# 13. Adult Learning in Hungary: Participation and Labor Market Outcomes

**Gábor Csanádi, Adrienne Csizmady, and Péter Róbert**

## INTRODUCTION

This chapter investigates the predictors of participation in adult learning as well as the labor market outcomes of adult learning in post-communist Hungary. The issues are discussed in the frame of the country's institutional settings. More information is available on the first research topic because participation in lifelong learning has been investigated nationwide by the Hungarian Central Statistical Office (KSH 2004, 2010). Moreover, Hungary was part of the Adult Education Survey (AES, Eurostat) as well as of an EU FP6 project, entitled "Towards a Lifelong Learning Society in Europe: The Contribution of the Education System".[1] The chief finding of these previous studies is that participation in lifelong learning is low in Hungary. The present chapter goes beyond the existing studies and employs the Hungarian Household Panel Study carried out by TARKI, Inc., and the analysis of the data provides more insight into the predictors of participation in adult learning in Hungary.

The second research topic, i.e., the labor market consequences of lifelong learning, has hardly been investigated in Hungary – though economists have analyzed income returns to human capital investments (Kertesi and Köllő 2002, 2005). Results from this part of the chapter deal with labor market outcomes, in particular with job mobility. This analysis puts a large emphasis on how various levels of schooling affect the chances of mobility. In fact, two options can be distinguished for lifelong learning. The first option is that participants receive relatively little initial education, in which case adult learning is a way of compensating for previous disadvantages in educational attainment caused chiefly by inequalities in learning opportunities due to social origin. This function of adult learning was characteristic of Hungary between the 1950s

and 1970s, when lifelong learning contributed to educational and occupational mobility for the masses (Kolosi and Róbert 1985). The other option for lifelong learning is that participants receive a relatively high level of initial education and return to learning in order to revise previous educational decisions and to obtain additional skills and a second tertiary degree with better labor market prospects. Lifelong learning in Hungary is selective, and the second option seems to be more typical under the current market conditions.

## NATIONAL INSTITUTIONAL SETTINGS

### The Welfare State

Post-communist countries, including Hungary, generally tend to fall under the radar of well-known international welfare maps. The theoretical constructions and typologies (social democratic, liberal, corporatist/conservative/Bismarckian, Latin/Mediterranean) can only be applied to the formerly socialist states to some extent. Given their wide social policies and safety nets, these societies used to belong to the social democratic type; however, they moved in different directions after the collapse of communism. Hungary has experienced significant downsizing of the welfare state. Based on an overview of the existing data on social expenditures and changes in government policies, Lelkes (2000) argues that Hungary has become more of a liberal type. At the same time, she also recognizes signs of a corporatist regime. In a comparative perspective based on employment-sustaining policy measures, Bukodi and Róbert (2007) classified the CEE countries, including Hungary, closer to the conservative-corporatist type, in contrast to the Baltic countries, which they viewed as being closer to the liberal type. Given Hungary's traditional connections to Austria and Germany, this move seems to be realistic.[2]

Very few empirical studies on welfare typologies have included former socialist countries. One exception is Fenger (2007), who performed a cluster analysis that placed Hungary in a group with Slovakia, Poland, and Bulgaria, which was close to the Czech Republic and Croatia. Based on the applied indicators, the CEE countries seem to resemble the conservative-corporatist regime, but the governmental program measures score below the values observed in the Western European countries of the type.[3] It is also difficult to speak about a coherent welfare regime in Hungary because preferences for welfare spending and for policy measures (labor market policy includes active and passive measures and unemployment benefits; family policy includes childcare and a taxing system) have varied with governmental changes and cycles in the last decades.[4]

## Educational System

Generally speaking, the Hungarian school system has several features in common with the German one, including tracking, selection at an early age, vocational specificity, and standardization of the curriculum. Many of these features changed after the collapse of communism. A more detailed overview is given in Bukodi, Róbert, and Altorjai (2008), Bukodi and Róbert (2008), and Halász and Lannert (2006), but the main processes are as follows: The school system has become more stratified due the (re)established private and church-run schools at the primary, secondary, and tertiary levels. From time to time, changes in the system of administration occur, regardless of whether schools are financed by the local or the central government, and these changes have an impact on school quality. Given the large variety of the 8+4, 6+6, and 4+8 curricula for the primary and secondary schools that pupils can attend between ages 6 and 18, the school system contains more tracks (parallel paths) than before and the impact of early age selection has increased, making the practice and regulation of school choice more important (Lannert, Mártonfi and Vágó 2006). Vocational specificity has declined and the vocational track has become less popular in contrast to secondary schools, which make students eligible for tertiary education.[5]

Educational expansion, particularly at the tertiary level, was strong in the 1990s and the early 2000s, but slowed afterward. In the 1990s, democratization and marketization of the school system were at the heart of the policy: The curriculum became less standardized, lots of new school books and teaching materials were published, and teachers had more freedom to choose between programs. This process has slowed down and reversed since 2000, at which point the system of the national school curriculum was reestablished. At the same time, the content of the curriculum has been under constant criticism for not being adequately competence based and for putting too much emphasis on accumulating large amounts of lexical information – a fact that is also revealed by Hungary's low placement in the PISA study rankings.

## Adult Learning in Hungary

Adult learning has a clear legislative basis in Hungary. Act CI of 2001 was established with the purpose of ensuring the transparency and accountability of the system in a regulated form and of providing a basis for the state support system for adult learning. Additional laws that also apply to adult education refer to and regulate it in relation to the various forms and levels of schooling.[6]

While lifelong learning refers to the formal and non-formal training of adults, legislation is more defined and elaborated for formal educational activities. Tasks regarding taking responsibility for formal adult education and

informal adult learning are shared by various public bodies and ministries. The Ministry of Education and the Ministry of Labor were originally responsible for these tasks; currently, however, the Ministry of National Resources plays the chief role. The National Vocational Training and Adult Training Council is another national body that assists the Minister in carrying out tasks related to adult education. Its duties also include the preparation of professional decision making, proposals, and evaluations. The Adult Education Accrediting Body is responsible for the qualification and accreditation of institutions and programs of adult education. Additional relevant umbrella associations and national (service) organizations include the National Institute of Vocational and Adult Education (NIVE), which deals with regional and national research related to adult learning, content development of vocational and adult education, and the handling of tenders. Nine regional training centers contribute to these activities in the form of a national network. From the perspective of civil control, the Association of Adult Educators and the Civilian Adult Education Network deserve mentioning.

In 2010, there were 7 987 registered institutes of formal adult education and informal adult learning. Of these, 1 469 were accredited institutes and 6 365 were accredited adult formal and informal learning programs. Together, these institutes and programs offered 39 406 courses, of which 17 470 were accredited courses in 2009.

Adult learning in Hungary is financed by various sources. Central and local government funds include training for both public servants and disadvantaged groups and offer complete or partial financing to national and local development programs. Employment and training-related funding come from the Labor Market Fund, which is the chief funding provider for adult learning. This fund offers support for the training of persons registered as unemployed or at risk of becoming unemployed. A third type of financial source is the permitted vocational training contribution for vocational education for adults inside and outside the school system. In addition, EU sources, i.e., the Human Resources Development Operational Program (2005–08), the Social Renewal Operational Program, and Social Infrastructure Operational Program (2007–10), tend to contribute to the costs of adult learning. Official statistics claim that public expenditure on formal education was about 4–5 per cent of the GDP in the 2000s. Zachár (2010, p. 12) reports a rate of 5–6 per cent in total without separating formal adult education. Expenditure on non-formal adult education is below 1 per cent according to the same source.

## The Labor Market and Employment Systems

The Hungarian labor market has become heavily deregulated since the collapse of communism. It is a typical transitional labor market (Cazes and Nesporova 2003) with a high level of flexibility. Characteristic forms of flexible and atypical employment in Hungary include part-time work, working with fixed-term contracts, self-employment, and distance work (Hárs 2012). While an unemployment rate of about 10 per cent is not extreme at the European level, employment is the lowest in the EU, at about 55 per cent. Nevertheless, the unemployment rate is probably underestimated because the eligibility period continues to be shortened and individuals continually disappear from the system. In terms of active labor market programs (ALMP), both public work and job retention subsidies deserve mentioning, whereas wage subsidies or spending on (re)training have declined (Fazekas and Molnár 2011).[7]

The Hungarian labor market used to be an insider economy, but employment protection legislation (EPL) has deteriorated. The role of collective work agreements has become more limited, and those in employment enjoy much less job safety. Employment in the private sector has become more uncertain and flexible since the collapse of communism. Recently, forms of atypical employment and a decline in job safety have also become typical for those working in public employment. More risks were shifted to the employees in the new Hungarian Labor Code of 2012, and industrial relations now tend to be in favor of employers.

Technological change in the economy is an important feature of post-communist Hungary and has led to a growing demand for an educated labor force. Between the 1990s and the 2000s, this technological change led to good opportunities for workers as a result of a wage premium, despite the increasing number of graduated job-seekers in the labor market. At the same time, due to strong educational expansion, young job-seekers with a higher level of schooling now beat their lesser-educated counterparts even at those jobs that do not require a diploma. Consequently, education has become a weaker predictor of occupational success in the labor market, and job status has decreased for each given level of schooling (Róbert 2009: Bukodi and Goldthorpe 2010).

## Linking the Elements of the Institutional Settings and Our Hypotheses

According to the quoted literature, Hungary belongs to some extent to both the corporatist and liberal welfare regimes. On these grounds, we do not find the Hungarian adult learning system to be very widespread and equal because equalizing access to adult learning, using the system of social redistribution

to support adult learners, and increasing the level of participation usually do not occur in these types of regimes. This view is in line with the bounded agency model by Rubenson and Desjardins (2009), who assume that there is an interaction between the structurally and individually based barriers to participation in lifelong learning.[8] These barriers are handled to a different extent by the various welfare regime types (Green 2011; Riddell and Weedon 2012).

Since retaining the existing differences characterizes the conservative-corporatist regime type, the previous level of schooling and labor market integration should be strong predictors of adult learning. At the individual level, the hypothesis derived from the welfare regime type is in accordance with the Matthew effect assuming that individuals with better education and in better occupational positions should accumulate further advantages in adult learning. We expect a quite linear relationship between education, employment, and the probability of studying (situational barriers). Thus, even the "*partial equalization hypothesis*" (see Chapter 1) may not hold for Hungary. The "*Matthew effect hypothesis*" has already found support for formal adult education in Hungary (Róbert 2011).

Equalization in adult learning cannot be expected due to institutional barriers. The programs, particularly in formal adult education, are usually long, lasting 1–3 years and requiring more commitment from learners in terms of time. As a result, not everyone can afford the required time to participate. Educational institutions in Hungary are not very sensitive to the purchasing power of possible adult learners. Since schools suffer from low budgeting from the state, they use formal adult education as an extra source of funding.[9] At the same time, the content of the accredited learning programs (the curriculum) is not in accordance with employers' needs, which leads to a decline in the vocational specificity or the occupational labor market character of the linkage between education and the labor market.[10]

Regarding the impact of demographics, we expect to find a strong age effect: The odds of returning to any school or training program should be significantly lower as individuals age. The "*gendered participation hypothesis*" for Hungary posits that women most likely participate in both formal and non-formal adult learning more frequently than men. This assumption is based on the fact that men and women try to overcome the barriers of participation in adult learning. In terms of financial barriers, there are no gender differences. In terms of time constraints to participation in further learning activities, a clear gender variation exists in Hungary. For women, the barrier involves combining studies and family obligations; for men, the barrier involves combining studies and (additional) working activities. It seems that women are able to study despite their family obligations. On the contrary, men in

Hungary are not able to study because they tend to have a second (or third) job in order to financially support the family.

Based on the previously cited studies, it is apparent that higher levels of schooling lead to wage premiums and to a decreased risk of losing a job. However, the effect of the original education and that of further adult learning has not been evaluated in previous analyses. Nevertheless, we expect that lifelong learning has an additional positive impact on labor market and employment outcomes.

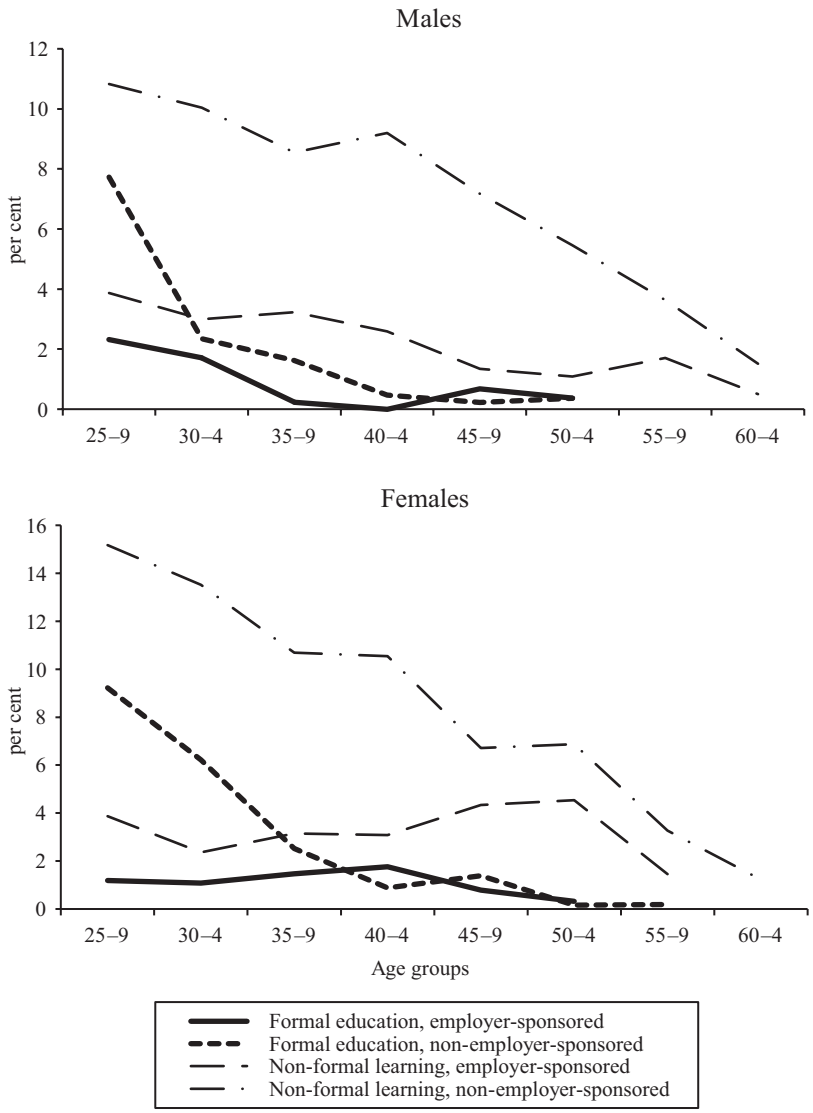
## RESULTS

### Participation Rates in Adult Learning

Hungary ranks low in lifelong learning participation in a comparative perspective. According to the data from the Adult Education Survey (AES) organized by Eurostat, Hungary occupies the lowest position in the league table of 25 EU nations with a participation rate of 9 per cent in formal and non-formal learning (the EU average is 36 per cent) (Boateng 2009).[11] According to the LFS data from 2005 and 2009, Hungary performs well below the EU benchmark level, and its lifelong learning participation rate has even been declining.[12] The most recent data on Hungary confirm that adult learning tends to be vocationally oriented. Nearly 33 per cent of adult learners participate in some vocational training and about 16 per cent study for a state-accredited vocational qualification. A similarly large proportion (14 per cent) of learners attend a language course. Another group of students (12 per cent) attend school in order to receive a qualification required by their job. Training for a public service-type qualification, IT trainings, and business-skill trainings are also popular. Only 10 per cent of adult learners participate in general adult education (KSH 2010).

Participation in formal and non-formal adult learning is shown in Figure 13.1 by gender and age group with a distinction between employer-sponsored and non-employer-sponsored forms.[13] Non-employer-sponsored non-formal training is the most frequent form of adult learning activity for both sexes, followed by non-employer-sponsored formal education (in the younger age groups). The decline by age, however, is steeper for non-employer-sponsored formal education. Employer-sponsored non-formal learning is thereby the second most frequent form for age groups above 35.

Regarding gender differences, women participate more in adult learning than men, the only exception being for employer-sponsored formal education.




*Notes:* Learning is sponsored if employers provide full or partial financial support or if the activity occurs fully or partially during working hours. Education that does not require tuition is considered not sponsored.

*Source*: Own calculations based on the Adult Education Survey (2006).

*Figure 13.1 Rates of participation in adult learning for persons aged between 25 and 64 by type of activity (per cent)*

**Predictors of Educational Upgrades**

In this section, we analyze panel data of the Hungarian Household Panel, conducted by TARKI. In the panel, 2 600 households were surveyed on a yearly basis between 1992 and 1997. The research focuses on certain aspects of the labor market, income inequalities, the life prospects of various strata of the population, and the financial and economic strategies of households. Ten years after the completion of the HHP's research on 7 200 persons, TARKI found 2 690 original respondents in the framework of the Living Condition of Hungarian Households Project. This project examined the period between 1992 and 2007 with the help of retrospective data and merged these data with the original HHP sources.[14] From the viewpoint of our analysis, the main limitation of the database is that there are few specific questions concerning adult learning, and these questions are limited to adult education. As a result, we can only analyze formal adult education. A similar problem is that there are few questions about the labor market situation. We have no data, for example, about the change in position or salary during the period our respondents were employed at the same workplace.

In Table 13.1, we examine the factors affecting the participation in and successful educational upgrading through formal adult education. We consider as an 'adult' a person who has completed a given level of education at least three years after the normal completion age. We run binary logistic regression models for men, women, and the whole population. In these models, the dependent variable is adult educational upgrade through formal education, and the predictive variable set consists of age, highest (initial) level of education, labor market status, having children, rural or urban residential location, logarithm of the family income, and gender (in the case of the whole population model). The models have good explanatory power in the case of the whole population and the sub-samples divided by gender: The Cox-Snell $R^2$ is between 0.24 and 0.26, and the Nagelkerke $R^2$ is between 0.42 and 0.44.

The results support our hypotheses that upgrades that are gained through adult education function rather similarly in Hungary: Persons with higher educational attainment and a better labor market situation have a better chance of participating in an educational upgrade. At the same time, an important difference in the levels of the former educational attainment is visible: The effect is not linear. The disadvantage in participation of upper secondary school graduates compared with those with higher education is not significant. On the other hand, the two lower levels of educational attainment (i.e., vocational and compulsory education) result in a substantial disadvantage in participation in adult education. The impact of the labor market status is more interesting from a gender perspective. Compared with those in stable jobs,

*Table 13.1 Predictors of an educational upgrade, 1992–2007 (logistic regression model, dependent variable: gained an upgrade in formal adult education)*

| | All | Men | Women |
|---|---|---|---|
| Age | 0.08 | −0.03 | 0.16* |
| Age squared | 0.00* | 0.00 | −0.00* |
| *Initial education (ref. university degree)* | | | |
| Compulsory | −3.05** | −3.42** | −2.91* |
| Vocational | −0.81* | −0.99* | −0.87** |
| Upper secondary | 0.07 | −0.28 | 0.19 |
| *Labor force status (ref. employed in stable job)* | | | |
| Employed in precarious job | −0.58* | −0.88* | −0.42 |
| Unemployed | −0.47* | −0.82* | −0.10 |
| Inactive (except students) | −0.68* | −0.47 | −0.69* |
| Full-time students | −1.88* | −2.42* | −1.32* |
| *Marital status (ref. single, living alone)* | | | |
| Cohabiting | 0.29 | 0.84* | 0.03 |
| Married | 0.39* | 1.12* | 0.13 |
| Other | 0.62 | 1.00 | 0.64 |
| *Children in the household (ref. no children)* | | | |
| Under three years | 0.50* | −0.19 | 0.89** |
| Over three years | −0.22 | −0.69* | −0.06 |
| Living in rural area | 0.02 | 0.54* | −0.41* |
| Log of household income | 0.00 | 0.19 | −0.11 |
| Male | −0.43* | – | – |
| Constant | −0.19 | −0.07 | −0.85 |
| Individuals | 2 680 | 1 176 | 1 504 |
| Cox & Snell $R^2$ | 0.24 | 0.24 | 0.26 |
| Nagelkerke $R^2$ | 0.42 | 0.43 | 0.44 |

*Notes:* **p < 0.01, *p < 0.05.

*Source:* Own calculations based on the HHP.

the other options reveal a significant disadvantage in becoming involved in adult learning, and there is a difference between men and women. In the case of men, unemployment and a precarious job are disadvantageous, whereas in the case of women, these labor-force indicators do not result in a significant disadvantage compared with the chances of individuals in stable jobs for an educational upgrade. For women, other forms of inactivity have a similar effect, yet these factors do not have significant effects in the case of men.

Marital status yields a significantly higher chance of an adult educational upgrade in the case of married men compared with singles. At the same time, another family status variable, having children below three years old, has a significant positive effect compared with childless respondents. This effect is not significant in the case of families with older children. The above-mentioned result comes entirely from the female part of the sample. Thus, childbearing shows significant positive effects on participation in adult education compared with childlessness among women, yet we do not find a similar effect among men. However, the effect is reversed in the case of older children: Men with older children have a significantly smaller chance of participating in a formal educational upgrade, whereas having older children in the family does not significantly affect women's participation.

The effects are also different by gender for rural residential locations. Living in rural areas negatively affects women's chances compared with urban residential locations, whereas the effect of living in rural areas is positive for men. This observation can be explained by the gender difference in the structure of adult education. As we know from our data, men have a higher chance of attending compulsory and vocational schools than do women, who usually look for learning programs that offer high school graduation or a connection to professional training. At the same time, a higher proportion of compulsory and vocational schools are located in smaller towns, whereas higher-level schools that provide education in women's professions tend to be located in cities. The urban location of these kinds of schools may be the reason why women living in smaller towns have lower chances of participating in adult education than do women living in urban areas.

## The Effects of Formal Adult Educational Upgrades in the Labor Market

Following the analysis of the inequalities of participation in adult education, we now examine the hypothesis of the positive effects of adult educational upgrades on the labor market situation. To measure the labor market effects of educational upgrades, we cannot use the standard event history analysis due to the features of our database and the software available to us. At the same time, standard logistic regression methods could help us carry out a significant part of the analysis similarly to an event history analysis (except for the analysis of the time factor).

### Do formal adult educational upgrades affect exiting unemployment?

We have to consider two additional limitations regarding the relationship between getting out of unemployment and educational upgrades. On the one hand and as indicated above, our data for a certain part of the examined period

does not come from regular annual surveys. In the case of the unemployed, it is not always possible to examine whether or not they were still unemployed at the time of the next data collection. The other, more important reason is that the number of cases of educational upgrades during unemployment was so low that further covariate effects were impossible to analyze.

*Table 13.2 Length of unemployment of upgraded and non-upgraded adults (in years)*

| | | Mean |
|---|---|---|
| Male | Non-upgraders | 2.11 |
| | Upgraders | 3.77 |
| | Total | 2.33 |
| | Post upgrading – unemployed period (year) | 3.46 |
| Female | Non-upgraders | 2.25 |
| | Upgraders | 2.72 |
| | Total | 2.30 |
| | Post upgrading – unemployed period (year) | 1.45 |
| Total | Non-upgraders | 2.18 |
| | Upgraders | 3.29 |
| | Total | 2.31 |
| | Post upgrading – unemployed period (year) | 2.54 |

*Source:* Own calculations based on the HHP.

In spite of these limitations, Table 13.2 reveals that especially in the case of male respondents, the length of unemployment seems to be longer among those who gained an educational upgrade than among those who did not study during their unemployment period: 3.8 versus 2.1 years for male and 2.7 versus 2.2 years for female respondents. At the same time, we can also calculate that educational upgrades among men occur in the first part of unemployment. After gaining an educational upgrade, men spend an average of 3.46 years in unemployment, whereas this period is shorter among women (1.44 years). This phenomenon is related to the fact that men who participate in adult education are more likely to only finish the compulsory level, whereas women gain a higher level of schooling during the period of unemployment.

It is important to be careful in our conclusions based on the limitations of our database; however, it appears obvious that our analysis confirms that adult educational upgrading can help individuals get out of unemployment. However, this only occurs if an individual can find a form of adult educational upgrading that is useful in the labor market.

**Does a formal adult educational upgrade affect labor market position?**
Now we examine how the processes of a changing labor market situation develop among those who could stay in the labor market, i.e., those from the 'insider' group. In other words, we investigate how labor market mobility processes are related to educational upgrades. In our models, the independent variable is whether or not there was any change in a person's occupational status during job changes, and if so, in what direction. To measure this, we use the ISCO occupational codes and the ISEI values they produce.

Thus we defined the upward and downward mobile groups according to the change in ISEI values.

We use two types of binomial regression models. First, we examine the relationship between upward and downward mobility and adult educational upgrades as a whole in one model each, controlling for age, educational attainment (before the upgrade), household income, and settlement type. We examine these models separately among men and women and also in the whole sample. Second, we analyze how much the different types of adult educational upgrades differ from one another in their effects on labor market status changes.

As we can see from the two models in Table 13.3, participation in formal adult education is positively related to labor market success. Those who use this opportunity have a better chance of obtaining a favorable labor market position with higher ISEI than do those who do not make use of this opportunity. Based on Model 2, we can also see that the risk of downward mobility decreases with participation in adult education in the case of the whole population, but this effect is significant only in the case of men and not among women.

*Table 13.3 Returns to adult educational upgrades as a whole*

| | All | Men | Women |
|---|---|---|---|
| Model 1. Upward mobility | | | |
| Adult education upgrade | 0.74+ | 0.91+ | 0.70* |
| Model 2. Downward mobility | | | |
| Adult education upgrade | −0.49* | −0.79* | −0.36 |

*Notes*: * $p<0.05$, + $p<0.10$. Reference category: no upgrade in formal adult education. Controlling for age, educational attainment (before the upgrade), household income, and settlement type.

*Source:* Own calculations based on the Hungarian Household Panel Study.

Related to the different effects for men and women, we can assume that the educational attainment of those earning formal adult educational upgrades may differ by the level of the educational upgrade. The results presented in Table 13.4 confirm this assumption, demonstrating that completing compulsory education does not have the same effect as higher levels of educational upgrades, which are directly useful in the labor market.

*Table 13.4 Returns on different types of adult educational upgrades*

| | All | Men | Women |
|---|---|---|---|
| Model 3. Upward mobility | | | |
| *Adult education upgrade levels (ref. no upgrade)* | | | |
| Compulsory | 0.67 | 0.68 | 0.71 |
| Vocational | 0.91+ | 0.88* | 1.03* |
| Upper secondary | 0.60* | 0.64 | 0.65+ |
| Higher education | 0.79+ | 1.33+ | 0.50 |
| Model 4. Downward mobility | | | |
| *Adult education upgrade levels (ref. no upgrade)* | | | |
| Compulsory | 0.04 | 0.10 | 0.02 |
| Vocational | −0.25 | −1.14* | 0.28 |
| Upper secondary | −0.84* | −1.44* | −0.64* |
| Higher education | −1.22* | −1.65 | −1.22* |

*Notes:* * $p<0.05$, + $p<0.1$. Controlling for age, educational attainment (before the upgrade), household income, and settlement type.

*Source:* Own calculations based on the HHP.

Based on Model 3, we can see that not all of those who gain an adult educational upgrade have a better chance of improving their labor market situation. Finishing compulsory education (which is often available to the lowest status groups) does not have a significant effect on labor market upgrades among either men or women. Observed differences between the two genders can probably be explained by the effects of labor market segmentation. Higher education (for men) and upper secondary education (for women) are the best forms of adult educational upgrades and offer the most important and significant improvements. The vocational level of educational upgrades may be particularly beneficial for women because of its relative rarity.

We can more clearly see the influence of formal adult educational upgrades on downward mobility in Model 4. The chance of decreasing in labor market status is not significantly smaller among those who finish compulsory education compared with the chances of those who do not upgrade at all. Even

participation in vocational education leads to a decreased risk of losing labor market status for men (but not for women). Only among men does earning a vocational educational upgrade decrease the risk of losing a labor market position. Higher levels of educational upgrades further decrease the chances of a downward occupational move, and the pattern is stronger for women than for men. An educational upgrade at the tertiary level has no significant impact on downward mobility among men.

## SUMMARY

For the first research issue, we were able to confirm that participation in adult education is determined by social forces: Individuals with a higher social status have a better chance of participating than do those from lower-status groups. One of the underlying reasons for this trend is the dichotomy of the Hungarian system, for adult education is not uniform in Hungary. There are types of adult education that help individuals adapt to changing circumstances, types that help with labor market integration, and types that help with status stabilization or even with the increase of social status. Higher-status groups often utilize these options more successfully. Moreover, there are types of adult education that only formally function in this manner (i.e., only according to their proclaimed principles), while they are actually unable (or only able in a very limited way) to help improve or stabilize the labor market position of participants. In sum, we found a strong Matthew effect associated with formal adult upgraders, and the "*partial equalization hypothesis"* could not be confirmed in Hungary.

Regarding further assumptions on gender differences in adult learning, we found interesting patterns. On the one hand, the male breadwinner hypothesis is supported for Hungary: Married or cohabitating men have higher odds of participating in an educational upgrade compared with their single counterparts. Differences in marital status turned out to be insignificant for women, for whom household composition matters more. Women with at least one child below three years old have a higher probability of studying. At the same time, having older children can be a barrier to returning to adult education for men. We can interpret these results as a modified version of the "motherhood penalty/fatherhood premium" explanation (Correll, Benard and Paik 2007). Mothers with small children do not seem to be penalized, but as children grow older, men have to do more work to support their family and have a smaller chance of participating in a formal educational upgrade than do men without children. This type of 'bonus' does not offer a real advantage to men because it means more work in the form of second jobs, overtime, etc.,

and not simply an upgrade of labor market status. In other words, men have already achieved their highest educational attainment by the time of having children, and their participation in adult learning cannot occur until their children move out. The higher adult learning activity of women with smaller children can be explained by the fact that they have the chance to compensate for their lower educational attainment in normal school ages as a result of their life situation. Hungary's various maternity-leave support options can also have substantial effect.

For the second research issue on the impact of educational upgrades on labor market outcomes, we can say that our data confirmed the hypothesis that formal adult education can improve one's labor market position and can prevent labor market decline. In this regard, we found positive effects on upward mobility and negative effects on downward mobility in terms of job change measured by ISEI scores. At the same time, the level of participation in formal adult education has also had an effect on labor market outcomes. Our analysis provides evidence that the different forms of adult education reflect different options in the labor market and in the structure of the institutional system. The higher-status groups can use their already-existing knowledge and education to choose the type of adult education that actually helps them improve and stabilize their position and thereby protect themselves from the risk of labor market deterioration. For them, participation in higher education or in upper secondary schooling is more advantageous. In contrast, the already-existing disadvantages of low-status groups are amplified by this system. Individuals in these groups can study at compulsory level or (at best) in vocational training programs, but these forms are less helpful in the labor market.

The pattern of gender difference is also interesting for labor market outcomes. The analysis reveals a strong positive effect on upward mobility for men if they study at the tertiary level. The same form of educational upgrade is significantly negative for women's downward mobility. This means that the best form of educational upgrade leads to a direct advantage for men, whereas it 'only' has an indirect benefit for women in the sense that it spares them from downward mobility.

## NOTES

1. For more details, see http://lll2010.tlu.ee.
2. Bohle and Greskovits (2007) also confirm the liberal character of the Baltic States but find Slovenia to be the only example of the corporatist type. They claim that Hungary belongs to an "embedded liberal" category.

3. Leibrecht, Klien, and Onaran (2011) also show that social protection expenditures as a share of total public expenditures are significantly higher in both the social democratic and the conservative welfare nations as compared with the liberal, Southern, and CEE countries.
4. For further details, see also Bukodi and Róbert (2008).
5. Since grammar schools provide the greatest chance of receiving higher education, most students try to attend this type of school.
6. These are Act 76 of 1993 on vocational education, Act 79 of 1993 on public education, Act 86 of 2003 on vocational education contributions, and Act 139 of 2005 on higher education. See also Róbert, Ayupova, and Altorjai (2013).
7. When examining the national spending of the Labor Market Fund in 2011, the largest share (40 per cent) was devoted to the support of job searches for the unemployed. Adult education and vocational training received 10 per cent of the total budget distributed by the Labor Market Fund in 2011.
8. The types of barriers can be situational, institutional, or dispositional. Situational barriers are related to previous schooling, the current job, and family circumstances. Institutional barriers refer to a person's inability to find an appropriate study course that he or she would be interested in attending. Dispositional barriers include a person's belief in their low ability, negative previous experiences with learning activities, and the feeling of being too old to study (Cross 1981).
9. Subproject 5 of the LLL2010 EU FP6 project investigated the national educational institutions that provide formal adult educational programs. For Hungary, see Róbert, Ayupova, and Altorjai (2013).
10. Subproject 4 of the LLL2010 EU FP6 project investigated the SMEs from the viewpoint of their attitudes and practices regarding lifelong learning. In fact, it is rare for employers in Hungary to contribute to the costs of their employees' formal learning activities in financial terms. If a company finds some training important for the employees, it tends to organize an appropriate course offered to them for free. The company can apply to have the costs of the course covered by the Labor Market Fund (Ayupova and Róbert 2010).
11. This survey was carried out between 2005 and 2007 and is representative of the population aged 25-64, and participation refers to learning activities in the 12 months previous to the data collection. For a comparative analysis of the data, see also Róbert (2012).
12. The rate was 3.9 for 2005 and 2.7 for 2009. This indicator refers to persons aged 25 to 64 who stated that they received education or training in the four weeks preceding the survey.
13. This result differs from the one shown in Chapter 2 due to different variable definitions. Rates are higher here because learning is not restricted to being job related.
14. See http://www.tarki.hu/en/research/index.html#Hungarian_Household_Panel_Survey.

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