



Types of adverse selection and Hungarian higher education

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Abstract

Adverse selection is the process in which buyers in a given market are unable or unwilling to show such degree of preference to product quality required for the survival or expansion of the market which would enable the product to maintain or increase its share on the supply side. We can distinguish five types of adverse selection beyond Akerlof's famous type. The processes of adverse selection are basically present in eight areas in Hungarian higher education. Admission of students, training of students, lecturers, graduates, school selection of students, course selection of students, accreditation of educational institutions and field of study, investment projects, tendering funds, individual aids.

Keywords: selection, adverse selection, quality, competition

1. Introduction

It is well known that a given market is best able to retain its weight, maintain the number of affected market players and successfully achieve its goals when the underlying selection mechanisms operate properly. As opposed to that, adverse selection is not a promising alternative. It may offer short-term advantages for some of the market players but it will definitely lead to a downhill ride for the market as a whole in the long run. The purpose of this study is to demonstrate that there are other types of adverse selection in addition to the one described by George Akerlof and that their existence may be based on factors other than lack of knowledge. The second part of the study uses the example of Hungarian higher education to show how these types of adverse selection work in practice. I hope that the study will enable its readers to recognise the phenomena of adverse selection in their vicinity or in the various fields of economy more easily. In fact, the recognition of such phenomena may be the first step of a possible healing process.

2. Adverse selection

Most probably, neither the citizens nor the so-called experts can ever agree on the necessity or economic/social importance of a given good. Therefore it is not the purpose of this study to identify the goods, and their markets, the long-term survival of which would be important for the relevant communities. Here and now, the only purpose should be to prove that the long-term survival of the market of a given good deemed necessary or important by consumers is not compatible with adverse selection. It means that, at given consumer preferences and income levels, the presence of adverse selection will gradually lead to shrinking sales volume on the market of the good in question, causing the *decline* and sooner or later, in lack of institutional response, the termination of the market.

In his famous study, George Akerlof (1970) has shown how information asymmetry between the demand and supply sides of a market may result in adverse selection which, in turn, may eventually lead to the collapse of the market. The process may become intensified due to a high and growing level of uncertainty, because the market has no institutions in place for minimising this uncertainty. In Akerlof's model the *buyers are unable to assess* actual product quality and, therefore, the products must be continually undervalued. In turn, this fact will keep away, to a growing extent, the vendors of higher-quality products from the market. As, in lack of sufficient information, *average prices* are assigned to goods labelled as average-quality goods, creating a situation which is disadvantageous for the sellers of high-quality goods and advantageous for the sellers of low-quality ones. Thus in this case buyers are unable to accurately assess product quality and, in lack of institutional assistance, it will lead to the collapse of the market. Adverse selection in this case stems from an unintended *lack of knowledge of the market players* on the buyer side. Actually, the buyers would really like to recognise, and pay a proportionately higher price for, higher quality but they are unable to.

In his study of the relationship between quality and quantity in the practice of socialist countries, János Kornai has stated (1993, p. 212) that a *special shift may occur between quality and quantity*. In other words, quantity growth takes place at the expense of quality. As far as the relevant market is concerned, it would be desirable to maintain or improve quality also in the case of growing quantities but, as Kornai has pointed out (*Ibid.*, p. 213), the bureaucratic coordination is either not able or *not willing to enforce it*. If dictated by their own interests, socialist companies may regularly and freely breach their contracts. (*Ibid.*, p. 523.) Unlike in the above example, where buyers are not able to properly assess product quality, buyers here are actually not willing to assess product quality.

Now it is worth sparing a thought to the fact that although the market players are able to recognise higher-quality goods, they fail to do it but not because of high price levels.

Just like others, Harrison and Harrell (1993) also found a link between the *principal-agent model* and the theory of adverse selection. Acting as agents of the company owners (principals), the managers decide on which project to launch and implement. When their interests may differ from those of the owners and when they possess more information on project and company profitability than the owners, the managers may often act against the interests of the company and its owners when they opt for lower quality and not for the higher one. Typically, such abusive practice of private company managers is also considered corruption in the USA (Heidenheimer and Johnston, 2011, pp. 28-29) because it is also a situation where, contrary to applicable regulations, community interests are sacrificed for the sake of private interests. Bureaucratic corruption may also be treated within the principal-agent theory, except that politicians supervising the bureaucratic structure are the agents of their respective electors. In other words, this is a case about the agents of agents. When writing about corruption, Guriev (2004) states that bureaucrats constantly and systematically destroy the highest quality when they demand their share of project revenues or implementation costs. As a result of this attitude, *often not the best applicants are selected as winners. Of course, the best ones would not need corruption to help them win*. Besides, lower ("quasi") quality offers the participants of a corruption business greater free resources available for skimming. However, economic incentives for further quality improvements will be weakened even if the highest quality is selected as winner in certain cases. Therefore, high-quality goods will gradually but inevitably disappear from the market, and the remaining – ever deteriorating – quality may cause ever greater damages to the community. Competition becomes distorted, causing indirect welfare losses to the entire society (Hámori 2002, pp. 194-195).

When analysing the *soft budget constraint*, János Kornai (1997, p. 944) points out that, when subjected to hard budget constraint, the actors consider it a matter of life and death to achieve an adequate level of efficiency allowing them to cover their expenses from their revenues. However, no soft budget constraint will ever force the actors to *face natural selection in the competition*. Those who should become the victims of natural selection may continue to flourish as their actual or relative losses will be covered. When they are saved by the state, it will raise the funds necessary to cover such losses or supplement the revenues by reducing, either directly or indirectly, the profit of successful actors. (*Ibid.*, p. 948.) Accordingly, adverse selection processes may gain ground, while competition will not offer the actors any incentive to move towards quality improvements designed to achieve lower costs and/or higher product values and, consequently, improved cost efficiency.

One may ask at this point that if the soft budget constraint means a certain kind of resource abundance then why the managers of the beneficiary companies fail to use this opportunity to strengthen their future competitiveness or establish higher quality routines within their organisation even when they are not forced to

do so by market or bureaucratic requirements. Their motivation, if any, should be at least the accumulation of system reserves in order to meet future expectations, which is called the “ratchet effect” (Kornai, Maskin, Roland, 2004b, p. 784).

Back in the era of socialist state-owned companies, there was not a major difference between the wages of high and low performing company managers or between those paid to the managers of large national enterprises and small local companies. However, production modernisation or end-product improvement requires – at least initially – increased efforts, additional resources and significant risk management commitments, where these sacrifices may be paid off in the form of future profit. However, if manager wages are not influenced considerably by the size and profitability of the company, there will be no real incentives for the managers to take actions for reducing the costs and increasing the profits. (Kornai, Maskin, Roland 2004a, p. 619.) The same is true for employees: a successful innovation brings about only minor rewards, if at all, even at managerial level but these rewards hardly affect the employees who actually carry out the innovation work (Kornai, 2010, p. 14). *“The link between the various institutional and behavioural aspects hindering innovation is the revenue paid without any performance or innovation”* (Hámori – Szabó, 2010, p. 892). Therefore, in the case of soft budget constraint, adverse selection emerges when there is only a loose or no connection at all between managerial performance and remuneration, and when there is no such set of rules and standards in place which may adequately motivate the members of the management board to make extra efforts on a voluntary basis or, at least, for compliance with institutional regulations.

Certain processing or reselling entities apply the lowest possible purchase prices to realise the greatest possible profit, at least in the short term. Although they need high-quality goods, they are not willing to – and they normally do not – pay for higher quality. *Frequently, a high-quality good does not give any advantage to its producer.* Under such conditions the producer may decide, practically at any time, to continue with lower quality. It should be noted that the parties in this case show no mutual cooperation or commitment: the supply side actors are asymmetrically dependent on the buyer of their product (Balogh, 2007, pp. 18-19), who may abuse this situation.

As confirmed also by Akerlof's model (1970), this situation leads to a transition during which higher quality gradually disappears from the supply side of the market. The *length of this transition* always remains a question. Actually, the supply side actors use their skills and competences to establish the routines which result in a given quantity and quality of goods. In certain cases *no lower quality may be produced for technological reasons.*¹ On the other hand, the process producing lower quality requires different routines in terms of labour force. The *routines used for survival or “quality impairment” must also be developed* and learnt, which also requires efforts. *Inertia* may fix production at its former level. In this particular case it means a higher level of quality (Schumpeter, 1980, pp. 126-135). At the time of changing technologies, the producer's inertia – measured as the length of reluctance to make changes – is greatly influenced by the *actor's size, expertise and income* (Dong and Saha, 1998). Furthermore, the *cultural embeddedness and norms* of either the strategy shaping owners/managers or the employees of the producer will hinder any effort to deliberately lower goods quality even if it would improve the actor's profitability or chances of survival. If the production of a high-quality (“best possible”) good is based on deeply embedded norms, habits or religions then these may be able to keep things going for long decades or over several generations (Williamson, 2000, pp. 596-598). Even if the ambition to produce higher quality is not embedded, there are frequent examples of *personal or group-level commitments*. Nevertheless, the institutional transformation – driven according to North (1994, p. 4) by a change in relative prices – may sooner or later modify the institutions representing higher quality without any surcharge. As a result, things like “impairing” the quality or leaving the community (e.g. in the form of emigration or job change) may become acceptable for actors committed to maintain or improve the quality of goods.

A special case of deliberate buyer undervaluation of a relatively high quality offered by supply side actors is when *sellers are not aware of the surplus quality they are offering in respect to each other*. Even if they may vaguely guess their ranking and the quality features of their goods, they are unable to assess the differences in the purchase price.² In other words, a seller offering relatively higher quality is unable to assess whether the

¹ E.g. precision saw mill, plant production site with good soil and location, plantation made with quality saplings.

² The situation is similar when bidders to a tender are unable to study the content and evaluation of the materials submitted by other

purchase price is proportional to his higher quality and to the additional efforts needed to achieve it. This information asymmetry is similar to that described in the Akerlof's model (1970) but it is just the opposite as in this case it affects the sellers. If a seller needs to make additional efforts in order to offer surplus quality then he will be sooner or later faced with the direct signs of his cost efficiency being lower than that of other sellers (receiving the same purchase price as him): such signs include a smaller consumption caused by smaller income and a quicker use of reserves or resources. The *buyer side may slowly kill the seller side*. It may happen when there is *no proper cooperation* between the actors of the supply side and when the formal or informal rules applicable to prices or quality have been established only in the small but separated actor communities and not at the level of institutions. In lack of sufficient information and a general reference base, the supply side actors depend on, and must take operational decisions in view of, the one-way flow of information provided by the sellers. In this case the supply side actors will face a special version of the prisoner's dilemma in which the buyer (i.e. the police officer) may take advantage of his surplus information. That is why Renard (2003, p. 88) states that "quality is an endogenous social construct that contributes to coordinate the economic activity of the actors". Accordingly, they will be able to communicate and negotiate partly with the actors of their own side and partly with the actors of the other (seller) side. If the supply side actors producing relatively high quality are not aware of the actual importance of their activity or quality for themselves or other affected actors then in lack of sufficient remuneration they will either use up their reserves, leading to a deterioration of their capacities, or they will shortly start a new activity with higher profit levels. *The deterioration will be coupled with a weakening of the seller bargaining positions* in a situation where buyers establish each purchase price through individual *bargaining positions* and separate negotiations, regardless of actual goods quality and using a special price discrimination. Thus the supply side deterioration of quality may become a self-fuelling process through the weakening of the seller bargaining positions. This may adversely affect certain actors (other than direct buyers) who perceive the gradual disappearance of the relevant good from the market as a loss. Such good may be a product, a lifestyle, a given condition of the natural environment, a community, a profession, a tradition, certain special skills and so on. This has led, among others, to the establishment of the *fair trade movement*. Certain actors, who feel affected, will make efforts to achieve that certain high-quality goods deemed desirable by them will not disappear from the market in lack of adequate recognition. The disappearance of a relatively higher quality is perceived as a crisis by the actors. They plan to eliminate such crisis by the institutionalisation of higher quality and the acceptance of a quality-based market price (Sylvander et al. 2006, p. 63).

The *status quo* between the actors, whether they are organisations or private individuals, plays a major role in the decision-making process. Any change of this status quo – even if it represents a better solution for the given actor's target achievement – means uncertainties. An actor may have acquired certain knowledge of the existing status quo from past experiences or through learning. However, much less knowledge may be available for assessing a future status quo. Lots of transaction and other costs will incur until the new status quo is established. It is difficult to forecast both these costs and the surplus yields. Apart from a cost-benefit analysis, a rising level of risks should be reckoned with as the existing routines and competences are not sufficient, or not properly proved, for the assessment of the future.

According to each market theory of Samuelson and Zeckhauser (1988), if at the time of making a decision it is *allowed* – under the applicable community norms, organisational standards and regulatory provisions – *to select the current status quo as an option then most probably this option will be selected*. If it is not allowed then an option resulting in conditions very similar to the ones represented by the current status quo should be selected. Naturally, the extent may differ due to the reasonable assessment of uncertainties and risks, the erroneous observations of cognitive origin (information decoding) and the variance of psychological commitments. Based on the empirical findings of competitive market assessments, the authors point out that the *pioneer actors creating always new status quo conditions acquire greater market share* in the long run (*Ibid.*, p. 45). Not by chance. Typically, those actors become pioneers who have advanced routines, strong abilities and a high potential to create new routines. This represents less uncertainties and lower risks for them, while their norms and rules are geared to new and higher quality. The same levels of uncertainties and risks are addressed differently by the actors. Improvements and innovations are not favoured by the actor's lower propensity to assume risks and higher willingness to avoid uncertainties (Hámori-Szabó, 2010, p. 893).

The manager will decide on behalf of the actors in issues like in-house technological options, product features, procurement sources or employee matters. Assuming uniform cognitive management competences, organisational routines and abilities within a given set of norms and rules, the manager with the lowest relative level of knowledge will be most committed to maintain the status quo (and will be, at the same time, most indifferent or even hostile to the new aspects of higher quality). This manager perceives the highest level of change-related uncertainties and risks or hazards, and thinks that any change in the status quo will put him in a less favourable position in terms of his target implementation. Naturally, it represents serious hazards to the organisation as adverse selection processes may gain ground regarding the selection and survival of employees, the acceleration of technological delays and the quality backlog of products. Eventually, the person or persons making the decisions place their private interests (i.e. to keep their position) above corporate interests in many cases as the relevant quality issues could have been properly evaluated by other managers with greater knowledge and better abilities. If this attitude does not violate any of the applicable norms or rules, it cannot be considered corruption because it is only a selfish behaviour neglecting the interests of the community.

In the course of the *selection* process the simultaneous operation of actors identifies the actors who are able to achieve the highest level of compliance, harmony and efficiency in view of the given set of conditions and requirements. The actors assigned to upper position by the selection mechanism will be allowed to continue their activity somehow so that they will become survivors again. Therefore the selection process will separate the wheat from the chaff. The greater the harmony between an actor and the set of requirements applicable to him, the higher the probability that he may become a survivor.

By way of *self-selection*, the actor gives a preliminary and voluntary waiver of activities performed to obtain certain advantages or to achieve certain conditions. Therefore the actors allowed to perform a given activity and to achieve specific targets or conditions will be identified not by the compulsory nature of the selective mechanisms but by way of *voluntary decisions*. At the time of self-selection the relevant actors will not engage, in accordance with the assumed selection rules, in the actual game. Instead, they will make the necessary decisions and establish their point of view regarding their future activity in advance and in view of the preliminarily estimated results. Accordingly, the actors will not assign separate resources for obtaining, as a result of the selection mechanisms, a judgment about how their conditions and activities comply with the relevant set of requirements. As a matter of fact, if their preliminary estimates and forecasts are correct, the result regarding the survivors would be the same as that of a traditional selection but an actor not engaging in the game would be able to save resources, including time, and achieve a relative short-term improvement of his position.

Self-selection often has beneficial impacts on market operation, especially when the actors properly adapt the selection requirements to their own activities and thus decide on self-selection. However, adverse selection emerges when self-selection is performed by actors capable of achieving higher quality. It may happen when the difference between the skills of the actors capable of achieving higher quality and the other actors is so significant that the other actors perceive as less menacing the selection hazard that has an adverse impact on their survival: they feel less uncertain and detect lower risks. Therefore they fail to decide to perform self-selection – although they would really need it – and their share keeps rising among the market players, generating an increasing level of market inefficiencies. Accordingly, the representatives of higher quality perceive increasing uncertainties and risks, which keeps intensifying their inclination to self-selection.

In view of the adverse selection phenomena discussed above, the following types can be identified:

- Due to their lack of information, the buyers are unable to recognise and properly assess offers of higher quality;
- Due to the lack of information on the supplier side, the buyers tend to consider the strength of their bargaining positions instead of goods quality when they assess the packages offered by the supplier side;
- Taking advantage of the fact that supplier side actors offering higher quality have become accustomed to producing higher quality for some reason, the buyers refuse to pay them any quality surcharge;
- Due to short-term risk minimisation considerations, the managers working under soft budget constraint and without proper motivation in terms of rules, norms and remuneration fail to make additional efforts to achieve higher quality;

- When making organisational decisions, the corrupt managers apply their own illegal set of rules instead of market selection aspects designed to achieve higher quality;
- Operating not with the most excellent available managers, the management board wants to keep the status quo by all means and for this reason refuses to allow efforts geared to higher quality;
- Due to their skills, which are significantly different from the skills of actors capable of providing lower quality, the representatives of higher quality perceive critical levels of risks and uncertainties regarding the market selection mechanisms and, therefore, keep performing self-selection.

3. Forms of adverse selection present in Hungarian higher education

On one hand, the quality of higher education can be perceived as student-focused on the grounds that quality higher education properly meets both the short-term and the long-term demands, whether express or latent, of students (Tan, Kek, 2004). Yet, on the other hand, we cannot ignore the existence and application of a quality category designed to achieve the best possible compliance with the requirements of the national economy or government, acting as the main user and financing entity (Stensaker, 2003). However, better quality, which would be able to comply with such requirements at a complex and high level, fails to gain ground in higher education as a result of adverse selection.

As to higher education in Hungary, the processes of adverse selection are basically present in eight areas.

Admission of students. Typically, schools are continually lowering their quality standards in order to attract the required number of students. As a result, quality standards, representing the realistically expected professional input requirements, will become generally lower in time. As to their input characteristics, the admitted students show a great variation and there is a gradual quality deterioration in general. According to the average figures of the last 5 years, the number of students entering Hungarian higher education has been slightly but constantly decreasing, though this trend falls behind the rate that would be justified in view of the shrinking population. At the same time, the average quality of secondary school leavers has been constantly declining (OECD, 2014), which means that higher education constantly eases the admission requirements in order to maintain student numbers.

Training of students. The lowering quality of students will, in time, make it difficult or impossible to expect the same quality from them as before. They will be able to learn less material with lower efficiency. High-performing students will not like the continual erosion of requirements because their low-performing counterparts will work less hard but will still be able to obtain good grades. The use of prohibited methods during examinations will have similar impacts. The spreading of such disagreeable patterns is caused mostly by the presence of adverse selection in education and, also, by similar general trends in the field of social norms. The lower quality of new students would require harder work from teachers, which is not acceptable for many of them (Johnson, Berg, Donaldson, 2005); therefore, people do not want to become teachers, while existing teachers abandon the profession or simply lower the level of education.

Lecturers. The remuneration of lecturers is inadequate in comparison with private sector salaries. In addition, no general arrangements have been made yet for the proper remuneration of those lecturers who excel with quality work. Often, the career development system shows only formal commitments to the pursuit of quality training and academic activities. Furthermore, in an environment of worsening general student quality it is hard to expect any quality improvement of the lecturers. Pursuant to applicable Hungarian legislation, higher education lecturers are not considered teachers and, consequently, they are always left out from any pay rise directed to the otherwise underpaid teachers in Hungary. As the wage paid to Hungarian teachers is half the OECD average, Hungary and Slovakia are at the end of the line (OECD, 2014), though the level of wages is a major factor in terms of teacher quality (Johnson, Berg, Donaldson, 2005).

Graduates. Most graduates find jobs at government or municipality entities where social capital tends to be more important than actual skills or competencies. The private sector is still not sensitive or responsive enough to quality, yet it is typically attributable not to the lack of willingness but rather to the lack of adequate information. It is also detrimental to the general assessment of quality when qualified professionals

migrate from various regions of the country and the remaining workforce (of poorer quality) is assessed similarly to better qualified persons. Despite the fact that most Hungarian higher education institutions are rather poorly ranked on international top lists and that the quality of their graduates is declining, higher education diplomas still generate one of the largest benefits to their holders among the OECD member countries (OECD, 2014)

School selection of students. As for the majority of students the purpose of obtaining a diploma is not to obtain knowledge and as the market fails to make any quality-based difference between the diplomas, many students are naturally interested in the selection of schools offering poor quality and low standards. It is also true for students who would equally be able to meet higher requirements. Higher education costs for students have been multiplied since the change of the political system in 1989, although families have not eventually become richer. It means that, in an effort to minimise the risks of funding, the trend discussed by Jacobs and Vijnbergen (2007) toward lower requirements (coupled with a greater probability of obtaining higher education qualifications more quickly) is becoming ever more evident.

Course selection of students. As a typical phenomenon, students strive not to obtain an adequate volume of knowledge but to achieve a specific number of credit points or grade point average. Therefore they tend to avoid courses and lecturers setting high levels of requirements, even if these persons are outstanding masters and scientists. When students do not have a parallel opportunity to avoid such courses, they often make strange attempts to lower the level of requirements or even to remove the lecturer in charge. For various reasons, including the desire to obtain better study results and thus to be eligible for higher scholarship amounts, the majority of higher education students tend to opt for courses with lower requirements, mostly in view of the fact there is no difference between the resulting higher education diplomas. Thus, just like in the case of school selection, students are able to reduce their financial risks and to enjoy more free time. In other words, competition in the form of the students' freedom to select their schools and subjects does not necessarily result in improved teacher quality unless other assessment criteria – such as the regular audit of lecturers – are applied (Hanushek, Rivkin, 2006).

Accreditation of institutions and majors. The system of accreditation was designed to reduce the uncertainty of employers and to arrange for the issue of diplomas on the basis of a fairly uniform set of requirements and for the output of students to the labour markets of the various industries. However, higher education institutions focusing on quality work will suffer a significant disadvantage if, despite the great quality differences, almost any entity may obtain accreditation after fulfilling the obligatory administrative conditions. According to Harvey (2004), even in the United Kingdom, the accreditation of higher education institutions is more about power and personal ties than about the wish to ensure higher quality. Nevertheless, the relevant standards are not in harmony with the actual quality requirements. In early 2014, the European Association for Quality Assurance in Higher Education suspended the membership of the Hungarian Accreditation Committee under the assumption that it had lost its independence from the Government of Hungary.

Investment projects, tendering funds, individual aids. The development of institutions from own funds is negligible when compared to tender-based (mostly EU funded) assistance or ad hoc targeted state subsidies. Success in winning funds is not in harmony with the inventory of quality assets produced by the universities. Certain ties to political circles or a good tender counselling agency may be a major factor in fund allocation. Besides, many investment or development projects do not properly match the main activity of the schools. They may even be contrary to the long-term interests of the applicant as they create capacities which cannot be maintained later in lack of funds. Therefore it may happen that a university of international reputation is unable to acquire funds, while a small town college offering low-quality training enjoys lots of student hostel beds and researcher positions at one of its departments considered of secondary importance even by the college itself. In fact, public financing in Hungarian higher education is still performed along the logics of the former socialist regime; actually, the new system of tendering for certain funds has not replaced the old structure but has been integrated into it. It means that Hungary highly tolerates the process (Fleurbaey, Gary-Bobo, Maguain, 2002) – which is present even in countries where the funding of higher education is very efficient – under which public funds are not distributed in ways which would ensure the highest level of

human capital growth.

4. Conclusion

Adverse selection is harmful and dangerous process capable of undermining the operation of a market. As discussed above, adverse selection may emerge not only as a result of information asymmetry but rather as a consequence of deliberate actor behaviour not subject to proper institutional control. It means that the relevant market lacks institutions which could suppress actor behaviour aimed at deliberately undervaluing higher quality. Therefore, a better supply of information to actors is only one – yet major – step in the fight against adverse selection. As a second step, institutions and routines committed to normal selection and enabling the most talented persons to become decision-makers should be operated at and above organisational levels. As a third step, the relevant decision-makers should be forced mostly by endogenous market-based institutions to perform ongoing and proportionate assessments of higher quality.

Table 1. Higher education and training

Country	Rank 2006/07	Rank 2014/2015
Hungary	30	52
Slovak Republic	38	56
Slovenia	26	25
Czech Republic	27	35
Poland	33	34
Austria	19	15

Source: World Competitiveness Report 2006/07; 2014/15 (World Economic Forum)

Table 2. Quality of higher education system

Country	Rank 2006/07	Rank 2014/2015
Hungary	42	96
Slovak Republic	49	125
Slovenia	52	48
Czech Republic	30	77
Poland	34	79
Austria	13	31

Source: World Competitiveness Report 2006/07; 2014/15 (World Economic Forum)

As it is clear from Table 1 and Table 2, Hungary and Slovakia have suffered a major setback in the field of higher education, considered as a priority area with regard to international competitiveness, while Slovenia has even managed to improve its position. The main reason for this result, apart from quantitative drops, is the substantial decline of quality in both countries but mostly in Slovakia. In order to attain and maintain higher quality, both countries should consider the fight against adverse selection as a priority task for the simple fact that, fortunately, such decline of quality was not caused by a destruction of infrastructure or humans but by such factors as the general undervaluation of quality and the gradual exclusion or marginalisation of higher quality actors. Actually, those – mostly Asian – countries were able to achieve progress in this field where quality was properly assessed and adverse selection was minimised, leading to an improved selection mechanism in the process of economic evolution.

References

Akerlof G. A. (1970) The Market for "Lemons": Quality Uncertainty and the Market Mechanism; *The Quarterly Journal of Economics*, vol. 84. no. 3 pp. 488-500.

Balogh E. (2007) Kooperáció és opportunizmus: a vállalatközi kapcsolatok megromlása és helyreállításának lehetőségei a hazai gazdaságban - Egy feltáró kutatás eredményei; PhD értekezés, Budapesti Corvinus Egyetem

Dong D. Saha A. (1998) He came, he saw, (and) he waited: an empirical analysis of inertia in technology adoption; *Applied Economics*, vol. 30. pp. 893-905.

Fleurbaey M. Gary-Bobo R. J. Maguain D. (2002) Education, distributive justice, and adverse selection; *Journal of Public Economics*, vol. 84. no. 1. pp. 113-150.

Guriev S. (2004) Red tape and corruption; *Journal of Development Economics* is. 73. pp. 489-504.

Hámori B. (2002) Érzellem-gazdaságtan – A közgazdasági elemzés kiterjesztése; Kossuth Kiadó, Budapest

Hámori B. Szabó K. (2010) A gyenge hazai innovációs teljesítmény intézményi magyarázatához; Közgazdasági Szemle, vol. 57. no. 10. pp. 876-897.

Hanushek E. A. Rivkin S. G. (2006) Teacher Quality; In: Hanushek E. A. Welch F. (eds.) *Handbook of the Economics of Education*, Elsevier

Harrison P. D. Harrel A. (1993) Impact of „Adverse Selection” on Managers’ Project Evaluation Decisions; *Academy of Management Journal*, vol. 36. no. 3. pp. 635-643.

Harvey L. (2004) The power of accreditation: views of academics 1; *Journal of Higher Education Policy and Management*, vol. 26. no. 2. pp. 207-223.

Heidenheimer A. J. Johnston M. (2011) *Political Corruptions: Concepts and Context*; Transaction Publishers, New Brunswick, New Jersey, pp. 1-850.

Johnson S. M. Berg J. H. Donaldson M. L. (eds.) (2005) *Who Stays in Teaching and Why: A Review of Literature on Teacher Retention*; Harvard Graduate School of Education, Cambridge

Kornai, J. (1993) A szocialista rendszer; HVG Kiadó, Budapest.

Kornai J. (1997) Pénzügyi fegyelem és puha költségvetési korlát; Közgazdasági Szemle, vol. 53. no. 11. pp. 940-953.

Kornai J. Maskin E. Roland G. (2004a) A puha költségvetési korlát I.; Közgazdasági Szemle, vol. 60. no. 7-8. pp. 608-624.

Kornai J. Maskin E. Roland G. (2004b) A puha költségvetési korlát II.; Közgazdasági Szemle, vol. 60. no. 9. pp. 777-809.

Jacobs B. Vijnbergen S.J.G. (2007) Capital-Market Failure, Adverse Selection, and Equity Financing of Higher Education; *Public Finance Analysis*, vol. 63. no. 1. pp. 1-32.

North D. C. (1994) Institutional change: a framework of analysis; *Working Paper Economic History*, no. 9412001.

OECD (2014) *Education at a Glance 2014*, OECD Indicators; OECD Publishing

Renard M. C. (2003) Fair Trade: quality, market, and conventions; *Journal of Rural Studies*, vol 19. pp. 87-96.

Samuelson W. Zeckhauser R. (1988) Status Quo Bias in Decision Making; *Journal of Risk and Uncertainty*, vol. 1. no. 1. pp. 7-59.

Schumpeter J. A. (1980) A gazdasági fejlődés elmélete; Közgazdasági és Jogi Könyvkiadó, Budapest

Stensaker B. (2003) Trance, Transparency and Transformation: The impact of external quality monitoring on higher education; *Quality in Higher Education*, vol. 9. no. 2. pp. 151-159.

Sylvander B. et al. (2006) Establishing a quality convention, certifying and promoting the quality of animal products: the case of beef; in: Rubino R. et al. (eds.) *Livestock farming systems – product quality on local resources leading to improved sustainability*; EAAP Publication, no. 118. Benevento, Italy

Tan K. C. Kek S. W (2004) Service Quality in Higher Education Using an Enhanced SERVQUAL Approach; *Quality in Higher Education*, vol. 10. no. 1. pp. 17-24.

Williamson, O. E. (2000) The New Institutional Economics: Taking Stock, Looking Ahead; *Journal of Economic Literature*, Vol. 38, No. 3. pp. 595-613.

World Economic Forum (2006) *World Competitiveness Report 2006/07*; WEF Publishing

World Economic Forum (2014) *World Competitiveness Report 2014/15*; WEF Publishing