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Keeping up with the Novaks: Income distribution as a determinant of household debt in <u>CESEE</u>

This paper contributes to the scarce empirical evidence on the determinants of household debt in Central, Eastern- and Southeastern Europe (CESEE). Using unique survey data for the 2009-2017 waves of the OeNB EuroSurvey, this is one of the first studies to compute income inequality measures comparable across countries and time on regional and country level. The OeNB Euro Survey is a household survey performed in ten CESEE countries and is commissioned by the Austrian Central Bank (OeNB). The survey was performed bi-annually between 2007 and 2014 and annually since 2015. In each country and per wave, the target population comprises around 1000 interviewees representative of the country's population, 14 years or older, selected via a multi-stage stratified random sampling procedure. For the period of analysis of this paper of nine years (i.e 2009 to 2017), this corresponds to a total number of individual of observations of about 110,000. In addition, each country consists of different number of regions which are on the level of NUTS 2 , which adds up to a total number of 657 region-year pairs for the whole period.

We then address the question whether interpersonal comparisons (i.e. "keeping up with the CESEE Joneses i.e. the Novaks"-channel) affect households' decision to take up a loan and thus constitutes an initial attempt to shed light on the underresearched role of income distribution for macrofinancial stability and financial access in CESEE. Making use of our large dataset with about 110,000 observations, we applying multilevel modeling to account for the hierarchical structure of the data. We construct a relative reference income measure, which is defined as the ratio between the mean income of all households in higher income deciles at country/regional level and the households' own income. We consider this measure as particularly fitting to our analysis as interpersonal comparisons tend to be directed upwards. Another reasons for using this measure is that is calculated at household level, thus allowing for more insights compared to other measures such as the Gini coefficient. Our results support the notion that relative income position along with absolute income is considered when demanding a loan, but this is valid mainly for households above the median. In other words: Mostly richer household appear to be upward looking in their loan decisions, and react to higher incomes of their reference groups (richer households) by increasing their probability of taking up a loan. For some specifications, interestingly, we find the opposite effect for the lowest decile: Higher reference income leads to less debt intake. This could hint to the "signaling" - function of the income distribution due to banks increasingly using additional information besides borrower's

income when macroeconomic uncertainty is elevated. From a supply-side perspective, banks use the country/regional income distribution next to the household's income to assess the creditworthiness of borrowers especially in countries where the coverage of credit registries is scarce (as is the case in some of the CESEE countries of our sample).

Taking a more granular approach, we find that regions with lower income inequality lack a demand-side (i.e "keeping up with the Novaks") effect from higher relative income inequality. On the contrary, when income inequality increases in regions with already higher income inequality (i.e above the median), this leads to higher probability of loans in more affluent cohorts. Our results also prove that the relative comparisons are valid for almost all components of household debt but are the strongest for mortgage, cars and foreign-currency loans. These results confirm the hypothesis that these loans are mostly used for consumption-type goods, rather than loans for other reasons (e.g. education). Mortgages and cars are perceived as status goods.