The Financial Specialities of Hungarian Public Education Compared with International Figures

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Abstract: In Hungary as well as in several other countries of the world the state is responsible for maintaining, operating and financing the public educational system in order to provide equal opportunities and access for everybody. However, this does not mean that other services, such as non-profit organisations and churches are excluded, whose participation in public education has increased a great deal in the past few years. The financial management of Hungarian public education has been criticised several times, but this criticism does not apply to the majority of institutions which are financed by churches, colleges and universities, as well as non-profit organisations. This criticism can mostly be justified or discarded if GDP figures regarding public education are taken into consideration. It is well-known that the proportion of GDP spent on Hungarian education is rather high, which is not justified by efficiency figures. The GDP per person taking part in education in kindergarten, primary education as well as in advanced-level vocational training courses compared with the GDP per head exceeds the same figure calculated in OECD countries. After all outstanding results could be expected by international standards (PISA, $TIMSS^{1}$ analyses). At the same time several analyses measuring the efficiency of education refers to a decline in efficiency and a deteriorating level of performance, therefore regards the money spent on primary education as wasted. Present paper aims to map out how fair the above-mentioned criticism is. During the preparation of this paper the authors used both domestic and international databases.

Keywords: public education, financial specialities, international data

¹ The PISA analyses measure the practical knowledge of 6th and 10th form students testing them on Mathematics, Natural Sciences, Reading Comprehension as well as examining their problem-solving abilities. These analyses in Hungary shed light on substantial shortcomings each year, moreover the annual results seem to be deteriorating in many ways year by year in the countries taking part in the survey. The TIMMS analyses test the lexical knowledge of the students in which Hungarian students seem to excel in contrast with the results of the PISA analyses.

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1 Financing Education in Hungary in Comparison with International Figures

Financing public education in Hungary as well internationally is multi-channelled. The state finances the highest number of institutions which can be complemented by contributions from local governments, own income and certain fees paid for the services provided. More than 90% of pre-school and primary education takes place in institutions financed by local governments. Due to the decentralisation of state sources, local authorities are in charge of paying the funds. The role that local governments play in financing education cannot be emphasised enough times. At the same time the real value of the state contribution is falling while the expenses are rising, consequently it generates further problems for the sector which is already full of conflicts.²".

Table 1

Public educational expenses at current rate (in million HUF) of state funded institutions between 2004 and 2006

		2004	2005	2006
Kindergarten	Central	1 416	1 458	1 466
	Local government	161 232	174 112	182 547
	Total	162 648	175 570	184 013
Primary	Central	21 372	10 798	10 321
education	Local government	610 723	431 732	440 259
	Total	632 095	442 530	450 580
Secondary education	Central	-	10 556	11 094
	Local government	-	224 735	239 804
	Total	-	235 291	250 898
Tertiary education	Central	45 591	50 217	51 883
	Local government	43 577	49 951	54 217
	Total	89 168	100 168	106 100
Total	Central	68 379	73 029	74 764
	Local government	815 532	880 530	916 827
	Total	883 911	953 559	991 591

Source: OKM Educational yearbooks, in: ÁSZ (2008)

In order to get a good picture about how public education is financed in Hungary, we definitely have to refer to how much money other countries spend on education in relation to their GDP. However, the ignorance of the GDP of the countries can result in considerable distortion. The countries which could take pride in a higher value of GDP at the current rate, supposing that the level of

² Translator's note: Attila Ágh used an expression which can be mirror translated as "conflict container" which the authors adopted in the original Hungarian text.

education is the same, obviously produce lower results than Hungary whose GDP was not outstandingly high in any of the analysed years.

Table 2 Average expenditure on education per student in GDP% per head (full-time education) in OECD										
countries Source: Own calculation based on Education at a Glance 2003, 2007										
	Kinder- garten		Primary school		Primary and secondary education		Tertiary and secondary education		Advanced- level vocational training	
	2000	2004	2000	2004	2000	2004	2000	2004	2000	2004
Australia	-	-	19	19	26	25	29	29	26	26
Austria	19	18	23	23	32	27	29	30	39	-
Belgium	12	15	16	21	-	-	-	-	-	-
Canada	22	-	-	-	-	-	-	-	-	-
Czech Republic	18	16	13	14	23	25	24	25	12	11
Denmark	15	16	25	25	25	25	28	29	-	-
Finland	16	14	17	19	27	30	22	22	-	-
France	16	17	18	18	28	27	33	34	25	14
Germany	20	18	16	17	21	20	37	35	39	35
Greek	-	-	21	17	_	-	_		9	21
Hungary	21	26	18	23	17	21	23	24	26	38
Iceland	-	18	21	25	24	25	23	22	-	-
Ireland	10	14	12	15	16	19	16	20	15	14
Italy	23	22	24	27	28	28	29	29	-	-
Japan	13	14	21	23	23	25	25	27	-	-
Korea	13	12	21	22	24	29	29	36	-	-
Luxembourg	-	-	-	21	-	28	-	27	-	-
Mexico	15	18	14	17	14	16	25	25	-	-
Netherlands	14	17	16	19	22	24	21	21	18	20
New Zealand	-	21	-	21	-	21	-	30	-	22
Norway	36	10	18	20	23	23	25	30	-	-
Poland	24	31	22	24	-	22	19	23	-	24
Portugal	13	23	22	24	31	33	33	31	-	-
Slovakia	15	18	12	14	14	16	22	22	-	-
Spain	17	18	20	19	-	-	-	-	-	-
Sweeden	13	14	24	24	24	25	25	26	17	11
Switzerland	11	10	22	25	27	26	39	44	24	24
Turkey	-	-	-	16	-	-	-	25	-	-

U.K.

USA

OECD average

27

23

17

25

20

18

16

20

19

19

22

20

-

-

23

-

-

23

-

-

26

-

26

28

-

-

16

17

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The next table which shows the percentage of GDP spent on public education does not justify the above-mentioned proportion. The Hungarian public education spending and the GDP proportion were lower than the OECD average in the three years surveyed. Whilst in the middle of the 1990s, in 1995 3% of the GDP was spent on public education in Hungary, the average figure was 3.8% at the same time. The disparity between the two figures is 0.3%, which can be regarded as acceptable if it is taken into consideration that during that period there was an economic recession, and consequently some austerity measures. After all Hungary with her 3.5% of GDP spending was rated in the middle.

However, a more considerable disparity may be seen in 2000, after the Hungarian economy had recovered from the crisis caused by the changes in the political regime, and there was a more positive climate for both the economy and the state budget. The disparity this time was twice as big as in the previous period, i.e. 0.6%, which can be considered outstanding even compared with the OECD Average. If we take a look at the order of the surveyed member countries, Hungary seems to have declined from the middle position to the end of the list. Only the Czech Republic (2.8%), Slovakia (2.7%), Turkey (2.4%), and Greece possessing the lowest value (2.3%) have lower performance figures than Hungary does.

The situation had also improved by 2004, when Hungary was again in the middle (3.5%). This was partly due to the increased contribution by the maintainers as well as some more private funds provided to cover expenses in education. In addition to this, the nominal value of state funds for education had also become more generous. The interesting fact about the surveyed year is that the gap between the minimum and maximum value of spending on education had increased. Whilst in the previous two surveyed years the average difference in absolute value was 2.4 (2000) and 3.0 (1995), in 2004 the maximum value was 5.4% (Iceland³), while the minimum value was 2,2% (Greece⁴), which indicates the increasing difference between OECD countries. Developed countries are further strengthening their positions due to education, while the poorer developing countries are still struggling to catch up since their opportunities are still rather limited.

³ In the case of Iceland the increased funds spent on education still have not stabilised the economy of the country: it was the first country in Europe being victimised by the sub prime crisis.

⁴ Greece had the smallest GDP proportionate educational spending rate in all the three surveyed years.



2004 2000 1995

Figure 1

Public educational spending in GDP% (from private and community sources) in OECD member countries, in 1995 – 2000 – 2004⁵ Source: Own calculation based on Education at a Glance 2003, 2007

Analysing the GDP proportionate values of education there are substantial differences regarding the different levels. Looking at the average values it can be concluded that in all of the OECD member countries the highest amount is spent on primary education opposed to secondary education and especially advanced-level vocational training courses. It is followed by higher and secondary education, while financing advanced-level vocational training is ranked last. The disadvantageous situation of this area can be explained with the unfavourable position of advanced training opportunities, as the majority of students not only in Hungary but in the surveyed countries as well choose this way of furthering their education as a last resort, and only a few of them recognise its practical use. Hungary unfortunately has a figure below the average rate in every surveyed year, the only exception is the education at kindergartens, in which case Hungary has a twice as high figure as the average. This detailed table supports the criticism according to which Hungary does not allocate its financial sources in accordance with the needs of her economy.

After all it can be seen that it is not true that Hungary spends a great deal of her GDP on education, it should rather be said that Hungary spends most of its GDP per head on fewer and fewer children (See previous table), which is regarded as problematic, since the realisation of educational spending is not efficient, and does not serve the interests of the stakeholders of the Hungarian economy.

⁵ There are no available statistical figures in the periods marked with 0 in the table.

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Table 3 Public educational spending in GDP% (from private and community sources) at different levels in OECD member states

Source: Own calculation based on Education at a Glance 2003, 2007

	Kindergarten		Primary and secondary education		Tertiary and secondary education		Advanced –level vocational training courses	
	2000	2004	2000	2004	2000	2004	2000	2004
Australia	0,1	0,1	3,3	3,2	0,9	0,9	0,1	0,1
Austria	0,5	0,5	2,6	2,4	1,2	1,4	0,1	-
Belgium	0,5	0,6	1,2	1,5	2,4	2,7	-	-
Canada	0,2	-	-	-	-	-	-	-
Czech Republic	0,5	0,5	2,0	1,9	1,1	1,2	-	0,1
Denmark	0,8	0,9	2,8	3,0	1,4	1,3	-	-
Finland	0,4	0,4	2,3	2,5	1,2	1,4	-	-
France	0,7	0,7	2,8	2,6	1,5	1,5	-	-
Germany	0,6	0,5	2,1	2,0	1,2	1,2	0,2	0,2
Greece	-	-	1,1	1,0	1,7	1,2	0,1	0,1
Hungary	0,7	0,8	1,8	2,1	1,1	1,2	0,1	0,2
Iceland	-	0,7	-	3,8	-	-	-	-
Ireland	-	-	2,2	2,5	0,6	0,7	0,1	0,2
Italy	0,5	0,5	2,0	2,1	1,3	1,3	-	0,1
Japan	0,2	0,2	2,0	2,1	0,9	0,9	-	-
Korea	0,1	0,1	2,7	3,0	1,3	1,4	-	-
Luxembourg	-	-	-	2,9	-	0,9	-	-
Mexico	0,5	0,7	3,1	3,4	0,8	0,8	-	-
Netherlands	0,3	0,4	2,3	2,6	0,8	0,8	-	-
New-Zealand	0,2	0,3	3,2	3,2	1,3	1,6	0,1	0,2
Norway	0,7	0,3	2,5	2,8	1,2	1,4	-	-
Poland	0,5	0,6	2,5	2,7	1,3	1,1	-	0,1
Portugal	0,3	0,4	2,9	2,8	1,2	1,0	-	-
Slovakia	0,4	0,5	1,7	1,8	1,1	1,3	-	-
Spain	0,5	0,6	1,2	3,0	2,0	-	-	-
Sweden	0,5	0,5	3,0	3,1	1,3	1,3	-	-
Switzerland	0,2	0,2	2,7	2,8	1,5	1,7	0,1	0,1
Turkey	-	-	1,7	2,2	0,7	0,9	-	-
United Kingdom	0,4	0,4	1,2	1,5	2,5	2,9	-	-
USA	0,4	0,4	-	3,0	-	1,0	-	-
OECD average	0,4	0,5	2,2	2,5	1,3	1,3	0,1	0,1

It is interesting to compare the spending on education internationally. If we study the table below it can be established that the greatest change can be found in Turkey, which spent two and a half times more on education in 2004 than in 1995. However, if the country's GDP proportionate value is looked at, it can be seen that even if it had increased its spending on education a great deal, it was still not enough to catch up, as it is still among the last ones with its 3.1% GDP proportionate value in 2004. (5th position from the bottom!)). The next country which shows a substantial surge in educational spending is Ireland, which spent almost 1.7 times more on education than in 1995, lagging behind Turkey. At the same time the increase in expenditure still did not turn out to be enough to raise its position based on GDP proportionate value. During the surveyed period of time Hungary grew its educational spending in compliance with the average, since it spent an almost one and a half times more on education than in the middle of the 1990s. The Hungarian figure is in accordance with the above-mentioned GDP proportionate values, however it could improve its ranking by a better allocation of its spending on education as well as by focusing more on vocational training.



Public educational expenses (primary and secondary education, advance-level training courses) (from private and public sources, 1995 = 100) in OECD countries⁶ Source: Own calculation based on Education at a Glance 2003, 2007

Based on the above-mentioned values it can be seen that Hungary has average values compared with the other surveyed countries, there is no outstandingly high result in any categories. On the other hand it can be stated on the basis of the figures that some important issues may be raised due to the present system of

⁶ There is no information available about the increase of spending in OECD member countries not mentioned in the table.

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financing education. As the GDP rates show the division of spending is not optimal. Too much money is spent on one child and it is not done in the most efficient way. Despite the decline in the number of children still a disproportionate amount of money is spent on education in kindergartens compared with the average figure, furthermore the efficiency of this level has not been clarified because of the problems with measuring. At the same time far less money is spent on secondary education than the average, which shows that the economic demands are not fulfilled, which results in a process generating expansion in tertiary education. Based on statistics about financial sources and participation, advanced-level vocational training courses – despite their practicality – seem to be regarded as last resorts in the system. Taking the statistical data in the tables into account, in my view primarily the spending structure would require urgent changes, which could be detected in the efficiency figures as well as in the more reasonable division of spending.

2 Conclusions and Final Statements – Connecting Financing and Efficiency

Based on the above-mentioned studies, as far as Hungary is concerned, it can be clearly stated that, unfortunately, our country faces serious problems of efficiency in public education, and this fact is fully prooved by international statistics, too.

Expenditures on education do not keep up with the decreasing figures of the fall of the number of children, there is no according intencity in decrease of the teaching staff, and the costs of operation remain almost unchanged. Due to these reasons superfluous capacities have acculmulated in the system causing problems in financing the system itself. However, in the past years there have been improvements and steps forward in order to increase efficiency and planning as a reaction on government initiatives and financial restrictions. In the end it was rather finalized in forms of closing down educational institutions. The following forms of possible rationalization are known in practice:

- closing down in one single step, i. e. termination of the institution without a legal successor, resulting in immediate cost savings,
- closing down in a roll-on way, i. e. this is the case when new grades are not launched by the institution any more, however, the existing grades roll on, the institution is still facing substantial transitional costs,
- amalgamation, when the educational institution organizationally merges with another institution, causing low cost savings at high organizational stress and tension,
- aggregation with transformation into an off-site / campus, when lower

grades remain in the old institute buildings but the higher grades operate aggregated, resulting measureable reduction of costs,

- integration of the managements of the organizations, which will benefit the self-govenment in the form of financial savings of those eliminated positions,
- formation of supply and service organizations for the needs of serving the institutions, in the form of the ex-GAMESZ system (GAMESZ - Economic Engineering Supply and Service Organization) In this case significant savings can be achieved by joint purchases.

From September 2007 onwards a new system in financing public education has been introduced. The obligation of the public educational efficiency indicator has been introduced and it has fundamentally changed the whole system of financing. The volume of central budget expenditures and support that can be given to the institutions has been linked to the number of student and teacher lessons and class sizes. The characteristics of the new system is summed up by Varga (2007):

- the new system determines what class size, number of lessons and what stuff number is worth being financed,
- the central budget support to the self-governments becomes more predictable,
- the volume of support is made dependent on a sole characteristic feature of the self-government, it is the class size,
- the income producing ability and the significant differences caused by this ability do still not count in the system.

Referring to the above-mentioned it can be stated that the indicator of public educational performance is strengthening the close relationship between educational expenditures and the amount of financial support in a way, however, the real solution would only be the fundamental transformation and reform of the system. The necessity of a wholely decentralised problem solving should be reconsiderd bearing in mind the possible opportunity of recentralization. The aim is to provide the same education for all students in all towns, villages and settlements all over Hungary and by doing so our homeland could again, with its highly qualified human resources, take a chance to win in the fierce competition set by globalisation.

References

- [1] Állami Számvevőszék (2008): Jelentés az OKM ellenőrzéséről (Hungarian)
- [2] Education at a Glance (2003), Organisation for Economic Co-operation and Development (OECD), Paris

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- [3] Education at a Glance (2007), Organisation for Economic Co-operation and Development (OECD), Paris
- [4] Országos Közoktatási Intézet (2004): Fenntartható-e a közoktatás? Hatékonysági szempontok érvényesítése a közoktatásban, Budapest, (Hungarian)
- [5] Varga, J. (2007): Az iskolaügy intézményrendszere, finanszírozása, Oktatáspolitikai Kerekasztal, http://oktatas.magyarorszagholnap.hu/images/Vargajulia.doc, downloaded: 2008. 07. 28., (Hungarian)