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## Social Structure

PÉTER RÓBERT
Centre for Social Sciences, Eötvös Loránd Research Network
and Tárki Social Research Institute

# Origins of Multidimensional Class Locations in Hungary

*Abstract:* The paper focuses on intergenerational mobility and explores the role of social origin in ending up in various class locations. Latent class analysis was applied to mapping the class structure based on economic, cultural and social assets. Parental education and occupation are used to examine how social origin operates in accumulating the various forms of capital and in getting into different class positions. Out of the forms of capital, economic resources, high cultural capital and prestige of social contacts depend particularly on social origin; these are the main channels affecting mobility into the best class locations. If coming from low educated worker class background, one may get only into one of the bottom class locations, while members of the top class positions come from families where parents hold tertiary degree and have high occupational status.

*Keywords:* class analysis, forms of capital, intergenerational mobility, parental resources, Hungary

## The Context of Social Mobility

The core categories in intergenerational social mobility analysis are *origin* and *destination* and mobility research basically deals with the OD association. While investigating how people move from an origin position to a destination position is largely descriptive and empirical, the way how social locations are defined is based on conceptual reasoning. Consequently, analysis of intergenerational mobility is fundamentally embodied in the theory applied to studying the stratification system or the class structure in the society. If one accepts the concept that occupation is the proper indicator for social position in the society, mobility analysis will refer to the effect of father's occupation on his offspring's occupation (Sorokin 1927; Lipset and Zetterberg 1956). If occupation is conceptually measured by some kind of socio-economic index (SES, ISEI—Ganzeboom, De Graaf and Treiman 1992), mobility analysis will take the form of status attainment models (Blau and Duncan 1967). Class analysis is a completely different view of investigating social structure in the society in theoretical terms; the European Socio-economic Class (ESEC) provides a good example (Rose and Harrison 2010). Intergenerational mobility studies based on the class concept will investigate social fluidity comparing father's class and offspring's class (Erikson, Goldthorpe and Portocarero 1979; Erikson and Goldthorpe 1992).

In contrast to the examples for mobility research quoted above, the curiosity of this analysis is that the concept behind the measurement of origin and that of destination differs conceptually. Multidimensional class locations serve as destination, while origin

is measured by the standard information on father's occupation and education at age of 14 of the respondent.

The multidimensional concept of class analysis is based on the work by Bourdieu (1983, 1984) and focuses on the role of various forms of capital, namely economic, cultural and social capital, in generating class positions. While the interplay between the forms of capital and class positions is more regularly investigated (Savage, Warde and Devine 2005; Bennett et. al. 2008), interestingly, capitals, assets, resources are rarely extended to parental background and how social origin contributes to get into classes (Devine 2004). The current paper contributes to the existing literature on social mobility and class formation in two perspectives: the impact of family background (parental occupation and education) is examined on class locations on the one hand, and on the three forms of capital, on the other hand. Thus, the study broadens the literature by investigating the variation in the influence of family background on accumulating the three forms of capitals as well as the origins of multidimensional class locations.

## Traditions and Recent Developments in Mobility Analysis on Hungary

Mobility research on Hungary has a relatively long tradition based on largescale datasets produced by the Hungarian Central Statistical Office. The comprehensive work by Andorka (1990) describes how intergenerational mobility has developed over time. He reports an increase of absolute mobility rates from 58% to 72% between 1962 and 1983 and about half of the rise was structural mobility due to the industrialization as well as the abolition of private farming in the Communist era (Andorka 1990: 212).

With respect to social fluidity, the Hungarian society turned out to be relatively open in the 1970s (Erikson and Goldthorpe 1992). Breen and Luijkx (2004) also report an increase of social fluidity in Hungary. This tendency, however, slowed down in the last period of socialism and, in particular, from the beginning of the 1990s. The decrease in social openness appears in terms of status attainment (Luijkx et. al. 2002) as well as of social fluidity (Róbert and Bukodi 2004). In their country case study, Bukodi and Goldthorpe (2010) provide further evidence on the closure of the Hungarian society, investigating how education mediates the class origin—class destination association.

Several recent analyses, based on the European Social Survey data, put Hungary into comparative perspective. The first study reports high absolute rates of immobility for both men and women, in consequence of the slow changes in the Hungarian class structure, leading to a low level of intergenerational structural mobility (Eurofund 2017). Similarly, Hungary is characterized by one of the lowest absolute mobility rates and takes the last position in terms of social fluidity among the 30 countries (Bukodi, Paskov and Nolan 2020). Hungary (with Bulgaria and Poland) belongs to those countries where post-socialist transition led to a decrease of social fluidity, in particular for men. This low fluidity set of countries is characterized by stronger hierarchy and inheritance effects (Bukodi and Goldthorpe 2021).

Results cited above come from studies based on strict class mobility analysis applying the ESEC schema for origin and destination. Even if the class approach employed here is different, the following hypothesis can be formulated:

multidimensional class locations depend strongly on inheritance of social origin, in particular in the class positions on the top and on the bottom of the hierarchy.

From the perspective of a mobility analysis, the three forms of capital play the role of *channels*, bringing people to various class positions. For the communist era, an essential finding was the 'narrow channel' for cultural capital with strong intergenerational inheritance (Ganzeboom, Graaf and Róbert 1990). While chances for inheritance of material inequalities were much more controlled by the state-socialist system, post-socialist transformation opened up the way for this channel. According to an analysis on intergenerational mobility with a focus on income, Hungary turned out to have particularly low mobility rates (OECD 2018). The role of social capital is also pronounced in contemporary Hungary as networking contributes to intergenerational inheritance of advantages and disadvantages. Network characteristics and chances for educational or occupational mobility as well as for reproduction seem to interrelate (Kmetty and Koltai 2018). Consequently, a strong influence of parental background on accumulation of capitals can be assumed.

## Data and Variables

The analysis employs the data from an online questionnaire survey, conducted by the GFK Hungary, which was available between January and April 2014 on the website of *Index* (an online journal) and *Heti Válasz* (a printed weekly magazine).[1] Although the survey was completed by 13650 individuals, respondents did not represent the Hungarian adult population correctly, in terms of education or region. Thus, a survey with 1000 cases was also fielded, based on a stratified random sample of the population aged 16–69 years old. Data used for the analysis are weighed to be representative by gender, age, education, and region.

The questionnaire has been developed aiming to measure the three forms of capital (economic, cultural and social) by Bourdieu and followed the practice of GBCS (Savage et. al. 2013). Two indices were developed for each form of capitals. Economic capital is based on household income per consumption units in the household and on assets derived from property value and household savings. These issues are sensitive, percentage for non-response varied between 19 and 29 per cent. Various imputation techniques were used to handle this problem; e.g. a household durable index was developed or external data sources were also considered on selling and buying of houses in the area where the respondent lived. Cultural capital involves an index on highbrow cultural consumption and an index for alternate 'everyday', 'emerging' leisure activities. Respondents received a list of 25 items of activities containing events as going to theatres, museums, reading books, on the one hand, and watching TV, surfing the internet, going to the pub, doing hobbies, on the other hand. Social capital is measured by the position generator method, i.e. respondents were asked whether they knew a person in 26 different occupations and whether this person could help or advise them if needed. Based on the responses, two indices were developed. The

[1] GfK means originally Gesellschaft für Kosumforschung, a German non-profit organisation but today it is Growth from Knowledge, an international market research institute. *Ákos Kozák*, managing director of GfK Hungary, acted as *spiritus rector* for the whole project. Financial support was provided by GfK and Heti Válasz; no public money was spent on the project.

first index shows the quantity of social relationships, the number of contacts, i.e. the size of network or nexus diversity. The second index depicts the prestige (the SIOPS scores) of the occupations (Ganzeboom and Treiman 1996) and this measure reflects the prestige of the contact person and the quality of the social capital. These six indices, in standardized form (mean = 0 and standard deviation = 1), served as input variables for the *latent class analysis* (LCA), the method applied for defining and constructing the social classes in Hungary.[2]

Social origin is represented by two questions on education and occupation of the father at age 14 of the respondent (or mother if father was not present or was unknown). About 70% of the respondents come from families where the parent had primary level of schooling or vocational qualification. In terms of occupational background, blue-collar parental jobs dominate in more than 70%. (See Table A1 in the Appendix.)

## The Multidimensional Class Map in Hungary

This section has two aims. On the one hand, class locations are characterized by the three forms of capital; on the other hand, family background for the various class positions is presented.

Multidimensional approach of social stratification is not novel in Hungarian sociology, Tamás Kolosi has carried out a large-scale stratification study in the 1980s. He described the Hungarian society in a dual structure of the redistributive order and market and put class locations into this coordinate system (Kolosi 1988). He also emphasized status inconsistency in the Hungarian society and his empirical work described the stratification system with a small consistent elite, a large consistent deprived group and various inconsistent status groups between the top and the bottom.

The current class map, presented in Table 1, reveals that the main features of the Hungarian class distribution persist: few people on the top, much more on the bottom, and about three-fourth of the respondents can be characterized by various combinations of capitals.

As shown by the previous analysis on the same data (Albert et. al. 2018), there is a tiny consistent upper class in Hungary, a group of people with the highest level of economic capital, the highest highbrow cultural capital, the second highest emerging cultural capital, and a not very diverse, but very prestigious network (social capital). The Hungarian middle class is fragmented: one part is dominantly characterised by cultural capital, while the other part is dominantly characterised by economic capital, especially by high level of assets. Both the cultural and the affluent middle class seem to have prestigious contacts and the cultural middle class is very strong in nexus diversity, too. Nevertheless, the class of network embedded rural workers scores the second highest in network diversity and the quality of their contacts is also above the average. There are two classes containing young respondents: the urban consumers have relatively high cultural capital and good quality of social capital, while the drifters score negatively for most of the capital indices. Finally, the deprived and the precariat classes with various forms of deficit of capitals involve about one-fifth of the respondents in the Hungarian society.

[2] The project participants came from the Centre for Social Sciences, Hungarian Academy of Sciences (today Eötvös Lóránd Research Network): Fruzsina Albert, Beáta Dávid, Zoltán Kmetty, Luca Kristóf and Andrea Szabó, in addition to the author of this article.

Table 1

**Class distribution in Hungary and characteristics of the classes**

| Classes | % | Standardized indices in the three forms of capital (mean values) | | | | | | Social origin (row %) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Economic capital | | Cultural capital | | Social capital | | Parental education | | Parental occupation | |
| | | Income | Assets | Highbrow cultural capital | Emerging cultural capital | Nexus diversity | Mean prestige of social contacts | Tertiary degree | Primary level | Manager & professional | Worker (not in agriculture) |
| 1 Upper class | 4 | 2.440 | 2.931 | 1.393 | 0.417 | 0.415 | 1.246 | 25.5 | 11.4 | 42.1 | 43.5 |
| 2 Cultural middle class | 9 | 0.333 | 0.154 | 0.727 | 0.098 | 2.036 | 0.872 | 20.2 | 24.4 | 28.5 | 49.2 |
| 3 Affluent middle class | 9 | 0.592 | 1.005 | 0.108 | 0.023 | 0.168 | 0.504 | 17.5 | 12.3 | 30.7 | 48.9 |
| 4 Young urban consumers | 25 | 0.195 | −0.038 | 0.697 | 0.639 | −0.355 | 0.326 | 12.5 | 15.6 | 17.5 | 59.7 |
| 5 Network embedded rural workers | 11 | −0.438 | −0.405 | −0.314 | −0.123 | 1.008 | 0.315 | 1.2 | 46.3 | 4.2 | 71.6 |
| 6 Young drifters | 22 | −0.355 | −0.467 | −0.488 | 0.275 | −0.484 | −0.502 | 3.2 | 37.2 | 3.4 | 77.4 |
| 7 Middle-aged deprived | 10 | −0.464 | −0.104 | −0.727 | −1.256 | −0.374 | −0.609 | 0.0 | 71.9 | 0.0 | 62.1 |
| 8 Precariat | 10 | −0.660 | −0.659 | −0.964 | −1.089 | −0.873 | −10.161 | 0.0 | 77.3 | 3.0 | 67.3 |
| Total | 100 | 0.001 | −0.002 | 0.003 | −0.001 | −0.001 | 0.004 | 8.5 | 35.9 | 13.1 | 63.1 |

The right side panel of Table 1 extends the picture by adding social origin of class members. For parental occupation, managerial-professional vs. worker categories, for parental education, tertiary vs. primary level of schooling categories are displayed. This look intends to focus on the hierarchical dimension. Percentages presented in Table 1 show the proportion of class members coming from a given category of social origin.

For the recruitment from families with different parental education, the two bottom classes (middle-aged deprived and precariat) involve people born in families where the parent has dominantly (above 70%) no more than primary level of schooling. Ratio of low educated parents is also high (46%) in the network embedded rural worker class. This means a marked over-representation of low-educated background in these classes. At the same time, the proportion of low parental education is only slightly over 10% for individuals in the upper class; this is a strong under-representation. Members of the upper class, cultural middle class or the affluent middle class mainly come from families with degree holder parents in a highly over-represented manner, indicating a high role of inheritance of educational advantages.

In terms of parental occupation, about two-third of the members in the two lowest classes come from worker class families. This proportion would go up to 90% if adding also agricultural labourers. This indicates again a marked over-representation for individuals in these class locations. At the same time, more than 40% of individuals in the upper class have a parent in managerial or professional job. The same proportion is around 30% for the members of cultural and affluent middle class. Low status parental occupations are clearly not typical of the upper or middle classes but there is a strong under-representation even among the young urban consumers.

No doubts that this class map is affected by demographic features of the respondents, in particular by age and place of residence. This may be understandable because (1) accumulation of capitals is partly related to life-course, ageing; and (2) urban-rural differences also influence the individual chances during the process of status attainment. Consequently, it is necessary to control for demographic aspects and it occurs for gender, age, partnership, size of household, Roma ethnicity, or place of birth in the multivariate analysis. Descriptive statistics for the demographic variables appear in Table A2 in the Appendix.

An age effect obviously appears for parental background, too, e.g. primary educated parents are more typical in the older cohorts of respondents, while e.g. low-educated parental background is under-represented for the class of young urban consumers. Mobility researchers call the attention to the fact that structural changes (decline in primary education, increase in professional occupation) have an influence on how parental background affects class formation, when discussing the openness of the society. This is another reason that the multivariate models control for the demographic characteristics.

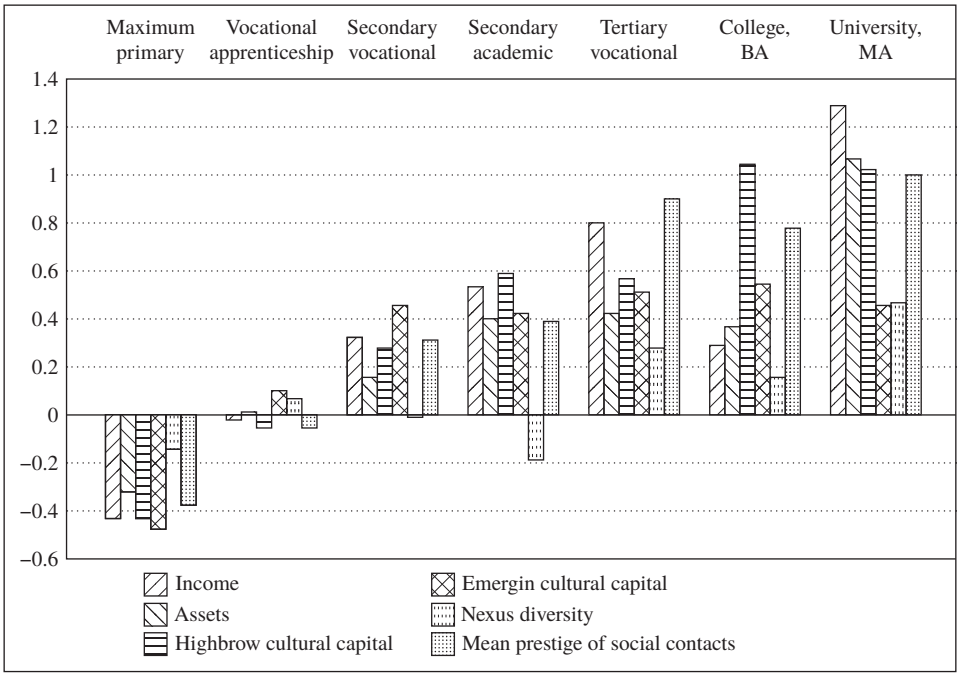
## From Origin to Destination 1: Accumulation of Forms of Capital

This section elaborates on the statistical relationship between forms of capital and social origin. Firstly, bivariate analysis provides a descriptive picture on family background in 2 graphs. Figure 1 and Figure 2 display the amount of accumulated capitals by parental

education and occupation, respectively. Association between social origin and accumulated capitals is particularly strong at the bottom and the top. People with low educated parents (primary education, vocational training) as well as from families where parents have low occupational status (agricultural labourer, unskilled or semiskilled worker) look very consistent: they could hardly accumulate any kind of capitals. Higher level of parental education allows much more opportunity but with a variation. For accumulating economic resources, parental university degree is the most helpful, while respondents with parents with college degree appear to be in a relatively favourable situation for cultural capital accumulation. A family background where parents have only secondary level of schooling provide much less chances for having assets. In terms of parental occupation, the white collar—blue collar cleavage seems to discriminate strongly in capital accumulation and self-employment is closer to the blue collar fraction. In sum, if parental occupation is high managerial, high professional or middle managerial job, respondents could definitely gain more resources compared to their counterparts with parents in lower occupational positions.

Figure 1

**Accumulated capitals by parental education***

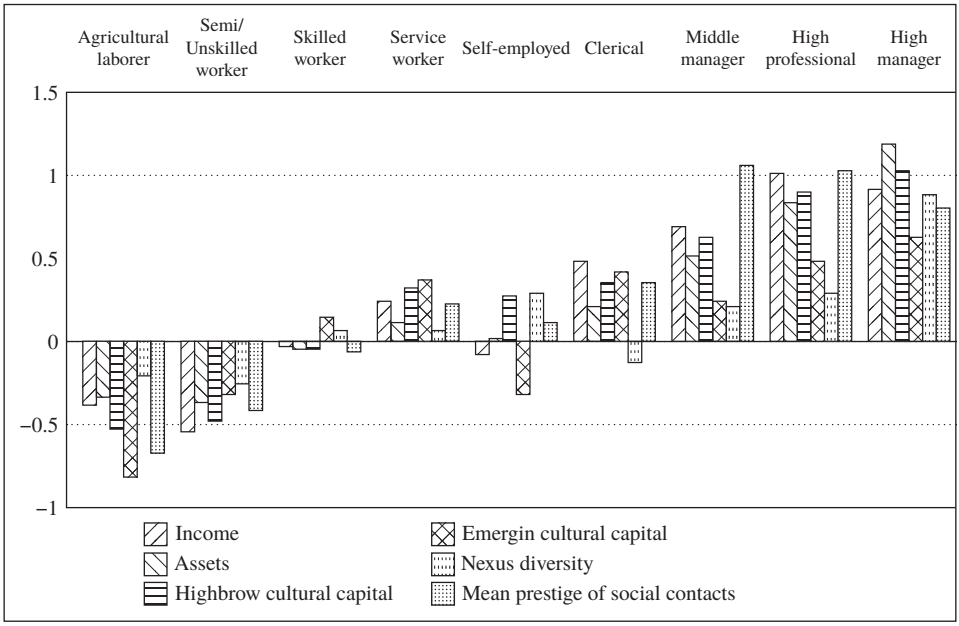



*Note: The figure displays mean values taken from analysis of variance.

Turning to the multivariate perspective, OLS regression is used to analyse the impact of social origin on accumulating the various forms of capital. Since both parental education and occupation are ordinal variables, a series of dummies are used in the regression models; primary education is the reference for parental education and skilled worker is

Figure 2

**Accumulated capitals by parental occupation***




*Note: The figure displays mean values taken from analysis of variance.

the reference for parental occupation. Regarding model building, estimates from three regression equations serve to predict each of the six indices. Model 1 contains education and the control variables; Model 2 includes occupation and the control variables, while Model 3 brings in both education and occupation with the control variables. Accordingly, Model 1 displays only the role of educational background, Model 2 displays only the role of occupational background and Model 3 contains their common effects. This model building aims to handle the trouble of multicollinearity: the high correlation between parental education and occupation. In fact, working with dummies also decreases the problem even if a parental background of tertiary degree and of professional job overlap. As mentioned earlier respondent's age and parental background also correlate but interestingly the association is actually higher with place of birth than with age. Nevertheless, for multicollinearity does not jeopardise the results according to the appropriate tests (values for tolerance and VIF).

Table 2 displays how economic capital, income and assets separately, are predicted by the two background indicators. As compared to primary level of schooling, higher level of parental education is significantly increases both forms of economic capital. Compared to having a skilled worker father, higher level of parental occupation increases, lower levels of parental occupation decrease both forms of economic capital. When both parental education and occupation are included in the equation, the impact of education persists stronger. It is worth mentioning that explained variance for models predicting the income

Table 2

**Predicting economic capital: income and assets (unstandardized coefficients from OLS regression)**

| Predictors | Income | | | Assets | | |
|---|---|---|---|---|---|---|
| | Model 1 | Model 2 | Model 3 | Model 1 | Model 2 | Model 3 |
| Parental education | | | | | | |
| university | 1.582*** | | 0.805*** | 1.406*** | | 0.695** |
| college | 0.718*** | | –0.024 | 0.693*** | | 0.036 |
| tertiary vocational | 1.118*** | | 0.610*** | 0.765*** | | 0.326*** |
| secondary academic | 0.828*** | | 0.437*** | 0.674*** | | 0.416*** |
| secondary vocational | 0.758*** | | 0.494*** | 0.575*** | | 0.431*** |
| vocational | 0.376*** | | 0.257*** | 0.352*** | | 0.306*** |
| Parental occupation | | | | | | |
| high manager | | 0.848*** | 0.564*** | | 1.151*** | 1.030*** |
| high professional | | 0.923*** | 0.774*** | | 0.828*** | 0.751*** |
| middle manager | | 0.683*** | 0.546*** | | 0.536*** | 0.526*** |
| clerical | | 0.438*** | 0.270*** | | 0.212*** | 0.122** |
| self-employed | | –0.167*** | –0.088* | | –0.016 | 0.078* |
| service worker | | 0.242*** | 0.205*** | | 0.157*** | 0.157*** |
| semi/unskilled worker | | –0.391*** | –0.168*** | | –0.297*** | –0.046 |
| agricultural labourer | | –0.407*** | –0.176*** | | –0.376*** | –0.118** |
| Adj. R Square | 0.195 | 0.188 | 0.226 | 0.108 | 0.119 | 0.134 |
| gender (male) | 0.073*** | 0.023 | 0.054*** | 0.088*** | 0.050** | 0.074*** |
| age | 0.000 | –0.001* | 0.000 | 0.008*** | 0.006*** | 0.007*** |
| age squared | –0.039*** | –0.019* | –0.020* | 0.060*** | 0.074*** | 0.081*** |
| has partner | 0.364*** | 0.375*** | 0.374*** | 0.311*** | 0.320*** | 0.322*** |
| size of household | –0.219*** | –0.226*** | –0.216*** | 0.001* | –0.005 | 0.002 |
| Roma ethnicity | –0.330*** | –0.315*** | –0.281*** | –0.381*** | –0.393*** | –0.360*** |
| Place of birth | | | | | | |
| capital city | 0.140*** | 0.112*** | 0.093*** | 0.142*** | 0.125*** | 0.115*** |
| other city | –0.089*** | –0.090*** | –0.114*** | –0.003 | 0.018 | –0.007 |
| small town | –0.049** | –0.050*** | –0.049** | –0.070*** | –0.074*** | –0.076*** |
| Intercept | 0.042 | 0.518*** | 0.144** | –0.920*** | –0.511*** | –0.894*** |
| Adj. R Square | 0.314 | 0.295 | 0.334 | 0.148 | 0.161 | 0.180 |

Significance: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$

Reference: Education: primary, Occupation: skilled worker, Gender: female, Partnership: lives alone, Ethnicity: non-Roma, place of birth: village

Value for tolerance and variance inflation factor (VIF) indicate no problem for multicollinearity. According to residual statistics and P-P plot of standardised residuals, residuals for income are normally distributed, residuals for assets slightly deviate from normal distribution. No problems were detected for heteroscedasticity by the scatterplot of predicted values and residuals.

index is about twice as much (close to 0.20) as for the models predicting the asset index (just above 0.10).

For demographics, the age difference needs to be highlighted: older age increases the amount of assets and this effect is even rising as one gets older (both the linear and the quadratic terms are positive). This is not the case for income. Living in partnership increases economic capital, while living in bigger household decreases income. Roma ethnicity

Table 3

**Predicting cultural capital: highbrow and everyday (emerging) cultural capital (unstandardized coefficients from OLS regression)**

| Predictors | Highbrow cultural capital | | | Everyday (emerging) cultural capital | | |
|---|---|---|---|---|---|---|
| | Model 1 | Model 2 | Model 3 | Model 1 | Model 2 | Model 3 |
| Parental education | | | | | | |
| university | 1.364*** | | 1.139*** | 0.525*** | | 0.314*** |
| college | 1.446*** | | 1.245*** | 0.566*** | | 0.417*** |
| tertiary vocational | 0.978*** | | 0.682*** | 0.592*** | | 0.371*** |
| secondary academic | 0.950*** | | 0.635*** | 0.649*** | | 0.413*** |
| secondary vocational | 0.707*** | | 0.429** | 0.435*** | | 0.235** |
| vocational | 0.373*** | | 0.126*** | 0.304*** | | 0.102*** |
| Parental occupation | | | | | | |
| high manager | | 1.063*** | 0.507*** | | 0.678*** | 0.489*** |
| high professional | | 0.849*** | –0.077 | | 0.194*** | –0.038 |
| middle manager | | 0.629*** | 0.038 | | 0.134*** | –0.084* |
| clerical | | 0.335** | 0.005 | | 0.139*** | –0.021 |
| self-employed | | 0.204*** | 0.166*** | | –0.243*** | –0.236*** |
| service worker | | 0.335** | 0.204*** | | 0.170*** | 0.101*** |
| semi/unskilled worker | | –0.429*** | –0.303*** | | –0.331*** | –0.237*** |
| agricultural labourer | | –0.501*** | –0.373*** | | –0.446*** | –0.349*** |
| Adj. R Square | 0.191 | 0.179 | 0.212 | 0.145 | 0.152 | 0.179 |
| Gender (male) | –0.266*** | –0.293*** | –0.276*** | 0.040** | 0.013 | 0.023+ |
| Age | 0.006*** | 0.004*** | 0.006*** | –0.035*** | –0.035*** | –0.034*** |
| Age squared | –0.017* | 0.008 | –0.012 | 0.048*** | 0.060* | 0.055*** |
| Has partner | 0.113*** | 0.121*** | 0.108*** | 0.096*** | 0.099 | 0.098*** |
| Size of household | 0.018** | 0.019** | 0.017* | –0.004 | –0.008 | –0.007 |
| Roma ethnicity | –0.259*** | –0.230*** | –0.188*** | –0.221*** | –0.210 | –0.190*** |
| Place of birth | | | | | | |
| capital city | 0.267*** | 0.309*** | 0.250*** | 0.306*** | 0.303** | 0.271*** |
| other city | 0.003 | 0.044* | –0.005 | 0.141*** | 0.143* | 0.125*** |
| small town | –0.001 | 0.011 | –0.009 | 0.110*** | 0.103 | 0.100*** |
| Intercept | –0.644*** | –0.222*** | –0.399* | 1.006*** | 1.364*** | 1.228*** |
| Adj. R Square | 0.231 | 0.219 | 0.251 | 0.404 | 0.409 | 0.415 |

Significance: *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1

Reference: Education: primary, Occupation: skilled worker, Gender: female, Partnership: lives alone, Ethnicity: non-Roma, place of birth: village.

Value for tolerance and variance inflation factor (VIF) indicate no problem for multicollinearity. According to residual statistics and P-P plot of standardised residuals, residuals for highbrow cultural activities slightly deviate from normal distribution, while residuals for everyday cultural activities are normally distributed. No problems were detected for heteroscedasticity by the scatterplot of predicted values and residuals.

significantly decreases accumulation of economic capital. Explained variance grows by more than 10% for income and by 5% for assets.

In Table 3, higher level of parental education strongly increases respondents' cultural capital, in particular accumulating highbrow cultural activities as the effect sizes for university and college degree reveal, compared to those for everyday leisure activities. The same distinction is present for parental occupation, as well, highbrow cultural capital

Table 4

**Predicting social capital: size of network (nexus diversity) and quality of network (unstandardized coefficients from OLS regression)**

| Predictors | Nexus diversity | | | Mean prestige of social contacts | | |
|---|---|---|---|---|---|---|
| | Model 1 | Model 2 | Model 3 | Model 1 | Model 2 | Model 3 |
| Parental education | | | | | | |
| university | 0.769*** | | 0.307*** | 1.271*** | | 0.107+ |
| college | 0.416*** | | –0.010 | 1.055*** | | –0.106+ |
| tertiary vocational | 0.557*** | | 0.191*** | 1.207*** | | 0.328*** |
| secondary academic | 0.094** | | –0.217*** | 0.663*** | | 0.013 |
| secondary vocational | 0.245*** | | –0.041 | 0.673*** | | 0.211*** |
| vocational | 0.206*** | | –0.071* | 0.261*** | | –0.011 |
| Parental occupation | | | | | | |
| high manager | | 0.738*** | 0.558*** | | 0.858** | 0.724*** |
| high professional | | 0.404*** | 0.200** | | 1.022*** | 1.005*** |
| middle manager | | 0.153*** | 0.043 | | 1.066*** | 0.970*** |
| clerical | | –0.043 | –0.036 | | 0.424*** | 0.324*** |
| self-employed | | 0.135** | 0.114** | | 0.152*** | 0.143*** |
| service worker | | 0.066* | 0.081* | | 0.274*** | 0.234*** |
| semi/unskilled worker | | –0.326*** | –0.377*** | | –0.292*** | –0.285*** |
| agricultural labourer | | –0.309** | –0.365*** | | –0.570*** | –0.561*** |
| Adj. R Square | 0.024 | 0.040 | 0.047 | 0.169 | 0.226 | 0.232 |
| gender (male) | 0.086*** | 0.069*** | 0.072*** | 0.006 | –0.033* | –0.018 |
| age | 0.003*** | 0.003*** | 0.003*** | 0.002*** | 0.002** | 0.002*** |
| age squared | –0.134*** | –0.123*** | –0.130*** | –0.0 67*** | –0.030*** | –0.035*** |
| has partner | 0.186*** | 0.190*** | 0.181*** | 0.137*** | 0.144*** | 0.144 *** |
| size of household | 0.037*** | 0.037*** | 0.039*** | 0.030*** | 0.026*** | 0.030*** |
| Roma ethnicity | –0.681*** | –0.598*** | –0.602*** | –0.631*** | –0.582*** | –0.573*** |
| Place of birth | | | | | | |
| capital city | –0.402*** | –0.437*** | –0.430*** | 0.219*** | 0.155*** | 0.153*** |
| other city | –0.431*** | –0.428*** | –0.429*** | –0.099*** | –0.127*** | –0.128*** |
| small town | –0.039+ | –0.043* | –0.044* | –0.124*** | –0.140*** | –0.138*** |
| Intercept | –0.248 | –0.002 | 0.048 | –0.466*** | –0.160*** | –0.224*** |
| Adj. R Square | 0.115 | 0.126 | 0.132 | 0.207 | 0.256 | 0.263 |

Significance: *** p < 0.001; ** p < 0.01; * p < 0.05; + p<0.1

Reference: Education: primary, Occupation: skilled worker, Gender: female, Partnership: lives alone, Ethnicity: non-Roma, place of birth: village.

Value for tolerance and variance inflation factor (VIF) indicate no problem for multicollinearity. According to residual statistics and P-P plot of standardised residuals, residuals for both nexus diversity and quality of network are normally distributed. No problems were detected for heteroscedasticity by the scatterplot of predicted values and residuals.

is stronger affected than emerging cultural capital. There is a deficit in cultural capital for those individuals where parental occupation is semi- or unskilled job or agricultural labour. In fact, these negative effects of parental occupation persist at most when parental occupation is controlled for parental education. The bigger R-square values for the models predicting highbrow cultural capital (close to 0.20 vs. about 0.14–0.16) also underline that everyday cultural activities are less related to family background.

Regarding demographics, there is a clear gender difference for highbrow cultural consumption; this form of capital is much more characteristic for women. Age effect also varies; highbrow cultural capital increases as one getting older while everyday cultural capital, on the contrary, is more typical for younger people. Not surprisingly, Roma ethnicity reduces accumulation of cultural capital. For place of birth, those born in the capital have higher stock of cultural capital than those coming from rural areas. The demographic features hardly increase the explanatory power of the model on accumulating highbrow cultural capital but the R-Square values grow to 40% for the model on everyday leisure activities. Thus, that this form of capital depends on demographic factors to a large extent.

As the effect sizes in Table 4 indicate, the role of parental education is much stronger in predicting the quality than the quantity of social capital. This holds for parental occupation, as well. When both background indicators are included, the impact of parental occupation persists, in particular when predicting the prestige of social contacts. Explained variance in the models differs for the two forms of social capital markedly; for quantity it is around 3–5%, for quality it is above 20%.

Regarding demographic features, the reversed U-shaped age effect (negative estimates of the quadratic terms of age) is interesting: it means that the network capital peaks for the middle aged respondents. Both living with partner and in bigger household improve the quantity and the quality of social capital. Roma ethnicity, however, is a big deficit in both forms of social capital; they have less contacts and the social prestige of their contacts is also lower. The effect of place of birth has an interesting pattern: those who were born in bigger settlements have lower level of nexus diversity compared to their counterparts from the rural areas. The quality of social contacts, however, is the highest for those who are from the capital.

## From Origin to Destination 2: Getting into a Class Locations

This section deals with the allocation process to the class locations from various social origins. As social class is a nominal variable, multinomial logistic regression is applied to estimating the effects of family background and the lowest class location, precariat is the reference. Model building is the same as for the forms of capital: Table 5 displays the results for parental education, Table 6 for parental occupation, while both indicators of family background appear in Table 7. All estimates in these tables are controlled for the demographic characteristics of the respondents. Roma ethnicity is an exceptions as the variable is skewed (3%) and Roma respondents basically appear only in the two bottom classes.

Results in Table 5 reveal that access to any class location is significantly more probable if parental education is of tertiary or upper secondary level. Primary level of schooling decreases the odds of getting higher than the precariat compared to vocational training. Tertiary education of the parent particularly improves the chances to end up in the upper class, in the two middle classes or in the young urban consumer class. In Table 6, parental occupation exposes polarized influence on access to the various class positions. Compared

Table 5

**The influence of parental education on class locations (Exp(B) values from multinomial logistic regression)**

| | Upper class | Cultural middle class | Affluent middle class | Young urban consumers | Network embedded rural workers | Young drifters | Middle-aged deprived |
|---|---|---|---|---|---|---|---|
| Parental education* | | | | | | | |
| Tertiary level | 65.820*** | 72.621*** | 27.556*** | 18.273*** | 3.384** | 2.982*** | 0.001 |
| Upper secondary level | 10.583*** | 14.580*** | 9.284*** | 10.479*** | 3.935** | 3.626*** | 2.678** |
| Primary level | 0.094*** | 0.227*** | 0.071*** | 0.131*** | 0.285*** | 0.251 | 0.655*** |
| Demographic controls | | | | | | | |
| Gender (male) | 0.967 | 0.815* | 0.922 | 0.518*** | 0.608*** | 0.617*** | 0.890 |
| Age | 1.009+ | 1.017*** | 0.999 | 0.973*** | 0.986*** | 0.959*** | 1.066*** |
| Age squared | 0.682*** | 0.651*** | 1.309*** | 1.321*** | 1.054 | 1.269*** | 0.759*** |
| In partnership | 4.592*** | 2.912*** | 2.482*** | 1.583*** | 1.561*** | 1.339*** | 1.184+ |
| Size of household | 0.765*** | 1.063+ | 0.911* | 0.997 | 1.056+ | 1.041 | 1.222*** |
| Place of birth: | | | | | | | |
| capital | 1.546* | 0.323*** | 1.118 | 4.470*** | 0.507** | 1.930*** | 0.559* |
| other city | 0.336*** | 0.516*** | 0.849 | 1.557*** | 0.614*** | 1.086 | 1.275* |
| small town | 0.419*** | 0.871 | 0.890 | 1.258** | 0.736*** | 0.837* | 1,241* |
| Intercept | –0.339 | –0.867*** | 0.156 | 2.079*** | 1.388*** | 2.981*** | –3.486*** |
| Nagelkerke R Square | | | | 0.464 | | | |

*Note: Categories of parental education should have been collapsed due to low number of observations by class locations.

Significance: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$

Reference: Class locations: Precariat; Parental education: low secondary, vocational training; In partnership: no partner; Place of birth: village.

to a skilled worker parent, the probability of belonging to the upper class or to the two kinds of middle classes is significantly higher if the parent works in high managerial or professional job. At the same time, if the parent is semi- or unskilled or service worker or agricultural labourer, the odds of entry to any class location but the two lowest ones, the deprived and the precariat, are significantly lower.

The interplay between parental education and occupation in Table 7 reveals that tertiary level of parental education is a stronger predictor than managerial or professional job for getting to the upper class. For cultural middle class position, upper secondary level of parental schooling also strongly increases the odds. Having a father in a managerial or professional job has a relatively bigger effect on ending up in the upper class or in the affluent middle class, if parental occupation is controlled for parental education.

The effects for the demographic variables are particularly characteristic in terms of ageing and regional differences. These features had a strong impact the accumulation of various capitals and this led to the outcome that some class locations—*nomen est omen*—show clear relations to age or urban-rural differences. Still, these effects are rather complex. First, significant quadratic terms for age reveal that ageing is not a linear process and not a simple difference of belonging to a younger vs. older cohort. Second, location is

Table 6

**The influence of parental occupation on class locations (Exp(B) values from multinomial logistic regression)**

| | Upper class | Cultural middle class | Affluent middle class | Young urban consumers | Network embedded rural workers | Young drifters | Middle-aged deprived |
|---|---|---|---|---|---|---|---|
| Parental occupation* | | | | | | | |
| Manager, professional | 12.920*** | 10.144*** | 5.480*** | 2.437*** | 0.712 | 0.457*** | 0.000 |
| Clerical | 6.439*** | 8.282*** | 4.896*** | 5.223*** | 2.566* | 1.586 | 1.861+ |
| Self-employed | 0.542+ | 1.982*** | 0.672+ | 1.233 | 0.915 | 0.236 | 1.553* |
| Semi-/unskilled/service worker | 0.371*** | 0.490*** | 0.134*** | 0.336*** | 0.237*** | 0.367*** | 1.066 |
| Agricultural worker | 0.082*** | 0.211*** | 0.097*** | 0.102*** | 0.261*** | 0.542*** | 1.397** |
| Demographic controls | | | | | | | |
| Gender (male) | 0.815+ | 0.732*** | 0.758** | 0.451*** | 0.566*** | 0.560*** | 0.892 |
| Age | 0.991+ | 1.001 | 0.983*** | 0.961*** | 0.980*** | 0.948*** | 1.059*** |
| Age squared | 0.654*** | 0.602*** | 1.179** | 1.199*** | 0.969 | 1.106* | 0.719*** |
| In partnership | 5.536*** | 2.854*** | 2.334*** | 1.366*** | 1.378*** | 1.266** | 1.105 |
| Size of household | 0.664*** | 1.005 | 0.859*** | 0.964 | 1.061+ | 0.993 | 1.216*** |
| Place of birth: | | | | | | | |
| capital | 1.789** | 0.437*** | 1.236 | 6.092*** | 0.565** | 2.357*** | 0.564* |
| other city | 0.566*** | 0.845 | 1.341* | 2.710*** | 0.845 | 1.705*** | 1.827*** |
| small town | 0.401*** | 0.878 | 0.819* | 1.277** | 0.705*** | 0.783** | 1,299** |
| Intercept | 0.414 | –0.092 | 1.115*** | 2.755*** | 1.853*** | 3.620*** | –3.510*** |
| Nagelkerke R Square | | | | 0.447 | | | |

*Note: Categories of parental occupation should have been collapsed due to low number of observations by class locations.

Significance: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$

Reference: Class locations: Precariat; Parental occupation: skilled worker; In partnership: no partner; Place of birth: village.

represented by individuals' place of birth and not current residence and this means that long-term regional inequalities and residential immobility contributed to class formation, too.

## Conclusion and Discussion

This analysis investigated how respondents with various social origin are allocated to different social classes in Hungary. As cited, class mobility has been extensively studied using various data on Hungary, but this study adds to the topic in the sense that class locations in the paper are defined theoretically and measured empirically in line with the concept by Bourdieu on the three forms of capital. Related to this approach, the paper also examined the role of social origin on accumulation of the capitals and, in this way, expanded the classic focus of in intergenerational social mobility research, the OD association.

Table 7

**The influence of parental education and occupation on class locations (Exp(B) values from multinomial logistic regression)**

| | Upper class | Cultural middle class | Affluent middle class | Young urban consumers | Network embedded rural workers | Young drifters | Middle-aged deprived |
|---|---|---|---|---|---|---|---|
| Parental status* | | | | | | | |
| Tertiary level | 19.775*** | 86.738*** | 11.554*** | 33.460*** | 5.737*** | 8.890*** | 0.006 |
| Upper secondary level | 6.204*** | 13.554*** | 6.870*** | 11.163*** | 4.781*** | 5.086*** | 2.849** |
| Primary level | 0.092*** | 0.252*** | 0.121*** | 0.170*** | 0.751* | 0.263*** | 0.432*** |
| Manager, professional | 3.803*** | 0.856 | 2.383** | 0.479* | 0.453** | 0.233*** | 0.000 |
| Clerical | 2.063* | 1.381 | 1.482 | 1.103 | 1.054 | 0.583 | 1.187 |
| Self-employed | 1.061 | 2.949*** | 1.418 | 2.051*** | 1.149 | 0.415*** | 2.263*** |
| Semi-/unskilled/service worker | 1.554* | 1.166 | 0.493*** | 0.973 | 0.291*** | 0.928 | 1.908*** |
| Agricultural worker | 0.511+ | 0.669* | 0.511** | 0.448*** | 0.334*** | 1.590** | 2.676*** |
| Demographic controls | | | | | | | |
| Gender (male) | 0.892 | 0.842* | 0.847+ | 0.517*** | 0.578*** | 0.603*** | 0.923 |
| Age | 1.003 | 1.014** | 0.994+ | 0.972*** | 0.981*** | 0.954*** | 1.063*** |
| Age squared | 0.733*** | 0.630*** | 1.318*** | 1.293*** | 0.983 | 1.199*** | 0.754*** |
| In partnership | 5.896*** | 2.921*** | 2.562*** | 1.522*** | 1.415*** | 1.348*** | 1.121 |
| Size of household | 0.703*** | 1.061+ | 0.902* | 1.004 | 1.062+ | 1.022 | 1.242*** |
| Place of birth: | | | | | | | |
| capital | 1.522* | 0.329*** | 1.082 | 4.668*** | 0.469*** | 2.117*** | 0.645 |
| other city | 0.394*** | 0.561*** | 1.001 | 1.811*** | 0,753* | 1.334** | 1.638*** |
| small town | 0.429*** | 0.897 | 0.852 | 1.309*** | 0.718*** | 0.814* | 1.310** |
| Intercept | –0.233 | –0.859** | 0.458+ | 2.062*** | 1.778*** | 3.251*** | –3.664*** |
| Nagelkerke R Square | | | | 0.501 | | | |

*Note: Categories of parental education and occupation should have been collapsed due to low number of observations by class locations.

Significance: *** p < 0.001; ** p < 0.01; * p,<',0.05; + p < 0.1

Reference: Class locations: Precariat; Parental education: low secondary, vocational training; Parental occupation: skilled worker; In partnership: no partner; Place of birth: village.

The assumptions formulated in the beginning of the paper are certainly not astonishing, they refer to the strong effect of social origin on class formation and accumulation of capitals. The paper finds that family backgrounds where parents had higher level of schooling and/or were in managerial or professional occupations indeed increased the odds of achieving a higher class location and accumulating a larger stock of capitals. Moreover, as the Hungarian class structure looks really polarized with a small consistent elite and a large consistent deprived class, precariat, the observed reproduction of advantages and disadvantages fit well to the terms of "sticky ceiling and sticky floor" (OECD 2018). Consequently, in line with the assumption, it is particularly difficult to fall out from an advantageous top position and to break forth from a disadvantageous bottom position in the Hungarian society. Regarding the forms of capital, social origin seems to have particularly strong role in accumulation of highbrow cultural capital, cultural inheritance seems to

persist. Furthermore, income and high prestige network contacts are the forms of economic and social capital affected by social origin to large extent. Emerging cultural consumption, nexus diversity and—surprisingly—assets seem to depend less on family background.

Explanation to this latter aspect of the results may be the shortcomings of the data in terms of social origin, namely that family background is measured only by parental education and occupation. Since there is no detailed information on the financial situation or the social capital in the family, the assumption cannot be rejected that the study even *underestimates the process of intergenerational inheritance*. Nevertheless, the paper provides a solid attempt to uncover the mechanism of inheritance and to provide an insight into the process how people end up in various class locations in Hungary. The interdependence between social origin and accumulation of economic, cultural and social capital helps to understand the reasons behind the common finding of several recent studies, namely that the degree of intergenerational social fluidity is so limited in Hungary.

The results obviously open up further directions for research. Mechanisms how members in the elite class are able to inherit their advantages, using the various forms of capital should be examined in more details. In particular the influence of social origin on accumulating assets may require further examination. It is similarly crucial to study more closely how the substantial deficit of capitals hinder members of bottom classes in moving up the social ladder. The role of ethnicity, the disadvantage of being Roma is a definite message to policymakers. With respect to age effect, cohort analysis could contribute to better understanding how intergenerational inheritance persists over time and how it operates for young generations. The role of place of birth in class formation requires further analysis on the relationship between social and regional mobility. Thus, the paper will hopefully generate further research on Hungary, leading to new lessons in the field of class analysis and class mobility.

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*Biographical Note*: Péter Róbert (Ph.D.), is research professor at the Centre for Social Sciences, Eötvös Loránd Research Network. He is also working for TÁRKI Social Research Institute as project based senior researcher. His research interests involve social stratification and mobility, educational inequalities, perception of social inequalities, political values and attitudes, subjective well-being.

ORCID iD: https://orcid.org/0000-0001-9521-1115

E-mail: robert.peter@tk.hu

## Appendix

Table A1

**Distribution of measures for social background (%)**

| Parental education | Distribution (%) | Parental occupation | Distribution (%) |
|---|---|---|---|
| University, MA | 4.3 | High manager | 1.0 |
| College, BA | 4.0 | High professional | 6.5 |
| Tertiary vocational | 4.1 | Middle manager | 5.4 |
| Secondary academic | 6.2 | Clerical | 7.9 |
| Secondary vocational | 10.2 | Self-employed | 4.8 |
| Vocational, apprenticeship | 35.4 | Service worker | 9.5 |
| Maximum primary | 35.8 | Skilled worker | 33.5 |
| | | Semi/unskilled worker | 20.3 |
| | | Agricultural labourer | 11.1 |
| Total | 100.0 | Total | 100.0 |

Table A2

**Descriptive statistics for the demographic control variables**

| Demographic variables | Mean/Percentage |
|---|---|
| Gender = % of male | 0.48 |
| Age (mean) | 42.33 |
| Lives in some kind of partnership (marriage, cohabitation) but not single, divorced, separated or widowed | 0.55 |
| Number of persons in household | 2.8 |
| Roma ethnicity | 0.035 |
| Born in the capital city | 12.4 |
| Born in other city | 23.3 |
| Born in town | 33.5 |
| Born in village | 30.8 |