadly satisfied with the training. The ELTE identity is weakest in the two former college faculties. The short common history and the greater geographical distance from the rest of the university certainly play a role in this. There is a particularly big gap between the ELTE and the faculty identity in the case of Bárczi Gusztáv Faculty

of Special Education. The other control identities show that the students are strongly connected to the university. According to the summary of responses, the faculty and the program identity exceed the control identities in any event, and the ELTE identity and national identity at university level were almost the same.

Table 2 The strength of the identities by faculties

Faculty	ELTE University identity	Faculty identity	Identity of university program	National identity	Settlement identity	European identity
of Law (ÁJK)	3,90	4,25	4,48	4,19	3,72	3,77
of Special Education (BGGYK)	3,70	4,70	5,32	3,95	4,20	3,74
of Humanities (BTK)	4,19	4,30	4,79	4,22	3,87	4,12
of Informatics (IK)	4,20	4,49	4,48	3,75	3,40	3,49
of Education and Psychology (PPK)	4,37	4,43	5,00	3,92	3,45	3,80
of Social Sciences (TÁTK)	4,27	4,44	4,65	3,87	3,90	4,29
of Primary and Pre-School Edu. (TÓK)	3,68	4,24	4,61	4,03	4,00	3,79
of Science (TTK)	3,85	4,18	4,59	4,11	3,89	3,89
ELTE total	**4,06**	**4,32**	**4,69**	**4,07**	**3,80**	**3,93**

It is important to note that there is a strong relationship between students' satisfaction with the training programs and the strength of university identities. There was a question about satisfaction with the training (students could choose values between 1 and 6). Not surprisingly, ties to the university are stronger when someone is more satisfied with their training. On average ELTE identity is 2,75, Faculty identity is 3,5, identity of university program is 3,63 if the satisfaction value is 1, and 4,71 - 4,93 - 5,17 if the satisfaction value is 6.

The answers to the questions "Which are the first three words that come to your mind about the university?" "Which are the first three words that come to your mind about your faculty?" give us a nuanced overview. The word cloud based at the university level answers show us the students associated generally positive feelings to the Eötvös University. There are some negative signs that refer to the theoretical, impersonal, disorganized training and the lack of money. However, the proportion of negative expressions and the object of the negative phrase is different by faculties. In relation to their own faculty, the responses show a similar picture with notable differences.

Figure 2 Word cloud about Eötvös University according to the students opinion

big	55	tradition	33	varied	17
science	50	quality	27	theoretical	16
high quality	49	famous	25	opportunity	16
knowledge	49	acknowledged	22	old	16
difficult	47	reputation	21	learning	15
community	41	patina	19	interesting	14
prestige	35	good	17	research	14

At university level, 12,8% of the terms were negative about ELTE and 13,4% about the faculties, which cannot be considered negligible. We can highlight the Faculty of Science and the Faculty of Law. In the case of the Faculty of Science, we cannot identify unique characteristics of the positive aspects - many praise the quality training. Here were the proportion of the clearly negative terms is the biggest, about the quality of education, about disorganization, mass education and lack of money. Students at the Faculty of Law emphasize the University's reputation, high standards, traditions and

prestige, often in regard to ELTE and to their own faculty. Here were a lot of negative terms about the education (unfair, outdated, bureaucratic) and about the spirit of the faculty (snob, elitist).

Table 3 Proportion of the clearly negative terms in the students' opinions on the university and on his own faculty

	Which are the first three words what come to your mind of the university?			Which are the first three words what come to your mind of your faculty?		
Faculty	Given terms	Clearly negative terms	Proportion of the clearly negative terms	Given terms	Clearly negative terms	Proportion of the clearly negative terms
of Law (ÁJK)	193	35	18,1%	185	43	23,2%
of Special Education (BGGYK)	70	7	10,0%	71	4	5,6%
of Humanities (BTK)	537	57	10,6%	460	63	13,7%
of Informatics (IK)	125	12	9,6%	122	11	9,0%
of Education and Psychology (PPK)	149	7	4,7%	136	5	3,7%
of Primary and Pre-School Edu. (TÓK)	133	6	4,5%	125	11	8,8%
of Social Sciences (TÁTK)	111	13	11,7%	105	18	17,1%
of Science (TTK)	367	78	21,3%	316	49	15,5%
ELTE total	1685	215	12,8%	1520	204	13,4%

5 Prejudice inside the university – students' opinions of each other

Each group that shares a common characteristic of a social aspect may be the target of prejudice (Smith, E. R. - Mackie, D. M. 2004). The university students can be viewed as such a group, and narrowly the ELTE students, moreover a faculty community or students of a specific degree program. We can talk about social categorization when people are more determined as a member of a group rather than as individuals. This definition is actually useful, because it helps to understand our environment, and the world we live in. However, this categorization may have negative effects, it can lead to the emergence of discrimination and stereotypes (Smith, E. R. - Mackie, D. M. 2004).

Prejudice is a positive or negative feeling regarding a person or a thing, which precedes the actual experience, or not based on experience. Most of the time the facts that form their basis are sporadic or excessive (Allport, G. 1999). The stereotypes may be accurate or inaccurate, although in terms of the "reality" is hard to measure, but it is possible to examine not necessarily the magnitude but the direction of the phenomenon (Smith, E. R. - Mackie, D. M. 2004).

The opinions and prejudices of Hungarian university students related to different groups (Marián B. 2012; Paczári V. 2013), and with a narrower focus on their prejudice against homosexuality (Dusa Á. R. 2010) have been examined already. However, these studies typically did not explore the students' thoughts about a university-related group (e.g. members of a faculty or program, representatives of a profession), but also measured bias towards ethnic, religious, cultural or political minorities.

Biases of students in university life have been studied by several international researches, of course. In the United States, a lot of research is focused on exploring different views of different races in university life (Yee A. H. 1992; Sailes, G. A. 1993; Ancis, J. R. et al 2000). Research has shown that different professions have their own occupational culture, which is showed, for example, in their language, morals and traditions. These features can contribute to the emergence of stereotypes as well (Mandy, A. et al 2004, Akbulut, A. Y. 2009). Our results show as well, there is a close correlation between opinions on professions and opinions on students who learn that professions. If we ask students about a university faculty and about the students of the faculty, then this opinion is closely related to the professions taught by the faculty.

Students' opinions of each other from different faculties may have an effect on the internal operation of the university. If there are negative stereotypes among the students against other discipline students it may reduce the efficiency of the university because it makes the development of interdisciplinary relationships harder. Therefore the issues related to how much the students know each other in different faculties are supplemented with questions of what they think of other faculties ("What three words or phrases do you think most describe the given ELTE faculty?" This question did not apply to their own faculty).

An interesting aspect of these questions about students' opinion is that all of them are members of a tight social group (ELTE students), therefore their opinions would be based on much more personal experience, rather than in the case of non-academic citizens, therefore the group categorization is probably more accurate among students.

This issue is particularly sensitive, so we drew attention to the fact that it is not mandatory to answer. Sixty percent of the students gave words about at least one other faculty. The clearly negative terms are chosen from the answers, and the proportion of those have been examined. There were very large differences between each of the

faculties. The negative perception of the Faculty of Law is outstanding among the students. A notable – but significantly lower than the case of Faculty of Law - number of negative words have been received by the Faculty of Humanities, the Faculty of Education and Psychology and the Faculty of Primary and Pre-School Education as well. For Bárczi Gusztáv Faculty of Special Education and for Faculty of Science, there were just a few negative terms, the perception of Bárczi Faculty – despite the lower awareness – is especially positive between students. Of all the faculties, the expression "nerd" occurred most often regarding the Faculty of Informatics, a total of 105 times. This word is not classified as a clearly negative term, although likely the majority rather used in a negative sense.

Table 4 Proportion of the clearly negative terms in the students' opinions

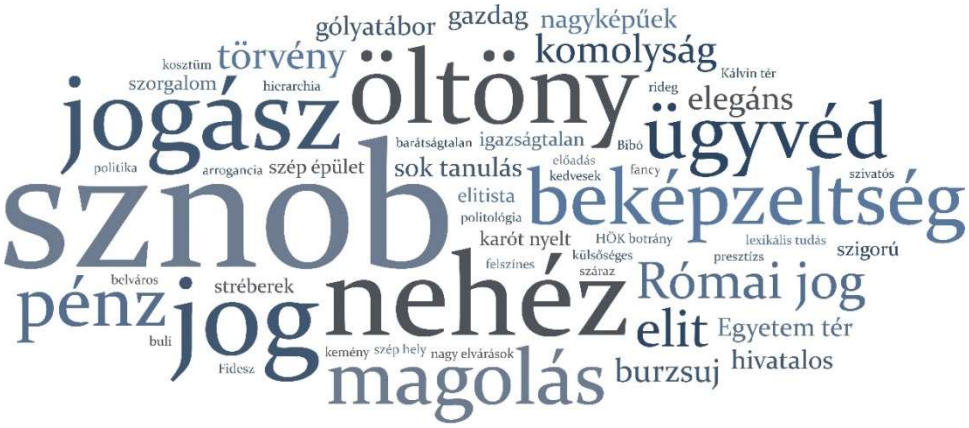
Faculty		of Law (ÁJK)	of Special Education (BGGyK)	of Humani-ties (BTK)	of Informa-tics (IK)	of Edu. and Psychology (PPK)	of Primary and Pre-School Edu. (TÓK)	of Social Sciences (TÁTK)	of Science (TTK)	ELTE total
		in relation to students								
of Law (ÁJK)	students responses		7,7%	30,4%	0,0%	9,1%	17,4%	9,5%	7,5%	13,8%
of Special Education (BGGyK)		27,3%		10,5%	14,3%	0,0%	11,8%	9,1%	4,5%	11,7%
of Humanities (BTK)		34,0%	5,2%		5,3%	20,9%	13,9%	12,3%	1,8%	15,8%
of Informatics (IK)		37,5%	0,0%	14,8%		41,2%	15,4%	15,4%	2,7%	16,8%
of Education and Psychology (PPK)		50,0%	3,7%	9,6%	4,0%		11,1%	0,0%	3,6%	14,0%
of Primary and Pre-School Edu. (TÓK)		42,1%	0,0%	9,3%	5,3%	4,8%		0,0%	0,0%	9,3%
of Social Sciences (TÁTK)		43,9%	0,0%	7,0%	23,5%	7,1%	6,3%		10,8%	18,3%
of Science (TTK)		36,4%	6,2%	29,3%	12,6%	16,2%	17,9%	17,3%		20,7%
ELTE total		37,7%	4,3%	19,6%	8,5%	16,8%	14,5%	11,7%	4,1%	16,4%

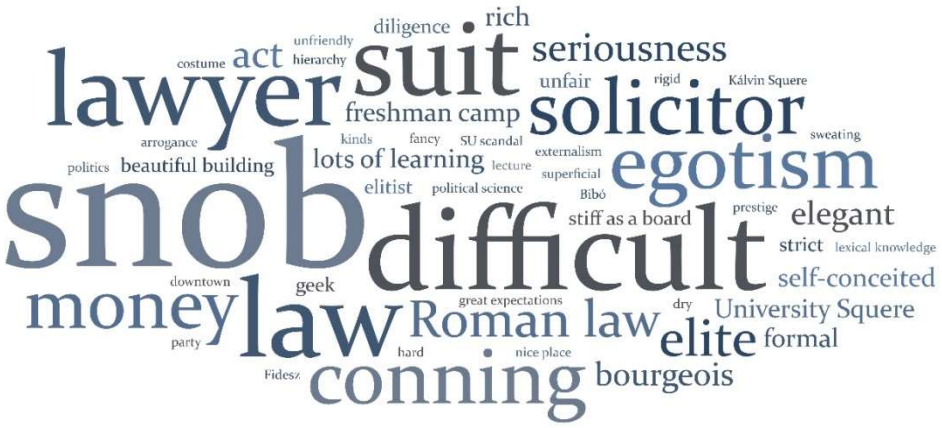
The social situation of the lawyers is a well-researched topic in Hungary. The unique nature of this profession has long persisted, one of the most important reasons being their relationship to power. The majority of the lawyers between the World Wars were loyal to the state. But this was the situation during the decades of socialism too, when the lawyers who were devoted to the previous system were replaced, and for the newly appointed lawyers the loyalty to the communist party was also more important than professional knowledge. It also had a negative effect on the social judgment of the legal

profession that they played a central role in many scandals after the Hungarian democratic transition (Arató K. 2000). Ágnes Utasi examined the social characteristics of solicitors (the legal profession is identified by many people with this occupational group). Her results show that most of the solicitors live in big cities, they classify themselves into the elite or middle class, mostly they are from at least middle-class families. From the lower class just a few people become lawyers, they participate in the political life and in the civil society organizations in large proportion, and they have many influential connections (Utasi Á. 2000). These findings can explain why there is a strong picture of lawyers in society, and why this picture may be the basis of many strong stereotypes.

The most interesting cases are the Faculty of Law and the Faculty of Humanities. For these, we made word clouds from the most common expressions. For comparison, we present the positively awarded Bárczi's word cloud and the Faculty of Informatics's interesting word cloud as well. In Hungarian society perhaps the stereotypes about humanities students are the most widespread. However, among students there were much less negative expressions regarding the Faculty of Humanities than the Faculty of Law. This is probably based on deeper personal experience. This assumption is supported by the relationship between the proportion of the clearly negative terms in the students' opinions and how much the respondents know the faculty (*Figure 7*.). At university level students who know the particular faculty less (value 1 or 2) and better (value 5 or 6) have more negative opinions than those who know it at medium level (value 3 or 4). The most interesting result is the difference between faculties in this context. If students better know the Faculty of Humanities, the negative opinion about the faculty strongly decreases. In contrast, in the case of Faculty of Law is different, because the negative opinion is increasing, if the knowledge about the faculty is deeper, then the opinion is worse. The depth of the research is not appropriate to judge them in detail, but it is definitely enough to draw attention to the existence of negative emotions.

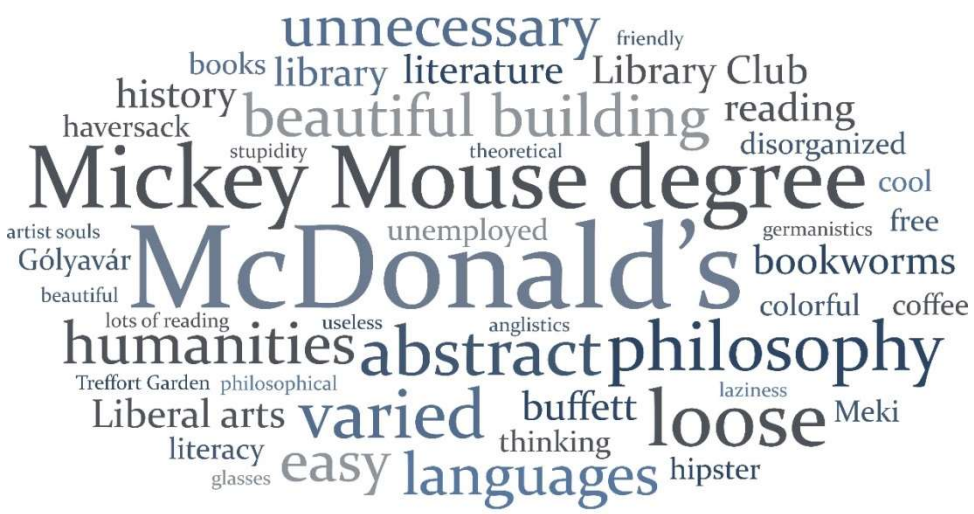
Figure 3 Word cloud about Faculty of Law according to the opinions of students from other faculties





snob	27	conning	12	Roman law	8
difficult	19	egotism	12	act	6
law	17	solicitor	12	seriousness	6
lawyer	16	money	11	borgeois	5
suit	16	elite	8	elegant	5

Figure 4 Word cloud about Faculty of Humanities according to the opinions of students from other faculties



McDonald's	12	beautiful building	6	history	4
Mickey Mouse		easy	6	Liberal arts	4
degree	9	humanities	6	library	4
loose	8	languages	6	Library Club	4
abstract	7	unnecessary	6	literature	4
philosophy	7	bookworm	4	reading	4
varied	7	buffet	4		

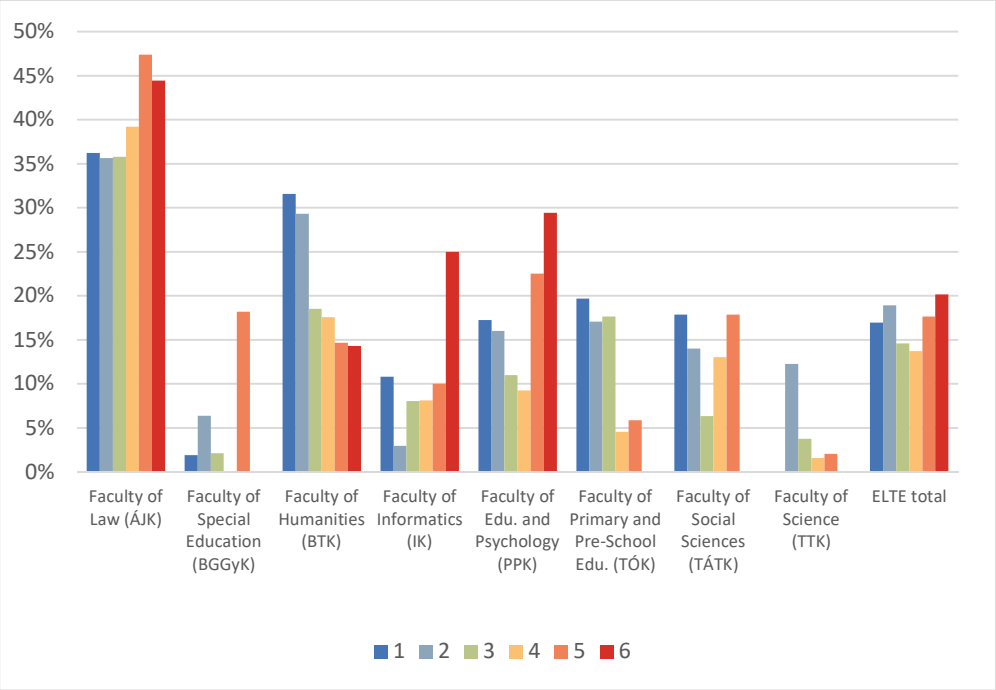
Figure 5 Word cloud about Bárczi Gusztáv Faculty of Special Education according to the opinions of students from other faculties

helpfulness	8	special		interesting	4
assistance	6	education	5	SPED	4
girls	6	special education		useful	4
help	5	teacher	5	vocation	4
kind	5	disabled	4		

Figure 6 Word cloud about Faculty of Informatics according to the opinions of students from other faculties

nerd	105	men	4
computer	10	Southern block	4
difficult	7	few girl	3
glasses	6	marketable	3
programming	6		

Figure 7 Proportion of the clearly negative terms in the students' opinions according to how much the respondents know the faculty



6 Conclusion

The results show that university identity and student prejudice cannot be ignored in the operation of ELTE. The strength of university identities shows that students are strongly attached to the university. It is important to emphasize that, in most cases, the faculty and university program identity are stronger than the ELTE identity, especially for former college faculties. It is typical that satisfaction with training is closely related to the strength of university identity, so without a good quality education, a strong university identity cannot exist.

We demonstrated that among university students there are negative stereotypes about each other. If there are prejudices among the students against students of other disciplines it may reduce the efficiency of the university, because it makes harder the development of interdisciplinary relationships, not just during the studying, but after the university also in the labor market. The Faculty of Law is particularly concerned about this issue: students have a quite bad opinion about the faculty. It is also noticeable that,

with deepening knowledge, the negative judgment of the faculty does not decrease, but is increasing.

During this scientific investigation, we have a strong effect on the examined phenomenon itself. Students often heard about the possibilities at the university while filling in our questionnaire. The university leaders were informed about our results, which is also not a negligible achievement, the wider publication of results within the university is planned as well. With the assumption that the strengthening of interdisciplinary relationships can make a significant contribution to the development of the university, the presentation of the results is important, because it draws attention to opportunities and to existing problems. Although this investigation only concerned with the Eötvös University, presumably the situation is similar in other universities. Therefore, the topic can be relevant to many large institutions that have several faculties, sub-units or several campuses in different places.

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Zsuzsa M. CSÁSZÁR, Tamás Á. WUSCHING

Trends and Motivations Behind Foreign Students' Choice of University in Three Hungarian Provincial University Towns

Abstract

Mirroring global trends, international student mobility is increasing in Hungary: in the autumn of 2016 28,628 foreign students studied at a higher education institution in Hungary, most of them at medical schools. For those who take part in full-time HE programmes – students who come in the framework of ''degree mobility'' – choosing their place of education is a very complex process that involves many aspects as this decision will influence students' life for a considerable amount of time. It is not surprising therefore that in the case of Hungary most foreign students choose to study in Budapest. However, there are three provincial towns in which welcome students in large numbers (all three are home to medical schools): in the autumn of 2016 there were 11000 such students combined at the universities of Debrecen, Szeged, and Pécs, which shows a growing share compared to the total number of students in Hungary. This paper compares students' motivations and their personal experiences in these three cities based on a questionnaire survey, taking into consideration the different student pools they draw.

1 Introduction

International student mobility is recently one of the most investigated areas of higher education. However, it was present in different forms earlier as well. This process was intensified in its present sense in the 1960s since the first major student flow routes, which still determine the major trends today, were created at that time. In 2015, more than 5 million persons carried out higher education studies abroad and by 2020 estimates state that this number will exceed 7 million. The significance of this process is demonstrated by the fact that the migration research centre (Migration Policy Institute) investigating the ten most important kinds of migration classified the migrations with an educational purpose as the ninth.

As a spatial process, the student mobility demonstrates significant geographical differences. Investigating it on the global scale, students tend to migrate from west to east, and from non-English speaking regions to English speaking countries (Brooks, R., Waters, J., 2013). Regarding Europe, we can say that the major student migration directions tend from the poorer, primarily southern Mediterranean countries to richer, northern areas (first of all Great Britain and Ireland and Belgium, Denmark, France, the Netherlands, Germany and Sweden) (King, R., 2003). The geographical proximity and the cultural resemblance also play an important part in choosing the target country (Lanzendorf, U., 2006). Those countries where the process of mass expansion has already begun, and where the peculiarities of the demographic processes constrain the sustainability and the possibilities of keeping up the higher education system, can allow for education with the enrolment of foreign students.

2 The issues of the international students' institution choosing

The decision towards foreign studies is one of the most important and most expensive enterprises considered by the students (Mazzarol, T., 1998). Accordingly, one of the directions of research dealing with international student mobility is to survey what kind of reasons and aspects the students have in choosing their foreign study location, country and university, and how these tendencies form the global student flow trends. According to Varghese, N. V. (2008), the country and institutional choice of students are motivated, among other things, by the following reasons: the costs of education; language knowledge; assumed higher education quality level in the target country; reception of foreign languages and cultures; possibilities of work in the target country; after returning home higher income in the country of origin; simple application procedure for visa. According to Mazzarol, T., Soutar, G.N. (2002), the most important aspects in choosing a target destination are personal recommendations and proposals, and further on from the point of view of the student, preliminary knowledge about the country. The proposals can be made both by family, friends, and acquaintances. In addition to this, financial factors and the geographical proximity also contribute to a student's decision-making process. The importance of personal connections is also highlighted by Bourke, A. (2000): stating that, during the decision of the destination choice, one of the most important factors are whether relatives, friends or acquaintances nominate the place after receiving the same services.

Srikatanyoo, N. and Gnoth, T. (2002) draw attention to the role of a country's image, starting off from the fact that students who are just before mobility possess no adequate previous knowledge about the university and the training programme, however, due to different brands and other cognitions they can create preconceptions about the target country. In the model of Cubillo, J.M. et al. (2006), the numerous factors influencing the students' choice of location are divided into 5 groups: these are personal reasons, country image, the impact of the city, the image of the university and the

evaluation of the certain training programme. Herrero, A. et al. (2015) also draws the attention to the importance of country and city image during the foreign students' choosing of the university. Beine M. et al (2014) highlight the *network impact*, namely that the presence of the same nationality migrant groups living beforehand in the area influence positively the decision of the choice of the target country and also in proportion to the mean qualification level of the people living there this impact further increases. Perkins, R., Neumayer, E. (2014) also mention this factor. Moreover, the authors give central importance to the quality of the university but they consider the expected income of the target country an even more important factor, just like the past colonial connections between the countries and common language, which also appear in the student mobility categories of Teichler, U. (2007). Finally, it can also contribute to the mobility of the students that at home, due to the high preliminary requirements or a low number of intake, they simply cannot get into a certain training: here Wiers-Jenssen, J. (2008) mentions the Norwegian medical training as an example.

Inward international student mobility plays a more and more important role in the Hungarian higher education as well. The number of those foreign citizens increases annually who study in higher education in Hungary: the quick increase is well shown by the fact that while in the autumn semester of 2010/2011 18850 foreigners studied in Hungary while six years later there were 28628. Taking into consideration the full-time training in Hungary, medical training is traditionally the most popular among foreign students, which can be found in 4 universities: these are the Semmelweis University in the capital, the University of Debrecen, the University of Pécs, and the University of Szeged. Foreign language medical training was launched in all four institutions in the 1980s, before the change of the regime, creating supply for the students coming from all over the world. Due to the continuous increase, by today the number of foreign students in medical faculties is around 2000. In the medical training, it is a huge strategic advantage for Hungary that in the sending countries there are quantity limits and, for those students, this solution is more cost-effective. But we cannot neglect that the tuition fee is lower and the cost of living is relatively cheaper compared to Western countries.

Besides our medical training, more and more other fields are becoming popular among foreign students. In favour of further successful recruitment, more and more universities are starting to launch English language training. In the case of such mobility, where the complete period of training is covered, taking into consideration the personal points of view, it is a highly important decision since the students will spend several years in a foreign country, spending the total amount of time of their training in a foreign university and such long-term mobility process could significantly affect their future life also. According to this, committing to foreign studies and deciding the location is preceded by a significant balancing process during which numerous factors should be taken into consideration.

The present study intends to reveal the personal motivations of foreign students studying in three significant rural universities of Hungary in the University of Debrecen, the University of Pécs and the University of Szeged.

3 Research methods

The starting point of this research is constituted by the already highlighted research antecedents. The analysis of the most important related international literature pointed out that it is worth examining the location-choosing motivations of foreign students studying in Hungary, and it can bring numerous useful results both to the processes of internationalisation and higher education developments. It can be especially important because the spatial direction of training purpose mobility is reverse to the international trends (see above) (Brooks, R., Waters, J., 2013).

We consider the most important method of this research in a questionnaire survey carried out in three higher education institutions.

The questionnaire survey providing the basis for this research was carried out in these three institutions during 2015 and 2016. The basic data of the respondents is demonstrated in *Table 1*.

Table 1 The basic data of the respondents of the questionnaire survey in the 3 analysed universities

	University of Debrecen	University of Pécs	University of Szeged
The amount of the surveyed multitude	500 persons	546 persons	441 persons
The ratio of respondents out of the total number of students taking part in foreign language training at the time of the questionnaire survey	15,18%	23,21%	22,45%
Mean age	22,92 years	22,06 years	22,9 years
Gender distribution	44% male 44,2% female 11,8% did not respond	45,97% male 48,35 female 5,68% did not respond	53% male 47% female 0% did not respond

Source: own edition

We can see that 15% in Debrecen and more than 20% in Pécs and Szeged of foreign students participating in foreign language training were surveyed: at the time of the survey the total number of students in foreign language training were 3292 in

Debrecen, 2352 in Pécs and 1964 in Szeged (from these numbers the Romanian, Serbian, Slovakian and Ukrainian cross-border Hungarian students have been subtracted who participated in Hungarian language training) [9]. Besides the basic data, it is worth investigating the faculty distribution of students and, within that, the ratio of students enrolled in medical training (general practitioner; dentist; pharmacist), since in Hungary by far this area of study is the most popular among the scope of the foreign students enrolled in foreign language training. According to this, 61.2% in Pécs, 63% in Debrecen and an even higher 79.4% in Szeged of all the responding students studied medicine.

Besides the faculty distribution, the composition of home countries is an even more important aspect, since basic social, economic and cultural differences can be experienced among the different regions of the world, and therefore we can assume that the answers of students are strongly influenced from which region they arrived in Hungary (*Table 2*).

Table 2 Countries providing the most students in the queried multitude in the 3 analysed universities, in brackets with the number of the students

University of Debrecen	University of Pécs	University of Szeged
Nigeria (105)	Germany (127)	Germany (46)
Brazil (27)	Jordan (67)	Great Britain (38)
Iran (23)	Norway (54)	China (26)
Turkey (23)	China (39)	Nigeria (23)
Israel (22)	Nigeria (22)	Iran (21)
Iceland (18)	Spain (19)	Israel (19)
Romania (14)	Brazil (13)	Spain (17)
United Arab Emirates (14)	South Korea (13)	Turkey (13)
Great Britain (14)	Iran (13)	Japan (11)
Vietnam (14)	Sweden (12)	Norway (11)

Source: own edition

[9] Those students taking part in the survey who arrived from the above mentioned neighbouring countries, who, similarly to the rest of the foreign students, took part in foreign language trainings, that is why they were involved in the survey.

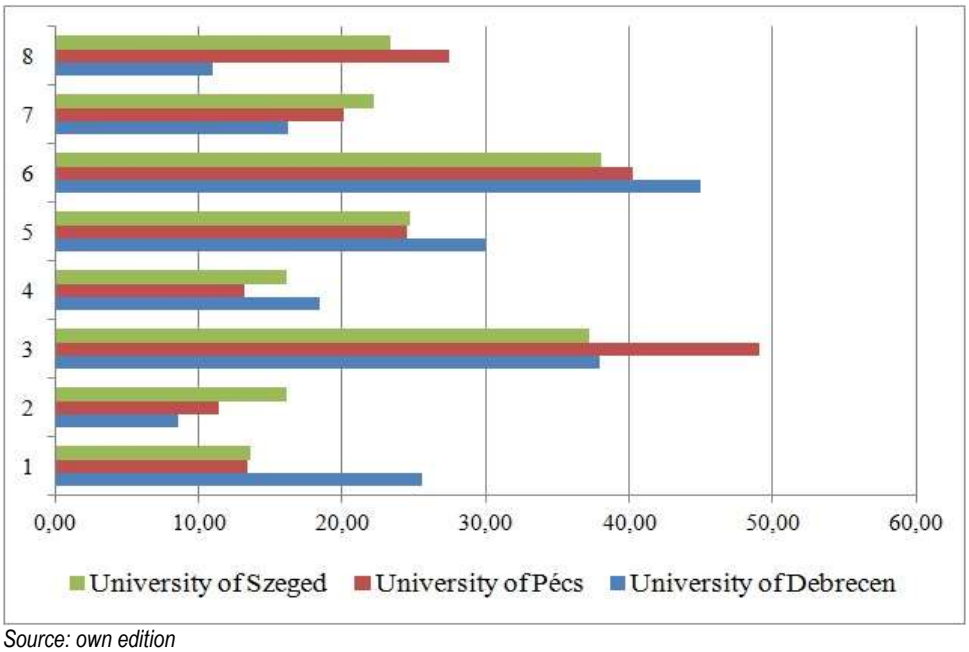
We can see that the respondents of the three institutions are characterised by a diverse ethnic composition, which is not surprising since the attraction zone of the three universities also shows significant alterations due to the different international relations and divergent recruitment policies. The high ratio of Nigerians in Debrecen and Germans in Pécs in the sample is due to the fact that they are also represented in the total number with more than 600 students altogether. However, in Szeged, we can find no such countries with dominating groups. The *questionnaire* contained three groups of questions[10]: *the first group* focused on the motivations of students and why they chose the specific university, where they received the information and what were their plans after finishing their present studies. With these questions, we were looking for answers in the following topics: what kind of factors pushed them personally to decide to continue their studies abroad; why did they choose the specific location for their studies; from where did they receive information about the Hungarian learning opportunities; what kind of alternative plan did they have related to the location of their studies; and finally what are their primary plans for the time period after their present studies.

4 Results

The first question of the questionnaire survey asked about the reasons why the students decided to learn abroad (*Figure 1*).

[10] In the present study we analyse the answers responded to the 1st group of questions

Figure 1 The distribution (%) of the answers received for the first question of the survey ("Why did you choose to study abroad?") in the 3 analysed universities



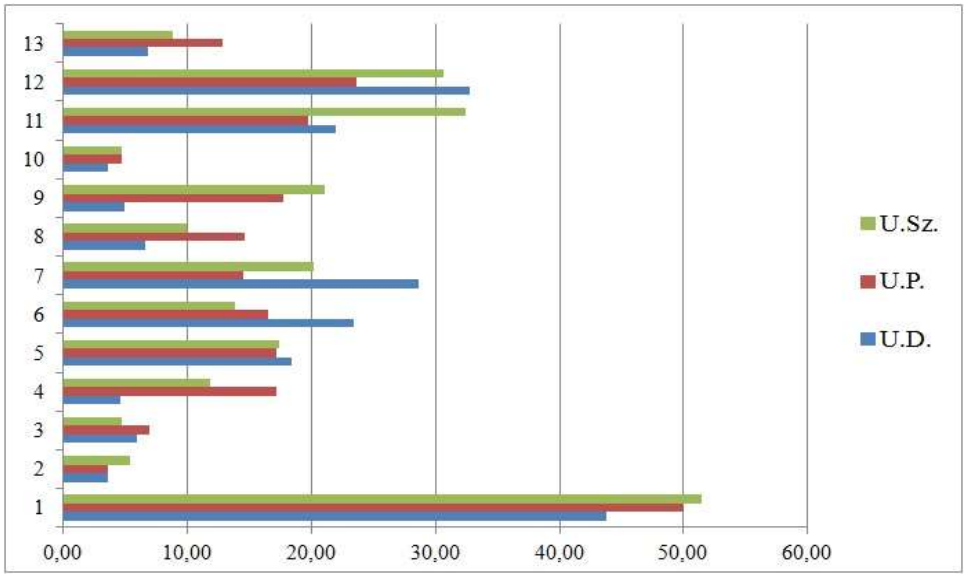
Source: own edition
(1 – at home higher education is not good enough; 2 – here one can get the same level of education for less cost; 3 – getting to know new cultures and languages; 4 – networking, getting to know others; 5 – getting separated from home and the parents; 6 – building their future, favourable workplaces in the future; 7 – adventurousness; 8 – other)

On the whole, the most frequently mentioned reasons among respondents were getting to know new cultures, building a future and better workplace perspectives. This is common in the case of all the three universities. This is not surprising since among the possible answers the latter is the most professional reason and during the planning of the foreign studies, in most of the cases, investing in the future is the most motivating factor. At the same time in Pécs and in Szeged, many Germans (plus the Norwegians in Pécs) came only because of pressure towards Hungary, since they did not get into the medical training at home because of the high requirements and the number limits. This reason was written next to the "other" category in the questionnaire. The case of the Norwegian students in Pécs justifies the statement of Wiers-Jenssen, J. (2008) about the difficulties of getting into the Norwegian medical programmes, due to which many travel abroad to study instead of enrolling in another programme at home. The option of "getting separated from home and the parents" also received a significant amount of nominations which was preferably more popular among the students outside Europe. Similarly,

students outside Europe indicated to a much greater extent that they decided to study abroad because higher education was not good enough at home. So it is not surprising that among the students in Debrecen this reason was the most popular, as 40% of the Nigerians, staying there in a high ratio, indicated it. In addition to this, "networking, getting to know others" and "adventurousness" played a role in the decision making of certain students about foreign studies. These reasons were again more characteristics of ones outside Europe.

The next question was oriented to the concrete method of choosing a university. The question was asked in a similar form as the previous one but with more answer options: the distribution is demonstrated in *Figure* 2.

Figure 2 The distribution (%) of the answers received for the second question of the survey ("Why did you choose this university as a location of your foreign studies?") in the 3 analysed universities



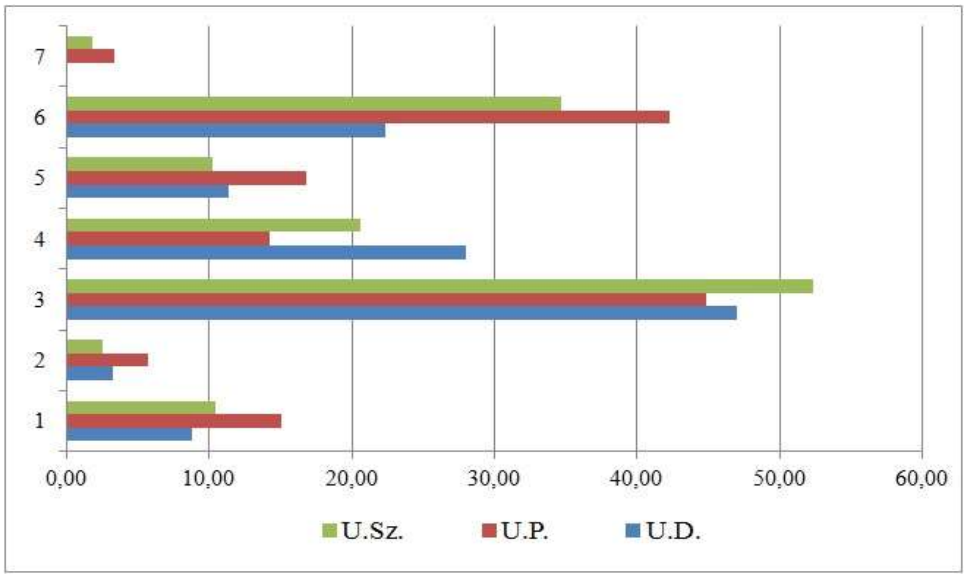
Source: own edition
(1 – fame of the university the acknowledged diploma; 2 – the tutors and their acknowledgement; 3 – wide range of courses; 4 – education in mother tongue; 5 – opportunity to learn a foreign language; 6 – simple application procedure; 7 – reasonable amount of tuition fee; 8 – the culture of the country; 9 – the attraction of the city; 10 – adequate selection of entertainment and cultural opportunities; 11 – favourable costs of living; 12 – the presence of relatives, friends or their recommendation; 13 – other)

Here it is common in all three samples that the fame and acknowledgment of the university were marked, with around a 50% ratio, as contributing the choice of institution.

This is not surprising since medical students represented a significant ratio in the sample out of whom the majority indicated this option. In all three universities, the foreign language medical training had already begun in the 1980s, with a long history by now, and are considered to be of a high level even internationally, so the continuous increase of demand is no coincidence. There is a significant difference between the European and non-European students in the marking ratio for the question asking about education in their mother language as a reason to choose their university: among the Europeans this reason is much more popular since the Germans representing a significant ratio in Pécs and Szeged can study medicine in their own language, while in Debrecen this opportunity is provided only for those whose mother tongue is English. It is not by chance that four times as many students marked this option in Pécs than in Debrecen. Interestingly, the culture of the country and the attraction of the city also show a dominance in Pécs and Szeged, which can be explained by more students associating a positive image with Pécs and Szeged. However, in the case of the latter option, this difference is surprising since the country is the same. Maybe one of the reasons for this is that in the sample in Debrecen the non-Europeans are in a threefold majority and so could possess smaller previous knowledge on the country than European students. On the other hand in Debrecen, along with Szeged, the measure of the tuition fee played a more dominant role in choosing the institution than in Pécs. This difference may be derived from economic differences of the sending countries with some certainty. Accordingly, from the samples in Debrecen, at a multitude of more than 100 persons, 43.81% of the Nigerians marked this reason, while out of the German students in Pécs only 2.36%: here certainly the reason for this difference is that the majority of the students compare the Hungarian tuition fees to the home ones. The simple application process and the personal connections appear in the greatest proportion also at the students of Debrecen, the ratio of this latter reason is also relatively high in Szeged. The "other" option received a greater marking proportion in Pécs, where most of the students came with a concrete, defined scholarship programme to the university, mostly German and Norwegian medical students. The favourable costs of living played a greater role among the students of Szeged when choosing the institution. On the whole, it appears that the majority of students chose the analysed institutions because of their prestige (particularly the medical courses), so before making the decision the students certainly informed themselves about the accessible training.

Accordingly, the next question was related to the ways of getting information before choosing the university: the students were answering from what sources they were informed about studying opportunities in Debrecen, Pécs, and Szeged (*Figure 3*).

Figure 3 The distribution (%) of the answers received for the third question of the survey ("Where did you receive information about this university and the local studying opportunity?") in the 3 analysed universities



Source: own edition
(1 – domestic higher education institution; 2 – domestic public education institution; 3 – friends, relatives; 4 – recruiting organisation; 5 – scholarship programme; 6 – internet or other media; 7 – other)

It turned out that among the respondents of all the three universities most of the students became aware of the university through personal connections, so the information was received from relatives, friends, and acquaintances. Since this is common in all three institutions irrespectively of a student's country of origin, it can be mentioned as an international tendency. That is why it is really important for the students studying in Hungary to associate a positive image about the university, the city and their years spent there, since this information is passed on to the acquaintances which can greatly influence the choice of the newer students. The results received for this question relate with the answers given to the previous questions asking about choosing the university, since there behind the fame and prestige the second most common indicated reasons are the presence or recommendation of relatives and acquaintances. Further on the second most important source of information was not surprisingly the internet, however here we find some differences: out of the respondents in Pécs two times more students were informed by the internet than in Debrecen, and the ratio of the students in Szeged can be found in between the two. Based on the three universities, this sample can be drawn a parallel with the differences of the ratio of the Europeans and non-

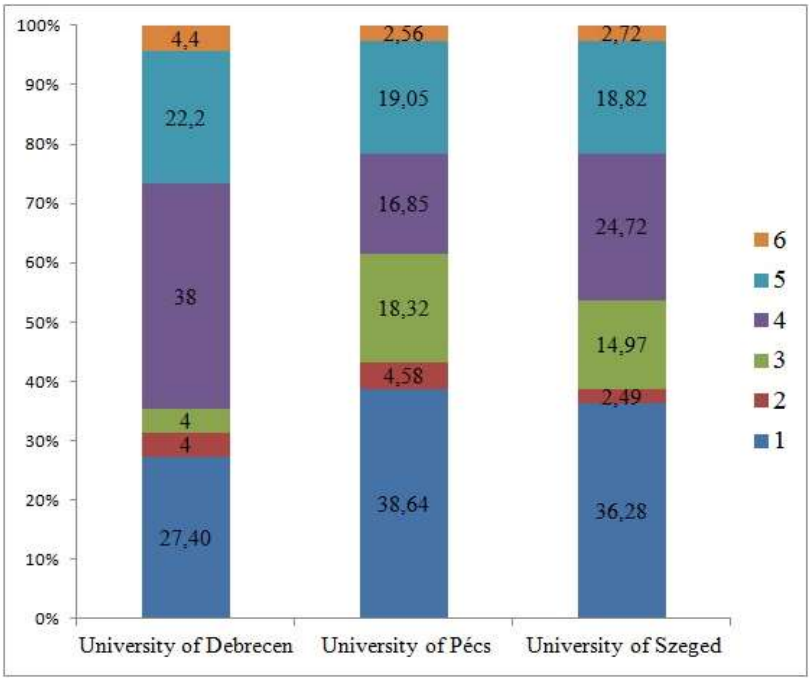
Europeans, however, we have no concrete evidence for this correspondence. On the other hand, out of the three universities, most can be found in Debrecen who received information about the university by a recruiting agency: this is also no coincidence since uniquely in the country the University of Debrecen possesses its own, well-functioning, recruitment bureau. Regarding Szeged, we should also highlight the case of the scholarship programmes: nearly 20% of the students outside Europe became aware of the University of Szeged by such a programme, while among the Europeans this ratio does not even reach 5%. On the whole, it is univocal that most students received information about the analysed university by personal ways, which is after all understandable since the choice of full-time foreign training is an important decision in the life of students that will affect them for years. So it is not surprising that most of them are gathering information about the university, city and country by personal ways before making their decision.

As was already mentioned related to the first question, in the case of many students, the foreign location is basically a forced path because of the excessive competition for home training, thus only going abroad remained an alternative, as long as they hold on to the certain (typically medical) training. Partially the next question is attached to this topic as well, laying emphasis on the alternative plans of students: they could answer in the form of a yes-no question whether they planned another location for their present studies or not. After this, the ones answering with yes in the second round could give the exact location they wished to study. The ratio of the ones answering with yes was more or less the same in the three cities: 55.4% in Debrecen, 47.1% in Pécs and 49.9% in Szeged, so broadly speaking, half of the students also had other plans besides the present location. Concerning Debrecen: the United Kingdom, the United States of America and Canada were dominant since the study language is English in Debrecen as well. In the case of Pécs, the situation was a bit different since Germany and Hungary were mentioned the most, but Norway was also mentioned frequently. The case of Germans and Norwegians correlates with the question about the choice of university, since out of them many would have stayed at home, so they only went abroad because they were not enrolled in local medical training. In Szeged, among the possible locations the United Kingdom was mentioned the most, which is also understandable since out of the British many would have stayed at home and, besides this, the UK is the most popular European destination of international student mobility, so it is understandable that many non-European students wished to learn there. In addition to this, it is common in all the three samples that many indicated Hungary and within that Budapest in the first place, and after that one of the three regional centres (e.g. students in Szeged indicated Pécs, etc.). So we can see a hierarchy based on which the majority of the students coming to Hungary wish to study: first in the capital, the medical students in Semmelweis University, and the ones attending courses in other institutions, and

within Hungary, they choose some of the regional centres only as their second choice. Of course, together with this, none of the analysed universities would complain since the increase of the demand is continuous besides the secondary option aspects, which is well reflected by the annual increase of the number of students.

The last question asked about the plans of the foreign students after taking the degree. During this 5 answer opportunities were provided, out of which they could choose the one adequate to their primary plan: they would go home to enter employment; they would stay in Hungary to enter employment; they would enter employment in a third country; they would continue their studies; apparently they do not know (*Figure 4*).

Figure 4 The distribution (%) of the answers received for the fifth question of the survey ("What would you primarily plan to do after finishing your studies?") in the 3 analysed universities



Source: own edition

(1 – (s)he would go home to enter employment; 2 – (s)he would stay in Hungary to enter employment; 3 – (s)he would enter employment in a third country; 4 – (s)he would continue their studies; 5 – (s)he does not know yet; 6 – did not answer)

As we can see the students in Pécs and Szeged plan to travel home to enter employment in a greater ratio than the students in Debrecen. Here the geographical composition can also play a role since we can assume that European students plan to return home in a greater ratio than, for instance, the Nigerian students. This assumption is further confirmed as earlier it turned out that, out of the Europeans (mainly the Germans and the Norwegians), many would have preferred to study at home. We can assume that they would like to move back home after finishing their studies in a great majority. In Debrecen, however, more than one-third of the respondents would like to continue their studies in Hungary or elsewhere. Since more than half of the students were studying on the undivided training offering a master's degree in the sample, in this respect it is interesting what do they mean by continuing their studies. Not surprisingly it was common in all the three groups that only a minimal, 5% ratio of students would stay in Hungary for employment purposes. Besides this, it was also common that an around 20% ratio did not know what exactly they want to do. Quite certainly, these students belong to the younger ones in a majority. In Pécs and Szeged, the ratio of those students is similar who imagine their future in a third country, while in Debrecen this group is extremely low, having the same ratio with the ones wish to stay in Hungary. This is a rather surprising data since we might assume that the Nigerian and Asian students, who provide three quarters of the sample in Debrecen, use Hungary as a stepping stone at a greater proportion to move towards the West. The lower ratio, however, is not due to that many would travel home or stay in Hungary, but the ratio of the ones wishing to continue their studies became higher than the expected.

5 Conclusions

Based on the survey, the decisions, motivations and plans related to the mobility of the foreign students arriving to the great rural cities of Hungary are well outlined, so we can also see that the students arriving from different regions and countries decide upon different reasons besides studying abroad and they also choose the institutions based on different aspects. This is not surprising since besides the different cultures the certain countries of origin are characterised by different economic development level and widely different higher education, academic standards. However, it is common in all the three analysed universities that the majority of foreign students take into consideration the prestige of the institution (and the given training) and/or the personal connection and references during the selection of the study location. Apart from this, personal connections play the most important role in the preliminary information acquisition. Hence as long as the management of the institutions and faculties wish to raise further the number of their foreign students, it is by all means important that those who are already there should leave Hungary or the related city and university with a positive image, since in this way they would recommend the location with a greater chance to

their acquaintances resulting in potentially more students. Finally, it can be also seen that despite of the continuous growth in number, taking into consideration the output of the internal students mobility, Hungary very much lags behind the major global target countries, since while in the west many students settle down in the countries and, as a highly qualified workforce, contribute to the local economy, from Hungary the students immediately leave after finishing their studies. Nevertheless, despite of the stepping stone role both the institutions and university cities can greatly profit from the growing inflow of the international students, since besides the realised univocal economic benefits (Füzesi Zs., Tistyán L., 2013; M. Császár Zs., Wusching Á. T., 2016) they can share positive experiences of the cities, universities and the country itself to the rest of the world.

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Samir SRAIRI

Determinants of student dropout in Tunisian universities

Abstract

The purpose of this paper is to analyze the determinants of university dropout in the first year of bachelor programs at Tunisian universities. We consider 160 higher education institutions with an average of 671 bachelor study programs per year from 2010 to 2015. Using several econometric models (pooled ordinary least square, fixed effect model, and random effect model), we regress student dropout rate on four categories of indicators: student characteristics, and institutional, contextual and external factors. The estimation results suggest that the institutional characteristics have a significant impact on dropouts. The findings show that student-staff ratio has a positive influence on student dropout. We also find a negative association between staff quality and dropout rate. In addition, the analysis reveals the importance of contextual factors such as university accommodation in helping students to complete university education. Finally, regression also indicates a significant and positive interaction between unemployment rate and the dropout rate.

1 Introduction

Higher education is considered to be a necessary condition to stimulate employment opportunities, social justice and economic progress (Sneyers, De Witte, 2016). According to OECD (2011), individuals with a tertiary level of education have a greater chance of finding a job and earn more than those who do not have a university degree. However, several studies showed that in many countries a substantial number of students leave the university without obtaining a tertiary degree. Student dropout has become a serious issue in the higher education system of several universities due to its increasing frequency (Montmarquette et al. 2001). It can be seen as a drain on public finance and may affect the effectiveness and efficiency of the university system. Several studies (e.g., Rouse, 2005; De Witte, Rogge, 2011) find that dropping out from school has significant consequences in terms of income for both individuals and society. In addition, a high dropout rate shows that the higher education system probably failed to match students'

expectations and needs (OECD, 2008). In the literature, there are two types of factors that can help predict whether students would drop out or graduate from high school: factors associated with the individual characteristics of students, and the factors associated with the institutional characteristics of their families, universities and communities (Rumberger, Ah Lim, 2008).

In order to reduce dropout rates and increase the accountability of higher education institutions, several actions have been undertaken, especially in the United States and Europe (e.g. "No child left behind act, 2001; Lisbon 2000; Europe 2020 goals). For instance, many countries have introduced some form of performance-based funding. These mechanisms link funding to some performance indicators such as student dropout, graduation rates, program quality ratings. Other approaches are focused on intensive coaching or mentoring programs (Steeg et al. 2015). In this program, we use coaches that give intensive personal attention and support to students at risk. Students received support and guidance with their study activities, personal problems, and internships in firms.

In Tunisia, the higher education sector is organized as a binary system consisting of private and public institutions. In this paper, we focus on the latter group that comprises 13 public universities (178 institutions) and 25 institutions for higher vocational education. In the 2015-2016 academic year, the total number of students amounted to 263817 (women accounted for 64%). According to the data published by the Ministry of Higher Education and Scientific Research (*Table 1*), the average dropout rate between 2010 and 2015 was situated at above 3%. The larger part of dropout cases occurs in the first year of bachelor programs (an average rate of 6%), probably indicating a misleading choice of academic discipline. The highest dropout rates were recorded especially in two disciplines: both social sciences, business and law (7,26%),and humanities and arts (8,1%). The dropout rate is higher for the male population in relation to female (55% against 45% respectively). The data related to the dropout rate for each institution shows that bachelor programs with a high percentage of female students have a lower dropout rate.

To better understand the underlying causes behind why students drop out in Tunisia, this study aims at determining the main factors behind this phenomenon. More specifically, we investigate which factors influence student dropout in the first year of bachelor programs. To this end, we apply three econometric models (MCO, FE, RE) and regress student dropout rate on a set of variables related to four categories of factors: student characteristics, institutional factors, contextual factors and external factors.

Besides its research question, this paper is innovative in many ways. First, to the best of our knowledge, it is the first study analyzing the issue of dropout in Tunisian higher education system. Second, the paper gives an additional contribution to existing

literature on university student dropout determinants: focusing attention on students enrolled in the first year of bachelor programs. Third, the econometric analysis is carried out on 160 faculties or institutes and includes an average of 671 bachelor study programs per year. Fourth, the analysis is based on extensive statistical data collected over a period of six years (2010 to 2015).

The paper is organized as follows. The literature on determinants of university dropout is overviewed in section 2. Section 3 provides information on variables, data and the model used in this paper. Section 4 presents the results of the analysis. Finally, in section 5, we conclude the paper with policy recommendations.

2 Literature review

Considering the importance of educational attainment to society, extensive research has been carried out in both developed and developing countries to examine determinants of university dropout. Student dropout is a highly complex concept influenced by various observed and unobserved factors (Sneyers, De Witte, 2015). In the literature, many factors have been identified as having a bearing on dropping out. Those factors can be grouped as (1) student factors, (2) family factors, (3) school factors and (4) community and country factors.

The student factors include the psychological and behavioral factors, and demographic factors (De Witte et al. 2013). The first category of factors falls into three areas: educational performance, behaviors, and attitudes. Most scholars (e.g, Rumberger, 2004; Entwisle et al. 2004) have found that early academic achievement in elementary and secondary school is predictive of early school leaving. Other studies (e.g., Plank et al. 2005; Entwisle, 2005) suggest that grade retention significantly increases the likelihood of leaving school permanently. A wide range of behaviors both in and out of university have been shown to predict dropout and graduation. Research consistently finds that student engagement (students' active involvement in academic work and the social aspects of university life) predicted early withdrawal from high school (Herbert, Reis, 1999; Entwisle et al. 2004; Appleton et al. 2008). Misbehavior in high school and delinquent behavior outside of high school are both significantly associated with higher dropout and lower graduation (Fergusson et al. 2003; Vizcain, 2005). Concerning student beliefs, values and attitudes, a substantial body of research has generally focused on a single indicator: the educational expectations (how far in school a student expects to go). Several studies (Rumberger, 1983; Entwisle et al. 2004; Dustmann, Soest, 2008) have found that a higher level of academic and professional aspirations or expectations are associated with dropout rates. The second type of factors are related to demographic characteristics. With respect to gender, some studies (Bynum, Thompson, 1983; Scott et al. 2006) found that women are less likely to dropout

than men. Other Scholars (Ishitani, Snider, 2006) suggest that race and ethnicity are linked to whether students dropout or graduate.

Besides students' characteristics, family factors can also influence educational outcomes. According to Rumberger and Ah Lim (2008), three aspects of family factors predict whether students drop out or graduate: family structure, family resources, and family practices. More unanimity in the literature is observed with regard to family structure. Students living with both parents have lower dropout rates compared to student living in other family arrangements (Rumberger, Ah Lim, 2008). Other studies (Dustmann , Soest, 2008) suggest that students from large families find difficulty in continuing their studies. Regarding family resources, which are measured by the parents' occupational status, education and income, several studies (Swanson, Schneider, 1999; Orthner et al. 2002 7; Dalton et al., 2009) report that students from poor families (especially in case parents' income is below the poverty line) or whose parents did not graduate from high school are at greater risk of dropping out from school than students from families without these risk factors. Family practices or parental support are also indicated as a predictor of school dropout. Students of parents who have high educational aspirations of their children and who monitor their children's school progress are more likely to complete high school (Bertrand, 1962; Cooper et al.2005).

Factors related to the organizational and structural characteristics of school are also important to understand the reasons for dropping out. School factors may include school resources, the curriculum, school regulations and teacher quality. Schools' resources are most frequently defined by the institutional size and teacher-student ratio. Smaller institutional size and lower student/staff ratio may have a positive effect on school achievement. Most studies (Calcagno et al. 2008; Scott et al. 2008) find a positive relationship between these two indicators and dropout rates. The effect of these variables on dropout is almost entirely related to a school's social climate, and more particularly the influence of student participation as well as the number of problems in the school environment (De Witte et al. 2013). Based on Tinto's (Tinto, 1975) model and Bean's model (Bean, 1980), empirical evidence suggests that students' social and academic integration in the institution (respectively institutional commitment and goal commitment) strongly influence student retention and student graduation. Students who are satisfied with the formal and informal academic and social systems in a university interact more within both the academic and social spheres of their university and are less likely to dropout than those who do not. Closely to related with the quality of an institution and academic integration are the institution's policy and regular practices. In their study on how a school's organizational structure affects dropout behaviors, Allensworth and Easton (2007) find that structures with clear norms in place held the most promise for students at risk of both absenteeism and dropout levels. Students are less likely to drop out if they attend institutions with a stronger academic climate and a high level of

participation in school activities. Teachers' experience is also indicated in previous studies as a predictor of dropping out. De Paola (2009), among others, finds that teacher experience has a positive influence on course graduation rates. The higher the university's teaching quality performance, the lower the student's propensity to drop out (Johnes, Mcnabb, 2004).

The last factors which are linked to higher education students' dropout are the community and country related factors. Several studies (e.g., Rumberger, 2004; Huisman, Smits, 2009) point out that community characteristics, such as local infrastructure, the urban or rural nature of the area, the geographical location of family residence may have detrimental effects on students' university performance, either directly or indirectly. These factors are related to political stability, economic conditions, government support and programs regarding education, unemployment and other fields (Ravallion, Quentin, 1999; Jordan et al. 2012). Finally, as suggested by Smeyers (2006), these factors have a more significant influence on dropout in the case of dynamic interactions between them.

3 Data and Methodology

3.1 Determinants of student dropout

There is potentially a large number of factors that may have an impact on the length of time that it takes students to graduate or dropout from university. Student dropout is influenced by four categories of factors: student characteristics, institutional factors, contextual factors and external factors (*Table 2*).

For the first group of variables, we choose two indicators: gender and student quality. The literature is inconclusive regarding the influence of gender on dropout. Johnson (1997) notes that men often carry on their education because of their attitudes to economic necessity and career advancement. Bailey et al. (2006) find that the percentage of female students negatively impacts graduation rates. However, several studies (Rumberger, 1983; Ouand Reynolds, 2006; Porter, 2000) suggest that institutions with more female students are expected to have lower dropout rates. The second indicator is related to student quality. A good performance at high school is usually expected to provide a strong background for further academic studies. Several studies (e.g., Belloc et al. 2010; Paura, Arhipova, 2014) conclude that high dropout rates are related to high school graduation marks. In Tunisia, students are oriented to faculties in two or three sessions according to their results and scores in secondary education. We assume that students admitted to higher education institutions (HEI) in the first orientation (university course selection) are more skilled than other students. Hence, we proxy the quality of students by the share of students oriented to HEI in the first session.

This indicator also shows the degree of student satisfaction. Students who do not feel satisfied with their institution of choice have a high risk of dropping out. Moreover, students prefer to enroll in institutions with high perceived student satisfaction.

Regarding the institutional factors, we examine three variables: the size of institution, education scale, and staff quality. Student dropout can be due to differences in institutional size. Some scholars (Pittman, 1993; Rumberger, 2004) have shown that smaller institutions are likely to result in lower rates of dropout. In general, large institutions have greater program or curriculum diversity, but a less positive social climate and academic support. In line with many studies (e.g., Sneyers, De Witte, 2015), we proxy this variable by the number of students in each institution. The second variable concerns the education scale proxied by student-staff ratio. Smaller class sizes and lower teacher-student ratios lead to frequent interaction between student and staff and may have a positive effect on university achievement (Smeyers, 2006). Staff quality is also expected to influence the propensity to dropout (Blue, Cook, 2004; Dalton et al. 2004). In our paper, teacher experience is proxied by the proportion of full professors and associate professors to total academic staff. We assume that the ratio is negatively correlated with dropout rates.

Other determinants which are linked to higher education students' persistence are contextual factors. Several researchers (e.g., Towns, 1997; Stratton et al. 2008;Carneiro, Heckman, 2005) conclude that students who obtained financial aid (grants or loans) tended to remain in university and achieve higher grades than the average student. Financial constraints might be strongly related to the decision to leave the university. In this study, this variable is proxied by the share of bachelor students in the first year who received grants from the State. Students' dropout is also related to the issue of university accommodation and type of accommodation. A significant body of literature (e.g., Christie, Dinhan, 1991; Torres, Solberg, 2001) suggest that staying in campus accommodation rather than living at home or at an off-campus location significantly facilities integration to university life socially and academically. Findings from studies prove that dropout rates can be reduced through increased university accommodation. In Tunisia, students, especially males, can benefit from university accommodation for just one year. In consequence, they have to look for off-campus accommodation, which incurs further costs. In our case, this indicator is measured by the share of students in each region of the country who benefit from on-campus accommodation.

Finally, we examine the effect of external factors on the university environment. In our model, we introduce an economic indicator and we proxy it by the unemployment rate. Using a binomial Probit model, Smith and Naylor (2001) find that the dropout probability is positively affected by labour market conditions and particularly by

unemployment in the country of prior residence. The same result is found by Akabayashi and Araki (2011) in the Japanese context.

3.2 Data

The data used in the study are provided by the Ministry of Higher Education and Scientific Research (Office for Studies, Planning and Programming) and covering the years 2010-2015 (six academic years). The study concerns 160 higher education institutions (12 public universities) and the final sample includes an average of 671 bachelor study programs per year. We concentrate our analysis on bachelor students enrolled in the first year of study. Our sample excludes students who are enrolled in medicine, pharmacy, architecture and engineering schools since the dropout rate in these institutions is very low and close to zero. We also eliminated private institutions in order to ensure comparability and obtain a homogenous sample. For the dropout analysis, we consider voluntary action and we calculate for each bachelor program in HEI and for each academic year the dropout rates. The student dropout rate is defined as the percentage of the first year bachelor students that cease their education (students who do not pass exams) at the institution during an academic year. The panel dataset is unbalanced because some bachelor programs are eliminated or new curricula are created during the period of study.

The data are further enriched by information on staff in each institution (number and rank), university accommodation and the number of grants delivered by the State for the first year bachelor student in each institution. Concerning the unemployment rates of each region in the country, the data are provided by the Tunisian Statistics Institute (INS).

3.3 Model

To examine the factors influencing student dropout rates in Tunisian universities, we apply the following linear model:

$$Y_{ij,t} = \alpha + \beta X_{i,jt} + \varepsilon \qquad (1)$$

Where $Y_{ij,t}$ is the yearly dropout rate of high school students in programme i of faculty or college j in year t. $X_{i,jt}$ represents a vector of exogenous variables, such as student characteristics, institutional factors, contextual factors and external factors. It includes eight indicators : gender, student quality, size of institution, education scale, staff quality, financial aid, university accommodation and unemployment rate. α is the constant of the model, β represents a set of parameters to estimate, and finally, ε is an error term.

Since we have a panel regression combining cross-section and time series data and following several studies (Clarke et al. 2010 ; Gitto et al. 2016), we estimate this

equation by using the fixed effects model (in this model, the error term is assumed to be constant over time) and random effects model (the effects related both to individuals and time are random). These models (FE, RE) allow the solution of the problem of unobserved heterogeneity with the inclusion of error terms constant across time or varying randomly. The fixed model is tested by the Fisher test (F), while the random effect model is examined by the Lagrange Multiplier test (LM). If the null hypothesis of heteroscedasticity residual variance is rejected, the ordinary least square (OLS) regression is favored. In order to select the most appropriate model, the Hausman specification test (H) is performed.

4 Empirical results

4.1 Descriptive statistics

Before we analyze the determinants of university dropout, it is useful to comment on some preliminary features of our data. *Table 3* presents descriptive statistics for dropout rates and the variables that concern student characteristics, and the institutional, contextual and external factors. The summary statistics show for example that the average dropout rate is relatively high in the first year of bachelor program (5.8%) with an extremely high dropout (65.2%) in some programs. Concerning student characteristics, we observe that the share of female students is also high (60.53%) and on average only 37% of students are satisfied with their study program. On the other hand, table 3 reveals that the share of students who received grants and benefit from on-campus accommodation is very low (35% and 19% respectively). Further, the first year bachelor program consists on average of 153 students enrolled with a student-staff ratio of 16 and a staff that consists of 32% of full and associate professors. Finally, the average unemployment rate in Tunisia during the period 2010-2015 is very high (15.8%) and reached in some regions a rate of 51.6%.

4.2 Regressions results

To estimate the panel regression model (equation1), we used three alternative models: Poole d ordinary least square, fixed effects model, and random effects models. Three tests are applied to choose between these methods. Firstly the F-test shows that individual effects are present, since the relevant F statistic is significant at the 1% level ($F(8, 1610) = 3.64$), thus we choose the fixed effects model. Secondly, for the random effects model and in order to investigate whether there is evidence of heteroscedasticity in the residual variance, the Breusch-Pagan Lagrange multiplier (LM) is calculated. With the large chi-squared (LM statistic = 772.53with $p < 0.000$), we reject the null hypothesis in favor of the random effects model. Finally as indicated by the Hausman test

(H = 47.75 with a p-value = 0.000), the difference in coefficients between fixed effect and random effect is systematic, providing evidence in favor of a fixed effects model.

Table 4 presents the empirical results of the determinants of university dropout. The first column reports simple ordinary least square estimates. In the next two columns, we report results using fixed effects and random effects models.

First, we consider the student characteristics that influence university dropout. As expected, we observe a significant negative relationship between student dropout and gender in the fixed effects model. In Tunisia, dropout rates are generally higher for males than for females. This result is consistent with previous research (e.g., Rumberger, 1983,7; Scott et al. 2006); Zotti, 2015) which finds that gender is significantly related to student dropout. According to Sneyers and De Witte (2016), these gender differences in performance could be explained by differences in psychological and/or biological factors and in characteristics that are correlated with attainment (e.g., family background). Our results also indicate (OLS model) a significant negative correlation between student dropout and student quality. Students with a higher score in secondary education are less likely to drop out. In consequence, students who are not oriented to their preferred higher institution because of their lower score have a higher probability of dropping out of the university (Cingano, Cipollone, 2007; Boero et al. 2005).

Turning to the institutional factors, in line with the main literature, we find a positive and significant association between student dropout and student-staff ratio. Generally, a low student-teacher ratio correlates to high graduation rates (Bound et al. 2010; Rumberger, 2004). In higher institutions with a low student-staff ratio, there will be frequent and successful interaction between students and professors. This environment could play a crucial role to promote academic interaction and persistence (Tinto, 2002). The results of the analysis also show a favorable significant influence of staff quality on student dropout. This is in line with several studies. For example, Sneyers and de Witte (2016) find a significant positive influence of the percentage of staff older than 50 years on student graduation and program quality ratings (for given dropout rates). As indicated by Johnes and Mcnabb (2004), the higher the university's teaching quality performance the lower the student's propensity to drop out. Concerning university size, our proxy is positive but not statistically significant. In the literature, the effect of university size on dropout is ambiguous. According to Pittman and Haughwout (1987), this issue is related to universities' social climate, and more particularly to the influence of student participation as well as the number of problems in the university environment.

Regarding contextual factors, table 4 shows for all models that financial aid has not a consistent effect on dropout. This indicates that higher education scholarships and study grants have not proved to be sufficient to curb dropping out. In Tunisia, the grants received by students are very low in amount and do not encourage students to continue

their studies. Our study also reveals (OLS and random effect models) a negative and significant relationship between university accommodation and student dropout. The results supported by several studies (e.g., Christie and Dinhan, 1991; Torres and Solberg, 2001) suggest that the students' social conditions, especially the issue of accommodation, strongly influence persistence in the university and academic integration. Murray (2014), in the context of South Africa, finds that students with some form of residence-based accommodation are graduating on average more quickly than students who have no form of accommodation.

Finally, the variable related to external factors has a statistically significant effect on dropout. Our result is consistent with previous research. For instance, in Japanese high schools, Akabayashi and Akari (2011) find that between 1989 and 2005 (in the Tohoku area) the dropout rates for public and private schools are positively correlated with unemployment rates in this region. In addition, they suggest, in the case of private schools, that there is potential for a two-way causality effect of economic conditions on dropout rates.

Conclusion

Dropout is a multifactor phenomenon that has become an important social and economic problem in many countries. Considerable research has addressed factors associated with dropping out of university. The main purpose of this paper was to give an additional contribution to the existent literature on this issue, focusing the attention on the factors influencing dropout in the first year of the bachelor program at Tunisian universities. To address this complex concept, we examine the most important factors that have been studied in the literature, from student characteristics to institutional factors in universities and communities. An econometric model is used in this paper to understand the underlying causes behind students' decisions to drop out.

Many factors have been identified as influencing dropping out in Tunisian higher education. First, dropout rates are generally higher for males than for females. Second, our findings indicate that the institutional characteristics have an important impact on student dropout. The results of the regression show that education scale measured by student staff-ratio has a positive influence on dropout. We also find a negative association between staff quality and dropout rate. On the other hand, the analysis reveals the importance of contextual factors such as university accommodation in helping students to complete university. Finally, in addition to these factors, university dropout is influenced by external factors and especially by the economic conditions in the country. Empirical results suggest that unemployment rate is positively and significantly correlated to dropout.

Based on the findings of this paper, it is useful to draw some policy implications and recommendations. First, no single factor can completely account for a student's decision to continue in university until graduation. For this reason, any policy decision of relevance must necessarily focus on the whole aggregate of factors at the level of students, universities and the broader environment (De Witte et al., 2013). To improve social and academic integration and provide a more attractive learning environment, policymakers have to implement some measures and programs in the university to counteract student dropout (e.g., new teaching approaches, development of extracurricular activities, increase the degree of student participation, development of literacy and language,…). In some countries (USA, Germany, the Netherlands), universities have adopted the community school concept where the students and social environment are closely involved. This concept is a combination of three activities: cooperation with external organizations, student and family involvement and extracurricular activities. Third, universities have to identify as soon as possible the students who are most likely to drop out and to provide special care and programs for them (e.g. intensive coaching or mentoring programs, orientation courses, peer-tutoring programs). Research has shown that these prevention programs have significantly improved pass rates, exam grades, and levels of retention (Glass, Garrett, 1995; Nelson, 1993). Finally, Tunisian universities have to reinforce their staff with experienced professors, which may lead to better student performance. In this regard, to increase the number of professors and associate professors in universities, the university has to encourage researchers by implementing a competitive system for the allocation of research funding.

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Appendix

Table 1 Selected statistics on student dropout in Tunisian higher education by year, 2010-2015.

years	2010	2011	2012	2013	2014	2015
Number of dropouts						
Total number of dropouts	16143	15586	10170	7812	11421	8765
Number of dropouts in bachelor program	10689	9168	6889	5324	8549	5267
Number of dropouts in the first year at bachelor program	7976	6899	5223	3978	7133	4011
Proportion of female	43%	48%	42%	42%	45%	47%
Dropout rates	4.23%	3.83%	2.87%	2.48%	3.84%	2.76%
Average dropout rates	5.19%	4.12%	3.13%	2.60%	4.14%	2.85%
Average dropout rates in bachelor program	7.91%	6.89%	5.33%	4.64%	7.73%	4.99%
Average dropout rates in the first year at bachelor program						
Dropout rates by fields of education	9.49%	7.45%	6.12%	1.38%	0%	0%
Education	7.57%	9.10%	9.30%	6.86%	7.27%	8.51%
Humanities and arts	8.34%	7.79%	4.56%	4.48%	13.59%	4.84%
Social sciences, business and law	8.48%	5.04%	3.62%	3.80%	5.41%	3.99%
Science	8.76%	6.30%	3.91%	4.48%	3.43%	2.47%
Engineering, manufacturing and construction	6.03%	7.05%	9.57%	13.08%	4.46%	14.13%
Agriculture	1.65%	2.49%	3.27%	2.88%	2.30%	2.82%
Health and welfare	7.86%	6.92%	6.11%	2.08%	2.77%	2.28%
Services						

Table2 Detailed description of variables used in regression analysis

Variables	Description
Dependent variable	
Student dropout rate	Percentage of the first year bachelor students that cease their education at the institution during an academic year.
Independent variables	
Student characteristics	
Gender	Share of women student in each bachelor program.
Student quality	Share of students oriented to HEI in the first session.
Institutional factors	
University size	Number of student in each bachelor program.
Education scale	Ratio of the number of students to the number of teaching personnel.
Staff quality	Total full professors and associate professors to total academic staff
Contextual factors	
Financial aid	Share of bachelor student in first year who received grants from state.
University accommodation	Share of student in each region of the country who benefit of university accommodation.
External factors	
Unemployment rate	Unemployment rate per region and per year

Table 3 Selected descriptive statistics of variables used in regression analysis

Variable name	Mean	Minimum	Maximum	Std. Dev
Dropout rate	0.0579	0	0.6520	0.086
Student characteristics				
Gender	0.6053	0	1	0.222
Student quality	0.3745	0	1	0.112
Institutional factors				
University size	153	8	1619	161.12
Education scale	16	7	55	7
Staff quality	0.324	0	1	0.283
Contextual factors				
Financial aid	0.348	0	0.949	0.14
University accommodation	0.1875	0.0654	0.588	0.0857
External factors				
Unemployment rate	0.158	0.09	0.516	0.057

Table 4 Regression results on the determinants of university student dropout

Independent variables	OLS		Fixed Effect		Random effect	
	Coefficient	**t-statistics**	**Coefficient**	**t-statistics**	**Coefficient**	**t-statistics**
Student characteristics						
Gender	0.0109	1.34	-0.0665**	-3.04	-0.0887	-0.81
Student quality	-0.0045**	-2.91	-0.0002	-0.13	-0.0016	-1.33
Institutional factors	0.0000	0.41	0.0002	0.426	0.00001	0.80
University size	0.0002	0.88	0.0006**	2.17	0.0004***	1.77
Education scale	0.0148**	2.31	-0.0628**	-2.28	0.0100	1.08
Staff quality						
Contextual factors	0.0077	0.61	-0.0066	-0.38	0.0127	0.92
Financial aid	-0.0011*	-5.20	0.0002	0.44	-0.0009*	-3.32
University accommodation	0.0002	0.86	0.0007***	1.66	0.0006***	1.88
External factors	0.0071	0.70	0.0857*	3.92	0.0119	0.94
Unemployment rate	2221		2221		2221	
Constant	0.0238					
No. of observation					772.53	
Adjusted R^2			47.75			
LM						
Hausman test						

, ** and * indicate statistical significance at 1%, 5% and 10%.*

Éva PÁLINKÓ, Zsófia VIDA

How to achieve high scientific impact in SSH research projects? Findings of a case study

Abstract

The article is based on a case study conducted in an interdisciplinary social science research project with outstandingly high scientific impact. The main goal of the paper is to analyse in depth the scientific success achieved by the project and the key elements that led to it. Besides the analysis of its scientific impact and background, the article examines both the political and social impacts of the project and those which were made on the ERA. The findings are based on a mixed methodology of desk research (e.g. document analysis, co-participation analysis, geographical analysis) and fieldwork. In the frame of the fieldwork, in-depth interviews with communicative orientation were conducted (Gómez, Puigvert, Flecha, 2010). According to this communicative approach, the case study not only identifies and explains the elements that enabled the project to achieve its significant impact but could also improve the capacity of Social Sciences research projects in general to reach a higher impact.

1 Introduction

The paper was elaborated in the frame of the IMPACT-EV project which evaluates the impacts and outcomes of EU funded SSH research. The findings are based on the case study of the GINI project[11] which was selected in the IMPACT-EV as a top success story regarding its scientific impacts regarding the high number of GINI affiliated publications in scientific journals and scientific dissemination activities (Scharnhorst et al., 2015). The

[11] The GINI Project studied the economic and educational drivers and the social, cultural and political impacts of the increasing inequality with novel contributions on the comparability across 25EU countries, USA, Japan, Canada and Australia. The project period was 2010-2013, with a sum of 2,7 million Euros EC contribution under the FP7.

main goal of this case study is to analyse the scientific impacts of the project and those factors which led to these.

2 The significance of the topic

Besides the policy-based demand for feasible, informative and generally applicable indicators being capable for predicting relevant aspects of research impact in the SSH fields, the alternative channels which may affect knowledge production should also be examined and taken into account in the evaluation of the SSH research impacts (Soós et al., 2017). This paper focuses on these alternative channels by analyzing the scientific impacts of the mentioned project. The findings fit into the frame of the impact assessment of the SSH research in different ways: on one hand by providing additional information for the development of the proposed indicator system, on the other hand by providing relevant information not only about the nature of the scientific impact and its background but also about the political and social impacts of the project, and those which were made on the ERA.

3 Methodology

In the case study, different sources of data and a mixed methodology of desk research techniques and fieldwork were used. The desk research consisted of classical analysis of the project documents, systematic data extraction for a co-participation analysis and for the visualization of the geographical coverage of the project activities. Research collaboration is an important area in the field of Information Science. The most frequent and simple meaning of collaboration is co-authorship, but collaboration has a wider meaning as well, for example participating in a common research project (Katz, 1997, Luukkonen et al., 1993). In our particular case, co-participation analysis was conducted on the common participation in the main project conferences. A conference or a workshop is one of the best places where future relations and collaborations can emerge.

In the frame of the case study, besides the desk research methods, intense fieldwork was conducted: in-depth interviews with communicative orientation (Gómez, Puigvert, Flecha, 2010) with the former members of the GINI project. As the interviews were conducted under the communicative approach, they entailed egalitarian dialogue between the interviewer and the interviewees to provide intersubjective knowledge production. Due to this orientation, the very process of interviewing could generate reflections among the former GINI members on aspects of their research impact they never thought about before. These reflections could be very useful for both the improvement of impact assessment systems and for enhancing the impact of the studied project (Gómez, Puigvert, Flecha, 2010).

4 Main findings[12]

4.1 *Outputs and impacts of the GINI project*

Scientific outputs and impacts

As GINI was selected as a top success story regarding its scientific impact (Scharnhorst et al. 2015), its scientific outputs have been analysed deeply. The following table (*Table 1*) represents all the expected and realized outputs of the GINI project a year after the project closed.

Table 1 Expected and Realized Outputs of the GINI Project by 2014. Oct.

Expected and Realized Outputs[13] of the GINI Project by 2014. Oct.		
Expected Outputs (Source: GINI Growing INequalities' Impact "Description of work")	**Realised Outputs** until 2014. October (Source: http://www.gini-research.org/articles/home)	**References of the realised output record**
	3 Books (e.g. 2 Volumes at the Oxford University Press)	http://www.gini-research.org/system/uploads/543/original/GINI_1-2_ResultsOutput_201309.pdf?1380620989
70 to 80 Discussion Papers	94 Discussion Papers	http://www.gini-research.org/articles/overview_of_all_papers
	5 Policy Papers	http://www.gini-research.org/articles/policy_papers
26 Country Reports covering 29 countries	26 Country Reports on 30 countries	http://www.gini-research.org/articles/cr
4 Analysis Reports	4 Analysis Reports	http://www.gini-research.org/articles/papers
1 Final Report	1 Final Report	
Dissemination booklet	98 Dissemination Activities	http://gini-research.org/system/uploads/557/original/A2.pdf?1381739017
Database	2 Datasets	http://www.gini-research.org/articles/data_2
and a host of academic publications	48 Scientific Publications (peer reviewed articles)	http://www.gini-research.org/system/uploads/617/original/A1.pdf?1412256016

Source: as signed at the references.

[12] The findings are based on different types of analyses (document analysis, co-participation analysis, geographical analysis and results of the interviews). In favor of the transparency the sources of the findings in the case study are signed with the following codes: D – Document analysis I – Interviews G – Geographical analysis C – Co-participation analysis.
[13] The list of the expected outputs is based on the document 'Description of work' (TA) which was compiled before the project, while the list of the realized outputs is based on the results of the document analysis.

The records (*Table 1*) show that the number of the realized outputs exceeded the number of the expected outputs in every targeted dimension. Most of the output documents produced in the GINI Project are primarily science related, but there are policy related scientific outputs (policy papers), and other outputs with mixed possible relations (datasets, country reports, and a number of dissemination activities), too (D).

The chapters of the listed books are edited and written by a number of participants of the project (core team members, country experts, and associate experts). The average number of co-authors of the book chapters is 2,29 persons (D). However, these co-authors were mostly close colleagues and there emerged a number of new collaborations thanks to the project in this form. This kind of new co-authorship is evaluated to be very fruitful by the interviewees (I).

The overall number of scientific articles written in the frame of the GINI project until 2014 October is 48 (D). Until this date, it was collected systematically by the project, but afterward, we have only sporadic information on the publication activities of the former members. The interviewees do not follow the subsequent publications regarding the project or the citations of the 48 previous articles (I). Out of this 48, 8 articles are written in original languages, but there are more national scientific publications (e.g. in Korean, Hungarian, Italian) which the interviewees mentioned. It is very plausible that a number of authors published more articles in original languages (I).

During the project period, four main international conferences were held for discussing and disseminating the results of the GINI project (in the UK, Italy, Hungary and the Netherlands). These conferences were open for not only the project participants but also for other stakeholders and the wider public (D). Besides these conferences, a number of workshops helped members to share and discuss their findings with each other (D).

Based on the good cooperation of the members the GINI project led to new research projects (e.g. FP7, TITA, NORFACE) (I).

Political and social impacts, and impact made on the ERA

The political and social impacts and those which the GINI project made on the ERA were examined mostly via the fieldwork.

Impacts on the ERA

The GINI project contributed to the strengthening of the ERA in different ways. It deepened the collaboration and broadened the network among different research institutions and researchers in Europe and outside the continent. The project proved to be beneficial for researchers at any stage of their career span, but mostly for young/junior scholars. They could learn from their seniors in many ways (how to make

science, how to manage a research project) and build networks with them. They could write important publications in the frame of the project and even new working opportunities opened for them (I).

Political impacts

As an interdisciplinary project, the target of the GINI project was wide in the political sense: touching many policy fields (e.g. economic policy, health policy, education policy, demography/population policy, social policy). According to its heterogenic political relevance, all the findings of GINI could not be canalized directly into policies. After the main goal 'to achieve scientific impact' the secondary aim 'to provide useful information to policymakers' could be realized only in particular topics (I).

In the frame of the GINI project, 5 policy papers were elaborated. What is more, the consortium made many efforts to make their findings better available and understood for policymakers. National and EU policymakers, OECD representatives were invited for the regular conferences and workshops of the GINI project. In addition, seminars and book launches were held for presenting the findings directly to national ministries or EU representatives (I). The then EU Commissioner for Employment, Social Affairs, and Inclusion wrote the foreword of the two mentioned books of the project. He was the person whose inauguration speech was connected to the results of the project, too (I).

The GINI project had intense contact with the relevant Directorates-General of the European Commission. Country desks at the DGs were interested in the results of the project. (I).

Social impacts

As a scientific project, GINI could not implicate direct social impacts but indirect ones. The most important is the increased awareness of the topic of inequality in the evidence-based media and the general public (I).

4.2 Strategies to achieve high impact

The most intricate question is how the GINI project was able to achieve such significant impact. Some of the background strategies derive directly from the narratives of the interviews, but there are others, which should have been analysed and visualized further based on the data of the project documents.

The first group of findings includes those simple factors which were mentioned during the interviews, by the frequency of the mentioning.

Core Factors - mentioned in the interviews

As the secret of the scientific impact of the GINI project the most frequent first mention was **excellent coordination** (I). The main coordinator of the project was a very experienced scientist, who was the coordinator of various FP5th and FP6th and other research projects before the GINI (D). Based on these management experiences, his scientific knowledge and personal charisma meant he was able to sustain the personal motivation of the members at every level while being able to make them stick to deadlines and be productive at the highest scientific standards (I).

The sum of the scientific outputs of the GINI project until 2014 October is 249, which involves a total of 240 authors (D[14]). The concept behind the human resource structure of the GINI project **was to have a huge network and maximize expertise at every level**. Not only the core team members and the advisory board members were internationally respected top scientists but also associate members and country experts could be mentioned among the best scholars of their research topics in their country (I).

A detailed work plan with a **clear concept and organizational structure** allowed the highly experienced Core Team with the contribution of highly skilled Country Experts and Associate Individual Experts to deliver relevant findings. They gained effective support from an outstanding Advisory Board (D, I).

The coordinators of the project were 6 leaders from the 6 consortium institutions. This **highly efficient Core Team** could help the work of the main coordinator very effectively both in the scientific and the managerial dimensions (I).

Not only the Core Team members and the coordinators were **committed people** but also all the other participants were dedicated to working at the highest standards. The snowball method in the selection of the different members was the proof of having the best personnel at all levels (I).

Thanks to the **demand for achieving at high standards at every level**, nearly all findings delivered by the project were suitable for being edited into one of the Oxford University books volumes. These books have special importance as in this form the findings of the GINI project reach the university students via lectures all around Europe (I).

The project did not have a detailed publication plan in advance but real efforts were made by the management and all participants to write high-quality papers. For the best results, an **internal peer-review system had been operated on** in the project.

[14] Based on the A1 document 'Academic publictions of the GINI project', the GINI Output document and the Country Reports

General factors

The following factors were mentioned during the interviews, too, but these are quite general categories with complex possible impacts and meanings, so we examined them deeply with different specific methods in the frame of the desk research.

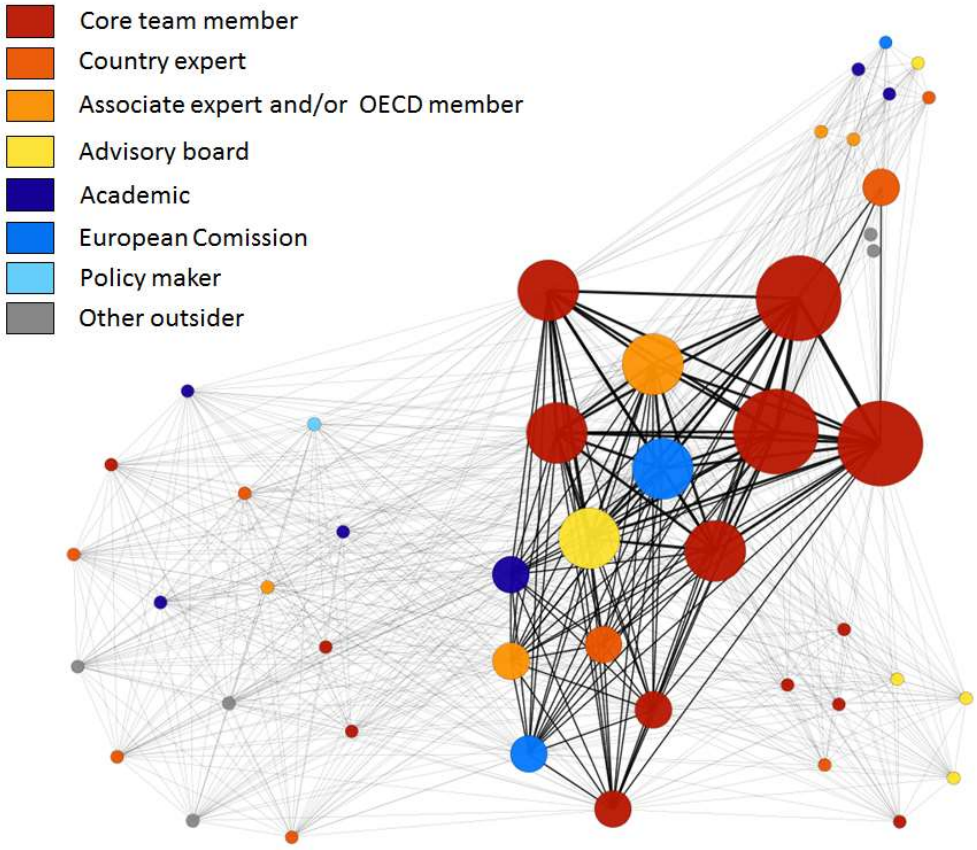
Effective dissemination activities

The dissemination activities of the GINI could reach the scientific community widely but were also very effective in cases of other stakeholders like policymakers. In many events, not only the GINI members were active but also outsiders connected efficiently (I, D)

The main conferences where findings were exposed were open for the whole scientific community, policymakers, the media and even the general public. In these events, all GINI members and other stakeholders were active as speakers or chairs (D).

Based on the plenary program of the four main GINI conferences (Amsterdam, London, Budapest, Milan) a co-participation analysis was conducted to trace out the co-participation patterns of the different types of project members and other stakeholders at these events. We detected which kind of project members appeared on these events and how these agents were situated in the co-participation network.

Figure 1 Co-participation network of GINI conferences according to the type of the membership



Data source: a Plenary program of the four main GINI conferences

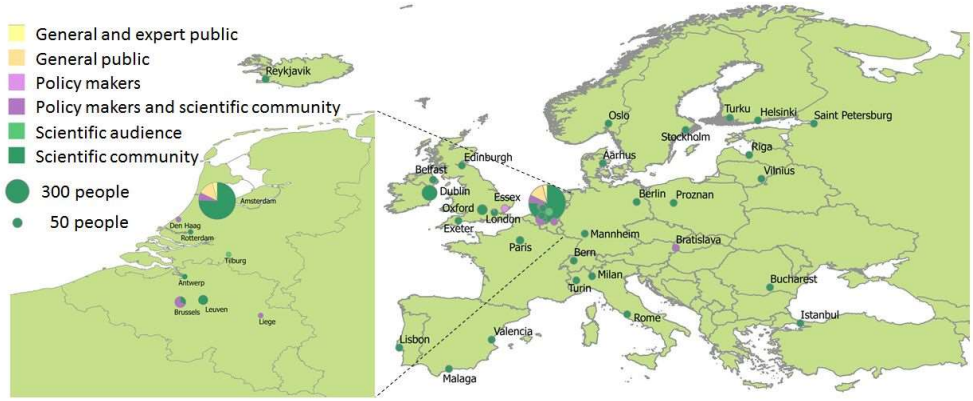
The network (*Figure 1*) shows that core team members were the most active at the conferences: most of them participated in more than one conference. There are some outsiders: an academic and two European Commission representatives occupy a central position in the network, which means that the project could effectively integrate both policymakers and representatives of the scientific community.

The wide geographical reach of the scientific community and other stakeholders

The GINI project provided comparable data and detailed analysis about the inequality issues of the 25 EU countries, the USA, Japan, Canada and Australia, so the geographical coverage of the results is outstandingly wide.

In the frame of the desk research, a geographical analysis of the GINI project was carried out to explore and visualise the territorial coverage of the dissemination activities and the involvement of different stakeholders of the project (D).

Figure 2 The dissemination activity based on the type and size of the audience in Europe



Data source: The list of dissemination activities /http://www.gini-research.org/

Figure 2 shows that the reach of the scientific community is the widest in every country but the policymakers are significantly visible, too, while the reach of the general public is the most narrow.

However, the next map shows a Europe-wide reach of stakeholders, where further document analysis reveals other important dissemination activities which are not on the official GINI list that is the base of the previous map. On the following figure *(Figure 3)* all the dissemination activities are visible which were explored by the further document analysis (besides the official GINI dissemination activities document, e.g. the program of the conferences, workshops and book presentations).

Figure 3 The dissemination activity based on type and size of activities in Europe

Data source: The list of dissemination activities /http://www.gini-research.org/

It is clearly visible (*Figure 3*) that the cities of the six consortium members are the most involved in all types of activities. Amsterdam, the base of the main coordinator had the most heterogeneous and richest dissemination-palette, but in London, similarly diverse events related to the project occurred. In Dublin three, and in Antwerp and Budapest two, types of dissemination activities were present. However, these were the most active cities regarding the dissemination activities, meaning the project could reach almost all European countries out of the Balkan countries with varied events and activities.

5 Conclusions

The GINI project has produced comparable statistics and deep understanding of inequality issues in 30 countries. According to our desk research and fieldwork the GINI achieved very high scientific impact: its findings have been published in high-quality books, a number of scientific journals, and generated new research projects and other initiatives. What is more, the project presented its results in open conferences and seminars and spread its findings among scientists very effectively. The cooperation of the GINI members with outsiders from the academia and other stakeholders was very high in form of publications and conference/workshop participation. Besides its scientific impacts, the GINI project achieved significant political impacts and left its marks on the

ERA in form of intense cooperation between researchers and even in the form of new job opportunities for early stage researchers.

This high impact level was mostly based on the very experienced and efficient leadership, the committed consortium and a huge network of top scientists at every level of the project organization.

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Aleš VLK, Šimon STIBUREK

Diversification, Autonomy and Relevance of Higher Education in the Czech Republic

Abstract

The relevance of higher education is understood mainly in terms of employability of graduates by the main stakeholders in the Czech Republic. However, some interpret relevance in "narrow" terms of directly applicable job-specific skills and knowledge, while others prefer a "broader" meaning of transferable competence. Neither national policy nor most of the strategies on the institutional level take a clear stance on which of these perspectives should be the driving principle of the study programme design. The decision how to make higher education more relevant to the society is usually left to lower levels – faculties and departments, and even individual teachers. It seems that the lack of political steering, combined with a traditional conservatism of academia and somewhat formal diversification of the whole sector all together contribute to the fact that the higher education system in the Czech Republic is slow to change and adapt to rapid social and technological development.

1 Introduction

It is not automatically understood that higher education (HE) necessarily meets the needs of individuals, economy and society. Its relevance is to be defined, steered and ensured by policies and policy instruments.

In our paper, we focus on three main questions. First, how is the concept of relevance actually understood in the Czech HE system in terms of its content? Second, who and at which level of governance defines what does "relevance" actually mean? Third, what measures are adopted on the national level to promote the relevance of HE? Answers to these questions are then put into the context of autonomy of higher education institutions (HEIs) and diversification of the sector.

When referring to higher education in this paper, we mean primarily the educational role of HEIs and thus teaching and learning. Other aspects of the university sector, including research and development as well as the "third role" are not of our main concern in this case.

This paper builds on a country case study developed for the project "Promoting the Relevance of Higher Education: Trends, Approaches and Policy levers" (HEREL). A conceptual approach of the HEREL project is used in order to discuss the issue of higher education relevance.

The HEREL project was funded by the European Commission (DG Education and Culture) in order to support cooperation in the field of higher education. The task was assigned to a team led by the Center for Higher Education Policy Studies (CHEPS) at the University of Twente. Its objective was to explore the design and effects of different government and sectoral policies designed to improve the relevance of higher education. At the same time, the purpose of the study was to exchange information on policy approaches and to learn from these as an input for future policy cooperation in Europe.

This paper uses selected outcomes of the Czech case study. Collected data is also further examined in order to analyse the roots of the higher education relevance policy development.

2 Relevance in higher education

The relevance of higher education is a multidimensional concept reflecting purposes of higher education found in academic literature (see Castells, 2001; Clark, 1983; Marginson, 2011; Trow, 1975) and also contemporary political discourse as represented for example by the Council of Europe (CoE, 2007). In order to be able to measure the relevance in higher education at least to some extent, it can be conceptualised along the following two dimensions:

- What is higher education relevant for (objectives of higher education)
- Whom is higher education relevant to (users of higher education and higher education results).

In this concept, students and graduates are regarded as major direct users of higher education. By using their skills and knowledge, graduates make higher education relevant first to the economic sector (employers use highly educated labour), and second to the society (society at large benefits from highly educated citizens in a variety of ways).

Focusing on the teaching function of higher education, and students and graduates as direct users, three main objectives can be distinguished:

- Personal development – i.e. development in terms of values, ethics, motivations and identity promoting self-respect and overall wellbeing.
- Sustainable employment of graduates – i.e. acquisition of qualifications, knowledge, skills, competence as well as social and cultural capital leading to successful transition to the job market, career opportunities, earnings, job satisfaction and long-term (sustainable) job security.
- Active citizenship – i.e. development of one's democratic values, tolerance, intercultural and civic skills, political literacy and (a sense of) ability to have influence, leading to inclusion and social or political participation.

Although each of these aspects can be considered relevant for the beneficiaries, not all stakeholders assign equal importance to all these dimensions. Thus, one can analyse not only to what extent HE is relevant in terms of its outcomes but also how, if at all, individual aspects of relevance are supported by both national and institutional policies. In line with this, one should take a closer look at what policy measures are adopted in order to stimulate the relevance of HE.

3 Methodology

As a part of the HEREL project (see above), eight case studies were conducted in various EU countries including the Czech Republic. In order to analyse policy approaches adopted in different case study higher education systems, two main methods were employed – desk research and expert interviews.

Conducting the study in the Czech Republic, we first reviewed all the major national policy documents over the last ten years (mainly the Strategic Plans for higher education - MYES 2008, 2010, 2015). As the second step, we conducted interviews with 13 individuals representing various Czech higher education stakeholders from the following institutions: Ministry of Education, Youth, and Sports (deputy minister, civil servants), universities and faculties (rectors and deans), Higher Education Council, Rectors' Conference, National Accreditation Office, Czech Association of PhD Students, and Czech Chamber of Commerce.

The interviews were semi-structured, guided by a script covering key areas of the research. The script was partly individualised in order to reflect the competence and role of the respective interviewee. As one of the main goals of the exercise was to identify the true interpretation of the concept of relevance by individual interviewees (which often stays implicit), we identified the risk of response bias. Our concern was that if the interviewees were presented with the analytical framework too early in the interview, they would be more inclined to encompass it in their answers. It could make them agree that all the dimensions of higher education discussed above are important. To avoid this risk the interviewees were asked a set of open questions on broader reflections of the HE

relevance in the introductory part of the interview, coding the answers to the above-discussed categories ex post.

4 Results

The policy document analysis revealed that all three dimensions of the HE relevance – sustainable employment, personal development and active citizenship – are present in the Czech HE policy discourse on the national level, yet employability-related aspects clearly dominate. All the policy measures, if assignable to any of the dimensions, target employability. Employment is also the only aspect monitored regularly through national data and graduate surveys.

At the same time, employment is being paid considerable attention by policymakers despite the fact that the unemployment rate in the Czech Republic keeps very low in the long term. Graduates in general find jobs relatively easily and quickly, and they are not substantially threatened by job insecurity.

Although the employability-related aspects of relevance dominate in the Czech policy discourse, the interviews revealed that within this approach, varying views can be identified with respect to how the career relevance is interpreted. On one hand, some actors emphasise the development of skills and knowledge necessary for specific positions – i.e. in their view, the main goal of relevant education is to train and prepare graduates for careers in specific fields. In that case, to keep teaching up-to-date with the technology development and expectations of employers is the main challenge. In contrary, other stakeholders prefer broader perspective. Their view takes into account the dynamic nature of modern labour market, emphasising the long-term employability as a goal. In this perspective, development of soft skills and transferable competence, including critical thinking and readiness for life-long learning, is crucial. These two approaches are further referred to as the “narrow” and “broad” perspective on employability.

The discussion whether to focus rather on general transferable competence and soft skills or on directly applicable professional skills and field-specific knowledge has been on for a long time, forming one of the main cleavages in the Czech higher education policy. While the “narrow” perspective seems to predominate among employers, politicians and general public, academia in general tends to prefer the “broad” universal view – although not unanimously. In this debate, the Ministry of Education, Youth and Sports (MYES) stays somewhere in the middle, although the recent Strategic Plan for Higher Education (MYES 2015) tends to prefer the broader perspective. Yet, the Ministry has not been taking any significant steps to promote one perspective over the other and stimulate it by targeted policy measures.

At the same time, not all HEIs share the same view on HE relevance and employability. In the interviews with HEI representatives as well as in the institutional strategic documents the employment-related dimension dominates in almost all cases while other dimensions of relevance (personal development and active citizenship) are rather underemphasised. However, the interpretation of the latter varies.

Most HEIs have no clear formalised strategy which of these two aspects to prefer. Hence the system is little diversified on the level of institutions. On one hand, almost everybody claims the goals should not be the same for every institution. On the other hand, only a few HEIs have taken real steps to profile themselves and distinguish from the mainstream – in any direction.

In the same time, there seem to be difference on the level of disciplines. Professionally oriented disciplines (for example in engineering or in services) tend to prioritise the "narrow" perspective of short-term labour market requirements and job-specific training. More academic and basic research oriented study fields in humanities, social or natural sciences stand for the second approach. Thus, the system tends to be diversified on a sub-institutional level and therefore only small narrow-profile institutions can distinguish themselves clearly in this respect.

However, this discipline-based dichotomy is not accurate as many exceptions can be found. In order to find out how relevance is actually understood in education design, one would have to go to the level of individual study programmes or even individual teachers, as this is something that is often left undecided on higher levels of decision-making. Thus, not only HEIs and their faculties, but frequently departments or units and even individual teachers are autonomous to set their priorities in this respect.

5 Conclusions

Perception of higher education relevance in the Czech Republic can be considered objective-oriented, focusing primarily on the employability-related aspects. For this purpose, various policy instruments are used from the realm of regulation, financial incentives, organisational changes as well as information.

However, due to extensive institutional autonomy of HEIs, mostly indirect measures have been applied and no clear instruction on how "employability" should be understood has been provided. The diversification of the HE sector seems insufficient both on the formal level as well as on the level of actual educational goals and structure of study programme provision at individual HEIs.

Highly diversified higher education system (with respect to institutional as well as study program diversification) might be more successful in offering adequate study options for increasingly heterogeneous student body. When various institutions focus on

various missions, their study program can be more flexible, responding to the changes in the society. Thus, they can deliver study programs more relevant to the labour market, better targeted on specific groups of students and provide them with an adequate added value. If higher education is adequately diversified, it is easier for students to find suitable study programmes, which they can successfully complete. Thus, this brings benefits not only to the relevance of education obtained but also to study success (see also Švec, Vlk & Stiburek 2015 and Vlk, Stiburek & Švec 2016) and subsequently to efficiency of the system.

Yet, it seems that in the Czech HE system the content, mode as well as structure of educational provision have not changed adequately over the last decades, so it has not become more relevant for contemporary student cohorts. A rather conservative higher education system reflects new needs and demands only very slowly.

A quarter of a century after the political changes in the Central and Eastern Europe the main challenge for the Czech higher education system remains the same as 25 year ago: to find an appropriate balance between the steering on the national level and the autonomy of individual higher education institutions. The higher education policy has to keep looking for the right mix of policy instruments applied on both national and institutional level which would make the higher education more relevant not only for the direct users (students and graduates) but also for employers as well as the society at large.

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Conference Documents

Central European Higher Education Cooperation (CEHEC)
3rd Conference

Worry or Not - Higher Education in Central and Eastern Europe
Current Trends and Scenarios for the Near Future

April 24-25, 2017
Budapest, Hungary

In 2014, CEHEC launched a new series of annual conferences co-hosted by the Center of International Higher Education Studies (CIHES) at the Corvinus University of Budapest and the Yehuda Elkana Center for Higher Education at Central European University (CEU), in collaboration with partners from the Czech Republic, Poland and Slovakia. Each conference in this series brings together researchers, policy makers, university leaders and other experts in higher education from Central and Eastern European (CEE) region and from other parts of the world. The main aim is to stimulate scholarly and professional dialogue on current trends and key issues in the region's higher education, as well as promote enhanced collaboration and experience sharing in higher education and science policies.

Conference Theme

In an atmosphere of declining enthusiasm and support for higher education, the 2017 Central European Higher Education Cooperation (CEHEC) conference proposes to scrutinize the chief reforms in higher education in the region over the past decade, identify the most important current trends and discuss possible future scenarios for the near future. Presentations will focus on the analysis and evaluation of institutional, national or regional policies, look into experiences and lessons learned from reform processes, or discuss current and forecast future trends.

Program

Monday April 24, 2017

Venue: Corvinus University of Budapest, Main Building (Budapest, Fővám tér 8), 2nd floor, Room 2001

13.00 – 14.00	*Registration*
14.00 – 14.05	**Welcome** Gergely KOVÁTS (Corvinus University of Budapest, Director, Center for International Higher Education Studies)
14.05 – 14.10	**Opening** András LÁNCZI (Corvinus University of Budapest, Rector)
	Introductory remarks Liviu MATEI (Central European University, Provost and Pro-rector)
14.10 – 14.20	**Plenary Session I.** **Chair:** Liviu MATEI (Central European University, Provost and Pro-rector)
14.20 – 14.50	**Keynote speech 1: European Trends in Teaching and Learning** Andrée SURSOCK (Senior Adviser, European University Association)
14.50 – 15:00	**Discussion**
15:00 – 15:20	Coffee break
15.20 – 15.50	**Keynote speech 2: Structural Reforms in Higher Education: Recent Experiences and the Way Forward** Jeroen HUISMAN (Professor, Centre for Higher Education Governance Ghent, Ghent University)
15:50 – 16.00	**Discussion**
16.00 – 16.30	**Keynote speech 3: Stratification and Diversification of Higher Education: From the Social Contract to the Mission of Universities** Attila PAUSITS (Head of Department for Continuing Education Research and Educational Management, Danube University Krems)
16.30 – 16.40	**Discussion**
16.40 – 17.00	Break
	Plenary Session II. **Chair:** Mátyás SZABÓ (Central European University, Budapest, Senior Manager, Yehuda Elkana Center for Higher Education)
17.00 – 18.00	**Introductory presentations of Eastern and Central European higher education policy and research centers**
19.00	Welcome dinner: **Academy Club**, Hungarian Academy of Sciences (Széchenyi István tér 9)

Tuesday, April 25, 2017

Venue: Central European University, (Budapest, Nádor u. 15, 1051)

9.00 - 9.30	*Registration (*Nádor u. 15 building**,** *1st floor, room 103)*
9.30 – 9.40	**CEU Welcome** *(1st floor, room 103)* Liviu Matei (Central European University, Provost and Pro-rector)
	Plenary Session III. *(1st floor, room 103)* **Chair:** Gergely KOVÁTS (Corvinus University of Budapest)
9.40 – 10.10	**Keynote speech 4: Long Term Strategies for Higher Education in Central and Eastern Europe: a New National Trend or an Elusive Goal?** Ligia DECA (State Adviser to the Romanian President on Education and Research)
10.10 – 10.20	**Discussion**
10.20 – 10.30	Coffee Break
10.30 – 11.00	**Keynote speech 5: Towards a Contractual State Model in Higher Education. Changes in the Relationship Between the State and the HEIs** Harry F. de BOER (Senior Research Associate, Center for Higher Education Policy Studies, University of Twente)
11.00 – 11.10	**Discussion**
11.10 – 11.40	**Keynote speech 6: Reaching for Excellence in Teaching and Learning in Central European Higher Education** Manja KLEMENCIC (Lecturer in Sociology of Higher Education, Department of Sociology, Faculty of Arts and Sciences, Harvard University)
11.40 – 11.50	Discussion
11.50 – 12.00	Coffee break
12.00 – 13.00	**Roundtable discussions with keynote speakers** *(1st floor, room 103)* **Moderator:** Liviu Matei (Central European University, Provost and Pro-rector)
13:00 – 14:00	*Lunch Break*
14.00 – 15.40	**PARALLEL SESSIONS I.** *(1st floor: rooms 101, 104 and 106)*
15.40 – 16.00	*Coffee Break*
16:00 – 17:40	**PARALLEL SESSIONS II.** *(1st floor: rooms 101, 104 and 106)*
17:40 – 18:00	**Concluding remarks** Liviu MATEI and Gergely KOVÁTS
18.00	*Farewell Coffee*

14.00 –15.40	**PARALLEL SESSIONS I.** (1st floor, rooms 101, 104 and 106)		
	Students in Higher Education room 101 Chair: Zsuzsanna GÉRING (Budapest Business School)	**National Higher Education Systems** room 104 Chair: József TEMESI (Corvinus University of Budapest)	**Human Capital Management** room 106 Chair: Kata OROSZ (Central European University)
14.00 – 14.20	**Trends and motivations behind foreign students' choice of university in three Hungarian provincial university towns** Zsuzsa M. CSÁSZÁR - Tamás Á. WUSCHING - Anna SÁLYI (University of Pécs, Hungary)	**Governance equalizer: Ukrainian case study** Kateryna SUPRUN – Ulyana FURIV (MARIHE program, Ukraine)	**Institutional change and higher education organizations** Kari KUOPPALA (University of Tampere, Finland)
14.20 – 14.40	**Why are the Bachelors not accepted? Difficulties and challenges with the introduction of first-cycle studies in Slovakia** Stanislav LUKAC (MESA 10, Slovakia)	**Diversification, autonomy and relevance of higher education in the Czech Republic** Aleš VLK - Šimon STIBUREK (Tertiary Education & Research Institute, Czech Republic)	**Competence management in the service of higher education** Éva KARCSICS (Pallasz Athéné University, Hungary)
14.40 – 15.00	**The role of the university identity and students' opinions of each other in the university operation – through the example of Eötvös University Budapest** Tamás JANCSÓ (Eötvös Loránd University, Hungary)	**Old and new funding formula for Polish universities** Jan L. CIEŚLIŃSKI (University of Białystok, Poland)	**Raising gender equality in Kazakhstan through management education modernization** Anastassiya LIPOVKA (Almaty Management University, Kazakhstan)

15.00 – 15.20	**Determinants of student dropout in Tunisian universities** Samir SRAIRI (University of Manouba / École Supérieure de Commerce de Tunis / Ministry of Higher Education and Scientific Research in Tunisia)	**Can a textbook reform of (higher) education work in practice?** Renáta KRÁLIKOVÁ (MESA 10, Slovakia)	**Reforms in teaching professions and changes in recruitment of initial teacher education** Matild SÁGI – Marianna SZEMERSZKI (Eszterhazy Károly University, Hungary)
15:20 – 15:40	**The changing role of Graduate Career Tracking System in Taiwan. What can we learn from Asia's experience in improving alumni feedback?** Jakub SOKOLNICKI (University of Warsaw, Poland)	**Dual executive leadership in higher education: the perception of chancellors in Hungarian higher education** Gergely KOVÁTS (Corvinus University of Budapest, Hungary)	**Double specialization in teacher training: A European comparison** Magda ILLYÉS – Anna SOÓS (Babeș-Bolyai University, Romania)
	Discussion	**Discussion**	**Discussion**

16.00 –17.40	**PARALLEL SESSIONS II.** (1st floor, rooms 101, 104 and 106)		
	Quality Assurance, Teaching and Learning room 101 Chair: Oleksandr SHTOKVYCH (Central European University)	**The Higher Education Environment** room 104 Chair: József BERÁCS (Corvinus University of Budapest)	**Social Aspects of Higher Education** room 106 Chair: Monica JITAREANU (Central European University)
16.00 – 16.20	**Trends and challenges in Hungarian higher education quality assurance** Valéria CSÉPE – Krisztina ROZSNYAI (Hungarian Accreditation Committee, Hungary)	**Higher education internationalization: the state of affairs** Daniela CRĂCIUN (Central European University, Hungary)	**Life-Long Learning: between strategy and planning** Pusa NASTASE – Mátyás SZABÓ (Central European University, Hungary)
16.20 – 16.40	**Effectiveness of teaching and learning at Moholy-Nagy University of Art and Design (MOME)** András DERÉNYI – Judit BÉNYEI – Andrea PALLAG – Andrea SCHMIDT (Moholy-Nagy University of Art and Design, Hungary)	**How to achieve high scientific impact in SSH research projects? Findings of a Case Study** Éva PÁLINKÓ – Zsófia VIDA (Pallasz Athéné University, MTA KIK, Hungary)	**Reclaiming higher education social inclusion policies in Central Eastern Europe** Simona TOROTCOI (Central European University, Hungary)
16.40 – 17.00	**Reforming learning and teaching in the Institute of Education (Eötvös Loránd University)** István Vilmos KOVÁCS – László HORVÁTH – Orsolya KÁLMÁN (Eötvös Loránd University, Hungary)	**Content analyses of university website as a QA tool** Yegor STADNY – Maria KUDELIA – Tetiana ZHERIOBLIKA – Mariana KAVTSENIUK (CEDOS Think Tank, Ukraine)	**Social roles of Hungarian higher education institutions as communicated in their mission statements** Zsuzsanna GÉRING – Kinga KOVÁCS – Yvette LOVAS – Viktória TERECSKEI (Budapest Business School / Corvinus University of Budapest, Hungary)

17.00 – 17.20	**When two worlds collide: cheating and the culture of academia** Nicholas CHANDLER – Gábor KIRÁLY – Zsuzsanna GÉRING – Péter MICKOLCZI – Yvette LOVAS – Kinga KOVÁCS – Sára CSILLAG (Budapest Business School / Corvinus University of Budapest)	**Regulative environment of spin-offs in Hungary** Katalin ERDŐS (University of Pécs, Hungary)	**Putting organizations at the center of student movements: a Central-Eastern European exceptionalism?** Viorel PROTEASA – Liviu ANDRESCU – Delia GOLOGAN (West University of Timișoara, Romania)
17:20 – 17:40		**Types of Innovations and their Management Patterns in Public Universities - The Case of Hungary** György DRÓTOS (Corvinus University of Budapest, Hungary)	**Initial experiences concerning community higher educational centers in Hungary** Gabriella KECZER (University of Szeged, Hungary)
	Discussion	**Discussion**	**Discussion**

Keynote speakers & Abstracts of keynote speeches

Andrée SURSOCK
Senior Adviser, European University Association (EUA)

European Trends in Teaching and Learning

The presentation summarizes the results of "Trends 2015", a study conducted by the European University Association. Based on a questionnaire, which was answered by 451 universities, the study confirms the pre-eminence of quality assurance, internationalization and ICT as three key change drivers that are affecting teaching and learning in Europe.

Jeroen HUISMAN
Professor, Centre for Higher Education Governance Ghent, Ghent University

Structural Reforms in Higher Education: Recent Experiences and the way Forward

Governments across the globe initiate comprehensive reforms of their higher education systems because they want their models to be the best and to excel at what they do. This regularly requires governments to change the higher education landscape (e.g. through mergers, excellence initiatives, establishing a new higher education sector). The presentation explores the current understanding of how successful such comprehensive reforms have been and which factors contribute to the success or failure of the reforms.

Harry F. de BOER
Senior Research Associate, Center for Higher Education Policy Studies (CHEPS), University of Twente

Towards a Contractual State Model in Higher Education. Changes in the Relationship between the State and the HEIs

In response to challenges stemming from developments such as a growth in demand (mass higher education), globalization, fiscal

crises, and inspired by neoliberal ideologies (NPM), modes of governance in higher education have changed in the last decades. Contemporary governments continuously are in pursuit of a governance model that 'fits'. According to our view this fit relies at least on two dimensions: the features of higher education institutions and the attributes of the services delivered by these institutions. The analyses based on these dimensions will address three governance models: state control, state supervision and the contractual state. This last model, which seems to be the current model is several countries, will be illustrated with examples from the Netherlands.

Manja KLEMENČIČ
Lecturer in Sociology (of Higher Education), Department of Sociology, Faculty of Arts and Sciences, Harvard University

Reaching for Excellence in Teaching and Learning in Central European Higher Education

Student-centered learning (SCL) has entered center stage on higher education policy agenda after the Yerevan Ministerial Summit of the European Higher Education Area (EHEA) in May 2015. It has become the key principle underlying the intended reforms enhancing the quality of teaching and learning in European higher education. Despite the universal appeal, SCL remains poorly defined in policy documents and this ambiguity potentially jeopardizes its implementation; especially in countries – such as those in Central Europe - which have been lagging behind in the reforms of teaching and learning. The keynote will address the different instances and evocations of the SCL approach in EHEA policies. Furthermore, it will seek to clarify the conceptual foundations of SCL. Two propositions are put forward. First, SCL should be understood as a 'meta-concept.' Such an understanding serves as a corrective to the eclectic use of SCL in association with a broad variety of issues. Second, the keynote questions the suitability of student engagement as a conceptual foundation of SCL. The main argument is that student engagement conceptually fails to sufficiently address student autonomy, self-regulation and choice, all of which have been highlighted by the literature as essential elements of SCL. The root concern of SCL is not propensity to certain types of desirable behavior as implied in student engagement, but rather student agency as students' capabilities to intervene in and influence their learning environments and learning pathways. Finally, the keynote will address the possible reform agendas for enhancing quality of teaching and learning in Central Europe.

Ligia DECA
State Adviser on Education and Research, Romanian Presidential Administration

Long Term Strategies for Higher Education in Central and Eastern Europe: a New National Trend or an Elusive Goal?

Public policies in the field of education and research have been constantly changing in the past two decades all around the world and their impact has been significant, especially in transitioning countries, such as those situated in Central and Eastern Europe. Romania, Slovakia and Croatia are just three examples of countries that are undergoing or have recently undergone large scale reforms in education and research. But are these reforms based on a socially and politically endorsed long term vision for the sector? Or are they likely to be continuously adjusted, in light of the swift electoral changes? The stability and continuity of education reforms remains a key challenge for transitioning countries, thus it is important to look at the fate of various reforms in order to prepare for the policy challenges of the future.

Attila PAUSITS
Head, Centre for Educational Management and Higher Education Development, Danube University Krems

Stratification and Diversification of Higher Education: From the Social Contract to the Mission of Universities

The European higher education policy has nowadays been dominated by an ambitious modernization of nation-state higher education systems. These reform processes have significantly influenced both core missions of higher education institutions (HEIs), namely research and teaching. The university's autonomy and governance, the Bologna Process, the Excellence Initiative, but also the changes in the funding of higher education - to mention some of the key issues - have led to a fundamental discussion on the role and responsibilities of HEIs. The changes range from comprehensive system reforms to institutional change processes, which are often expressed and propagated with headings like "from government to governance", "from teaching to learning" or "from research to innovation." There are examples of a necessary change and a new alignment of the social contract for HEIs, e.g. new financing models; trends such as the expansion of tertiary education; or the right of active participation in the process of lifelong learning. But these new developments and changes lead to the same question: alongside teaching

and research are there other tasks for a modern university in a knowledge society? If so, then the existing social contract between HEIs and society has to be renegotiated. Politicians, decision-makers and university administrators are in search for a new identity and a new strategic anchoring of the modern university in society. The presentation deals with this phenomenon and attempts to develop a theoretical and conceptual framework of this third pillar of university activities.

Papers presented at the conference

1. Nicholas CHANDLER – Gábor KIRÁLY – Zsuzsanna GÉRING – Péter MISKOLCZI – Yvette LOVAS – Kinga KOVÁCS – Sára CSILLAG

When two worlds collide: cheating and the culture of academia

Quality Assurance, Teaching and Learning session, April 25, 17.00 – 17.20
Room: 101

The culture of academia in higher education has been described as tribes with their territories (Becher, 1987). Cheating, on the other hand, seems to traverse boundaries as not only students, but teaching staff may also have a role to play in regard to their tolerance or even compliance with cheating. Thus, the question arises as to how cheating fits into academic culture.
Our paper considers teaching staff as a functional subculture and we explore cheating as perceived by these staff as we attempt to piece together the factors that link perceived cheating with the culture of academia through the use of Causal Loop Diagrams.
We found that academic culture is characterized by conflict and cultural clashes which is further exasperated by cheating. Massification has an effect on academic staff and cheating, potentially leading to a sense of powerlessness, despite apparent autonomy. This sense of powerlessness and uncertainty is argued as leading to a stronger academic culture. The link is made between organizational culture type (hierarchy), with values based on stability and control, and the importance of control as a perceived causal factor of cheating.

2. Jan L. CIEŚLIŃSKI

Old and new funding formula for Polish universities

National Higher Education Systems session, April 25, 14.40 – 15.00
Room: 104

The funding formula for Polish universities defines the volume of the block grant which is the main source of the revenue for Polish public universities. Theoretically this block grant is “for teaching purposes” but the salaries of the staff come almost exclusively from the block grant for teaching. Now, the funding formula is considered in Poland as a „black box” producing a distribution of block (core) grants for higher education institutions. We show that the funding formula is not a passive tool for the distribution of public funds. Using the funding formula one can achieve a variety of specific goals. Until 2016 only one incentive was clear and widely known: the total enrollment. This had deteriorating impact on the quality of higher education in Poland. Since 2017 a new funding formula has been introduced (quite abruptly, in fact). The new formula is a very

strong incentive for improving the student-staff ratio at Polish universities (in order to obtain the desirable value 13). We present a detailed analysis of both funding formulas (old and new). We describe specific objectives rewarded by the formulas and discuss to what extent the rewarded goals are consistent with the mission of public universities.

3. Daniela CRĂCIUN

Higher education internationalization: the state of affairs

The Higher Education Environment session, April 25, 16.00 – 16.20
Room: 104

Until recently, the discourse on the importance of and need for internationalization in higher education went as follows. With the rise of the knowledge-based economy, governments have waged a 'global war for talent' (Florida, 2005; Brown & Tannock, 2009), as highly-skilled individuals are believed to be the pre-requisite ingredient for sustaining economic growth and competitiveness (Fernandes, 2006; Csedö, 2010; Bergerhoff et al., 2013). In this context, the University has become "the knowledge factory" (The Economist, 1997) which provides the breeding grounds for human capital development. Furthermore, globalization has challenged the inward looking nature of national education systems and attempts at reform have become central to sustaining their functioning (Scott, 2000). As a result, internationalization is considered a significant strategic priority for governments, "which are increasingly aware of the importance of universities in supporting national and regional competitiveness" (Wilson, 2013, p.30, quoted in Jones & de Wit, 2014, p.28).
The recent rise in nationalist sentiments and the apparent return of Realpolitik around the world, seem to challenge this widespread discourse and, as a result, questions have been raised about the future of internationalization in higher education. The present paper argues that it is important to take stock of the current state of affairs in internationalization, before we can make any sort of predictions about its future in light of current political developments.
Starting from the premise that the nation state plays a central role in the process of internationalizing higher education, the paper presents original data with regards to the spread of national internationalization policies around the world. It finds that strategically thinking about internationalization is a relatively new phenomenon with limited coverage in terms of the number of countries that adopt internationalization policies. This picture describes a world dominated by scattered efforts when it comes to higher education internationalization. Why is the absence of an internationalization policy problematic? In countries where universities are largely dependent on public money, having no cohesive direction for internationalization at the system level is likely to also lead to lead to limited internationalization efforts at the institutional level. In keeping with the regional focus of

the conference, the paper zooms into and out of the Central and Eastern European area. It zooms into the national internationalization approaches of the area in order to contextualize the rationales and realities behind the process. It zooms out of area in order to understand the developments here in a wider frame of reference and to avoid what is called eastern European orientalism.

4. Zsuzsa M. CSÁSZÁR – Tamás Á. WUSCHING – Anna SÁLYI

Trends and motivations behind foreign students' choice of university in three Hungarian provincial university towns

Students in Higher Education session, April 25, 14.00 – 14.20
Room: 101

Mirroring global trends, international student mobility is increasing in Hungary: in the autumn of 2016 28,628 foreign students studied at a higher education institution in Hungary, most of them at medical schools. For those who take part in full-time HE programmes – students who come in the framework of ''degree mobility'' – choosing their place of education is a very complex process which involves many aspects as this decision will influence students' life for a considerable amount of time. It is not surprising therefore that in the case of Hungary most foreign students choose to study in Budapest. However, there are three provincial towns in which welcome students in large numbers (all three are home to medical schools): in the autumn of 2016 there were 11 thousand such students combined at the universities of Debrecen, Szeged and Pécs, which shows a growing share compared to the total number of students in Hungary. Present paper compares students' motivations and their personal experiences in these three cities based on a questionnaire survey, taking into consideration the different student pools they draw.

5. Valéria CSÉPE – Krisztina ROZSNYAI

Trends and challenges in Hungarian higher education quality assurance

Quality Assurance, Teaching and Learning session, April 25, 16.00 – 16.20
Room: 101

After 23 years since the Hungarian Accreditation Committee's establishment and the 2016 completion of its third full cycle of institutional accreditation, the HAC has passed a new Strategy for 2017-2018, prepared by the new president. The Strategy stresses the HAC's readiness to assist higher education institutions in fully exploiting their responsibility for their internal quality assurance and will offer workshops to offer its expertise and to exchange ideas on approaches and methodologies.

The Strategy extends to the revision of the HAC's evaluation criteria in light of the ESG 2015, a variety of approaches to accreditation depending on institutions' degree of maturity in quality assurance, and considering institutional profiles. Program accreditation will evaluate the full student life-cycle, with a shift from input to process and output criteria. Internal restructuring of the secretariat, the hiring of young staff with language proficiency and the streamlined administration of committee work has begun. Additional funding has been secured; a new IT system is being planned.

6. András DERÉNYI – Judit BÉNYEI – Andrea PALLAG – Andrea SCHMIDT

Effectiveness of teaching and learning at Moholy-Nagy University of Art and Design (MOME)

Quality Assurance, Teaching and Learning session, April 25, 16.20 – 16.40
Room: 101

The study presents the results of effectiveness research conducted at Moholy-Nagy University of Art and Design, Budapest (MOME), between 2015 and 2017. The research analysed the present teaching and learning practices of the university based on direct reflections on quality and effectiveness, including the opinion of both teachers and students.
The primary objective of this research was to have better understanding of the nature of the teaching and learning process occur in the university in the field of media, art and design. As the concept of "teaching effectiveness" has several interpretations and is used with versatile foci, the definition had to be narrowed and applied specifically.
The different steps of multilevel research resulted in a more detailed picture of the characteristics of teaching and learning at MOME. Results prove that teachers and students have considerably different views firstly on the pedagogical significance and effectiveness of cooperation; secondly, on the pedagogical role of evaluation; thirdly, on useful knowledge that supports entering work and pursuing carriers, and on the role of the university in knowledge building. These findings led to the design and launch of new development projects and further trainings for the benefit of the faculty of MOME.

7. György DRÓTOS

Types of Innovations and their Management Patterns in Public Universities - The Case of Hungary

The Higher Education Environment session, April 25, 17.20 – 17.40
Room: 104

According to the mainstream literature innovation in the public sector considerably differs from that of the business sector at least along three dimensions 1) the strength of

external pressure on the organization 2) the characteristics of the expected rewards for the innovator, and consequently 3) the form and level of motivation that drive organizational members to innovate.
From this perspective it is interesting to examine how public universities, that are supposed to make state-of-the-art research and fulfil critical parts in the product and technology development value chain of several industries, regard and manage innovation within and beyond their organizations.
Since the innovation typology stated in the generally referred Oslo Manual has limitations when applied to specific sectors and fields, first a new classification system had to be set up that is adapted to the characteristics of higher education institutions. This new classification defines 1) research related 2) education related 3) management and organizational and 4) business model innovations. Then, the present management patterns and future challenges of these four innovation categories are elaborated and tentative conclusions are made, including some proposals for university managers.
The subjects of the research are Hungarian public universities in which the author gained considerable experience in the last 25 years as faculty member, leader of different organizational units and projects, as well as management consultant. In the second phase of this research project targeted interviews are planned with key stakeholders of university level innovation in Hungary.

8. Katalin ERDŐS

Regulative environment of spin-offs in Hungary

The Higher Education Environment session, April 25, 17.00 – 17.20
Room: 104

The contribution of university spin-offs to the development of some of world's leading high-tech regions attracted significant interest of policy-makers and scientists alike. Many countries changed their regulative environment in order to create success stories like the Silicon Valley or Route 128. Modifications affected for example intellectual property rights and university IP management. The intention was to spur innovation and technology transfer to enhance competitiveness. Nevertheless, the regulations that are effective in a certain environment do not necessarily work under different institutional settings.
The legislative changes in Hungary around 2004 and 2005 explicitly encouraged universities' active involvement in technology transfer. Though also support schemes were introduced to spur spin-off activity, the evidences are mixed. This research aims to investigate the regulative environment of spin-offs in Hungary. Besides summarizing the most important legislative changes related to university spin-offs it also investigates the practical implementation of those and their outcomes.

9. Zsuzsanna GÉRING – Kinga KOVÁCS – Yvette LOVAS – Viktória TERECSKEI

Social roles of Hungarian higher education institutions as communicated in their mission statements

Social Aspects of Higher Education session, April 25, 16.40 – 17.00
Room: 106

In connection with higher education (HE), a large part of the academic discourse is concerned about changes and challenges in relation to globalization, third mission, technological innovation or even to teaching methods. All of these inquiries lead to a core question, namely, what is the (changing) role of higher education institutions in society.
This is the main question of our research as well. To find an answer, we analyzed the mission statements of the Hungarian higher education institutions with textual analysis.
In our research, we identified the social roles, goals and tasks mentioned based on the mission statements of all the Hungarian HE institutions. We used public institutional websites as source. The research extended not only to the textual coding of social roles, but also to the completion of the textual analytical results with standard institutional characteristics (like number of students etc.). In this fashion, we were able to analyze if there are different groups regarding the communicated social roles among the institutional differences.
As a result, this research helps us to understand the main topics and issues addressed in the sector, and could show us how different Hungarian HE institutions identify themselves as important actors in society.

10. Magda ILLYÉS – Anna SOÓS

Double specialization in teacher training: A European comparison

Human Capital Management session, April 25, 15.20 – 15.40
Room: 106

The existence of double specialization in teacher training is a core issue since most secondary and high school subjects are taught in small weekly class numbers. In order to get a full teaching position, teachers either have to work in more than one school, or (and this is the ideal case) they have to teach more than one subject. Moreover, many vacant positions in schools are for very small number of weekly classes, schools can't offer a full job position is most cases.
Although double specialization in university teacher training would solve many of these (and many other) problems, the introduction of the Bologna system abolished double specializations in Romanian higher education. The Law of Education of 2011 makes possible the reintroduction of such specializations, but the lack of an application methodology delayed the process. The situation might change in the near future since

several higher education institutions are urging the process of developing the above mentioned methodology, but there are still many open questions and gray spots regarding the issue of double specialization. The present paper aims at presenting a synthetic comparison of the situation of double specialization in teacher training across Europe emphasizing best practices and suitable models.

11. Tamás JANCSÓ

The role of the university identity and students' opinions of each other in the university operation – through the example of Eötvös University Budapest

Students in Higher Education session, April 25, 14.40 – 15.00
Room: 101

"ELTE – a community of knowledge." This is the motto of Eötvös University (ELTE), it has been used a lot in recent years. The question could arise, is the ELTE community more than just a single sum of the eight independent faculties? There are many elements of the inside relations in the universities. In the case of a multi-campus university the geographical space has importance in the connections between faculties. In addition, many other factors can play a role as well, such as the distance between disciplines, institution history, communication within the institution, or personal experiences. In this study the focus will be on the university identity and the students' opinions of each other.
The university identities are powerful in the Eötvös University, the academic program identity is the strongest, followed by the faculty and the university identity. Students' opinions of each other from different faculties may have an effect on the internal operation of the university. If there are negative stereotypes among the students against other discipline students it may reduce the efficiency of the university, because it makes harder the development of interdisciplinary relationships. The results show this is an existing phenomenon in the Eötvös University.

12. Éva KARCSICS

Competence management in the service of higher education

Human Capital Management session, April 25, 14.20 – 14.40
Room: 106

Competence-based human resources management is one of the key tools for implementing an organizational strategy. In using this tool, we define the critical competences (knowledge, skills, capabilities, etc.) that are required for fulfilling a job successfully and effectively (and implementing an organizational strategy). Our next goal is to achieve a match as perfect as possible (by assessing the degree of congruence) in the selection of labor force, development, career planning and performance

management. The higher the degree of match between the competences of the individual and the job, the better chance we have to implement the organizational objectives. As the main goal of higher education institutions in society is to produce experts who are competitive in the labor market, competence management – with proper adaptation – can be successfully applied in this sector as well. This paper provides an overview of the development of competence-based human resources management why the concept of competence has become important in higher education as well. It will introduce the most important research projects on this theme and present how the first competence assessment in Hungary has been developed in the area of training economists.

13. Gabriella KECZER

Initial experiences concerning community higher educational centers in Hungary

Social Aspects of Higher Education session, April 25, 17.20 – 17.40
Room: 106

In 2014 the Hungarian government decided to establish a new type of higher education institution: the community college. In the 2015 amendment of the higher education act of 2011 it was declared that the new type of institutions would be called “community higher education centres” (CHECs), and they would not be independent institutions, just training locations of existing universities. In my paper submitted to the last CEHEC conference I raised some doubts concerning the Hungarian version of this type of institution.
Since in 2016 four CHECs started its operation, it is worth to examine whether my concerns were valid or not. Thus, I study the experiences of the community higher education centre of Hatvan, Siófok and Kisvárda. My research methodology is interviews conducted with the local government of the new higher education locations and with the gestor universities. I focus my analysis on the drivers behind establishing the CHEC, the preliminary expectations and the initial experiences. The fourth CHEC (Sümeg) that got permission from the ministry in the first round was the off-site location of a private institute, but its permission has been revoked after several problems of academic, financial and legal nature. I include the conclusions of the Sümeg case in my analysis.

14. István Vilmos KOVÁCS – László HORVÁTH – Orsolya KÁLMÁN

Reforming learning and teaching in the Institute of Education (Eötvös Loránd University)

Quality Assurance, Teaching and Learning session, April 25, 16.40 – 17.00
Room: 101

Quality teaching is becoming an important issue in higher education institutions. Analysing the practice of higher education institutions (OECD, 2010) three major ways of supporting quality teaching were identified: (1) institution-wide and quality assurance policies (2) initiatives focusing on monitoring programme design and implementation and (3) supporting teaching and learning at the individual level of teachers and students. The aim of our study is to develop a conceptual framework for enhancing teaching and learning, and promoting professional development of university teachers in the context of Eötvös Loránd University, Hungary.
We introduce the Research Group on Higher Education and Innovation and its initiatives according to the previous statements along the three missions of higher education, focusing on our main projects: European Doctorate in Teacher Education (EDiTE), Master in Research and Innovation in Higher Education (MARIHE), our higher education specialisation programme, the innovation research and other research project and our involvement in the HEInnovate initiative.
The issues mentioned in our study culminates in an institutional strategy for supporting the professional development of university teachers which builds upon the synergy of the three mission and reflects on the special academic culture that could be a driver or a barrier for the implementation of the strategy.

15. Gergely KOVÁTS

Dual executive leadership in higher education: the perception of chancellors in Hungarian higher education

National Higher Education Systems session, April 25, 15.20 – 15.40
Room: 104

In 2014 a new system of governance was adopted in Hungarian higher education. State-appointed chancellors became responsible for the finance, maintenance and administration of institutions, while rectors kept their responsibilities in academic issues. This governance system was completed by the introduction of a new board (called consistory) which has veto power in economic and financial issues. The new governance system created institutions the success of which depends on the cooperation of its two independent and interdependent leaders, the rector and the chancellor.
Although unitary leadership is dominant in current management practice and assumed to be more efficient in management theory, dual leadership is not unheard of. Terms such as dual leadership, shared leadership, co-leadership, distributed leadership, top management teams and collective leadership are all used. As a result there is no clear description of the challenges posed by dual leadership situations and the conditions when dual leadership is beneficial. The main questions of the paper are the following: What are the key challenges and success factors in dual leadership situations in higher

education? What recommendations can be derived from these success factors to higher education policy and institutions generally? How the chancellor system in the Hungarian higher education can be evaluated against these recommendations?
The evaluation is based on the analysis of the legislative and incentive structure on one hand, and on quantitative (survey) and qualitative (interviews) data collection on the other.

16. Renata KRÁLIKOVÁ

Can a textbook reform of (higher) education work in practice?

National Higher Education systems session, April 25, 15.00 – 15.20
Room: 104

According to international comparisons and reports Slovak education, including the higher education, performs poorly. Teachers are increasingly unhappy with their low pay and employers with the lack of qualified labour, young people vote with their feet and leave to study abroad. All these negative trends created a momentum for reforms of education in Slovakia. One of the current reform initiatives – Learning Makes Sense – will be described and analyzed in the paper. This initiative could be labeled as an attempt for a textbook reform as it aims at designing comprehensive reform, based on proper analysis of problems of education and on proposing solutions for the identified problems. These solutions will be tested in the pilot projects. The results of the problem analysis and the reform proposals will be widely discussed with all relevant actors. The paper aims to discuss whether such textbook reform is viable and what are the dilemmas related to the reform process in general and to the changes in higher education in particular.

17. Kari KUOPPALA

Institutional change and higher education organizations

Human Capital Management session, April 25, 14.00 – 14.20
Room: 106

In Finland, all universities as part of state administration were moved to a new state steering system in 1993, called at that time result based management, which has been called a Finnish version of New Public Management (NPM). In a modified form this steering system still determines the financial position of Finnish universities even if they are nowadays formally private sector organizations and not any more state accounting offices. The period from the year 1993 until 2013 offers a higher education laboratory for the analysis of institutional change. The long lasting effects of deep institutional change can be empirically underlined through the analysis of HRM (Human Resource

Management) in the universities. One formally big reform of Finnish universities took place in the year 2009 through the new university law which gave full employer status for the Finnish universities first time in their history. The effects of profound institutional change of the year 1993 are evaluated through the interviews of chief human research managers in eight biggest universities in Finland. It seems that the move to the result based management system changed even the HRM of universities more than the later change of the employer status.

18. Anastassiya LIPOVKA

Raising gender equality in Kazakhstan through management education modernization

Human Capital Management session, April 25, 14.40 – 15.00
Room: 106

The majority of economics and management students in Kazakhstan are females. Women graduates face impediments in professional employment, career development and labor remuneration due to gender challenges. Gender managerial stereotypes widespread in Kazakhstani society underpin gender inequality. The study of gender managerial stereotypes of Kazakhstani undergraduate students was conducted in one of Almaty universities. The study comprised a survey and a focus group. The survey sample constituted 162 (81 males and 81 females) respondents, and the focus group included 10 participants (5 males and 5 females). The study identified higher level of gender managerial stereotypes of economics students comparatively to technical students. Management male students demonstrated the highest level of gender stereotypes out of all respondents. The significant discrepancy in females and males' responses indicated lower level of stereotypes among female students. Both males and females associated a man with an image of an effective manager and attribute managers' characteristics mostly to men. Implications of modernizing management education with gender aspect are discussed.

19. Stanislav LUKAC

Why are the Bachelors not accepted? Difficulties and challenges with the introduction of first-cycle studies in Slovakia

Students in Higher Education session, April 25, 14.20 – 14.40
Room: 101

Although Slovakia signed the Bologna Accord in 1999, figures show that Slovak higher education institutions (HEIs) have been since then struggling to introduce flexible, professionally-oriented, attractive-for-students and recognized-by-employers first-cycle

degrees. Only 3% of the Slovak adult population completed their tertiary studies with a Bachelor's degree or its equivalent, whereas this portion of graduates accounts for 16% of the 25-64-year-olds in the OECD countries.
Learning Makes sense is launching an intense qualitative research into the vices of the Slovak HE sector, and the problems related to a failed implementation of the Bologna process regarding the introduction of well-functioning and full-fledged Bachelor's programs will be a big part of our research endeavor. We will probe into the reasons why the public HEIs do not offer fully fledged Bachelor degrees which would produce a much bigger part of the graduate population that would be qualified and prepared to find their place on the labor market once completed their first-cycle degree. What are the factors standing behind the unsuccessful introduction of Bachelor's programs at our HEIs? This is one of the crucial questions we will try to find the answers to.

20. Pusa NASTASE – Mátyás SZABÓ

Life-Long Learning in Romanian universities: between strategy and planning

Social Aspects of Higher Education session, April 25, 16.00 – 16.20
Room: 106

Lifelong learning has been an important component of European employment policy and was incorporated in the national policy documents of all EU member states. In this context adult education has been given a particular attention as it relates directly to several key important issues such as the employability, equity and access to higher education among others. The universities have incorporated LLL in their strategic documents but the offer of lifelong learning programs has been very different in scope and achievements in the EU countries. This research explores the existing lifelong learning programs available at public universities in Romania and highlights how key policy implementation stages are approached. It investigates how decisions about which programs to offer are taken at university and department level and the degree of autonomy available to departments in choosing whether to offer or not such courses and in which form. It also sheds light on the type of teaching and learning pedagogies involved and whether they are suitable for such type of programs. In light of the debate of funding for LLL programs the study also looks at the financial implications of these programs and whether they are financially self-sustainable and can even contribute towards the institutions' budget.

21. Éva PÁLINKÓ – Zsófia VIDA

How to achieve high scientific impact in SSH research projects? Findings of a Case Study

The Higher Education Environment session, April 25, 16.20 – 16.40
Room: 104

This article is based on a case study of an interdisciplinary social science research project with outstandingly high scientific impact. The main goal of the case study is to analyse in depth the scientific success achieved by the project and the key elements that led to it. Besides the detailed analysis of the scientific impact and its background, the case study examines both the political and social impacts of the project, and those which were made on the ERA.
The case study has a comprehensive methodology of desk research and fieldwork. Desk research methods used: Document analysis, Web content analysis, Co-participation analysis of the project members and the other stakeholders, Geographical analysis of the dissemination activities. Field work method used: In depth interviews with communicative orientation (Gómez–Puigvert–Flecha 2010). According to this communicative approach, the case study not only identifies and explains the elements that enabled the project to achieve impact but also could improve the capacity of Social Sciences research to reach high impacts.
By the findings the following dimensions proved to be the most important and effective in achieving high scientific impact: experienced and efficient leadership, committed consortium, orientation to achieve at high standards, high number of top scientists in the project, clear concept, sufficient internal communication, and effective dissemination activities.

22. Viorel PROTEASA – Liviu ANDRESCU – Delia GOLOGAN

Putting organizations at the center of student movements: a Central-Eastern European exceptionalism?

Social Aspects of Higher Education session, April 25, 17.00 – 17.20
Room: 106

We use a neo-institutionalist framework for understanding the dynamics of student organizations in Central Eastern Europe, which we argue that explains also the “neo-corporatist – pluralist” tension in the Romanian case, but also the configuration of the organizational field and the repertoires of collective action. For the Romanian case we identified four arenas of competition between student entrepreneurs and other actors, more or less connected to the campus, especially from the professoriate: (1) the

patrimony of the former communist associations, (2) the services traditionally offered by the former communist associations, complemented by the market opportunities, (3) national representation, where competition manifested in terms of coalition, cleavages on one hand, and on the other hand in terms of representation towards the government, including disruptive action, such as protests, strikes a.o. These arenas opened for competition due to the 'structural holes' left by the sweeping of the communist arrangements regarding student organization and representation. We argue that such an account explains not only Central Eastern Europe's exceptionalism in terms of the major role played by organizations in student movements, but also the major organizational types and their dynamic.

23. Matild SÁGI – Marianna SZEMERSZKI

Reforms in teaching professions and changes in recruitment of initial teacher education

Human Capital Management session, April 25, 15.00 – 15.20
Room: 106

In our analyses we try to recover changes in (self-)selection of application into teacher track of higher education in Hungary, between 2013 and 2016. For this analysis the pulled official data base of higher education entry register were used.
Besides the descriptive analyses, multinomial logit models were applied for disclosing potential effects of time spent since introduction of mass of educational reforms. For it, date of student application to the higher education (year) were involved as explanatory dummy variable (with the reference category of 2013), while our dependent variable refers to the combination of the main tracks of initial application to tertiary education. Total average entrance scores, the existence of the advanced level of maturity exam, special disadvantageous status and some information about formal secondary education were also involved into our models as explanatory variables (control variables).
Our analysis supported our main hypothesis: since 2013, a bit larger proportion of young people has applied for entrance to teacher education than previously, so the selection base of higher education widened a bit. The year of application has significant effect on choice of teacher/non-teacher track of higher education.

24. Jakub SOKOLNICKI

The changing role of Graduate Career Tracking System in Taiwan. What can we learn from Asia's experience in improving alumni feedback?

Students in Higher Education session, April 25, 15.20 – 15.40
Room: 101

Graduate Career Tracking System (GCTS) has become an important element of quality management policy on universities during the last few years. The task for modern university is to prepare highly qualified specialists in accordance to the requirements of the labour market.
One of the most significant factor of this process is the feedback from graduates. It could be measured by rate of employability, although it is not the only way to evaluate the efficiency in education. The crucial role in this process plays system of collecting data from graduates concerning their current job position, earnings, job satisfaction or competency level. As a great source of information about the professional progress of graduate students and their opportunities on the labour market, it gives feedback for university how well graduates are prepared for their professional role.
I present results of my research on GCTS implementation in Taiwanese universities. Taiwan is an interesting example of adapting the higher education system to the new challenges that face the universities in global world.

25. Samir SRAIRI

Determinants of student dropout in Tunisian universities

Students in Higher Education session, April 25, 15.00 – 15.20
Room: 101

The purpose of this paper is to analyse the determinants of university dropout in the first year of the bachelor programs at Tunisian universities. We consider 160 higher education institutions with an average of 671 bachelor study programs per year from 2010 to 2015. Using several econometric models (pooled ordinary least square, fixed effect model, and random effect model), we regress student dropout rate on four categories of indicators: student characteristics, institutional, contextual and external factors. The estimation results suggest that the institutional characteristics have a significant impact on dropout. The findings show that student-staff ratio has a positive influence on student dropout. We also find a negative association between staff quality and dropout rate. In addition, the analysis reveals the importance of contextual factors such as university accommodation in helping students to complete university. Finally, regression also indicates a significant and positive interaction between unemployment rate and dropout rate

26. Yegor STADNY – Maria KUDELIA – Tetiana ZHERIOBLIKA – Mariana KAVTSENIUK

Content analyses of university website as a QA tool

The Higher Education Environment session, April 25, 16.40 – 17.00
Room: 104

The development of the Internet requires universities to pay special attention to their websites, which becomes the main tool of information policy. From the lack of attention to the content of sites suffer both universities and students/applicants. This article describes a study conducted in Ukraine, which intends to help universities to better understand the informational needs of applicants and students. CEDOS (Kyiv-based think tank) conducted content analysis of 186 higher educational institutions websites where more than 91% of all university students in Ukraine studies. Content analyses was held by specially composed methodology which is based on the needs of the students. As a result of study each of 186 universities receives individual recommendations on how to improve the content of its site. The article tries to show how external university website assessment could help to strengthen internal quality assurance.

27. Kateryna SUPRUN – Ulyana FURIV

Governance equalizer: Ukrainian case study

National Higher Education Systems session, April 25, 14.00 – 14.20
Room: 104

Despite the vast research on new public management concept as a new managerial model in Anglo-Saxon socio-cultural context, little is known about its application in the perspective of post-Soviet countries. This study attempts to obtain a holistic picture of higher education system in Ukraine from 1991 up to the present and to determine whether the new managerial concept can actually be applicable within the scope of existing socio-productive relationships. The investigation is based on the qualitative research method, namely on such analytical tool as a governance equalizer. By comparing its various dimensions, such as state regulation, external guidance, academic self-governance, managerial self-governance, and competition, the key factors stipulating transformational characteristics of the higher education market have been identified.

28. Simona TOROTCOI

Reclaiming higher education social inclusion policies in Central Eastern Europe

Social Aspects of Higher Education session, April 25, 16.20 – 16.40
Room: 106

In the early 1990s, in the search of a more democratic society and in line with adapting therefore to the European values, most of the post-communist countries started looking after (policy) ideas and approaches which were believed to positively contribute in reforming their main sectors. While there is a lot of talk about the failure of such copy-pasted models and the consequences they have created, there was no comprehensive

analysis of what exactly has been adopted and how it was implemented/ transformed on the ground. This paper aims to contribute to this field and shed light on such aspects in the field of social inclusion policies in the higher education sector. It aims to engage in the discussion which aim to reconciliate theories of policy learning and policy change (Bennett & Howlett, 1992; Evans & Davies, 1999; Dolowitz & Marsh, 2000), more specifically to point out where is the line between naturally inherited national policies and policies which were imported from outside, and who reclaims these policies, as a result of policy change.

29. Aleš VLK – Šimon STIBUREK

Diversification, autonomy and relevance of higher education in the Czech Republic

National Higher Education Systems session, April 25, 14.20 – 14.40
Room: 104

Our contribution discusses the relationship between relevance of higher education (HE), the diversification of the sector and the autonomy of higher education institutions (HEIs) in the Czech Republic. It reveals that while employment-related aspects are predominant in the HE relevance discourse, there is a lack of consensus in how employability of graduates should be understood –the "narrow" short-term job-specific and "broad" transferable competence oriented perspective form a major cleavage.
The national policy takes no clear stance in this discussion and only indirect measures are applied. While understanding of the role of HE remains mostly homogenous on the institutional level, the actual profiling takes place, if even, on the level of study programmes. In many cases, individual study programmes are de facto autonomous in how they understand their relevance, and they often miss a broader strategic perspective and steering on the system level.
The conservativism of academia limit the diversity of education provision mostly ignoring the needs of the heterogeneous 21st century student body. In this respect, a lack of formal diversification in the HE system combined with extensive autonomy of HEIs as well as their faculties and departments makes the study provision rather slow to adapt to new challenges.

Conference organizers

About Corvinus University of Budapest

Corvinus University of Budapest defines itself as a research university oriented towards education, where the scientific performance of the academic staff measures up to the international standard and the students can obtain a competitive degree having a standard and knowledge content identical to similar-profile universities and acknowledged on the European Union's labour market and on a global scale. The University admitting more than 14,000 students offers educational programmes in agricultural sciences, business administration, economics, and social sciences, and most these disciplines assure it a leading position in Hungarian higher education. At the same time, its key ambition is to display the institution's uniqueness and to exploit the synergies resulting from professional diversity and from studying multiple disciplines.

About Higher Education Research at Corvinus University of Budapest (CIHES)

The Center for International Higher Education Studies (CIHES) was established in May 2008. The Center is an umbrella organization for those researches who are teaching and pursuing research in various fields of higher education at different faculties of CUB. One of the goals of the Center is to join European research consortia and to contribute to their results in the analysis of the educational processes with suggestions and proposals. Research topics include: analysis of the three-cycle system and the introduction of Bologna-type study programs, internationalization of higher education, mobility in higher education, funding reforms in higher education, social dimension of higher education, pedagogical methods, quality assurance, institutional management.

About CEU

Central European University is a graduate-level university where faculty and students from more than 100 countries come to engage in interdisciplinary education, pursue advanced scholarship, and address some of society's most vexing problems. It is accredited in both the United States and Hungary, and offers English-language Master's and doctoral programs in the social sciences, the humanities, law, management and public policy. Located in the heart of Central Europe -- Budapest, Hungary -- CEU has developed a distinct academic and intellectual focus, combining the comparative study of the region's historical, cultural, and

social diversity with a global perspective on good governance, sustainable development and social transformation.
With approximately 1,400 students and 370 faculty members from more than 130 countries, CEU is one of the most densely international universities in the world. Its rare mix of nationalities, ethnicities, and cultures creates an ideal environment for examining such "open society" subjects as emerging democracies, transitional economies, media freedom, nationalism, human rights, and the rule of law. It also brings multifaceted perspective to all aspects of community life.

About Higher Education Research at CEU

The Yehuda Elkana Center for Higher Education at Central European University, named after the third President and Rector of the University, is a collaborative academic initiative promoting applied policy research and professional training in higher education. The Center builds on more than two decades of experience at CEU in promoting policy research in higher education, as well as policy advising and professional development programs for governments, international organizations, non-governmental organizations, and higher education institutions from countries on all continents. The Center also builds on the long history of cooperation between CEU and the Higher Education Support Program (HESP) of the Open Society Foundations (OSF).
The Center is committed to pursuing the overall open society mission of CEU through activities in the area of higher education policy. The Center places a particular focus on applied studies and practical initiatives regarding the relationship between higher education policies and practices, and issues of democratic development. Research, training, and applied policy projects are carried out by CEU faculty members, researchers, and graduate students in cooperation with higher education experts from other universities and organizations worldwide.