

CAUSES OF BARRIERS IN INVESTING INTO HUMAN CAPITAL

Petr Wawrosz, Herbert Heissler

Economic theorists (for example Becker 1993, Becker 1997, Eltis, Lewis and Sokoloff 2009) admit that one of necessary conditions for long-term growth includes investments into human capital, it means into knowledge, abilities and skills of people. Human capital, no doubts, can be acquired in many ways, school education, however, is one of the most natural – the objective of school should be to educate and to tutor (Pelcová 2001, Pelcová 2004). For individual people to obtain the needed knowledge, abilities and skills through various grades of school education, they must have equal access to education. Various studies (Matějů, Schneider, Večerník 2003), however, show that it is not the case. In other words, it is clear that there are strong barriers preventing every person to invest into his/her education. Many countries, however, have succeeded to remove or mitigate the barriers (Palacios Lleras 2004) through reforms of the education system. In the Czech Republic, a number of reforms are implemented at present – the reform of health care area, the pension system reform, the reform of tax rates, etc. The reform of education system, however, remains a bit neglected, resp. there are objections against it (e.g. Zlatuška 2009), while the objections against individual proposals state that the reform in fact will not remove the barriers in investing into human capital. We have reasons to ask the question why the barriers survive, resp. why reforms that really want to remove them are not implemented.

Existence of interest groups

Among other things, it is caused by the fact that if little persons invest into their education they have an advantage of a monopoly, resp. oligopoly – thanks to their abilities, they are more productive than other persons and because of the productivity they can earn higher profits. If other persons invested into their abilities then those who have already invested would lose that monopoly, resp. oligopoly position, they would face stronger competition, prices of their production factors, resp. prices of assets they produce could drop and their profit could disappear.

Economic theory (Holman 2007) speaks generally about existence of interest groups when individual persons try to protect their interests (for example in the form of higher profits). Most successful in this protection are small, well organized interest groups with low costs of association, their members usually have little different views, so they are able to clearly formulate their interests. Thanks to the low costs, they are capable to influence politicians, officers, resp. other persons so that such rules prevail in the society (in terminology of the institutional economy institutions – see for example Furobotn and Richter 2005) supporting or defending their interests. From the perspective of the society as a whole theory (Holman 2007) points out that society usually is not able to formulate a unified interest – it is too wide and heterogeneous for that, resp. interests of individual persons and groups (members of society) are too different. For understandable reasons, society has high costs of association and therefore society as a whole often cannot prevent a small interest group to assert its interests. For members of a small interest group it can be profitable – when profits of the advanced claim exceed its costs. Because the profits are allocated to members of a small interest group, one member can achieve a high profit while the costs linked with the advanced

claim can be allocated by a small, well organized group to all members of the society¹. From the point of view of non-members of the well organized interest group it often means that the costs imposed on them by the small, well organized group are too low, while costs linked with their removal might be prohibitively high (costs of removal of the costs are higher than the costs themselves), it means that removal of the costs does not pay off, therefore non-members of the small, well organized interest group do not endeavour to remove them. We point out that many times, they even do not know that a specific small, well organized group exists, that the group will achieve various advantages while the advantages are to the detriment of other members of the society.

Real reforms and the contextual game theory

One of consequences of existence of small, well organized interest groups is that the groups succeed to influence public opinion. When some reforms are really implemented they are often able to carry through the reforms in such direction which does not endanger their interests, even supports them. To persuade other members of society that the reform is good and that it will be for their sake, small well organized interest groups use various means of communication (for more detail e.g. Jiráček Jan, Říhová Blanka 2000). It does make sense to ask a question in this context how real reforms should look like, it means reforms implemented in favour of the whole society. Basic characteristics of such reforms, in our opinion, include:

- reforms enabling development of every member of the society;
- reforms contributing to development of the society as a whole;
- reforms extending the possibility of free access into an industry and free departure from the industry;
- reforms protecting ownership rights of individual members of the society;
- reforms not influenced by ideological prejudice.

Enforcing of the mentioned objectives is not easy. A tool serving to help this is the contextual game theory. We will describe it in brief. The game theory (Dlouhý and Fiala 2007, Mañas 2002) usually sees an individual game (it means a conflict situation of decision) separately – sets of individual players, sets of their strategies, as well as pay-out matrices (functions) – i.e. what payouts individual players will have² if they use some of possible strategies, depend on the specific game, while it is not taken into account how behaviour of an individual player in a game influences his/her payouts (more generally his/her position) in another game. It is possible to admit that in games with repetition the game theory deals with how future games will influence strategies of the player in the present game³. Nevertheless, it is only a game of a certain type (the type of the same conflict situation). As a rule, individual players, however, are now, as well as in the future involved in more type different conflict situations, while if behaviour in the present situation influences their payout in other type different situations then it will pay off for them to include those other type different situations into their considering. If they do so we can argue that we have therefore created one game in which the payout matrix is based not only on payout directly resulting from the present conflict but also on

¹ Ideally among other members of the society – it means a situation when the costs linked with enforcing of the interests are paid by all other members except for members of the small, well organized group.

² The payout need not be only income (profit) of a player but also a different value. In the well known game prisoner's dilemma, in its classical variant, the payout is the size of the penalty of individual players.

³ Again, it can be pointed out the game prisoner's dilemma with the definite number of repetitions. The theory (for example Carmichael 2005) achieves the conclusion that the best strategy in the present game is betrayal (i.e. in the classical prisoner's dilemma to confess).

payouts from conflict situations linked with this situation. We think that this thesis is not entirely exact – payouts from other, type different games are partially influenced by behaviour of the player in the present game and partially by characteristics of the other games themselves. Linking into one game can hide own characteristics of other, type different games. Therefore we think that the concept of a contextual game, which expresses the fact that the strategy of players in the present game depends not only on their payout in the present game but also on how behaviour of the player in the present game influences his/her payout in future games, is useful. We point out that a number of publications (e.g. Lamsdorff 2007, Coyle 2010) frequently considers context when analysing human behaviour in which the analysed behaviour takes place. Nevertheless, it is not usually within an integrated theory.

Interest groups as the context of reforms

When we go back to the question asked at the beginning, why reforms of the education system are not implemented, resp. are implemented in an unsuitable way, the contextual game theory will answer that interest groups are among the contexts influencing the involved reforms. As we have mentioned above, real reforms could endanger position of interest groups. In the environment where abilities of individual persons are insufficiently developed, interest groups can easily hide their real interests. In other words and perhaps more generally, educated people can easily discover context of individual games and endanger position of the interest groups. It is therefore for the sake of the interest groups to struggle against real reforms. If the interest groups succeed, they can persuade the public that the measures proposed by them (including draft reforms) are measures in the interest of the whole society, although in fact they are only in the interest of those groups. Therefore, if non-members of the groups support the measures of the interest groups, although they do not benefit for them, then they, in a way, play the role of “useful idiots“.

To summarize, we can conclude that if we want to remove barriers preventing investments into human abilities it makes sense to develop the contextual game theory as a tool showing in what context individual games are played – including which interest groups are played in the society and what games (including parallel games⁴) are played by the groups.

References:

- BECKER, Gary S. 1993. *Human Capital: a theoretical and empirical analysis with special reference to education*. 3rd edition. Chicago: The University of Chicago Press.
- BECKER, Gary S. 1997. *Teorie preferencí*. (Preferences Theory). Praha: Liberální institut.
- CARMICHAEL, Fiona 2005. *A guide to game theory*. Harlow: Pearson Education Limited
- COYLE, Diane 2010. *The soulful science: what economists really do and why it matters*. Princeton: Princeton University Press.
- DLOUHÝ, Martin; FIALA, Petr 2007. *Úvod do teorie her*. (Introduction to the Game Theory). Praha: Oeconomia.
- ELTIS, David; LEWIS, Frank D.; SOKOLOFF Kenneth L. 2009. *Human capital and institutions: a long run review*. Cambridge: Cambridge University Press.
- FURUBOTN, Erik G.; RICHTER, Rudolf 2005. *Institutions and Economic Theory*. 2nd Edition. Michigan: The University of Michigan Press.

⁴ A parallel game can be defined as a hidden game inside another game (other games) where rules of those other games are broken. For more details see Valenčík.

HOLMAN, Robert 2007. *Mikroekonomie: středně pokročilý kurs. (Micro-economy: Medium Level Course)* 2nd edition. Praha: C.H. Beck.

JERÁBEK, Hynek 1997. Paul Lazarsfeld a počátky komunikačního výzkumu. (Paul Lazarsfeld and the Beginnings of Communication Research). Karolinum, Praha.

JERÁBEK, Hynek 2003. Měření názorového vůdcovství v českých sociologických výzkumech. (Measurement of Leadership in Opinions in Czech Sociologic Research). In Sociologický časopis. Sociologický ústav AV ČR, Praha.

MANAS, Miroslav 2002. *Teorie her a konflikty zájmů. (The Game Theory and Conflicts of Interests)*. Praha: Vysoká škola ekonomická.

MATEJŮ, Petr; SCHNEIDER, Ondřej; VEČERNÍK, Jiří 2003. *Proč tak těžko? (Why so Difficult)*. Praha: ISEA.

KUBÁTOVÁ, Jaroslava 2003. Možnosti komunikace s veřejností – námět pro českou politiku. (Possibilities for Communication with the Public – Theme for the Czech Politics). In Marek Pavel. POLITOLOGICA 2. Univerzita Palackého v Olomouci, Olomouc.

LAMBSDORFF, Johann G. 2007. *The institutional economics of corruption and reform: theory, evidence, and policy*. Cambridge: Cambridge University Press.

PALACIOS LLERAS, Miguel 2004. *Investing in Human Capital – a Capital Market Approach to Student Funding*. Cambridge: Cambridge University Press.

PELCOVÁ, Naděžda 2001: *Vzorce lidství. Filosofie o člověku a výchově. (Formulas of Humanity. Philosophy about a Man and Education)*. Praha: ISV nakladatelství.

PELCOVÁ, Naděžda 2004. *Filozofická a pedagogická antropologie. (Philosophic and Pedagogical Anthropology)*. Praha: Karolinum.

SARTORI, Giovanni 2001. Srovnávací ústavní inženýrství. (Comparative Institution Engineering). Slon, Praha.

ŠUBRT, Jiří 1998. Kapitoly ze sociologie veřejného mínění. (Chapters on Public Opinion Sociology). Karolinum, Praha.

SCHULZ, Winfried. Funkce a důsledky politické komunikace. (Functions and Consequences of Political Communication). In JIRÁK, Jan, ŘÍCHOVÁ, Blanka. Politická komunikace a média. Karolinum, Praha 2000.

ZLATUŠKA, Jiří 2009. „Bílá kniha nasadí absolventům klapky na oči“. (“The White Book will Blinker Graduates”). *Právo*, 18.9.2009.

*Ing. Herbert Heissler,
University of Finance and Administration,
Czech Republic*

*Mgr. Ing. Petr Wawrosz,
University of Finance and Administration,
Czech Republic*