Research on poverty in Europe is strongly characterized by a differentiation between indirect measures based on household income and direct measures based on different indicators of material deprivation. One strand of the literature deals with the substantial relationship between income poverty and material deprivation. This paper focuses on household over-indebtedness as a particular dimension of material deprivation (i.e. illiquidity resulting in arrears and/or defaults) and relates it to income poverty in a longitudinal perspective. Using EU-SILC data, by over-indebtedness we refer to a situation where a household reports not being able to pay back its obligations in time due to financial reasons (arrears/defaults). In contrast to income poverty there is less research on spells of deprivation measures, particular illiquidity and debt problems.

Based on UDB EU-SILC panel data 2010-2013 for 25 European countries\(^1\) three research questions are addressed. First, the degree of overlap between over-indebted households and income-poor households is investigated. Therefore, indicators of persistent income poverty and persistent over-indebtedness (self-reported illiquidity and payment problems) are compared. It is analyzed how income poor and over-indebted households differ in terms of their socio-economic and socio-demographic structure. For whom is over-indebtedness only a transitory status and which groups face persistent illiquidity? In the literature, there is evidence that older people show a lower level of material deprivation than is implied by income poverty estimates. Does this also apply for over-indebtedness indicators?

Second, it is analyzed which events and factors affect the likelihood of exiting over-indebtedness and how these effects differ compared to explaining transitions out of income poverty. Is there a single path or are there multiple ways out of over-indebtedness? With reference to the theoretical literature on poverty dynamics, we evaluate the effects of structural factors (f.i. sex, education) on the likelihood of exiting over-indebtedness as compared to biographical events (f.i. getting unemployed, changes in the martial status). It is expected that biographical events which are associated with financial shocks increase the likelihood of entering deprived living conditions and also make it more difficult to escape from over-indebtedness. On the income side, both the presence of children, due to care obligations, and a bad health status are expected to hinder full labor market participation. Furthermore, these factors may be associated with higher expenses for a given household budget and are thus expected to have a negative effect on the likelihood of exiting over-indebtedness. The overall picture on the relationship between age and financial problems is ambiguous though. On the one hand, the classical life cycle hypothesis of saving states that debt and thus also debt problems are less likely to occur in later stages of life. Further arguments stress a greater

\(^{1}\) AT, BE, BG, CY, CZ, DK, EE, ES, FI, FR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, SI, SK, UK
proficiency in managing money, decreased consumption habits, a lower tolerance of financial risks and the de-accumulation of wealth among the old. On the other hand, older people may find it more strenuous to gain well-paid employment rendering the exit from over-indebtedness more difficult. Net of its correlation with income and the employment status, a positive relationship can also be hypothesized due to increasing health problems, for instance.

Third, from a macro-sociological perspective it is asked if over-indebtedness dynamics resemble the dynamics for income poverty if different welfare state regimes and welfare state indicators are compared. Particularly for exit rates from poverty, consistent country differences according to welfare regimes are not always found in the literature. This could also apply to over-indebtedness. For instance, if a welfare regime emphasizes active labor market policies, then lower entries into and higher exits out of poverty should be expected. Such policies in certain states might elevate households above the poverty threshold, but may not translate into higher exit rates from over-indebtedness if wages, for instance are not sufficient to cover current expenses and (increasing) costs resulting from payment problems (interest rate).

Ordinal logit models are applied to the research question on the persistence of over-indebtedness. The dependent variable is the number of over-indebtedness spells in the observation period (0 to 4). As the observational period in SILC is only four years, using discrete-time logistic hazard models for the conditional probability of exiting over-indebtedness, would impose challenges (left-censoring etc.) Thus, primarily logistic regression models are applied to assess the impact of the explanatory variables on exit probabilities from over-indebtedness within two consecutive periods 2011/2012.

Preliminary results show that the odds for more periods in over-indebtedness are significantly lower for older age groups than for younger age groups. Furthermore, a quick escape from both over-indebtedness and income poverty is more prevalent in liberal welfare states. There is descriptive evidence, however, that once a longer time has been spent in deprivation, the likelihood of exiting over-indebtedness is highest in conservative welfare states respectively in liberal welfare states in the case of income poverty. Currently ongoing analyses also apply multilevel regression methods with random and fixed effects at the country level to the research questions.