**Title:** Over-indebtedness in the EU. A comparison of policy measures and the incidence of over-indebtedness among private households in the European Union.

**Abstract:** An individual’s temporal allocation of consumption ultimately refers to the two options of saving vs. getting indebted. There’s a long tradition of research in Microeconomics dealing with theoretical and empirical aspects of private indebtedness as the outcome of a rational choice. One of the most prominent concepts is represented by the Life-Cycle-Hypothesis based on the work of Ando/Modigliani (1963) which was complemented by research in the field of economic psychology (Behavioural-Life-Cycle Theory and Mental Accounting by Shefrin/Thaler 1988 and Thaler 1999).

However, there is also a social policy dimension to the topic. Beside a voluntary rational decision, indebtedness can also be the result of (mostly) unexpected critical incidents (job loss, illness, divorce, etc.), leading to substantial income losses or increases in expenses. Such an involuntary situation of indebtedness representing a financial burden to households or individuals is labelled as over-indebtedness. Although there exists a broad range of definitions for the term (Groth 1986; Korczak/Pfefferkorn 1992; Schmitt 1993; Schmidt 1995; Backert 2001; European Commission 2008; for an overview see Korczak 2003), a common aspect is illiquidity, resulting in defaults, arrears or legal consequences like private bankruptcy or garnishment. Despite the relevance for social policy and the fact that private over-indebtedness, at the macro level, can also have adverse consequences for financial markets if there occurs a substantial number of defaults, there is only sparse research on the topic. This is especially true for comparative questions.

This paper is aimed at filling this gap and deals with two related aspects of over-indebtedness of private households in the EU. Firstly, based on a literature review the implemented mix of policy measures in fighting over-indebtedness of private households in 19 European countries with a focus on regulations and in-kind transfers is compared. A differentiation between preventative and retributive measures is made. Secondly, the magnitude and group-specific risks of over-indebtedness are compared among European countries in order to evaluate whether there are common patterns among European countries. Thirdly, we searched for evidence whether any association between the scope of the policy mix and the incidence of over-indebtedness can be found between EU countries.

In order to answer the second and third question the SILC USER DATABASE for 2005 and 2006 is employed. Our analyses include the EU-25 (without Malta) and the EFTA countries Norway and Iceland. As private over-indebtedness is only barely researched yet this database is currently the only source that provides secondary data for comparative research on the issue. Based on the discussion in the literature and on the available variables in SILC we differentiated between two operationalisations for over-indebtedness: an objective definition (i) comprising households with arrears for consumption or accommodation and a subjective definition (ii) comprising households that regard their repayment of debts from hire purchases or loans as a burden. In the bivariate und multivariate analyses, however, we focused on the objective definition as the burden-variable (ii) excludes mortgage loans.

To check whether there exist similarities concerning group-specific risks of over-indebtedness between European countries we applied a multivariate logistic regression model and checked...
for the effects of several socio-demographic variables (in particular age, marital status, number of children in the household) and socio-economic variables (income, education) which are cited in explorative studies to have an effect on the probability of over-indebtedness.

Results show that there are only minor differences concerning the range of types of policy measures between socio-democratic, conservative and liberal welfare states (Esping-Andersen 1990). However, new member states of the EU in Southern and Eastern Europe (Poland, Bulgaria Lithuania) and Greece have implemented the smallest range of types of policy measures against over-indebtedness.

Moreover, preliminary results of the analysis of the SILC-Data suggest that countries with a small range of policy measures tend to have a high incidence of over-indebtedness and vice versa. The highest rates of over-indebted households according to our objective definition can be found in Greece and Poland (31% resp. 19%), whereas relatively few households are over-indebted in Austria and Spain (3% resp. 5%). The average for the EU is 10%. By contrast, the average rate of subjectively over-indebted households among all countries analysed amounts to 20%.

Regardless of the number of policy measures implemented, results of multivariate logistic regression models show that single parents, people living in divorce, non-EU citizens, unemployed persons and people with low income bear an above-average risk of being over-indebted. These outcomes are similar for the vast majority of European countries.