Hard times: The Great Recession and the effect of job loss on household incomes

Timo Lepper Goethe University Frankfurt am Main lepper@soz.uni-frankfurt.de Markus Gangl Goethe University Frankfurt am Main mgangl@soz.uni-frankfurt.de

Paper proposal for the 5<sup>th</sup> European User Conference, GESIS Mannheim

**Keywords:** job loss, economic recession, household income, welfare regime.

**Introduction: Description of the topic & research questions** 

Following the financial and economic crisis in 2008 unemployment rose in all industrial countries. Considering the widespread economic disruption and rising levels of unemployment, the aftermath of the crisis varied considerably between countries.

In this paper we examine the role of personal unemployment experience and aggregate labor market conditions for the economic situation of households' in the short and medium run. We consider households as the unit of analysis because personal economic well-being is a matter of resource polling, utilizing the amount of income all persons living in the same dwelling produce, rather than individual incomes. Welfare policies moderate the effect of job loss on household income, however, buffering depends on the specific national institutional setting. Therefore, we address the question of how different welfare state regimes produce distinct patterns of income buffering and how income protection legislation for the unemployed mitigated the recent economic crisis. Furthermore, we will address the question of how different social strata have been affected by the great recession and how this prolonged economic crisis influenced the ability of individuals and households to financially recover from negative income shocks.

## Data and method

We use a data set combining six harmonized household panel surveys. At the core of this data set lies the European Union Statistics on Income and Living Conditions (EU-SILC) that provides data for 27 European countries. Data for the United States originate from the Panel Study of Income Dynamics (PSID). For Germany we use the German Socio-Economic Panel Study (GSOEP) and for Switzerland the Swiss Household Panel (SHP) as data source. The data for the United Kingdom stem from two household surveys, namely the British Household Panel Study (BHPS) which ended in 2008 and its follow up survey Understanding Society. Our unified data set spans from the year 2003 up until the latest release of 2013.

Our sample includes annual observations on labor market status, household incomes, household composition and macroeconomic conditions. Because of the distinct panel design

we are able to track employment histories up to four years. In order to capture the buffer effect of the welfare state we use three different income measures, namely household labor income, household gross income and household disposable income (DiPrete and McManus, 2000; Ehlert, 2012). All income variables have been made comparable by translation into Euro, adjusting for household size and deflation of respective income values.

To appropriately determine changes in macro-economic conditions and their effect on individual unemployment for household incomes we test different indicators for aggregate labor demand, namely unemployment rates, gross domestic product and the national output gap.

For our analysis strategy we use a two-step approach: On the first level, our statistical model is a fixed effects regression model. It removes all household constant effects on our outcome. As dependent variables in our analysis we use the log of the respective income variable to be analyzed. In order to measure short and medium term effects of unemployment on household incomes we include lagged values of our unemployment indicator. We compare incomes before transition into unemployment to subsequent household incomes. Therefore changes in income can be captured until 3 years after the job loss. Furthermore, we control for changes in household composition. Using our fixed effects model we predict, on the second level, household incomes for the group of households experiencing unemployment and for those who do not. The newly created country-year data set allows us to analyze the influence of changing macro-economic conditions on the unemployment penalty differentiated for welfare state regimes.

## **Preliminary findings**

Our results show that household labor incomes are worst affected by unemployment compared to household gross and household disposable incomes. Although welfare states share the characteristic of buffering a large share of the effect of unemployment on household incomes, there is a clear differentiation in the effect between welfare state regimes. First findings show that the effect of unemployment increases with higher rates and is especially sensitive to very high rates of aggregate unemployment.

Further analysis will contain the differentiation of the effect of unemployment on household incomes depending on the relative position of the person who is becoming unemployed and the household composition. These analyses will be completed by investigating the differential effects of job loss with respect to different income strata.

## References

- DiPrete, T. A. and McManus, P. A. (2000). Family change, employment transitions, and the welfare state. Household income dynamics in the United States and Germany. *American Sociological Review*, **65**, 343–370.
- Ehlert, M. (2012). Buffering income loss due to unemployment. Social science research: a journal of social science methodology and quantitive research, **41**, **H. 4**.
- Ehlert, M. (2013). Job loss among rich and poor in the United States and Germany. Who loses more income? *Research in Social Stratification and Mobility*, **32**, 85–103.
- Gallie, D., Jacobs, S. and Paugam, S. (2013). Poverty and financial hardship among the unemployment. In Gallie, D. (Ed.). *Economic crisis, quality of work, and social integration. The European experience*. Oxford: Oxford Univ. Press.
- Gangl, M. (2006). Scar Effects of Unemployment. An Assessment of Institutional Complementarities. *American Sociological Review*, **71**, 986–1013.