

Introduction

In recent years the topic of household wealth holdings and their distribution has been discussed intensively in the literature. An obvious reason for this is the increase of accumulated private wealth in relation to the national income in the affluent industrialised economies, from the late 1970s onwards as analysed among many others by e.g. Piketty (2014). In addition to this development, in most OECD countries inequality of income rose from the 1980s onwards (see for example OECD 2011). Another reason for the increased interest in research on household wealth is that micro data have become available in the past two decades for more and more countries that allow us to study wealth holdings and inequality, not only at the level of individual countries but also to compare the situation across countries, first via the Luxembourg Wealth Study Database and more recently based on data from the Eurosystem Household Finance and Consumption Survey (HFCS).

In a previous paper (Leitner, 2016) I have already applied the Shapley value approach to decomposition to wealth inequality based on HFCS 2010 data. The present paper replicates the analysis using data from the second wave of the survey (HFCS 2014). Thus the aim is to test the robustness of the results obtained previously and analyse potential differences. Similar to the previous research done (Leitner, 2016), my assumption is that the accumulation of wealth stocks by households is facilitated by the receipt of bequests or gifts (mostly of ancestors). Thus the wealth inequality of one generation can be passed on to the following, which over longer periods of time may result in an increase in the inequality of wealth within a society. In principle, households build up wealth stocks in three ways. Either they save out of their income from employment or self-employment or out of financial sources. The second way, important for many households, is to receive bequests or gifts and to save them instead of using the assets for consumptive purposes. A third form, which however cannot be dealt with in this paper, is that the assets owned appreciate in real terms. In my paper I am interested in the process of households' building-up of wealth stocks via the first two processes and the respective inequality in asset holdings that results therefrom. In order to detect the sources of wealth inequality across countries I apply (as in Leitner, 2016) a decomposition methodology based on the Shapley value approach to the inequality measure used most frequently in the literature: the Gini index. This decomposition method allows for an assessment of the relative importance of explanatory factors in inequality. While some authors (see the literature review below) have already worked for some decades on measuring how much of the accumulated stock of household wealth can be attributed to inheritance and intergenerational inter vivos transfers (contrary to wealth built up over the life cycle via saving and investment), decomposition approaches to the distribution of wealth have been performed only recently. However, in the literature one can so far find only decompositions by wealth source but not by subgroups. This latter analysis is performed in the following and should highlight the relative importance of inheritance, income and household characteristics in shaping wealth inequality in a cross-country manner, thus providing a novel contribution to the literature.

The paper is organised as follows: Since the approach of this paper equals the one of previous research performed in Leitner (2016) I will not replicate or present a distinct literature review in this publication. Instead I refer the reader to the one presented there, covering the relevant publications on developments of household wealth inequality, the effects of inheritance and inter vivos transfers and on decomposition methods used to analyse income and wealth inequality. Section 2 discusses the most relevant aspects of the data used (sources, measurement issues and definitions) and Section 3

introduces the concept of the Shapley value approach to decomposition, discussing the way I apply this method. Section 4 presents the empirical results of the analysis for inequality in net wealth stocks of households and Section 5 compares those with previous outcomes based on HFCS 2010 data as published in Leitner (2016). Section 6 concludes.

Data

The data for the analysis presented in this paper are drawn from the Household Finance and Consumption Survey wave 2 (HFCS 2014 – UDB 2.0). Furthermore the results were compared to those published in Leitner (2016) where analysis was performed using data from the first wave of the survey (HFCS 2010 - UDB 1.1 published in February 2015). While in the first wave the survey was conducted in 15 euro area countries¹, in the second wave not only all euro area countries except for Lithuania participated, but also Hungary and Poland. Due to data issues however not all of these countries could be considered in the analysis presented in this paper. A detailed description of the methodology of the survey is presented by the European Central Bank (2016). The HFCS provides data on gross and net wealth holdings of households and their components and socioeconomic characteristics for the households and their individual members. Moreover, it covers data on inheritance and gifts received and gross income. Interpreting results in cross-country comparisons of wealth inequality should be done cautiously. As discussed by, for example, Fessler/Schürz (2013) and Tiefensee/Grabka (2014) and more recently Fessler/Lindner/Schürz (2016), although a lot of ex-ante harmonisation was conducted, there are several aspects of potential methodological constraints regarding cross-country comparability due to non-harmonisation of sampling frames, sample sizes, survey modes, oversampling of top wealth households, reference periods, weighting or imputation methods applied and variations in initial response rates by countries. Nevertheless, as emphasised by Tiefensee/Grabka (2014:26), ‘the HFCS is still the best dataset for cross-country comparisons of wealth levels and inequality in the Euro area and it is definitely a first (big) step into the right direction’. The HFCS data offer five different multiple imputations in order to correct for item non-response. I take these imputations into account in my estimation analysis by using Rubin’s Rule. Moreover, unit non-response is accounted for in the HFCS data by providing 1000 replicate weights, which are all used in my estimations.

Similar to the analysis performed in Leitner (2016) in this paper I also decompose two different variables depicting wealth holdings of households: gross wealth (total household assets excluding public and occupational pension wealth) and net wealth (gross wealth minus total outstanding household liabilities). As explanatory variables I first apply total household gross income and five different types of inheritances and gifts (household main residence, further dwellings, land, business and the sum of other assets) received by all household members. Obviously, the net income of households would be a better measure of assessing the potential of households to save out of their income; moreover, present income may not be the best predictor of income flows accrued by individuals in their previous (working) life; however, this information is so far not available in the HFCS. In the HFCS 2014, the reference person is asked to provide information on whether the main household residence, if owned, was inherited or a gift. Furthermore, information is collected on up to three inheritances or substantial gifts from someone who is not a part of

¹ The HFCS 2010 was conducted in Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Italy, Luxembourg, Malta, the Netherlands, Portugal, Spain, the Slovak Republic and Slovenia.