## An Integrated View on Trends in Consumption and Income Inequality in Europe over the Last Two Decades

Stefan Angel Vienna University of Economics and Business stefan.angel@wu.ac.at

## Benjamin Bittschi KIT

It is well-known that income of individuals and households varies over their lifespan and that governmental and private transfers cushion periods of lower income to allow for consumption smoothing. Thus, solely looking at income inequality can lead astray in investigating social inequality and in inferring welfare consequences. Furthermore, in economic theory, utility is usually more closely linked to consumption rather than income. Therefore, a joint investigation of both parts of the household budget would be preferable.

However, lacking data often hampers such endeavors. Reflecting the availability of suitable data most studies pertain to the USA. A central question is if consumption inequality has followed patterns of income inequality over the last decades. Although this has been studied in the United States for some time, the available evidence is mixed. While some studies show a less steep increase of consumption inequality than for income inequality, more recent work argues that these findings are downwardly biased due to ignoring measurement error in income and consumption data.

In Europe, similar studies are only available for countries with long household panels, such as the UK, Germany or Spain. Furthermore, existing work is concentrated on the period before the financial crisis of 2007/2008.

Thus, we investigate to what extent consumption inequality has mirrored household income inequality over the last 20 years in Europe. We use SILC and ECHP data which have not yet been fully employed for this question, although they provide detailed information on household income, consumption data on necessary household expenses as well as data on housing costs. More specifically, we will use a question on subjective basic household needs (self-reported very lowest net monthly income that a household would have to have to make ends meet - in relation to the present circumstances of the household) from the European Union Survey on Income and Living Conditions (EU-SILC) and its forerunner – the ECHP - to approximate basic household consumption. Although this question was intended to capture the economic deprivation of European household we show that it can readily be used to study various components of household consumption. The interview instructions of this question make this more visible as they explicitly refer to expenses: Thinking of the household's basic needs, according to its size

(including housing related debts but excluding business and farm work costs) what is the very minimum amount of money the household needs every month to pay its usual expenses.

To assess data quality, we follow a similar approach as Jappelli and Pistaferri (2010) and compare our survey data to national accounts on aggregate consumer expenditures. COICOP components which reflect usual household expenses very closely track the development of the respective SILC question. In addition to Jappelli and Pistaferri (2010) we also investigate first differences of both time series to rule out a spurious correlation over time which again reveals a close comovement. We therefore conclude that this variable is a suitable proxy to study the development of a large share of household consumption.

First results based on SILC for the period 2005-2014 demonstrate that irrespective of the economic and financial turmoil that characterizes this decade, income and consumption inequality as measured by various indicators (e.g. GINI, percentile ratios, log(variance)) remained relatively stable for most of the countries. Exceptions are for instance Latvia which experienced a strong increase in both income and consumption inequality during the 2007/2008 crisis. This may be traced back to harsh austerity measures. Portugal, another country hit hardly by the crisis, saw a strong decline in income inequality. Moreover, for most European countries consumption inequality changes only slightly time and countries. over between

Ongoing work extends the analysis on the relation between wage inequality and consumption inequality period to the year 1994 by including ECHP data. The 1994-2015 period covers a higher number upswings and economic recessions throughout Europe. Furthermore, we also aim at differentiating our consumption and income inequality estimates by welfare regimes, NUTS regions and degree of urbanization. Regions with higher wage rates could also imply a higher price level of housing and daily living costs whereas regions with declining wage rates could induce price decreases for expenditures of daily living. Furthermore, welfare state polices on housing markets can crucially impact on housing costs and rent prices.