5.3 KNOWLEDGE ACCUMULATION IN ADULTHOOD JÁNOS KÖLLŐ

Adult learning, predominantly taking place in non-formal or informal settings, has outstanding importance in acquiring the skills which are in demand in the economy. Although the basics of knowledge and learning ability are learnt at school and within the family during childhood, most of the practical skills are acquired and updated after leaving school. If empirical knowledge does not accumulate because there is nowhere or nobody to learn from or where there is a lack of willingness or resources, the economy punishes this with lower wages and a higher risk of unemployment. It is especially true when one has to adapt to technological changes. One of the most important reasons for labour shortage can be weak learning ability and insufficient basic skills required for lifelong learning.

We have comparable international data on knowledge accumulation in adult-hood from two international OECD-coordinated surveys, the *Adult Literacy and Lifeskills Survey (ALL)*, and the *International Adult Literacy Survey (IALS)*. See *OECD-Statistics Canada* (2011) and *Statistics Canada* (2011). Hungary did not participate in the earlier data collections of the more recent, ongoing OECD survey, Programme for International Assessment of Adult Competencies (PIAAC). This short chapter relies on the ALL surveys and – partly intentionally, partly involuntarily – restricts the analysis to those with a *lower-secondary qualification at most*. Intentionally because they are the core of the long-term unemployed, who were unable to find employment even during the post-crisis recovery (see *Chapter 3*), and involuntarily because, although the findings are probably less marked but also relevant to vocational school graduates, they are difficult (and in some countries impossible) to identify in the survey.

The variables related to adult learning are presented in five categories in *Table 5.3.1*. The columns include average values of the nine participating countries, the Hungarian average, the ranking of Hungary and the average of the country closest to Hungary in the ranking. The data relate tpo the population aged 16–54 years, who completed a maximum of ten grades and are not in education. The reference year is 2008.

Indicators concerning *formal adult education and training* – similarly to other surveys (*Pulay*, 2010, *Torlone–Federighi*, 2010) – show that Hungary falls behind to a considerable degree: the share of unqualified Hungarians participating in courses or practical training in the 12 months prior to the interview is lower than the half of the sample mean. Italy has similarly low figures, even lower than Hungary.

Table 5.3.1: The participation of the working age population with a maximum of ten completed grades and not in education in various forms of adult learning – ALL, 2008 (per cent)

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	ALL average	Hungary	Ranking	Closest country (ALL value)
Formal training				
Course in the previous 12 months	22.6	7.6	8	Italy (7.2)
Practical training at a company or institution	14.4	6.1	8	Italy (3.3)
Informal learning				
Learning by experimenting, trial-and-error ^a	56.4	15.8	9	Italy (25.1)
Learning upon advice from others, imitating ^a	48.3	13.8	9	Italy (24.0)
Reading a manual, guide, technical specification ^a	33.5	12.0	9	Italy (18.0)
Learning with a computer, on the Internet (outside a training course) ^a	26.9	4.1	9	Italy (10.7)
Using TV or video for learning ^a	24.4	7.6	9	Holland (13.8)
Attending a workshop ^a	14.8	5.1	8	Italy (4.0)
Visiting a museum or exhibition on a guided tour ^a	12.4	2.1	9	Italy (8.6)
Attending trade fairs, presentations, conferences ^a	12.1	2.4	9	Bermuda (6.7)
Independent information gathering, education, enterta	inment			
Newspaper ^a	84.7	79.2	8	Italy (76.6)
Magazine ^a	79.5	67.4	9	Italy (74.7)
Has he/she ever used the Internet?	76.7	54.4	9	Italy (56.7)
Has at least 25 books	61.3	56.1	8	Italy (48.2)
Reading letters, notes, email ^a	59.1	42.2	8	Italy (38.4)
Does he/she use a computer at home?	57.3	36.4	8	Italy (29.8)
Bookshop, shops selling books ^a	52.2	59.9	4	Holland (58.5)
Library ^a	29.1	13.1	9	Italy (13.5)
Watching TV (number of hours estimated) ^b	2.9	3.3	1	US (3.0)
More than five hours watching TV	10.9	18.9	1	US (17.0)
Civil integration				
Participation in a sports club ^c	17.1	2.2	9	Italy (9.5)
Charitable fundraising ^c	12.3	3.0	9	Holland (3.7)
Participation in group of worship ^c	11.4	4.2	9	Switzerland (5.1)
Participation in a local school group ^c	9.9	1.8	9	Italy (5.0)
Collecting food, clothes for charity ^c	9.8	1.9	9	Holland (3.2)
Participating in a cultural or leisure activity ^c	8.6	1.8	9	Italy (3.7)
Other volunteering ^c	8.0	2.5	8	Italy (1.9)
Counsel, teach or train others as a volunteer ^c	7.4	0.1	9	Italy (2.1)
Unpaid member of a board ^c	7.3	2.2	9	Italy (2.9)
Participation in another group or organisation ^c	6.0	3.7	8	Italy (1.6)
Participation in a political organisation ^c	2.7	0.8	9	Canada (1.7)
Literacy at work				
Employment rate (E)	62.8	42.3	9	US (57.7)
Number of writing-reading-numeracy tasks at work (T)	5.2	2.0	9	Italy (3.0)
Literacy impulse at work (E×T) ^d	3.3	8.0	9	Italy (1.8)

Sample: population aged 16–54 years, who have completed a maximum of 10 grades and are not in education, from nine countries (number of cases in brackets): Bermuda (179), US (312), Holland (486), Canada (2,800), Hungary (631), Norway (611), Italy (1,917), Switzerland (505), New-Zealand (639). The samples interviewed in

different languages in Switzerland and Canada are merged. Sample mean: the unweighted average of individually weighted national averages.

- ^a At least occasionally.
- ^b The figures were calculated based on class averages (0.5 hour, 1.5 hours, 3.5 hours) and in the case of the top, open category, based on one-and-a-half times the lower limit. The average obtained in this way is close to the findings of the time-use survey of the Central Statistical Office: 3.1 hours among those with a lower-secondary qualification at most.
- ^c At the time of the interview.
- ^d This index is intended to describe the influence affecting the total unqualified population through the fact that some of its members are employed and at least occasionally carry out writing-reading-numeracy tasks. The number of tasks occurring is 17.

Source: Individual data of the Adult Literacy and Lifeskills Survey (OECD-Statistics Canada, 2011), author's calculation.

The second block of *Table 5.3.1* mainly contains *types of informal learning* where the interviewee gains knowledge under the supervision or with the direct or indirect assistance of others or imitating others. In these activities, the Hungarian level of participation does not reach one-third of the sample mean, in some cases it is even much lower than that. Hungary is the last in the ranking in all but one of the activities, dramatically lagging behind even the last but one country (which is Italy in six out of eight cases).

The third block contains variables of *information gathering*, *education and entertainment* which do not necessarily require the participation of others: reading, writing, watching television, using a computer or surfing the Internet. Hungary ranks last or last but one (preceding Italy) in this field also, except for two activities. Quite a number of participants have visited shops selling (among other items) books (4th placein the ranking) and this block also contains the only activity in which Hungary ranks first: watching TV and spending more than five hours a day by watching TV.

The fourth block provides an overview of the various forms of *civil integration*. Success in the labour market depends greatly on non-cognitive in addition to cognitive skills, for example communication and people skills, being open to new and different ideas as well as reliability (*Bowles–Gintis*, 1976, *Heckman–Rubinstein*, 2001, *Heckman et al*, 2006). The questionnaire of the ALL survey does not directly assess non-cognitive skills but provides plenty of information on activities that develop them: including all forums of civic interaction where unqualified individuals are able to be in touch with more qualified people, share goals and work together. The level of civic engagement among the unqualified is low in the entire sample: it only exceeds ten per cent in the case of sports and leisure, religious groups and charitable fundraising. However, the figures are even lower, between zero and four per cent, in Hungary. We rank last in nine of the eleven indicators and last but one in the remaining two indicators.

Last but not least, there is a dramatic lag in terms of work as a source of literacy. This is described by an index which accounts for the probability of em-

ployment and the exposure to literacy at work. The product of employment probability and the number of literacy tasks at work – i.e. the probability of treatment times the dose – more or less reflects the strength of this influence, in which there is a more than twofold difference between Hungary and the last but one (Italy again), and a fourfold difference compared to the sample mean.

A single table is of course unable to provide a full picture of post-school knowledge accumulation. Nevertheless it is capable of calling attention to serious problems in this field: Hungary ranks last in 23 out of 34 activities and last but one in eight activities, and it only ranks first in passive television watching not for learning purposes. It is impossible to decide and is not necessarily a matter to be decided whether it is a cause or effect: whether joblessness restricts social contacts, knowledge accumulation and income, while knowledge deprived of development and poverty restrict employment and the building of social relationships, which in turn prevents the uptake of the reserve supply of the unemployed by businesses.

It would be a self-deception if we looked at Italy, which also lags behind, to seek comfort. In Hungary, smallholders, shops and workshops disappeared in the decades of state socialism and this sector was unable to recover following the political changeover to reach the level of Southern European countries, which have preserved the traditional structure of their economy. Family-owned small enterprises are able to ward off troubles resulting from skill gaps more effectively because of their personal network and are more tolerant towards losses arising from them. In contrast, low-qualified Hungarians cannot count on the traditional family-owned small business sector as a lifebelt.

1 The question is analysed in more detail by comparing Hungary, Norway and Italy in *Köllő* (2013, 2014).

References

- BOWLES, S.-GINTIS, H. (1976): Schooling in capitalist America: Educational reform and the contradictions of economic Life. Basic Books, New York.
- HECKMAN, J. J.-RUBINSTEIN, Y. (2001): The importance of non-cognitive skills: Lessons from the GED testing program. American Economic Review, Vol. 91. No. 2. pp. 145–149.
- HECKMAN, J. J.-STIXRUD, J.-URZUA, S. (2006): The effects of cognitive and non-cognitive abilities on labor market outcomes and social behaviour. Journal of Labor Economics, Vol. 24. No. 3. pp. 411–482.
- KÖLLŐ JÁNOS (2013): Patterns of integration: Low educated people and their jobs in Norway, Italy and Hungary. IZA Discussion Paper, No. 7632. Institute for the Study of Labour, Bonn.
- KÖLLŐ JÁNOS (2014): Integrációs minták: iskolázatlan emberek és munkahelyeik Norvégiában, Olaszországban és Magyarországon (Patterns of integration: Low educated

- people and their jobs in Norway, Italy and Hungary). In: Kolosi Tamás–Tóth István György (eds.): Társadalmi Riport (Social Report), Tárki, Budapest, pp. 226–245.
- OECD-STATISTICS CANADA (2011): Literacy for life: Further results from the Adult Literacy and Life Skills Survey. Second International ALL Report. OECD Publishing.
- PULAY GYULA (2010): A hazai felnőttképzési rendszer hatékonysága európai kitekintésben (The efficiency of the Hungarian adult education and training system). Munkaügyi Szemle, Vol. 54. No. 1. pp. 72–81.
- STATISTICS CANADA (2011): The adult literacy and life skills survey, 2003 and 2008. Public use microdata file user's manual. Statistics Canada, Montreal, available on request.
- TORLONE, F.-FEDERIGHI, P. (2010): Enabling the low skilled to take their qualifications "one step up". University of Florence.