OBSERVATOIRE DE L'EPARGNE EUROPÉENNE

Household structure and household wealth: Evidence from Germany, France, Spain, Italy and Portugal

January 2014

Mikkel Barslund & Ales Chmelar
Centre for European Policy Studies (CEPS)

Florence Legros
University Paris-Dauphine and CEPS

Household structure and household wealth: Evidence from Germany, France, Spain, Italy and Portugal

Authors[1]

Mikkel Barslund
Centre for European Policy Studies (CEPS)

Ales Chmelar
Centre for European Policy Studies (CEPS)

Florence Legros
University Paris-Dauphine and Centre for European Policy Studies (CEPS)

Abstract:

Distribution of household net wealth differs starkly within the eurozone. We use the recently released Eurosystem Household Finance and Consumption Survey (HFCS) from the ECB to assess to what extent these differences are due to variations in household structure. Taking French household structure as the benchmark, counterfactual distributions are derived for Germany, Spain, Italy and Portugal assuming these countries have the household structure of France. Differences in household demographics explain a large – and statistically significant – share of the differences in net wealth distributions between France and Spain, respectively, Italy. More than half the observed differences at central points of the Italian distribution. For the comparison between France and Germany we find no role for household structure, while the picture is more complex for Portugal, where differences in household structure explains most of the difference in parts of the lower half of the distribution, but with no explanatory power in the top part of the distribution. We also find that these results are robust to different definitions of household structure.

[1] Mikkel Barslund (Mikkel.barslund@ceps.eu) and Ales Chmelar (ales.chmelar@ceps.eu) are respectively Research Fellow and Researcher at Centre for European Policy Studies in Brussels (CEPS). Florence Legros (Florence.LEGROS@dauphine.fr) is Professor at the university Paris Dauphine and an Associated Fellow at CEPS. The authors would like to thank Reyyan Erguder for excellent research assistance and Sebastien Perez-Duarte for helpful comments and suggestions. All remaining errors are ours. This research project has received generous support from L'Observatoire de l'Epargne Européenne (OEE).

1. Introduction

This paper describes and analyses net household wealth and its components in five important euro zone countries, Germany, France, Italy, Spain and Portugal. It has two main purposes: first it documents, describes and highlights in detail the main differences in asset holdings, liabilities and net household wealth among the five countries. Second, the descriptive analysis provides the foundation we use to analyse to what extent the observed differences are due to demographics or whether they arise from what can loosely and broadly be characterised as differences in the economic, institutional and cultural environment that households from different countries face.

Historically, the analysis of household or individual wealth is a relatively recent topic for economists. Macroeconomists first pointed out the importance of households' savings behaviour, paying attention to the division of income between savings and consumption. Central to this analysis was the idea that excess savings could induce disequilibria or – at least – a decline in economic growth if the savings rate is higher than the so called golden rule savings rate (Phelps, 1966).

On the other hand, the question of wealth accumulation was seen as a side issue. All macroeconomic models have an equation which explains the sharing of income between consumption and savings, but most do not consider explicitly the accumulated wealth; although wealth accumulation do play an important role in the life cycle hypothesis and derived models (Modigliani and Brumberg, 1954).

More recently, a number of studies have aimed at explaining wealth inequalities. The literature is roughly divided along two lines, with the American literature focusing on the wealth of the richest 1% of the population while the European literature focused on (income) poverty issues. Thus, the literature dealing with wealth accumulation was during a long period mainly the preserve of US based economists (except for the abundant literature on wealth accumulation due to Arrondel and Masson, see Arrondel and Masson, 2007).

The main reasons often cited for wealth inequalities are liquidity constraints and credit facilities for the wealthy compared to the poorer households, tax policies, declining risk aversion with wealth and induced higher returns for the wealthy households. In other words, the main factors are economic and the literature often neglects demographic factors or family composition.

European countries differ in their demographic composition. These dissimilarities arise not only from the fact that some countries (in particular Germany) are ageing faster than others, but also because of differences in cultural and institutional factors affecting important outcomes such as the age at which families are formed, number of children, extended family arrangements etc. (Reher, 1998; Bover, 2010). It is likely that these factors as well as the median age affect household wealth accumulation and thus, to the extent that they differ among countries, differences in the distribution of wealth within countries. This observation provides the prime motivation for our paper: what part of distributional differences in wealth can be explained by demographics?[2]

2 When the ECB released their overview study of the same dataset as we employ here in April 2013 many analysts and observers (as well as ECB itself) pointed out that one of the main factors contributing to muddy cross-country comparisons was that demographics differ among European countries, i.e "Germany and the euro

There are, however, a number of other perspectives from which describing differences in the distribution and composition of household net wealth would be of interest; even if we do not pursue these directly in this study. One is from the point of view of measuring inequality. It arguably matters whether wealth inequality stems mostly from, say, housing wealth or from individual private pension wealth, since the former is costlier to convert to consumption (when retired). Detailed knowledge of differences in the distribution of wealth among countries might also inform about the merits of different economic theories and models of distribution of wealth (Bover, 2010; Cagetti and Di Nardi, 2006). Distilling international differences in wealth levels and composition is also useful in trying to assess the impact of the economic environment and regulation on the accumulation and distribution of wealth, as well as to inform about country similarity in economic environment within the European Union (Christelis, Georgarakos and Haliassos, 2013; Sierminska and Doorley, 2012).

Further issues arise in the context of population ageing and its effect on wealth accumulation and distribution and the question of individuals' adequate saving for retirement, hereunder the question of de-accumulation of housing wealth (Poterba, Venti and Wise, 2011, 2012; Chiuri and Jappelli, 2010).

Our countries of prime focus are Germany, France, Spain, Italy and Portugal. The first four ones have been chosen because they are the largest countries of Eurozone: in 2012 they respectively represent 16.2% of the EU27 population for Germany, 13% for France, 9.2 for Spain and 12.1 for Italy. To this sample of big countries we added Portugal, which represents "only" 2.2% of the EU 27 population but which has seen changes in its demography, family structures and sociology in the last decade. In order to have an idea, consider the fertility rate that has decreased from 3.16 children per women in 1960 to 1.35 in 2011, according to Eurostat. Portugal has now the smallest fertility rate of our sample (this rate is 1.36 in Germany and Spain, 2.01 in France, 1.4 in Italy). As an illustration of these huge changes in the Portuguese society, take the divorce rate, which went up from 0.1 (for 1000 persons) in 1960 to 2.5 in 2011. A higher rate than in Germany, Spain and France.

This study adds to the emerging literature on the analysis of cross-country differences in the distribution of wealth. Our data source is the recently released Eurosystem Household Finance and Consumption Survey (see ECB, 2013) and is as such the most harmonised up-to-date survey of household wealth representative of European countries.

Our contribution to this literature is empiric in nature. We employ methodologies from three recent related studies of cross country wealth comparisons, Bover (2010), Sierminska and Doorley (2012) and Christelis, Georgarakos and Haliassos (2013), to uncover differences in wealth accross the five countries.[3]

Christelis, Georgarakos and Haliassos (2013) cover severeal European countries via a harmonised survey instrument (SHARE data) their analysis is (for data reasons) constrained to the important part

- Don't make us Führer", *The Economist*, April 13, 2013, *EUobserver*, April 10, 2013 (http://euobserver.com/economic/119751), "Cyprus ranks near top for household wealth", *Financial Times*, April 9, 2013, D'Alessio, Gambacorta and Ilardi (2013), "Europe's Poorest", Look North, *The Wall Street Journal* April 10, 2013.

[3] Earlier contributions include Banks, Blundell and Smith (2003) and Bover, Martinez-Carrascal and Velilla (2005).

of the population aged above 50 years. In contrast, we cover the entire age distribution for the countries we investigate. Sierminska and Doorley (2012) use different data sets to cover some of the countries we cover (Germany, Italy and Spain) as well as two others (USA and Luxembourg), whereas the present paper rely on a harmonised data set of a more recent date and in addition covers France and Portugal.[4] We also highlight the importance of including pension wealth in the survey instrument in order to get an accurate picture of household net wealth. Bover (2010) is primarily concerned with the differences in household wealth between the US and Spain.

The emphasis in our study is on the part of the differences among countries explained by demographics, rather than on the residual. The residual no doubt is related to the economic and institutional environment (Christelis, Georgarakos and Haliassos, 2013) but as pointed out in Arrondel and Alii (2007) – and as already mentioned by Franck Knight in 1921 – wealth is a stock which is complex to explain, resulting also from psychology, attitude towards risk circumstances, family behaviour in the present and in the past, like altruism, bequests and attitudes of parents and grand-parents. Thus, it is difficult to evaluate what part of the residual difference, once demographic disparities are accounted for, would be down to economic and regulatory framework, and what part would be related to cultural differences, which would exists even in completely alike regulatory and economic environments.

Arrondel and Masson (2003) underline that what makes the wealth analysis difficult is that wealth does not only rely on the present household's situation but on past saving behaviour since the beginning of household's active life, and even, by means of bequests on the previous generations' behavior.

Past savings behavior is influenced by past taxation schemes, marriages, donations, fertility behaviors, mortality, human capital accumulation, etc. The way bequests have been transferred is as well influenced by succession taxation or succession rules that can differ across countries (equi-distribution, primo-geniture for example). Bequest can, in turn, change the actual generation behavior; for example, an early unexpected bequest can discourage savings.

Lorenz curves provided by ECB (2013) deliver a clear message: net wealth shows a much more unequal profile than income for European countries with huge inequalities in wealth for France, Germany and Portugal and smaller differences for Spain and Italy.

As mentioned before, the analysis of such differences cannot be explained by simple ways. If life cycle hypothesis theory is a powerful tool to explain the differences due to age and income, age and income are not sufficient to explain the whole differences in wealth between individuals and between countries.

In order to explain the heterogeneity of wealth, Arrondel and Masson (2003) suggest that savings are twofold and lead to two types of wealth. They distinguish between "wealth for oneself" and "saving for itself or for someone else".

Wealth for oneself is the wealth that results from life cycle hypothesis type savings. These savings answer the household's need and are clearly postponed consumption for various matters as

[4] We provide some results for most other Eurozone countries.

retirement, unexpected need of liquidity, durable goods, home ownership, etc. When people are altruistic, life cycle wealth also includes voluntary bequests whose determinants are the children's welfare.

Wealth for itself, or capital according to mentioned authors, is much more complex. While they distinguish a family capital, dedicated to children, they also suggest identifying an investment capital that would be accumulated in order to whether accumulate or preserve a social status or economic power. While the "wealth for oneself part" would follow the usual inverse U shape, according to a simple life cycle hypothesis, the capital accumulated for itself of for bequests would differ according to the professional activities of the various households and would increase with age and with the family size.

While some wealth components would be affected by the institutional factors that affect life cycle and consumption, some wealth components would be affected by institutional factors that affect education, wealth accumulation and professional profiles according to the economic surrounding (agricultural enterprises belong to this category for example, as self-employed business wealth).

A quick comparison of the weight of public pensions between European countries shows huge differences that will not miss influencing the life cycle savings (table 1). These differences in public pensions "generosity" do influence the life cycle savings but myopic behaviors or differences in economic and financial literacy will of course induce huge differences in savings allocation (Fornero and Monticone, 2009).

Table 1: Share of public pensions in GDP for selected countries, 2010 (%)

	Public pension, share of GDP
European union (27)	11.3
Denmark	10.1
Germany	10.8
Spain	10.1
France	14.6
Italy	15.3
The Netherlands	6.8
Portugal	12.5
Sweden	9.6
United Kingdom	7.7

Source : Ageing report 2012, European Commission

The capital or "wealth for itself » is mainly influence by the will to produce income. It can be combined or not with human capital. Without any doubt, the differences in education between European countries may lead to (or may come from) differences in the economic structures and sectors such as size of agricultural sector, number of self-employed persons. On the other hand, if education –including higher education such as universities - is mainly public, it lowers the need for liquidity for the children human capital improvement and capital can be whether lower or devoted to other assets like equities or various participations. Within Europe, according to OECD, while continental countries mainly finance education by the bias of public expenditures (5.8% of the GDP In France, 4.3 in Italy, 5.4 in Portugal and 4.8 in Spain come from public funding versus 0.5%, 0.4, 0.4, and 0.8 respectively from private funds), Great Britain funding is more balanced (5.1% of the GDP is

public funding and 2.2% comes from the private sector).

Both "life cycle wealth" and capital or "productive health" deserve an analysis of their demographic engines. In the first case, life cycle hypothesis with altruism and "saving for itself" or capital building behavioral analysis both require to take into account the family structures and size. In this study we do not distinguish between the two types of wealth but instead identified a combined influence of demographic differences among countries.

As a preview to our results, we find that differences in household structure play a large and statistically significant role when comparing France with Spain and Italy. For the comparison between France and Italy, household structure explains more than half of the observed differences; somewhat less in the case of Spain. We find mild effects on the participation rate – whether a household holds an asset or not – in different asset classes. The most pronounced effect comes via ownership of household dwellings.

The relatively large differences between the net wealth distributions of France and Germany are not due to differences in household structures, but are due to other factors. Accounting for differences in household structure does not bring the household net wealth distributions of the two countries any closer. The comparison between France and Portugal is more complex. While household structure seems to explain most if not all the difference between the distributions for the lower half of the distributions (although not in the tail), the distributions move further apart in the upper half. This suggests that the relatively large net wealth difference between France and Portugal would further widen substantially if France had the household structure of Portugal. By this metric French household net wealth is 'underestimated' in a direct comparison (i.e. without netting out demographics) with Portugal.

We also calculate a series of counterfactual distributions for France taking into account household structures for each of the other 15 countries in the survey.[5] The point is to illustrate how much the French household net wealth distribution should be adjusted when comparing net wealth with other countries and there is a wish to eliminate differences in demographic structure. The necessary adjustment differs enormously among countries. Whereas imposing the Slovakian household structure on the French distribution barely alters anything in along the distribution, employing Dutch household structure lowers the median net wealth in France by 60 percent, all else equal. Our main message therefore is that differences in household structure between two countries can be a powerful explanatory factor of household net wealth distribution, but that it is not necessarily so.

The rest of the paper is organised as follows. Section 2 describes the data sources before we delve into the descriptive part in section 3. Section 4 contains the main analysis of counterfactual distributions and the explanatory power of the differences in demographic composition, while section 5 concludes.

[5] The full set of countries consists of France, Germany, Italy, Spain, Portugal, Austria, Belgium, Cyprus, Finland, Greece, Luxembourg, Maltese, the Netherlands, Poland, Slovenia and Slovakia

2. Description of the Data

We use data from the Eurosystem Household Finance and Consumption Survey (HFCS) (see ECB, 2013 for a detailed description of the survey). The survey data consists of household assets and liabilities, net wealth, income, and measures on consumption and credit constraints, and other economic and demographic variables. It is representative (using appropriate weights) for the population of households in the countries covered. Information is available on individuals in each household but most information used in this study is at the household level. It covers a total number of over 62,000 observations of individual households from 15 European countries. A deliberate attempt was done to oversample wealthier households in order to get better precision in the estimates of wealth distribution given the well-known skewed or non-normal distribution of wealth (Davies and Shorrocks, 2000). Our main study uses data for the five countries of France, Germany, Portugal, Spain, and Italy with a total number of 37,123 observations of individual households distributed as shown in table 2.[6] The final part uses the full sample covering all 15 European countries.

Table 2. Description of data used.

Country	Number of observations	Year
Germany	3,565	2010
Spain	6,197	2008
France	15,006	2010
Italy	7,951	2010
Portugal	4,404	2010

Source: Eurosystem Household Finance and Consumption Survey (2013). Own calculations.

The Eurosystem Household Finance and Consumption Survey is a joint research effort with the central banks of the Eurosystem and the National Statistical Institutes of France, Finland, and Portugal. The survey was done between late 2008-mid 2011 in 15 countries most of which with reference year 2010. A number of quality checks of the data have been carried out by both the ECB and participating institutes themselves.

It provides detailed data on the asset and liability side of the household balance sheets, selected indicators of debt burden and financial fragility, net wealth, income distribution and some indicators on consumption (mainly food) and credit constraints. The household portfolio includes all private households, excluding people in collective households and institutional homes. The assets include real (household main residence, other real estate property, vehicles, valuables, and self employment businesses) and financial (deposits, mutual funds, bonds, publicly traded shares, money owed to the household, voluntary private pension assets, whole life insurance policies, other) assets. Wealth is collected on the household level; therefore public wealth and wealth of other sectors are not included. While private voluntary pension assets are included, occupational pension plans are *not* included and neither is the value of accrued state old age pension/social security. Debts are

[6] Data are in a multiple imputations format with 6 different samples from each country. One with the original data, including missing values and another 5 with different imputations for the missing values (see EBC, 2013b). All Stata (version 11.2) do-files are available from the authors upon request.

composed of mortgage debt and other debt such as credit lines, overdraft, credit card and other non-mortgage debts. The data also contains income measures (total income and income from assets).

For the households' income, consumption, and wealth related questions that were not or could not be answered, multiple imputations (implicates) were made to reflect the uncertainty of each imputation (see ECB, 2013 for more details). The estimated quantities and features of the distribution presented in the paper take the nature of the imputations into account.

Our main focus is on the distribution of *household* net wealth. Thus, we do not employ an equivalence scale to normalise household wealth or attempt to look at personal or per capita net wealth. The notion of household structure employed here is different (and, we argue, richer) than a mere number of people or number of adults per household.

3. Descriptive analysis

Demographics

Table 3 reveals some notable differences between countries. First, the average household size is 2.3 for whole sample but 2 "groups" of countries can be distinguished: the southern ones where the household's size is bigger than the average and the France and German set where the household's size is below the average.

If the difference in sizes can be linked with fertility rates regarding the difference between France and Germany, the fertility rates cannot explain the bigger size of households in southern countries. Taking into account the average age of the reference person in the household (the 'household head') provides a beginning of explanation: the average age is higher than the sample averages in Italy and Portugal, attesting to the reality of intergenerational cohabitation in those countries.

[Table 3 around here]

Another notable characteristic is the difference in ownership of real estate. While Spain, Italy and Portugal appear as countries of owners, France and to an even larger extent Germany appear as countries of renters. This is in line with previous studies including the ECB (ECB, 2013).

If we now consider the employment status of the reference person, table 3 shows again huge differences among countries: southern countries, with the biggest and the oldest households, have also inactive reference persons; he/she is retired in Portugal and Italy and "other not working" in Spain, likely unemployed senior worker. The reference person in a typical French or German household is an employee or is retired (one third of reference persons). The smallest size of French and German households in front of this share of retirees which is close to southern countries' share seems to indicate that – while generations cohabitate in the more southern countries – French and German cohabitation prevalence is smaller.

This is perfectly in line with the SHARE survey findings (dedicated to an in-depth analysis of the situation and behaviour of individuals aged 50 years or more) as described in Kohli et al. (2005). They

note strong differences between European countries in terms of family structures. The Mediterranean countries called – "Strong family countries" – saw strong changes in the close past: they had high fertility rates in the past and low today; on the other hand, gender equity is still at a low level, despite some evolution. Despite these slow changes, the dominant model is still that of the male "breadwinner" and of the traditional family structure. In the Mediterranean countries, authors notice a late and increasing age of leaving parental house. For instance, in France, around 22% of respondents who has at least one child declare that they leave in the same household than their child/children while this ratio is 49% in Italy and 52% in Spain. Among the oldest group, 1% of the Swedish and 23% of Italian and 34% of Spanish leave with at least one child. 4% of Spanish and 3% of Italian leave with their grand children (the percentage is null for France).

The educational status of the reference person varies a lot too. One third of reference persons have a primary education in France and in Spain, nearly one third in Italy while persons in this group are only 2% of the reference persons in Germany and while the share attains two thirds (64%) in Portugal. This most likely reflects both general difference in educational attainment and the fact that the reference person tends to be older in Portugal; indeed, when considering the 25-64 old people in Portugal, 44% of them have a primary or under primary education level (OECD, 2013).

Portugal is also the country where the share of persons who have a tertiary education is the lowest (9%) while Germany and Spain have a bit less than one third of reference persons with a tertiary education (respectively 29% and 26%).

To summarize, France and Spain have a fairly equal distribution of education between primary, secondary and tertiary while Germany appear as the most educated country and Portugal the country where the primary education is preponderant. Italy is a secondary education country according to our data. These descriptive results differ slightly from the OECD "Education at a glance" results but are in line with them (OECD, 2013), given that our sample do not describe population averages, but relates to household reference person averages.

Spain and Portugal have a high rate of home ownership. If "owner outright" and "owner with mortgage" are added, 83% of the Spanish and 71% of the Portuguese households are home owners, an enormous difference with Germany (44%) and France (55%) where cohabitation is not so ordinary. The conclusion is that cohabitation and home ownership are linked, whether cohabitation provides an incentive to be a home owner, or, being a home owner provides convenience to cohabitate.

What seems as well evident is that cohabitation is more likely to happen in modest (and modestly educated) households (in the sense that the household reference person has a low education level.

We now turn to a more detailed breakdown of household demographics by categorising each household into one of 16 different household groups based on its household structure. Specifically, we divide households along the dimensions of age (of the reference person), cohabiting status (single or cohabiting), and the presence of children. In doing this we follow Bover (2010) who report robust results from this specification. In order to justify our analysis in terms of importance of the demographic elements, we refer to table 4.

[Table 4 around here]

Table 4 first provides some elements about the population structure reflected by the ECB survey sample. The structure of the population is given by the percentage of couples with and without children for various age intervals: less than 25, 25-34, 35-55, more than 55. The mono-parental families, the share they represent in the population and – further their net wealth - are also part of the elements which are provided. The median net households' wealth for each category is provided in the columns that are at the right side of the table.[7]

At the young ages, the population structures show slight differences between countries. The salient fact is that Spain, France and Portugal exhibit more couples with children in the 25-35 years old bracket, while Spain, Italy and Portugal have more couples with children in the 35-55 years old category. Note that – according to the fact that the households' sizes do not differ so much between the countries – the fact that there are more couple with children does not say anything about the number of children in the families. France has fewer couples with children than the southern countries (and more than Germany) but has more single women and male with children. On the top of the age pyramid, Spain, Italy and Portugal still have more couple than France or Germany.

If we now consider the median net households' wealth, it appears that – except for France – data have to be taken with precaution for the youngest households because of the small number of households in some of the household groups.

Except in Germany, the median net households' wealth is bigger for couples with children than for couples without children (as table 6 will show this appears to be due to the property holding which is higher for couple with children). This is clear for the age group of 35-54 year olds and begins to appear for the 25-34 age group (not for Germany nor Portugal for this specific age group). Single persons have smaller wealth whatever is their gender but single women's wealth is lower than the one of single males. Single women with children have a smaller wealth than single women without children, except in Italy. This is in line with what was shown in table 3.

Asset holdings and demographics

We know from the ECB (2013) that there are large differences in participation rates in the different countries. The following table shows that there are large differences among demographic groups within countries (table 5).

It is useful to divide assets into real and financial assets (ECB, 2013). Real assets consist of the the household main residence, other real estate property, vehicles, valuables and assets in self-employment businesses. The category "valuables" contains the value of jewellery, antique or art. Financial wealth includes deposits, mutual funds, bonds, publicly traded shares, money owed to the household, voluntary private pension assets, whole life insurance policies, and other assets.[8]

[Table 5 about here]

[7] It is important to keep in mind that some cells in our household categorisation have few observations for one or more of the countries, and that the number of observations varies substantially across household groups. We believe this is unlikely to influence our results on the importance of demographics in any substantive way. Some robustness analysis regarding this issue is presented at the end.

[8] See ECB (2013) for a complete definition of assets included.

Considering large categories of real and financial, the most salient fact is that the German case seems to be an exception in the sample: participation in the real assets is much lower than in other countries and participation rates differ according to the household composition. If participation rate in real assets is very high in southern countries and France (where it reaches 100%), this participation rate is lower in Germany for single person households.

As a complement, the share of financial assets in total assets is higher in Germany than in the other countries and for all the household groups.

Separating within the real assets between "property", "valuables" and "assets in self employed business" allows a more precise analysis.

[Table 6 about here]

Reading table 6 horizontally shows that Spanish households hold property in the majority of households, while German households have a rather modest property rate (except for the couple with no children aged 35-55 who has an holding behaviour which is comparable to the French, Italian and Portuguese) that lead Germany to have an average rate of property ownership much lower than in the other countries.

If we now read the table vertically, the holding behaviour appears to be higher for couples with children than for couple without children of for single persons. As for valuables, the notable fact is the French households' participation rates at 100%. Italians also have a high participation rate compared with Spain, Germany and Portugal. Single households generally have lower participation rates than couples.

As for assets in self-employed businesses, participation is higher for couples with or without children aged 35-55. This is also the case at younger ages for Spanish, Italian and Portuguese households. Even for older households, participation rates are lower for German and French households. They are still high for "old" households (55 years and more) in Spain and Italy.

It is interesting to compare the median value of real asset (in '000 Euro) held by households. What stand out are the relatively high median values for the age group less than 25 years old. For all five countries the young seems to hold property with the same value as older households – conditional on owning property. This likely reflects that the young who hold property (a minority in all the five countries, except Spain) are at the top end of the income distribution, whereas for the older age groups household ownership is spread over a larger share of the income distribution (also, one should keep in mind the low number of observations for some young household groups). It is also clear that in accordance with ECB (2013) German property values are relatively low compared with Italy, Spain and France with only Portugal having smaller median property asset holdings. For all five countries and demographic groups, property holdings are the most important real asset – except for a few entries which are caused by very few observations.[9]

[Table 7 about here]

[9] Median values for assets held in self-employment businesses are not reported due to the relative small number of households participating in this asset class.

Participation rates in financial assets also show differences between countries and between demographic groups. Except in Italy, participation in liquid assets is rather high in the all sample (it reaches nearly 100% for Germany, Spain, France and Portugal while it varies between 57 and 95% in Italy).

[Table 8 about here]

Considering illiquid assets, Germany has the highest participation rates while Italy has the weakest rates. Southern European countries have the smallest participation rates with a minimum for Italy while France is in an intermediary situation. It is difficult to draw something simple about the participation rates by demographic groups: maximum are obtained for young couples without children in Germany, for single female with children in Spain, for couple with children of intermediary ages in France, for old (more than 55) couples in Italy and for single males in Portugal.

According to OECD, the share of pension fund in the GDP is around 5.5%, i.e. less than in Spain where it reaches 7.8%, like in Portugal (7.7%) and 4.9 in Italy. Despite these differences, the participation rate in pension assets is higher in Germany than in other countries and the mean financial asset holding is higher as well.

French participation rates show a strange profile: participation rate roughly increase with age but do not decrease after 55. This is due to the large proliferation of life insurance in France where there are no pension funds and where life insurance benefits from generous fiscal arrangements. In addition, individuals can close their life insurance device and have a lump sum instead of an annuity, which answers to the well-known disaffection of individuals in front of annuities compared to lump sums.

This pattern is recognisable in table 8. French holding of pension assets in euros reaches its maximum for the oldest group (which attests of the role played by life insurance as a safe, fiscally advantaged saving vector in France) while the holding of pension wealth is at its maximum for the median ages in the other countries which is consistent with the life cycle hypothesis. Single persons generally have lower amounts than couples (except for young Portuguese women with children and for young single males).

[Table 9 about here]

The median financial amount compared with the holding rate provides an idea of the distribution of the assets within the population. For example, Italian households have a low participation rate in liquid assets but the median amount is comparable to the one of the other countries.

The median amount increases with age in all the countries with a maximum for German households and a minimum for Portuguese households.

As we have seen before, Italian households have a rather low participation rate in illiquid assets. If we now consider the amount they have, the median are maximum (compared to the other countries of the sample) at each age or nearly which shows again an unequal distribution of these assets within the population of households.

[Table 10 about here]

Table 10 presents the detailed participation rates for liquid assets (for a definition of variables, see Annex C).

For the 5 countries participation rates in deposits are around 100%. There are few groups of households for which participation rates are significantly below 100%. If we focus on the groups for which the participation rates are lower than 90%, they are concentrated in Italy and Portugal. In Portugal it concerns single males older than 25 and single females above the age of 55. In Italy the very young – less than 25 years old – have participation rates below 90%, but also some groups of 25 to 35 year olds have relative low participation rates in this asset category.

If we now consider participation rates in bonds, the panorama is very different and it is worth commenting the rates that are significantly positive.

France has very low participation rates in bonds which is most probably due to the fact that fiscal devices and high participation rates in life insurance lead them to intermediate bond holding. The Portuguese and the Spanish, like the French, have very low participations rates.

High participation rates for bonds are observed for German couples (overall with no children), Spanish women with no children, Italian couples, young with no children or older (between 35 and 55) with children and, over all, Italians older than 55.

About Spanish women with no children it is worth remarking that the size of the group is rather small; when considering their median wealth (70.2 thousands euro), it is rather high comparing with the same group in other countries. For the Italian case, the high participation rate of oldest Italian is in line with the observed wealth levels.

About publicly traded shares (a group of assets which includes “over the counter” shares), France shows an opposite profile compared with bonds. The participation rate is particularly high for every age group above the age of 25 with the noticeable exception of single females with children. Rates are the highest for couples with or without children.

In Germany, like for bonds, shares are mostly in the hands of couples, with the highest participation rates for couples without children, at all ages. Spanish participation rates are the greatest for single males aged between 25 and 35 and for couples over 55. Few Italians and Portuguese hold publicly traded shares.

For mutual funds, the German households show markedly different behaviour compared to the other countries. Participation rates are particularly high for couples with no children (aged over 25), single males (also over 25) and young single females (between 25 and 35). French couples with or without children also have a high participation rates at all ages.

Young (between 25 and 35 years old) Portuguese single males have the highest participation rates and Spanish single women with no children as well, showing again this specific financial behaviour. Italians have low participation rates in mutual funds at all ages.

Liabilities and demographics

The levels of participation in debt instruments across studied countries show widely ranging levels both between the countries and between demographic groups within each of the country (Table 11). Participation in debt instruments varies from as low as 10% in case of single households of over 55 years of age in Italy to over 86% in case of Spanish younger couples (between 25 and 35) with children. The relative span is even larger in case of mortgage loans where the participation ranges from virtually nil values in case of the youngest Italian and French households to as high as 77% in case of the afford mentioned Spanish couples between 25 and 35 with children.

[Table 11 about here]

Country-wise, one third of all Spanish households have a mortgage, while only one tenth of Italian and about a quarter of French and Portuguese and about one fifth of German ones do possess such collateralised loan. There are therefore important institutional differences between the five studied countries with Spanish households at the top and Italian ones at the bottom among the five countries. There is also a clear linkage between different debt instruments as participation in mortgage credit also increases chances of taking out other type of loan; countries with more mortgage debt therefore are also more likely to take different types of smaller consumer or other types of loans.

Children are an important factor of participation in debt instruments, but their importance tends to decrease with time. The highest participation in debt instruments making reference to age groups only is among households between 35 and 55 where the occurrence of children plays a less significant role than in case of younger couples where having children is an important component influencing mostly participation in mortgage markets.

Significant liabilities of households can be a large source of either lower savings (if difficult financial situation or occurrence of high levels of debt perpetuates) or of potential higher (precautionary) savings in the long run. Although some credit and savings instruments are complementary – such as mortgage and pension savings, mostly among middle-aged couples with children, in cases of credit over-indebtedness, the debt burden can have determining repercussions on the ability of households to save. Liabilities of households are therefore intertwined with participation in and the amounts of savings.

Two specific characteristics of household liabilities have to be taken into account in considering impact on net wealth. Firstly, mortgage loans linked to an equity owned by the household is largely net-wealth neutral. Dependent on the development of the real-estate markets as the amount of collateralised debt is usually more stable than market equity price. In other words, the effects of such liabilities on net wealth largely depend on the stage of the real-estate cycle, in which households and the country find themselves. Real-estate developments in the studied countries linked with falling real-estate prices (most notably in Spain), had by definition important repercussion on household's current net wealth as the size of the mortgage liability becomes relatively higher than the market price of the property. It is also a question of the real significance of current wealth values in countries with unstable real-estate markets as individually the current price may reflect the opinion as stated in the survey, but a simultaneous clearing of the market (sell-off) might lead to massive drops

throughout the most wealthy parts of population (Chmelar, 2013). Falling prices of real estate could even be a source of negative wealth as the price of property shrinks as the liability remains the same.

As Table 11 shows, overall participation in credit products in the five studied countries varies significantly. Participation in credit markets among European households however follows by and large the same patterns demographically. This reflects household's financial life cycle as younger families tend to become gradually more indebted in early stages, culminating their liabilities during their middle-age and then increasing their net wealth and savings towards the end of their active lives. Most significantly, the financial life cycle is observable in collateralised credit (mortgage in most cases), which also in the five studied countries tends to increase with age from relatively low levels in the initial periods and culminating in the period between 35 and 55 of age and being reduced again towards lower levels in later stages of productive and unproductive life and generate higher savings and therefore net wealth.

Looking at the micro picture, although the participation in mortgage is the highest among middle-aged families (35 to 55 years of the reference person), the highest median values of mortgage debt are registered for households between 25 and 35 years of age, reflecting the average age of acquiring a mortgage. There are also marks of credit-type substitutions as relatively higher values of participation in non-collateralised credit lines among young couples, most notably in Germany, are a sign of substituting consumer credit for mortgage credit Germany, reflecting either a more complex access to it or other institutionally entrenched difficulties in acquiring a mortgage. High levels of liabilities are also not to be judged as destabilising household's financial situation as the highest the highest risk of adverse financial changes are registered among the oldest and the youngest households (Brown, Garino, Taylor, & Price, 2005).

The median values of wealth reflect at the same time the size of the mortgage, but also the division between demographic groups as high levels of median values are often accompanied by low participation. This means that in some countries existence of a specific debt instrument may not be widely spread, but users of this debt instrument tend to use it more than in other countries. This is the case of Italian households where the participation in mortgage markets is significantly lower than in any other of the studied countries, but median values remains comparable. Considering the age division of median values, it confirms the hypothesis of life-cycle that higher rates of median debt are registered among younger households and those tend to decrease with time as the savings tend to increase over the same period (see Table 12).

[Table 12 about here]

Net wealth and demographics

We now turn to the issue of distribution of net wealth among demographic groups for the five countries of interest (Table 13).

[Table 13 around here]

Table 13 provides interesting elements about the wealth dispersion within demographic groups in the countries. First, it is clear that some groups show significant interquartile ratios for various reasons. The highest interquartile ratios are those for single females or males in Spain and for single

Portuguese males, but it should be kept in mind that the sample size is small for some of these groups (see table 3). The same holds for Spanish single females with children aged between 25 and 35.

Now, it is worth considering the data for Germany which show huge interquartile differences for single females aged 35-55 and – less – for single males aged more than 55. The same remarks hold for the mean-median ratio. The German ones show significant differences for single persons aged 35-55. The last five columns of table 13 represent the ratio of the share of wealth held by a specific household group (still characterized by age-family structure) to the share this household group represents in the whole sample (population of households).

These data confirm the above remarks: in Germany, couple aged 35-55 concentrate more than their weight in terms of wealth, in France couple with children in the same tier of age as well, and in all the countries, couple aged more than 55 concentrate between 1.4 times and 1.8 times their weight, the maximum being in France and Germany. This is likely due to the importance of "private voluntary pensions and whole life insurance" that French and German households hold in their financial portfolio (ECB, 2013).

Because of the significant concentration of these "private voluntary pensions and whole life insurance" in the older, likely retired households group (with less cohabitation than in the southern countries, see above), it is likely that the counterfactual analysis will show significant differences when applying the French demographic structure to southern countries with different family structure and ageing population.

4. Counter factual analysis

The counterfactual analysis takes as a starting point French household structure as a benchmark and applies it to other countries. In effect the result is a comparison between wealth distributions or participation rates if all the countries had the same household structure as the one which is present in France (household structure is netted out). This counterfactual exercise helps to understand of how much of wealth distribution is due to demographics. This is followed by an exercise where we apply to France the household structure of the four other countries which will show how the features of the French distribution would change applying different countries' household structure. The result tells us something about the role demographic structure plays when comparing moments of the French distribution with that of other European countries.

Methodology

We generate counter-factual distributions of net-wealth for the European household in each of the four different countries, France being a benchmark following Bover (2010).

The principle can be described as follows. The empirical wealth distribution for a country X can be written, assuming that we consider J types of households (or generally population groups), denoted j:

$$\hat{F}_X(r) = \hat{\Pr}_X(w \le r) = \sum_{j=1}^{J} \hat{\Pr}_X(w \le r | z = j) \cdot \hat{\Pr}_X(z = j)$$

Let's consider a second country, Y.

$$\hat{F}_Y(r) = \hat{\Pr}_Y(w \le r) = \sum_{j=1}^{J} \hat{\Pr}_Y(w \le r | z = j).\hat{\Pr}_Y(z = j)$$

The difference in the wealth distribution (between the 2 countries) is the following one:

$$\hat{F}_Y(r) - \hat{F}_X(r) = \underbrace{\sum_{j=1}^{J} \left[\hat{\Pr}_Y(w \le r | z = j) - \hat{\Pr}_X(w \le r | z = j)\right].\hat{\Pr}_X(z = j)}_{I} +$$

$$\underbrace{\sum_{j=1}^{J} \hat{\Pr}_Y(w \le r | z = j).\left[\hat{\Pr}_Y(z = j) - \hat{\Pr}_X(z = j)\right]}_{II}$$

The first part of the former equation (I) can be assigned to the difference between the conditional distribution of wealth in the two different countries and the second part (II) is to be assigned to the difference between the populations (households) groups.

In detail, (I) is obtained by subtracting $\hat{F}_X(r)$ from an artificial conditional distribution of the second country with the first country population structure.

Denoting:

$$F_Y^C(r) = \sum_{j=1}^{J} \hat{\Pr}_Y(w \le r | z = j).\hat{\Pr}_X(z = j)$$

$F_Y^C(r)$ is the counterfactual distribution of Y, i.e. the wealth distribution in the country Y with the X country population structure. This estimate will be used in the following developments of the study in order to mimic the wealth structure of the considered countries (i.e. Germany, Spain, Portugal, Italy and France) if they had the demographics of a specific country. This provides a convenient non parametric estimate in order to isolate the demographic contribution of the wealth distribution. The same principle applies to the analysis of counterfactual participation rates, that is, the participation rates in different asset classes had a given country had the same household structure as France.

Before we turn to counterfactual wealth distributions, we look at the extent to which participation rates are affected by household demographic structure.

Differences in participation rates and the influence of household structure

Table 14 provides the differences in participation rates between the four countries and France and within these differences those that are attributable to households' structure. Largest differences in participation rates are differences affecting property and pensions: property rates are particularly

low in Germany compared with France and pension wealth is particularly high in France compared with southern countries as a result of life insurance in France. For Germany, the opposite is observed, i.e. private pensions are more frequent in Germany than in France. Having wealth in self-employment businesses is more usual in Spain and Italy as already observed.

For liquid assets, Italian households have more bonds and less publicly traded shares. Portuguese have also a low level of publicly traded shares.

The difference between participation rates due to households' structure show that the main part of differences in liquid asset holding is due to other factors than demography as fiscal or institutional devices. An exception is noticed for Italian bonds which are held in a large part by the oldest Italian (table 10). Because fiscal rules are the same at all ages this success can be very prudently attributable to the high rate of return of Italian bonds and/or to a altruistic attitude of Italian households aware of the high level of public debt but a remaining part is attributable to the households' structure i.e. the large part of retirees in the sample (39%) compared with the other countries.

Spanish, Portuguese and Italian self-employment business participation rates are also increased by the households' structure: Italian and Portuguese are more self-employed than the other countries while Spain has the highest rate of not working persons (see table 3) which implies a high rate of self employed within the active population.

The main differences which can be linked with households' structure are the differences in property rates in the southern countries. This seems to be completely in line with the cohabitation habits in these countries where the households' size is greater than for Germany and France despite a low fertility rate compared to France. Table 3 also shows important differences between the ages of reference persons in the households with particularly old ages in Spain, Italy and Portugal where the reference person is a home owner and more often a retired or a not working person. The phenomenon seems to be particularly noticeable for Portugal where the difference explained by demography represents nearly half of the overall difference in property participation rate. There is likely a link between cohabitation and property ownership but the direction of causality is not evident.

Overall, household demographic structure most often explain less than 10% of the observed differences with the notable exception of Italian and Portuguese home ownership, where household structure explains one-third and 40%, respectively. The difference between the propensity to hold bonds in France and Spain is also to some extent due to household structure, which explains 15% of the observed differences.

This picture of relative minor effects of household structure on participation rates in different asset classes also holds when comparing France to the other 10 countries in the survey, as is evident for Annex A.

Differences in actual wealth distributions

Before we examine counterfactual wealth distributions, we first note some differences in the true distributions (Figures 1a and 1b)

[Figure 1a around here]

[Figure 1b around here]

A first thing to note is the significant proportion of households with negative or close to zero net wealth. Close to 25% of households in France, Germany and Portugal have very little net wealth. This proportion is smaller in Italy and the lowest in Spain.[10] Secondly, it is clear that distributions of net wealth do differ between the studied countries. As an example, the medians differ markedly between France and, respectively, Germany, Spain and Portugal – and to a smaller extent Italy. The same is the case with the differences in net wealth at the 75th percentile for France and Portugal and Germany, respectively. The distributions of Portugal and France 'cross' around the 40th percentile. Thus, while the median French household is wealthier than the Portuguese median household that is not the case when looking at the 30th percentile. It is also worth noting that at the very top end of the distribution (the top 1.5% of the distribution, not shown in Figure 1b) the French and German cumulative distribution curves cross so that net household wealth at the 99th percentile is 150,000 EURO higher in Germany than in France. Even if this concerns only a small part of the distribution, it has a large impact on the difference in average household wealth, as also shown in ECB (2013). This is consistent with the finding of Germany as a relatively wealth unequal European country.

Figures 1a and 1b also illustrate that the central parts of the distribution are estimated with high precision. This makes it more likely that observed differences are true and not due to sampling variance within the countries.

Differences in distributions between France and the other countries are statistically significant across large parts of the net wealth distributions, although this is not the case in the tails (Figures 2a and 2b).[11] This holds for all four countries compared with France.

[Figures 2a and 2b around here]

The difference between the French and the German distributions turn significant at around the 20th percentile with the difference roughly increasing until the 96th percentile where differences also turn insignificant (top four percentiles not shown in graphs). As mentioned above, the difference turns negative between 98th and 99th percentile, but even if large in absolute value this negative difference is not significant in a statistical sense. The difference between Spain and France is rather stark, with Spanish net wealth higher at almost all parts of the distribution (although one should keep in mind that the data from Spain is from 2008). The same is the case for the comparison with Italy, but with differences smaller in absolute magnitude.

Finally, the difference between France and Portugal is estimated with tight confidence interval. Around the 20th percentile the difference turns negative and stays so statistically significant until the reversal around the 40th percentile. French households are increasingly better of regarding net wealth when comparing the upper end of the two distributions.

[10] Here it is important to keep in mind that the Spanish data set dates back to 2008 and therefore – given – the fall in house prices might not give an accurate picture of the situation in 2010 when the other data sets were collected.

[11] Top ends of the distributions are not shown for readability. They tend to be less precisely estimated than the central parts of the distribution.

Differences in counterfactual wealth distributions

We now investigate to what extent the net wealth distributions in Germany, Spain, Italy and Portugal are sensitive to a change in demographics resembling the one prevailing in France. Figures 3a and 3b are similar to figures 1a and 1b above, but also show the counterfactual distribution for the four countries together with their 'true' distributions and the one of France. The counterfactual distribution being the one which would theoretically prevail had the country had the same demographic structure as the one in France.

[Figures 3a and 3b around here]

The first thing to note is that counterfactual and true distributions are somewhat similar. This is particularly the case for Spain and Germany, while there is more movement in the curves from Italy and Portugal. For Germany the two curves are situated more or less on top of each other, whereas for Spain the difference is visible. The Spanish counterfactual shifts the distribution towards the French one for most percentiles but not by very much. This makes it clear that in some cases, i.e. for Germany in particular but also for Spain, the differences may be due to noise (or sampling variance) – that is, not statistically significant.

The situation for the Italian counterfactual is similar to the one for Spain, but here the shift in the curve is more marked. The Portuguese case is interesting. It seems that the true differences for the first part of the distribution, until around the 35th percentile, are due entirely to demographics. However, from there on adjusting for demographic differences shifts the Portuguese distribution further away from the French one.

Distributions and counterfactuals for the other 10 countries in the survey can be found in Annex B.

Figure 4 illustrates to what extent observed differences between true and counterfactual distributions are significant. The graphs show the difference between counterfactual distributions and true distributions with 95% confidence interval.

[Figure 4 around here]

As expected from looking at figure 3a the difference between counterfactual and true distribution is not significant for Germany. The differences are also small numerically, in the order of less than 5,000 Euro for most of the distribution. For the other three counterfactuals there are significant differences for almost the entire distribution, except to a smaller or larger extent in the tails. This is true for even for Spain where the counterfactual was relatively close to the true distribution (Figure 3a).

From Figure 4 it is clear that demographics have a significant effect on the net wealth distribution of three of the four countries studied relative to France. However, Figure 4 does not tell us whether netting out household structure makes the distributions more similar or if counterfactual distributions are actually moving further away from the true French distribution. We now turn to addressing this question; to what extent do these demographic differences explain observed differences in the true distributions.

Table 15 expresses the share explained by demographics of the difference between the distributions

of net wealth in France and respectively Germany, Spain, Italy and Portugal at various points of the distribution. For each of the countries the column 'Diff to FR' gives the total difference in net wealth between the country in question and France in '000 Euro at different points of the distribution. The first two columns show the true distributions at the 5th percentile for respectively France and Germany. French households hold net wealth of 2,000 Euro more than German households (at 5th percentile) as can be seen in the third column. This increases (for the entries in the table) all the way to the 95th percentile where the total difference is 114,200 Euro. The next column, column four, shows how much differences in demographic structure – in '000 Euro – explain of the true differences in distributions. In this case 300 euro out of the 2,000 total difference. Staying in column four, we note that for the first half of the distribution differences in household demographics play a very small role at least in absolute terms. This is the equivalent of the German true distribution and counterfactual distribution being almost indistinguishable in Figure 4. Column four also indicates if the observed difference from netting out demographics is statistically significant. Column five details how much (in percentage terms) of the total true difference between the German and the French distributions is due to differences in household demographics. A positive entry indicates that the counterfactual distribution is 'moving towards' the French distribution. A negative entry reveals that the gap between distributions grows larger once household structure differences are accounted for.

The results in table 15 shows clear differences in how much demographics can explain of distributional differences. The German case shows a negligible and insignificant difference between the counterfactual and the true distribution while Spain and – over all – Portugal show rather important and negative difference for the lowest percentiles and Italy shows positive differences that increase with the wealth percentile.

As mentioned, in line with the results from figure 4, it is evident that household structure has weak explanatory power when it comes to the differences in distributions of household net wealth between Germany and France. Between the 10th and 75th percentile applying counterfactual demographic structure changes the German distribution very little - and insignificantly also in a statistical sense. In the upper tail of the distribution, at 90th and 95th percentile, the counterfactual move further away from the French distribution. Thus, while household structure seems to matter to a small extent for the wealthier households, netting it out, amplifies the difference between Germany and France. However, none of these observations are statistically significant.

[Table 15 around here]

Where results are significant Spain conforms to expectations (given figure 2a) and household demographics explain between 9 to 64 percent of the differences (where statistically significant) at various points of the distribution. At the median household structure is able to explain away 6,000 Euro of the 66'900 Euro difference. Looking at the 10th percentile a full two thirds of the difference is due to different household structures.

For Italy the role of demographics is even starker. Here household structure is able to explain more than 50% of the differences overall. Except from the difference at the 5th percentile, the results are significant for the part of the distribution reported. At the 95th percentile almost 90% of the close to 80'000 Euro difference is due to differences in household characteristics.

As was already evident from Figure 3 the Portuguese counterfactual shifted towards the French distribution for the percentiles between the 20th and 35th but then diverged further away from the French distribution. This is also clear from Table 15. The counterfactual for the 25th percentile move very close to the true French distribution - and in fact household structure more than fully explains the difference between the two observed distributions. At the median, however, accounting for differences in household structure widens the gap with almost one third. Qualitatively, the story is the same at the upper half of the distribution. This is not unlike the complicated picture depicted in Bover (2010) in a comparison between Spain and the US.

The importance of household structure for net wealth distribution comparing France and the remaining 10 countries in the survey is presented in Annex D. The results resemble those from the four focus countries. In comparison with Belgium, Luxembourg and the Slovak Republic household structure plays a very limited role at all percentiles considered. A more blurred picture arise in the case of Austria, Greece, the Netherlands and Slovenia, where at certain points of the distribution demographic structure is important in explaining differences among France and the countries; whereas at other points differences are enhanced when taking household structure into account. Finally, when comparing France with Cypress, Finland and Malta, household structure plays an important and consistently large role in explaining the differences among countries.

Robustness check

The division of households into 16 distinct groups based on their demographic structure was influenced by Bover (2010) who reports good results using the same split of households as applied in this study. However, some of the groups contain a large percentage of households and it is of interest to investigate the robustness of our results to changes in the grouping of households. In the following we focus on the group of couples aged between 35 and 55 with children (see table 4) and the group of couples aged above 55. These two groups account for 42% of the household population.

The group of couples aged 35 to 55 years old with children is split into three groups depending on the number of children, namely one, two or three and more children. This creates an additional two groups. We do the same for the group of couples above the age of 55 years old. An additional three household groups are created; one for three member families, one for four member families and one for five and more family members. These operations result in a total of 21 household groups more evenly divided than before.

There are no qualitative changes to the results from this exercise. Plotting the counterfactual based on the 16 groups in the same graph as the counterfactual based on the 21 household grouping gives two lines basically on top of each other.

Table 16 shows the percentage difference between the two counterfactuals at certain points of the distribution.

[Table 16 around here]

Only at the 10th percentile for the Spanish counterfactual distributions is there a substantial discrepancy. All the other differences are less than six percent with a majority of cells within 1%. For Spain using the alternative counterfactual would mean that household structure explains even more

of the difference than the 64% reported in table 15. Household differences would explain closer to 85% of the differences between the French and Spanish net wealth distributions.

Overall we conclude that our results are not very sensitive to the choice of household categories.

Counterfactual French distributions

Here we focus on what the French distribution would look like when having other countries characteristics (table 17, Panel A). As a consequence the results provide what could be labelled an adjustment factor if one wants to compare the French distribution with that of another country, netting out differences in household demographics.

The first data column in table 17 shows some points on the true French distribution in '000 Euro. The following columns then show the same points of the French distribution under the assumption of France having the same household structure as the country in the heading of the column. As an example, the median French household would have a net wealth of 144'000 Euro if France had the household structure of Spain. This would move France much closer to the Spanish distribution, which is the mirror image of the finding in table 15, where the Spanish distribution moved closer to the French one when applying French household structure to the Spanish distribution.

Panel B details the adjustment factor for each country and each presented point in the distribution. Continuing with the previous example, a comparison of the median net household wealth of Spanish and French households should add 41,000 Euro to the observed French median of 116,000 Euro in order to adjust for differences in the household structure. By a similar token when comparing the median of Dutch and French households' net wealth, 2,400 Euro should be subtracted from the observed French median in order to level the household structure. Panel C reports the adjustment factors as percentage of the original French distribution (column 1, Panel A).

It is important to note that table 14 does not tell us how much demographics explain the observed differences in distributions. As was the case for some parts of the distribution with Portugal above, the adjustment factor might move the distribution in the 'wrong direction' – or it might over explain the difference (or move 'too far'). It merely says whether there is a role for household structure when comparing distributions. The main message from this analysis is that one has to be very careful in accounting for demographic structure when comparing household net wealth distributions of some European countries, whereas in other cases it does not matter much.

5. Conclusion

Distributions of net household wealth differ starkly among euro-zone countries. There are large differences in wealth stemming from real estate and from private or occupational pension schemes. This has already been well documented by the ECB. Direct comparisons of net wealth distributions and moments hereof among countries should be carried out with caution due to a number of forces which impact on the accumulation of wealth. Among these are cultural differences, differences in social security, in particular when old, affecting incentives to save, differences in capital and real

estate markets, and, differences in household structure.

We have focused on the latter part in this paper for a number of reasons. Firstly, household structure is to a first approximation likely to be exogenous to household net wealth, at least for the countries we compare. That is, accumulation of wealth only affects household formation with a second order effect. Thus, we hope to identify differences driven by household structure alone. This is also the reason we have not considered the explanatory effect of the propensity to own real estate. Ownership of own dwelling can influence wealth accumulation through various channels, not least through the behavioural effect of paying down a mortgage, but property ownership is not exogenous to net wealth which complicates the exercise considerably.

Secondly, one of the repeated arguments heard when comparing household wealth across countries, is that it is very difficult because of differences in demographic structure. It is therefore of interest to see if this is borne out in the new Eurosystem Household Finance and Consumption Survey. Our analysis confirms that it is – for some country comparisons.

We quantify the share of the difference in net wealth distributions that can be attributed to differences in household structure in the comparison of France vis-a-vis, respectively, Germany, Spain, Italy and Portugal. Our analysis establishes that for some country differences, household structure will explain more than half the difference at several key points of the distributions. This is the case for the comparison between France and Italy and to a smaller extent between France and Spain. In comparing France and Germany differences in household structure play no role. The comparison between Portugal and France is more complicated, showing parts of the distribution where household structure explains away all the difference. In other parts of the Portuguese distribution, applying French household structure actually move the Portuguese distribution of net wealth further away from the one of France. These results are very robust to changes in the classification of household structure.

The mirror to applying French household structure to other countries is to analyse what would happen to the French distribution of net wealth had it had a demographic structure of another country. We do this exercise for all 15 countries involved in the survey, and from this derive country specific adjustment factors which should be applied to the French distribution when comparing with a given country. The results confirm the more detailed analysis for France compared to Germany, Spain, Italy and Portugal, and suggest that demographic structure is sometimes hugely important (as when comparing the Spain, Italy or Portugal with France), and at other times negligible (as in a comparison between France and Slovakia).

Our findings show that caution is needed in both dismissing any difference in distributions as generated by different demographic structures, and, in comparing countries without taking differences in household structure into account. An interesting further avenue for research would be to investigate to what extent the results presented here would hold up if accrued social security wealth *and* occupational pension plans together with the implicit value of health care were taken into account.

References

Arrondel, L., Masson, A., 2003, « Le patrimoine et ses logiques d'accumulation », Delta-CNRS Working paper, N° 2003-06

Arrondel, L., Masson, A. Verger, D., « Préférences de l'épargnant et accumulation patrimoniale : Les comportements de l'épargnant à l'égard du risque et du temps », *Economie et Statistique*, 2004, n° 374-375, 9-19.

Arrondel, L., Masson, A., 2007, *Inégalités patrimoniales et choix individuels*, Economica, Paris

Arrondel, L ., Masson, A., "La crise, le risque et l'épargnant", *Risques*, 2011, n° 85, 65-75.

Banks, J., R. Blundell and J. P. Smith (2003). "Understanding differences in household financial wealth between the United States and Great Britain", *The Journal of Human Resources*, 38 (2), pp. 241-279

Bover, O., C. Martinez-Carrascal and P. Velilla (2005). "The wealth of Spanish households: a microeconomic comparison with the United States, Italy and the United Kingdom", *Economic Bulletin*, July, Banco de España.

Bover, O., 2008. Wealth Inequality and Household Structure: US vs. Spain. SSRN Electronic Journal. Available at: http://www.ssrn.com/abstract=1093617.

Bover, O., 2010. Wealth Inequality and household structure: U.S. vs. Spain. *Review of Income and Wealth*, Vol. 56(2), pp. 259–290.

Brown, S., Garino, G., Taylor, K., & Price, S. W. (2005). "Debt and Financial Expectations: An Individual- and Household-Level Analysis", *Economic Inquiry*, *43*(1), 100–120.

Cagetti, M. and M. De Nardi, (2006). "Wealth Inequality: Data and Models," NBER Working Paper 12550.

Cairns, D., (2011). "Youth, precarity and the future : undergraduate housing transitions in Portugal during the economic crisis", *Sociologia*, Problemas de praticas, 66.

Chiuri, M. and Jappelli, T. (2010). Do the elderly reduce housing equity? an international comparison. *Journal of Population Economics*, 23(2):643–663.

Chmelar, A. (2013). "Household Debt and the European Crisis", *ECRI Research Reports,* (13).

Christelis, D., Georgarakos, D., & Haliassos, M. (2013). Differences in portfolios across countries: Economic environment versus household characteristics. *Review of Economics and Statistics* 95:1, 220-236.

D'Alessio, Giovanni, Romina Gambacorta, Giuseppe Ilardi (2013). 'Are Germans poorer than other Europeans? The principal Eurozone differences in wealth and income', VoxEU, May. Available here: http://www.voxeu.org/article/are-germans-poorer-other-europeans-principal-eurozone-differences-wealth-and-income

Davies, J. and Shorrocks, A. (2000), "The Distribution of Wealth", in A. B. Atkinson and F. Bourguignon

(eds.), *Handbook of Income Distribution*, Vol. 1: 605-675. Amsterdam: North-Holland

ECB. (2013), The Eurosystem Household Finance and Consumption Survey. ECB Statistics Paper Series, No. 2, April 2013.

ECB. (2013b), Using the HFCS with Stata. ECB Household Finance and consumption survey technical series, Version 1.4, July.

European Commission, 2012, The 2012 ageing report: economic and budgetary projections for the 27 EU member states (2010-2060), European Economy 2/2012, May, Brussels.

Fornero, E., Monticone, C., 2009, Adequacy of households' savings and financial literacy: challenges from pension reforms, in Adequacy of Saving for Old-Age in Europe, Elsa Fornero, Annamaria Lusardi and Chiara Montecone, prepared for the Forward Look Project "Ageing, Health and Pensions in Europe", European Science Foundation (2009)

Knight F.H. (1921),Risk, Uncertainty and Profit, Houghton Mifflin, New-York.

Kohli, M., Künemund, H., Lüdicke, J.(2005), Family structure, proximity and contact, in Health, Ageing and retirement in Europe: First result from Survey of Health, Ageing, Retirement in Europe. Borsch – Supan, Brugiavini, Jürges, Mackenbach, Siegrist and Weber ed. Mannheim Research Institute for the Economics of Aging (MEA), april 2005.

Modigliani, F. and Brumberg, R. (1954), Utility analysis and the consumption function: an interpretation of cross-section data, in Post Keynesian Economics, pp. 388-436, K.K. Kurihara (ed.), Georges Allen and Unwin, London.

OECD (2013), *Education at a Glance 2013: OECD Indicat*ors, OECD Publishing.

OECD (2012), *Pension outlook,* OECD Publishing

Poterba, James, Steven Venti, and David Wise (2011). "The Composition and Drawdown of Wealth in Retirement," *Journal of Economic Perspectives*, 25(4), 95-118.

Poterba, James, Steven Venti, and David Wise (2012). "Were They Prepared for Retirement? Financial Status at Advanced Ages in the HRS and AHEAD Cohorts," in D. Wise (ed.) *Investigations in the Economics of Aging*. Chicago. University of Chicago Press, 21-69.

Reher, D. S. (1998). "Family ties in Western Europe: persistent contrasts", *Population and Development Review*, 24 (2), pp. 203-234.

Sierminska, Eva and Karina Doorley (2012). Decomposing household wealth portfolios across countries: An age-old question? CEPS/INSTEAD Working Papers No. 2012-32.

Table 3. Descriptive statistics, 2010 (2008).

	France	Germany	Spain	Italy	Portugal	Total
Average HH size	2.2	2.0	2.7	2.5	2.7	2.3
Housing status (%):						
Owner outright	38	26	56	59	47	41
Owner with mortgage	17	18	27	10	24	17
Renter	45	56	17	31	29	41
Avg. age of reference person	52	52	53	56	55	53
Work status of reference person						
Employee	47	47	41	38	41	44
Self-employed	8	7	8	11	10	8
Retired	34	30	21	39	36	32
Other Not Working	11	17	30	12	12	16
Education of reference person:						
Primary/no education	32	2	31	26	64	22
Secondary	45	69	39	63	27	56
Tertiary	23	29	26	11	9	23

Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 4: Selected statistics on the 16 demographic household groups

	Proportion of population (%)					Number of observations in the sample					Median net household wealth (EUR thousands)				
	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal
Age < 25															
Couple	1	1	1	0	1	29	19	90	16	26	3.7	5.5	7.9	9.0	4.2
Single Male	2	0	1	0	0	55	11	98	25	11	6.2	186.8	5.0	33.5	1.5
Single Female	2	0	2	0	0	52	19	128	18	13	1.2	1.4	2.8	108.0	2.7
25 ≤ age < 35															
Couple, no children	3	3	4	2	2	91	81	272	84	60	24.6	50.0	24.1	57.8	46.8
Couple, children	4	7	6	3	5	106	135	576	180	144	22.4	105.2	42.7	67.5	27.4
Single male	4	2	3	2	1	82	64	246	98	49	13.3	128.6	13.1	9.2	31.5
S female: no children	3	1	2	1	0	62	40	160	76	31	11.9	70.2	17.9	19.5	6.1
S female: children	1	0	1	0	0	20	13	128	22	16	0.0	5.4	3.9	15.0	2.6
35 ≤ age < 55															
Couple, no children	5	4	3	3	2	203	137	347	182	94	114.2	148.6	116.1	127.0	66.4
Couple, children	13	21	15	19	22	464	930	2,309	1,272	723	97.8	193.6	183.6	180.6	80.2
Single male	6	3	5	3	2	111	167	526	231	84	26.5	182.4	31.7	110.0	51.2
S female: no children	3	2	2	3	1	59	102	238	185	58	8.9	131.7	31.2	51.0	51.2
S female: children	2	3	4	2	2	64	119	483	141	107	5.7	118.9	9.7	92.2	17.8
Age ≥ 55															
Couple	27	31	27	36	38	1,522	2,817	5,732	3,309	1,828	161.7	267.0	259.5	244.0	103.4
Single male	10	6	8	6	5	261	497	1,143	568	307	53.0	175.4	120.3	152.7	68.0
Single female	15	15	18	17	17	382	1,046	2,530	1,544	853	23.9	152.5	103.1	120.0	50.7
Total	100	100	100	100	100	3,565	6,197	15,006	7,951	4,404	51.4	182.7	115.8	173.5	75.2

Notes: In percentages 0 stands for less than 0.5% and 0.0 in thousands of euros stands for less than 50 euros. Columns may not sum to total due to rounding.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 5: Participation rates in real and financial assets, and share of financial assets in total asset portfolio (by demographic group)

	Participation rate in real assets (%)					Participation rate in financial assets (%)					Mean share of financial assets in total assets (%)				
	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal
Age < 25															
Couple	90	84	100	92	83	100	100	100	57	98	59	18	57	15	31
Single Male	68	79	100	91	38	100	100	100	86	94	71	31	54	34	77
Single Female	56	62	100	100	43	100	100	99	69	100	69	35	60	18	73
25 ≤ age < 35															
Couple, no children	82	99	100	100	93	100	100	100	95	99	51	15	46	16	20
Couple, children	85	97	100	99	95	100	97	100	88	98	49	9	27	15	24
Single male	57	95	100	90	85	99	97	100	89	97	70	30	46	31	47
S female: no children	66	84	100	97	77	100	100	100	95	98	66	25	46	26	35
S female: children	40	96	100	81	62	100	96	100	79	100	77	8	38	19	55
35 ≤ age < 55															
Couple, no children	97	95	100	98	86	100	98	98	94	92	35	19	26	20	27
Couple, children	97	98	100	100	96	100	99	100	95	99	33	11	21	13	16
Single male	74	94	100	98	81	100	100	99	93	82	63	17	34	22	24
S female: no children	65	77	100	93	78	100	100	100	86	98	61	30	44	25	36
S female: children	56	89	100	94	78	100	100	99	93	96	75	18	37	22	33
Age ≥ 55															
Couple	93	98	100	99	95	100	98	100	95	96	36	12	22	13	20
Single male	76	93	100	96	85	96	97	99	90	86	50	18	33	20	23
Single female	63	92	100	96	78	99	97	100	86	87	57	14	36	18	29
Total	80	95	100	98	90	99	98	100	92	94	48	14	31	16	23

Notes: 0 stands for less than 0.5%. Real assets: Household residence, other real estate property, vehicles, valuables (jewellery, antique or art), and asset in self-employment business. Financial assets: deposits, mutual funds, bonds, publicly traded shares, managed accounts, money owed privately, other financial instruments, private pension plans and whole life insurance policies (see Annex I in ECB (2013) for complete definitions).
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 6: Detailed participation rates in real assets (by demographic group)

	Property (%)					Valuables (%)					Assets in self-employment business (%)				
	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal
Age < 25															
Couple	8	59	11	13	15	90	84	100	92	81	0	0	4	20	4
Single Male	13	60	8	47	12	67	63	100	85	32	5	0	0	8	0
Single Female	12	49	1	63	17	56	56	100	97	38	6	2	1	8	6
25 ≤ age < 35															
Couple, no children	32	66	34	48	62	75	96	100	100	87	14	23	9	24	16
Couple, children	31	84	53	52	59	84	95	100	97	92	2	22	13	23	8
Single male	9	60	26	31	40	56	90	100	87	79	4	4	8	20	0
S female: no children	20	57	27	44	51	59	79	100	92	51	2	0	11	27	6
S female: children	16	34	16	38	25	30	68	100	81	56	0	0	3	13	0
35 ≤ age < 55															
Couple, no children	65	77	62	55	64	93	87	100	98	77	22	23	14	27	7
Couple, children	65	88	75	72	80	94	95	100	99	90	16	20	18	27	11
Single male	27	81	44	60	61	70	82	100	93	72	6	23	12	21	13
S female: no children	33	68	38	53	58	63	66	100	91	59	2	4	4	15	0
S female: children	18	74	32	56	58	52	71	100	94	62	6	7	6	12	7
Age ≥ 55															
Couple	71	94	84	85	84	89	86	100	97	82	11	15	11	19	9
Single male	53	87	63	78	77	66	63	100	89	64	10	9	5	10	4
Single female	43	88	59	70	70	41	45	100	90	37	3	3	1	6	1
Total	49	86	61	72	75	73	79	100	95	74	9	14	9	18	8

Note: 0 stands for less than 0.5%. Property: household residence, other real estate property. Valuables: vehicles. jewellery, antique and art.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 7: Detailed median real asset holding conditional on participation (by demographic group), '000 Euro.

	Property					Valuables				
	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal
Age < 25										
Couple	380	138	116	180	90	3	4	2	8	4
Single Male	296	246	158	200	125	2	13	1	7	10
Single Female	259	469	160	250	60	2	15	1	4	3
25 ≤ age < 35										
Couple, no children	150	191	183	200	150	10	9	4	12	15
Couple, children	198	173	192	200	99	6	9	5	11	5
Single male	70	205	130	219	88	6	7	2	5	4
S female: no children	164	238	127	200	99	7	6	3	8	4
S female: children	100	284	112	260	120	4	5	2	5	3
35 ≤ age < 55										
Couple, no children	200	182	229	230	114	10	7	5	11	8
Couple, children	200	216	252	220	110	8	10	6	12	6
Single male	180	214	158	200	100	7	5	3	8	4
S female: no children	92	193	162	190	114	3	4	2	6	8
S female: children	150	204	181	200	100	2	5	3	7	5
Age ≥ 55										
Couple	200	244	249	250	100	10	8	6	11	5
Single male	130	180	169	170	87	6	4	3	6	3
Single female	147	169	155	180	75	5	4	3	4	4
Total	180	210	211	200	100	8	7	4	10	5

Notes: 0.0 in thousands of euro stands for less than 50 euro. Property: household residence, other real estate property. Valuables: vehicles. jewellery, antique and art.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 8: Detailed participation rates in financial assets (by demographic group)

	Liquid (%)					Illiquid (%)					Pension (%)				
	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal
Age < 25															
Couple	100	100	100	57	98	11	12	11	0	9	57	9	22	21	8
Single Male	100	100	100	86	94	18	18	5	2	0	38	20	13	10	0
Single Female	100	100	99	69	100	35	0	3	4	23	32	0	8	24	0
25 ≤ age < 35															
Couple, no children	100	100	100	95	99	42	9	17	9	4	64	20	37	19	20
Couple, children	100	97	100	88	98	20	12	9	3	9	59	14	34	23	14
Single male	99	97	100	89	97	21	9	10	1	11	59	15	21	8	15
S female: no children	100	100	100	95	98	24	3	8	1	10	64	21	32	9	19
S female: children	100	96	100	79	100	21	0	9	6	13	55	20	26	7	10
35 ≤ age < 55															
Couple, no children	100	98	98	94	92	23	11	11	2	13	72	38	43	30	19
Couple, children	100	98	100	94	99	16	11	14	5	12	76	33	43	28	21
Single male	99	100	99	92	81	33	9	15	4	16	58	21	28	28	16
S female: no children	100	100	100	86	98	29	5	10	7	8	43	17	31	26	18
S female: children	100	100	99	90	95	21	9	11	4	10	65	17	31	20	19
Age ≥ 55															
Couple	100	98	100	95	96	23	7	14	6	8	41	27	47	17	14
Single male	96	97	99	90	85	24	6	15	6	7	24	19	36	13	8
Single female	98	97	100	86	86	17	3	9	3	4	19	12	33	5	6
Total	99	98	100	92	94	22	8	12	8	8	47	24	37	18	14

Note: 0 stands for less than 0.5%. Liquid assets: deposits, mutual funds, bonds, publicly traded shares, managed accounts. Illiquid assets: value of non-self employment private businesses, money owed to the household, other assets. Pension: voluntary pension savings and whole life insurance products.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 9: Detailed median financial asset holding conditional on participation (by demographic group), '000 euro

	Liquid					Illiquid					Pension				
	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal
Age < 25															
Couple	0.9	0.1	3.0	4.5	0.8	0.5	0.9	6.7	..	0.7	1.5	0.4	1.4	0.3	1.8
Single Male	2.7	1.7	2.0	4.7	0.3	1.5	1.5	1.2	10.0	..	5.8	4.5	1.1	4.2	..
Single Female	0.9	1.1	1.9	1.5	1.2	0.9	..	1.0	1.5	0.3	1.9	3.6	0.7	10.6	..
25 ≤ age < 35															
Couple, no children	5.4	4.6	8.4	5.2	5.5	0.9	6.0	2.0	7.4	2.6	4.1	2.3	2.0	3.0	2.1
Couple, children	5.3	2.0	4.6	4.2	1.7	1.0	2.6	2.1	6.0	5.0	4.2	2.8	2.2	9.7	1.8
Single male	2.6	12.0	3.3	3.5	8.6	0.5	1.2	1.8	1.8	8.0	5.2	6.5	3.5	8.0	15.0
S female: no children	5.7	4.2	5.9	5.0	1.3	0.6	0.3	1.8	1.8	2.0	4.9	7.0	1.7	14.9	1.8
S female: children	0.1	1.0	0.7	1.1	0.5	2.5	..	1.5	1.5	1.0	2.8	3.3	1.1	0.2	4.0
35 ≤ age < 55															
Couple, no children	12.0	4.0	6.9	5.1	2.8	5.5	15.0	3.0	3.0	3.0	20.3	5.0	5.1	8.7	1.9
Couple, children	12.6	4.0	9.3	6.8	2.7	5.4	12.0	3.6	7.0	3.0	16.8	6.0	7.9	11.8	4.8
Single male	7.9	3.0	4.5	5.0	3.5	2.8	6.0	2.7	15.0	10.0	14.7	6.6	5.2	9.0	3.0
S female: no children	1.0	2.3	5.9	6.0	3.1	2.6	4.5	3.8	5.0	1.2	4.1	3.5	6.4	8.4	13.8
S female: children	2.2	1.1	1.8	4.7	1.0	2.0	4.5	2.0	6.0	4.0	3.0	4.5	3.6	10.4	2.3
Age ≥ 55															
Couple	20.0	7.4	14.0	12.0	5.5	4.0	12.0	6.1	5.5	6.2	20.2	13.8	23.3	11.8	9.1
Single male	12.5	8.6	7.6	10.0	3.8	6.1	10.2	4.8	5.0	3.8	27.4	11.0	23.9	7.0	5.8
Single female	8.0	2.4	6.0	6.1	2.0	2.2	3.0	6.3	3.0	2.9	6.5	8.1	15.1	6.8	7.2
Total	9.6	4.0	7.2	7.8	3.5	2.6	7.0	4.2	5.2	4.2	11.4	7.4	10.6	10.1	5.9

Note: 0.0 in thousands of euros stands for less than 50 euros. Liquid assets: deposits, mutual funds, bonds, publicly traded shares, managed accounts.
Illiquid assets: value of non-self employment private
businesses, money owed to the household, other assets. Pension: voluntary pension savings and whole life insurance products.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 10: Detailed participation in liquid financial assets (by demographic group)

	Deposits (%)					Bonds (%)					Publicly traded shares (%)					Mutual funds (%)				
	DE	ES	FR	IT	PT	DE	ES	FR	IT	PT	DE	ES	FR	IT	PT	DE	ES	FR	IT	PT
Age < 25																				
Couple	100	100	100	57	98	0	0	0	3	0	2	0	6	0	4	0	0	4	3	0
Single Male	100	100	100	86	94	0	0	1	0	0	3	0	1	0	0	4	0	1	2	0
Single Female	100	100	99	69	100	0	0	0	0	0	0	1	1	0	0	4	0	2	0	0
25 ≤ age < 35																				
Couple, no children	100	100	100	95	99	10	0	2	10	0	14	7	14	0	6	28	3	10	4	1
Couple, children	100	97	100	88	98	3	0	0	3	1	4	5	12	1	3	10	0	14	0	5
Single male	99	97	100	89	97	1	0	0	1	0	11	21	11	5	6	21	9	9	3	11
S female: no children	100	100	100	95	98	2	13	0	7	0	9	5	9	3	4	19	17	9	5	6
S female: children	100	96	100	79	100	0	0	0	0	0	0	0	1	0	0	13	0	4	0	0
35 ≤ age < 55																				
Couple, no children	100	98	98	94	92	9	0	1	8	0	19	12	17	5	7	27	3	12	8	2
Couple, children	100	98	100	94	99	3	1	1	10	1	13	10	20	6	6	22	6	16	7	3
Single male	99	100	99	92	81	6	2	0	15	0	13	8	14	3	1	21	7	10	8	7
S female: no children	100	100	100	86	98	1	1	2	9	0	3	4	12	1	1	13	2	10	6	0
S female: children	100	100	99	90	95	2	1	1	8	0	6	4	6	0	3	17	5	5	5	2
Age ≥ 55																				
Couple	100	98	100	95	96	9	2	2	21	0	14	15	21	6	5	17	7	13	8	3
Single male	96	97	99	90	85	4	2	3	17	1	11	13	15	7	4	16	7	10	5	3
Single female	98	97	100	86	86	5	2	2	13	0	6	7	9	2	2	10	4	6	4	1
Total	99	98	100	92	94	5	1	2	15	0	11	10	15	5	4	17	6	11	6	3

Notes: 0 stands for less than 0.5%. Managed accounts are only held by very few people in the sample. Participation rates are therefore not reported.
DE: Germany, ES: Spain, FR: France, IT: Italy, PT: Portugal

Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 11: Detailed participation in liabilities by components (by demographic group)

	Total debt (%)					Mortgage debt (%)					Credit lines, cards and overdrafts (%)					Other non-mortgage debt (%)				
	DE	ES	FR	IT	PT	DE	ES	FR	IT	PT	DE	ES	FR	IT	PT	DE	ES	FR	IT	PT
Age < 25																				
Couple	78	48	49	40	40	7	21	6	0	10	48	1	2	3	10	50	32	44	37	30
Single Male	32	20	22	25	42	5	0	4	2	12	15	0	4	3	36	20	19	16	22	0
Single Female	43	25	23	2	39	4	7	0	2	0	18	0	5	0	22	32	18	22	0	17
25 ≤ age < 35																				
Couple, no children	79	74	58	32	69	22	58	26	13	51	35	23	3	9	13	53	37	43	20	12
Couple, children	68	86	78	41	64	23	77	44	23	44	34	13	11	9	17	36	43	55	20	26
Single male	51	37	46	21	42	1	7	18	6	19	21	10	7	4	12	35	26	26	17	23
S female: no children	45	47	45	18	50	0	25	18	13	40	21	3	14	0	9	38	28	22	7	16
S female: children	53	79	45	39	38	9	33	8	21	20	20	13	19	0	27	35	36	28	18	27
35 ≤ age < 55																				
Couple, no children	67	67	66	39	54	43	53	39	17	40	32	16	10	7	12	25	28	38	17	19
Couple, children	71	73	79	47	65	46	56	56	22	52	30	12	9	8	11	28	39	47	29	21
Single male	51	47	55	23	42	13	32	25	12	38	27	5	12	6	5	30	16	29	12	7
S female: no children	55	53	42	29	38	11	26	20	14	28	28	6	8	6	10	34	28	22	16	11
S female: children	47	68	54	30	56	6	49	19	9	36	23	14	16	4	20	28	28	32	22	24
Age ≥ 55																				
Couple	43	40	43	21	27	27	20	22	8	18	18	4	5	5	4	13	24	27	13	10
Single male	36	23	28	12	19	16	8	12	5	11	17	5	6	2	6	13	13	15	8	7
Single female	22	23	22	10	16	10	9	8	3	9	10	2	5	2	3	9	16	12	7	7
Total	47	50	47	25	38	21	33	24	11	27	22	8	7	5	7	22	27	29	15	13

Notes: 0 stands for less than 0.5%. Other non-mortgage debt includes car loans, consumer loans, installment loans, private loans from relatives, friends, employers etc., and other loans. Credit lines are usually linked to a bank overdraft, may also be granted on the basis of an 'umbrella contract' allowing the customer to draw loans on several types of loan accounts up to a certain maximum amount applying to all loan accounts together. Bank overdrafts are defined as debit balances on current accounts. Definitions according to ECB/2001/18. DE: Germany, ES: Spain, FR: France, IT: Italy, PT: Portugal

Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 12: Detailed median liabilities by debt type conditional on participation (by demographic group), '000 Euro.

	Total debt					Mortgage debt					Credit lines, cards and overdrafts					Other non-mortgage debt				
	DE	ES	FR	IT	PT	DE	ES	FR	IT	PT	DE	ES	FR	IT	PT	DE	ES	FR	IT	PT
Age < 25																				
Couple	4	18	3	3	18	80	160	137	70	45	0.5	4.9	0.0	0.6	0.7	7.3	10.0	2.7	2.5	6.5
Single Male	0	10	4	4	0	198	83	14	127	82	0.2	0.9	0.2	2.0	0.3	1.4	10.0	4.5	3.5	5.4
Single Female	5	4	2	80	0	150	164	80	75	82	0.8	0.1	0.9	0.7	1.0	3.0	1.9	0.4	2.9	8.0
25 ≤ age < 35																				
Couple, no children	5	60	43	21	79	109	90	109	97	79	0.7	1.4	1.0	2.0	4.5	8.0	5.0	9.2	2.5	8.4
Couple, children	10	71	72	40	59	104	90	78	86	80	1.4	1.3	0.9	0.7	0.4	6.9	5.0	4.3	8.0	6.0
Single male	3	6	9	5	12	82	62	76	108	63	0.5	2.5	2.4	1.0	0.2	4.5	5.0	8.1	4.8	16.8
S female: no children	8	27	9	89	65	90	75	148	79	95	0.7	0.5	3.1	2.6	0.2	3.9	4.0	1.0	1.6	15.6
S female: children	3	18	2	180	35	180	47	90	60	70	0.5	0.7	0.7	0.7	2.0	3.1	7.0	5.0	11.5	8.0
35 ≤ age < 55																				
Couple, no children	56	47	42	7	45	55	59	90	51	68	1.2	2.0	0.8	0.9	2.0	8.2	7.2	1.1	4.7	8.0
Couple, children	44	42	51	27	42	63	50	100	80	46	0.7	2.2	4.5	0.5	1.0	7.7	8.0	4.4	3.3	11.0
Single male	4	63	14	35	45	55	51	90	20	45	0.4	1.0	0.6	1.1	1.2	5.3	1.0	4.8	3.6	2.8
S female: no children	4	12	28	40	34	73	38	39	60	72	0.3	0.5	1.2	0.8	1.0	8.9	8.5	11.3	1.3	3.6
S female: children	2	40	9	12	43	94	60	56	48	25	0.8	2.2	1.0	1.5	2.5	4.1	8.0	4.0	6.5	9.0
Age ≥ 55																				
Couple	21	20	13	10	15	40	27	115	102	30	1.0	0.9	0.9	1.1	2.5	6.7	7.0	5.9	8.7	10.0
Single male	23	12	7	12	17	64	37	56	45	19	1.8	1.2	0.6	0.8	2.5	3.0	6.0	3.0	3.0	9.7
Single female	11	12	6	9	12	30	29	.	.	.	0.8	.	.	.	.	4.1	5.0	3.3	.	.
Total	13	36	18	15	32	80	60	59	60	49	1.5	0.9	0.9	2	0.9	4.5	8.0	6.0	6.5	4.9

Notes: 0.0 in thousands of euros stands for less than 50 euros, 0 for less than 500 euros. Other non-mortgage debt includes car loans, consumer loans, installment loans, private loans from relatives, friends, employers etc., and other loans. Credit lines are usually linked to a bank overdraft, may also be granted on the basis of an 'umbrella contract' allowing the customer to draw loans on several types of loan accounts up to a certain maximum amount applying to all loan accounts together. Bank overdrafts are defined as debit balances on current accounts. Definitions according to ECB/2001/18. DE: Germany, ES: Spain, FR: France, IT: Italy, PT: Portugal

Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 13: Wealth dispersion within and between demographic groups in each country

	Interquartile ratio (p75/p25)					Mean-median ratio					Share of wealth / population share				
	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal	Germany	Spain	France	Italy	Portugal
Age < 25															
Couple	172	.	13	2	114	9	9	3	4	3	0.2	0.2	0.1	0.1	0.1
Single Male	10	226	5	36	192	14	1	3	4	6	0.4	0.8	0.1	0.4	0.1
Single Female	307	6179	4	47	78	91	190	5	2	27	0.5	0.9	0.1	0.6	0.5
25 ≤ age < 35															
Couple, no children	22	23	14	22	13	3	3	3	2	2	0.3	0.5	0.3	0.5	0.6
Couple, children	26	4	28	13	23	3	1	2	2	3	0.3	0.4	0.4	0.5	0.5
Single male	36	28	15	45	9	2	2	6	12	2	0.1	0.8	0.3	0.4	0.3
S female: no children	15	54	16	22	174	4	2	4	6	5	0.3	0.5	0.3	0.4	0.2
S female: children		400	15	172	94	.	12	6	4	9	0.0	0.2	0.1	0.2	0.2
35 ≤ age < 55															
Couple, no children	7	7	31	15	24	2	1	2	2	1	1.3	0.7	0.9	0.7	0.6
Couple, children	10	4	7	9	6	3	1	2	2	2	1.3	0.9	1.2	1.0	0.9
Single male	52	6	49	22	48	5	2	5	2	2	0.6	0.9	0.7	0.7	0.8
S female: no children	780	45	51	35	23	6	1	3	3	2	0.3	0.5	0.4	0.5	0.8
S female: children	151	7	51	29	122	8	1	8	2	4	0.2	0.6	0.3	0.6	0.4
Age ≥ 55															
Couple	8	3	3	4	4	2	2	2	2	2	1.8	1.5	1.8	1.4	1.4
Single male	42	6	27	5	9	3	2	2	2	2	0.9	1.1	1.0	0.9	0.8
Single female	29	3	26	13	19	5	1	2	2	2	0.6	0.7	0.7	0.7	0.7
Total	32	4	28	9	9	3.8	1.6	2.0	1.6	2.0	..	..	..	..	..

Note: 0 and 0.0 stands for less than 0.5 and 0.05 respectively.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 14: Differences in participation rates in different asset classes due to household structure

	Participation rates (%)					Difference to France (France – country)				Difference due to household structure (%- points)			
	Germany	Spain	France	Italy	Portugal	Germany	Spain	Italy	Portugal	Germany	Spain	Italy	Portugal
Property	49	86	61	72	75	12	-25	-12	-14	0	-2~	-4~	-6~
Value of self-employment business	9	14	9	18	8	0	-5	-9	1	0	-2~	-1~	-1
Illiquid financial assets	22	7	11	4	8	-11	4	8	3	0	0	0	0~
Private pensions	47	24	37	18	14	-9	14	19	23	-0~	-2	-1	-1
Detailed financial assets:													
Bonds	5	1	2	15	0	-4	0	-13	1	0	0	-2~	0
Publicly traded shares	11	10	15	5	4	4	4	10	10	0~	-1	-1	0
Mutual funds	17	6	11	6	3	-6	5	4	8	0	0	-1	0

Note: ~ indicates that the counterfactual household structure moves the participation rate closer to the French participation rate. 0 stands for less than 0.5. See tables 5, 7 and 9 for detailed descriptions of the different asset classes.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 15. Differences due to household structure relative to France at different points in the distribution, '000 Euro

	France	Germany				Spain				Italy				Portugal			
	FR	DE	Diff. to Fr	Due to HH structure	% of total diff	ES	Diff. to Fr	Due to HH structure	% of total diff	IT	Diff. to Fr	Due to HH structure	% of total diff	PT	Diff. to Fr	Due to HH structure	% of total diff
p5	0.4	-1.6	-2.0	-0.3 (0.3)	13	0.2	-0.1	0.2* (0.1)	-121	1.0	0.6	0.0 (0.2)	0	0.1	-0.3	0.1 (0.0)	-15
p10	1.6	0.1	-1.5	0.0 (0.0)	1	5.7	4.1	2.6*** (0.7)	64	5.0	3.4	1.4*** (0.1)	41	1.0	-0.5	0.7*** (0.2)	-135
p25	9.8	6.6	-3.2	0.0 (0.3)	-1	77.9	68.1	11.3*** (2.5)	17	34.2	24.4	13.7*** (1.9)	56	18.4	8.6	9.5*** (1.0)	111
p50	115.8	51.4	-64.4	1.4 (1.4)	-2	182.7	66.9	6.0*** (2.1)	9	173.5	57.7	20.2*** (2.1)	35	75.2	-40.6	12.0*** (1.9)	-30
P75	279.1	209.8	-69.3	3.3 (3.4)	-5	331.0	51.9	10.9*** (3.7)	21	321.4	42.3	25.3*** (3.6)	60	160.1	-119.0	16.5*** (1.8)	-14
P90	511.6	442.3	-69.3	8.3 (6.8)	-12	607.7	96.1	7.0 (9.6)	7	577.1	65.6	46.1*** (6.4)	70	297.2	-214.3	23.1*** (4.8)	-11
P95	775.4	661.2	-114.2	15.1 (10.3)	-13	878.5	103.1	20.4 (14.8)	20	855.0	79.6	69.0*** (12.9)	87	482.4	-293.0	65.8*** (12.2)	-22

Note: *, **, *** Differences statistical significance at respectively the 10, 5 and 1 percent level.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 16. Deviations between counterfactuals based on 16 and 21 household groupings, respectively (%)

	Germany	Spain	Italy	Portugal
p10	0	-33	1	0
p25	1	-6	-2	-5
p50	1	-3	0	-1
p75	1	-2	0	-1
p90	2	-4	-2	0

Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Table 17. French net-wealth distribution when household structure of other countries is applied

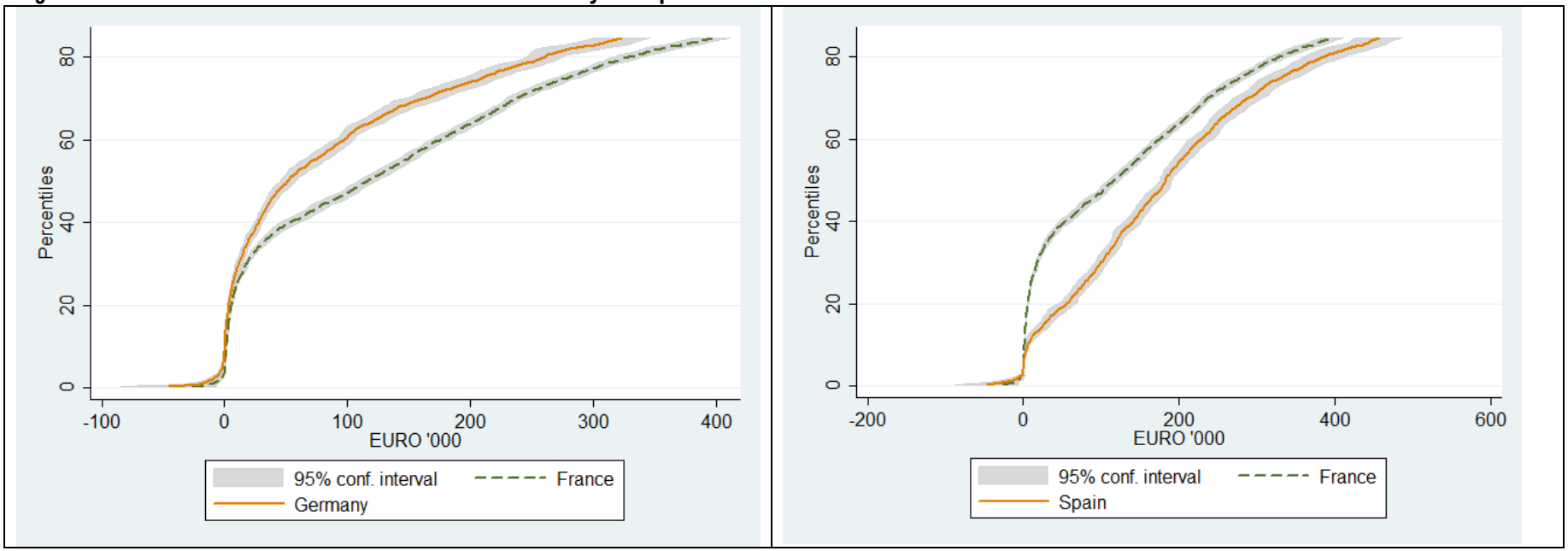
	True France	Panel A: Counterfactual France with other countries' household structure													
		German	Spanish	Italian	Portug.	Austrian	Belgian	Cypriot	Finnish	Greek	Luxem.	Maltese	Dutch	Slovenian	Slovak
p10	1.6	1.5	2.1	2.3	2.6	1.5	1.6	2.0	1.4	1.8	1.6	2.6	1.6	1.8	1.6
p25	9.8	9.2	16.6	19.3	22.9	8.8	10.7	16.1	7.5	10.9	10.6	22.8	10.4	11.0	9.7
p50	115.8	113.1	144.1	156.8	163.2	108.8	120.2	142.7	93.1	126.9	118.8	164.2	118.2	129.2	115.9
mean	233.4	234.4	258.8	274.1	280.6	228.6	239.1	263.7	216.7	247.5	238.2	282.0	234.9	244.2	233.7
p75	279.1	279.0	305.9	319.8	327.3	272.5	284.5	308.8	259.2	294.9	284.0	329.0	280.2	290.9	281.1
p90	511.6	518.6	559.0	586.9	596.0	505.5	525.2	571.8	486.0	541.4	524.6	599.0	514.2	534.5	513.6

	Panel B: Difference between other countries' household structure and real France													
	German	Spanish	Italian	Portug.	Austrian	Belgian	Cypriot	Finnish	Greek	Lux.	Maltese	Dutch	Slovenian	Slovak
p10	0	1	1	1	0	0	0	0	0	0	1	0	0	0
p25	-1	7	9	13	-1	1	6	-2	1	1	13	1	1	0
p50	-3	28	41	47	-7	4	27	-23	11	3	48	2	13	0
mean	1	25	41	47	-5	6	30	-17	14	5	49	2	11	0
p75	0	27	41	48	-7	5	30	-20	16	5	50	1	12	2
p90	7	47	75	84	-6	14	60	-26	30	13	87	3	23	2

	Panel C: Difference between other countries' household structure and real France (in %)													
	German	Spanish	Italian	Portug.	Austrian	Belgian	Cypriot	Finnish	Greek	Lux.	Maltese	Dutch	Slovenian	Slovak
p10	-3	32	47	66	-5	4	29	-12	13	3	66	-1	12	4
p25	-6	69	97	134	-10	9	65	-24	11	8	133	6	13	-1
p50	-2	24	35	41	-6	4	23	-20	10	3	42	2	12	0
mean	0	11	17	20	-2	2	13	-7	6	2	21	1	5	0
p75	0	10	15	17	-2	2	11	-7	6	2	18	0	4	1
p90	1	9	15	17	-1	3	12	-5	6	3	17	1	4	0

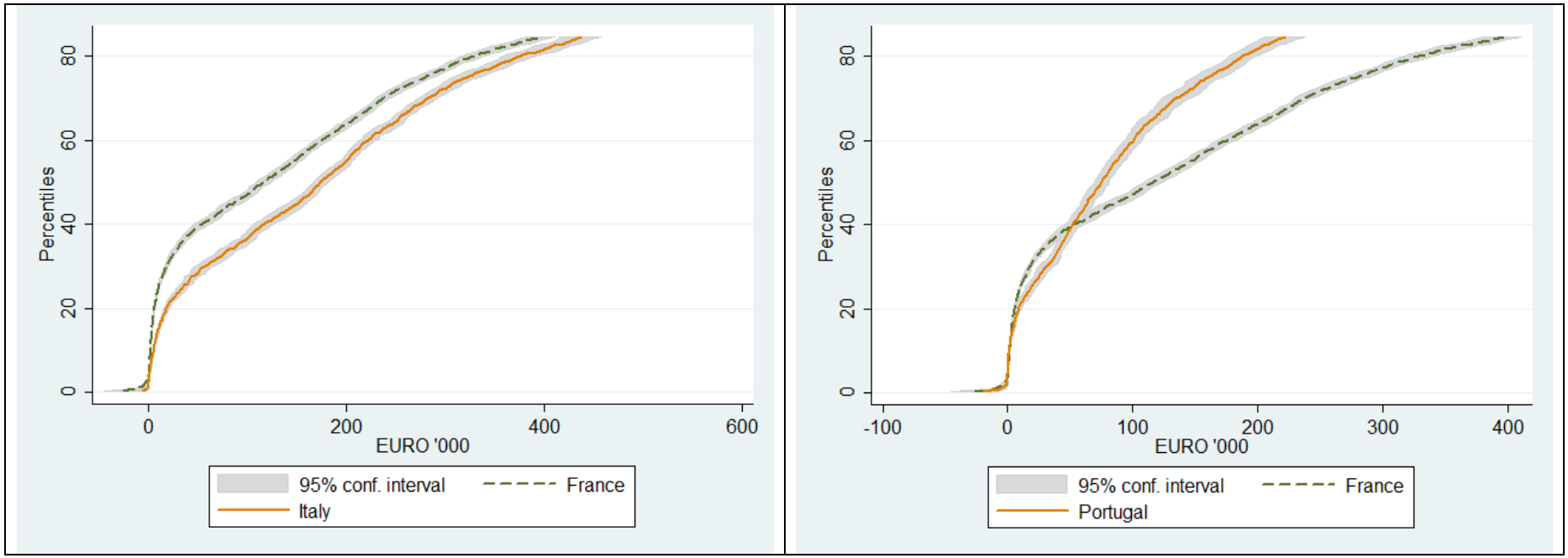
Note: Zero in Panel B stands for less than 500 euros. Zero in Panel C stands for less than 0.5%.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Figure 1A. Distribution of household net wealth in Germany and Spain vis-a-vis France.



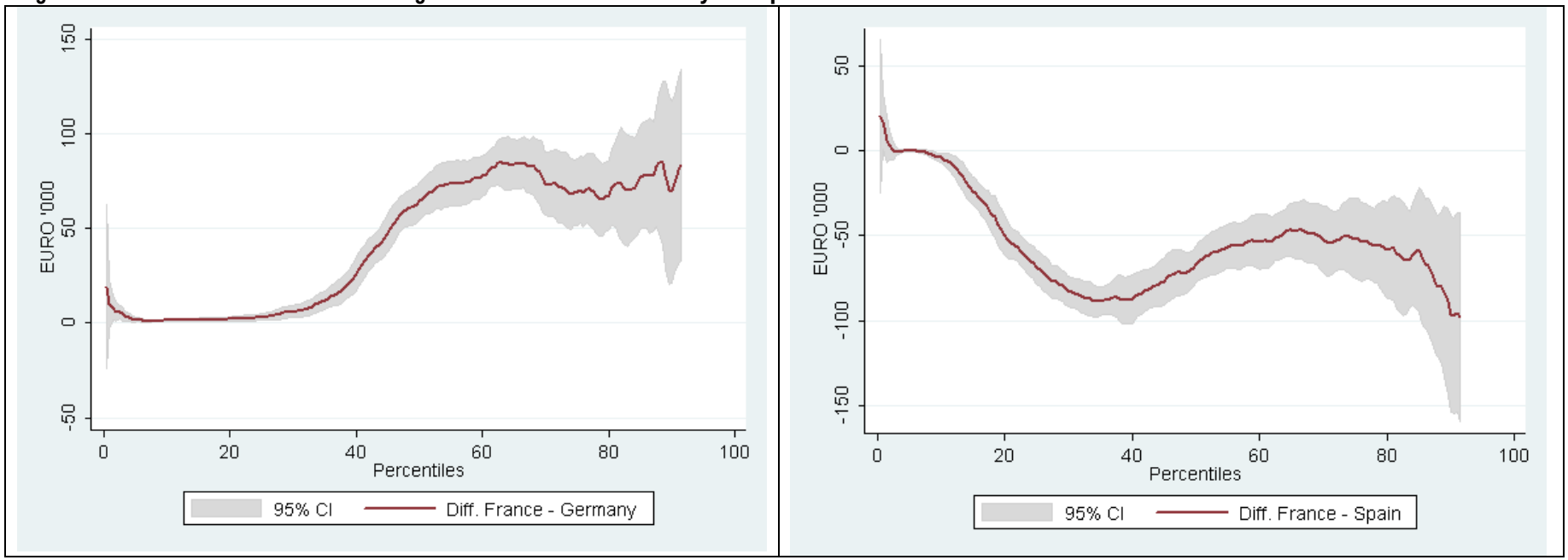
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Figure 1B. Distribution of household net wealth in Italy and Portugal vis-a-vis France.



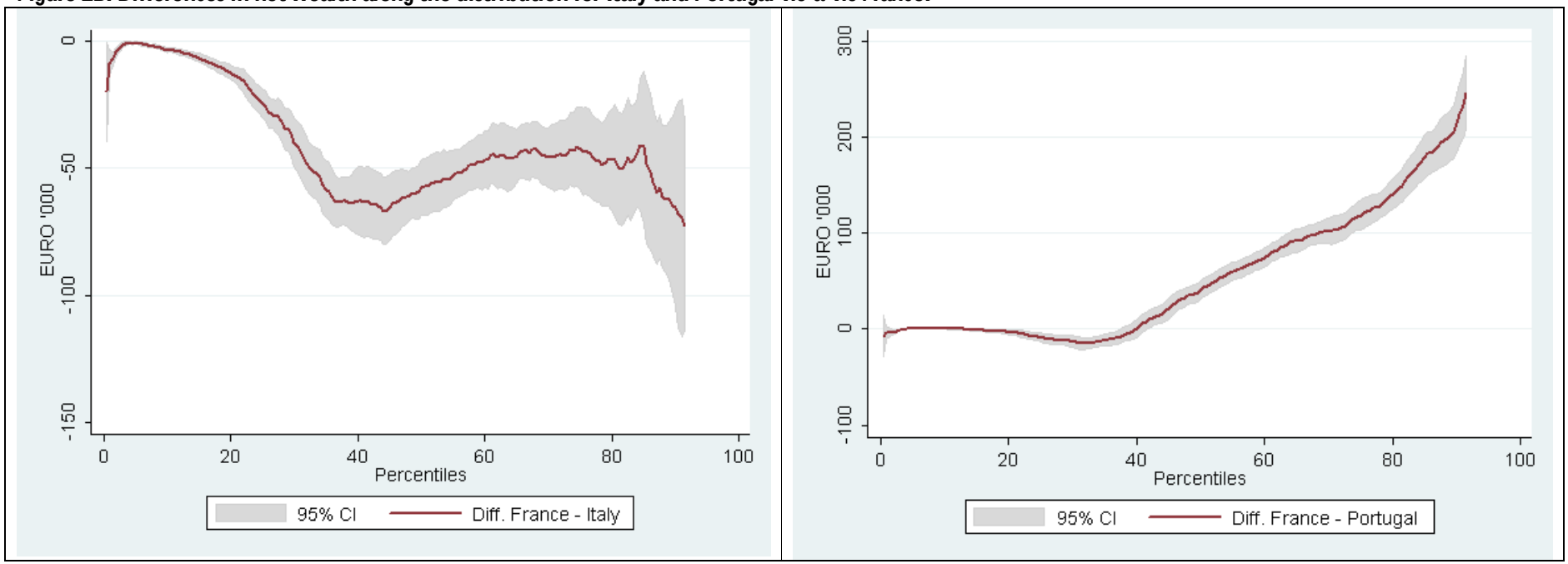
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Figure 2A. Differences in net wealth along the distribution for Germany and Spain vis-a-vis France.



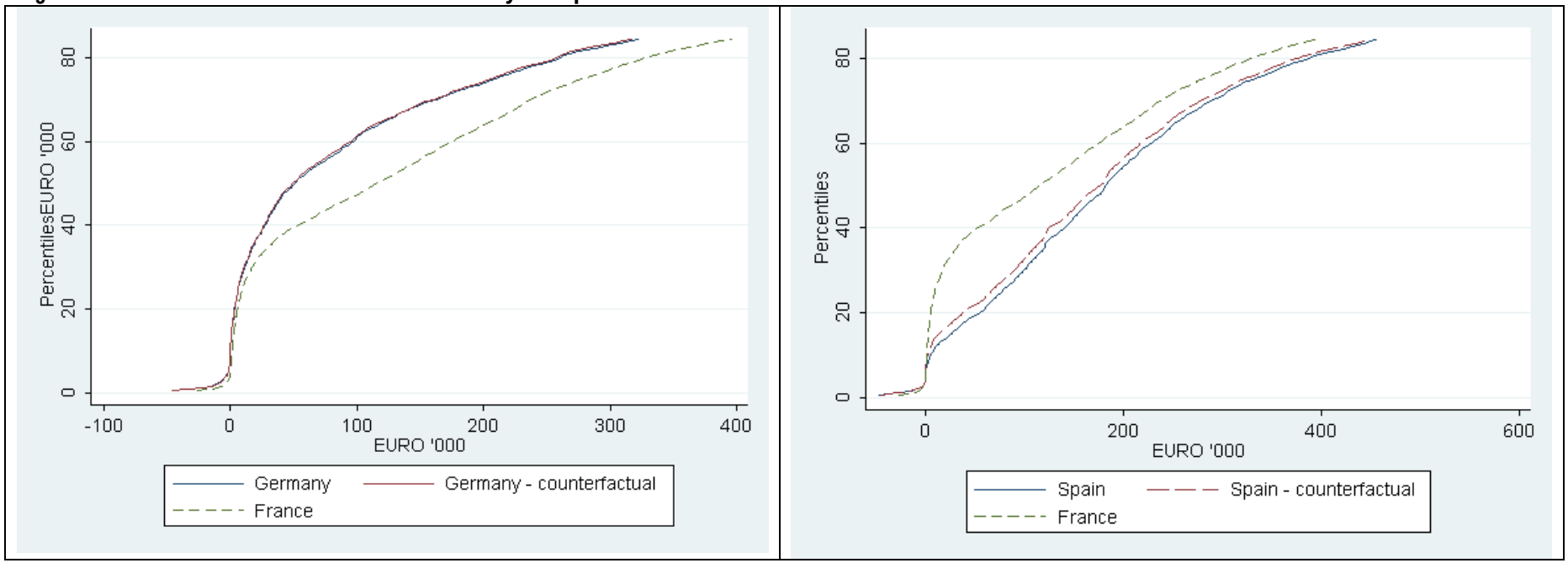
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Figure 2B. Differences in net wealth along the distribution for Italy and Portugal vis-a-vis France.



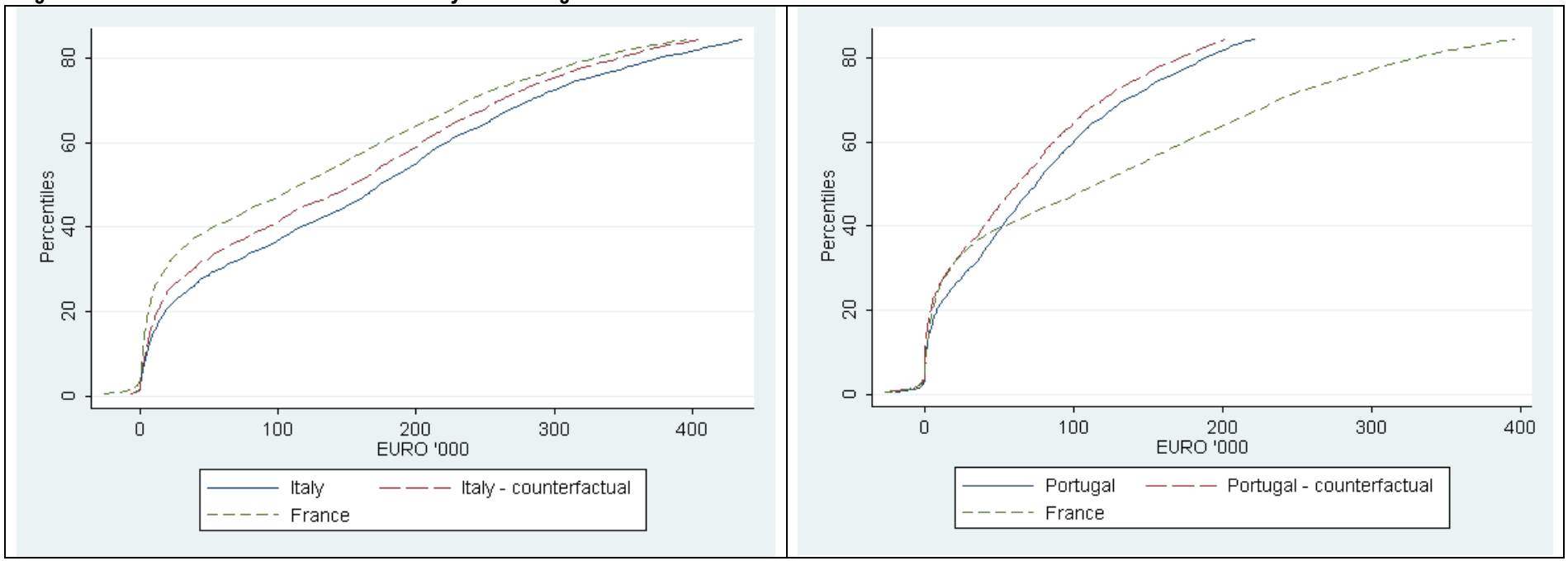
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Figure 3A. Counterfactual distributions for Germany and Spain.



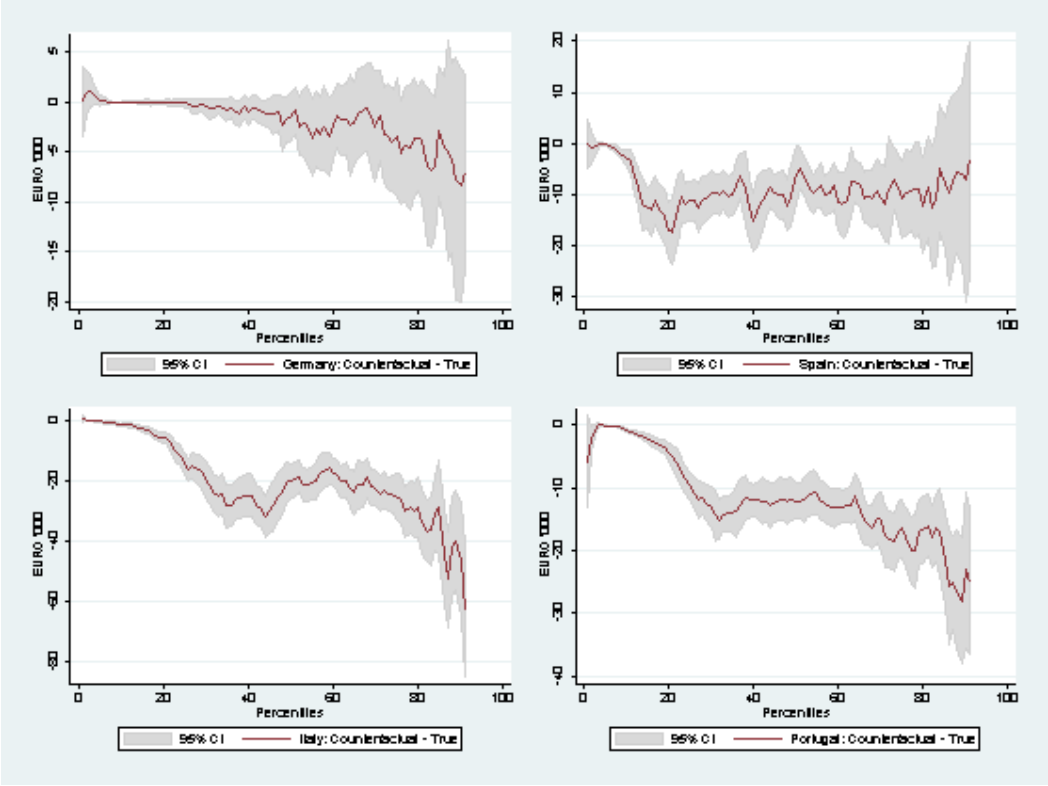
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Figure 3B. Counterfactual distributions for Italy and Portugal.



Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Figure 4. Difference between counterfactual and true distributions for Germany, Spain, Italy and Portugal.



Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

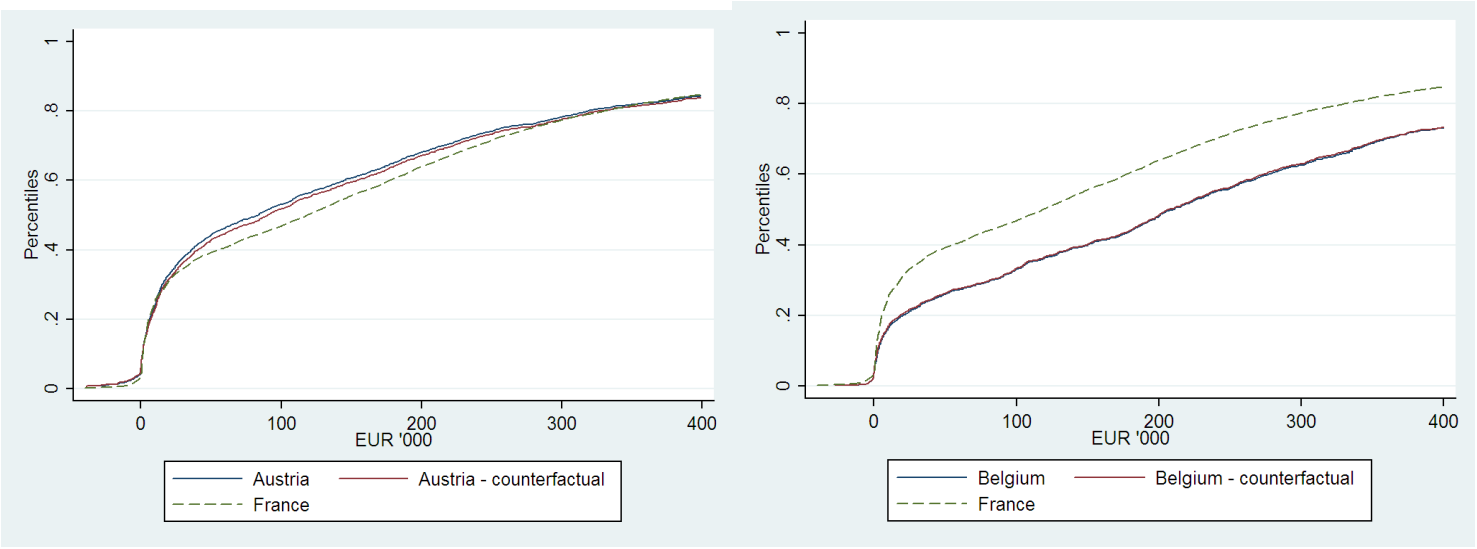
Annex A – Participation rates in different asset classes and the influence of household structure

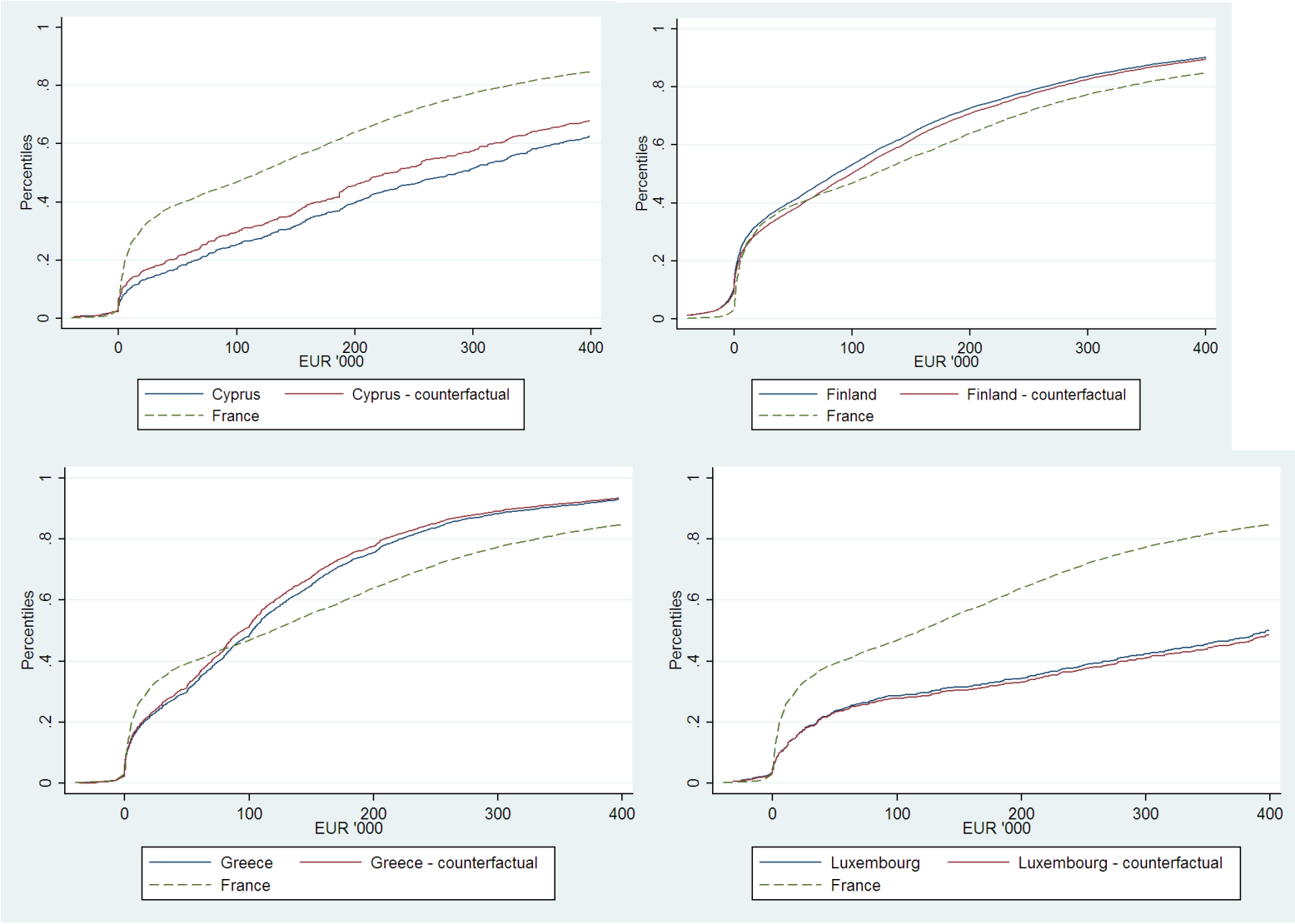
	True France	Panel A: German	Spanish	Italian	Portug.	Austrian	Belgian	Cypriot	Finnish	Greek	Luxem.	Maltese	Dutch	Slovenian	Slovak
		Participation rates													
Property	61	49	86	72	75	52	73	84	71	79	75	80	58	84	90
Self-emp. business	9	9	14	18	8	9	7	20	14	10	5	11	5	12	11
Illiquid fin. assets	11	22	7	4	8	11	10	10	0	4	9	5	11	6	10
Private pensions	37	47	24	18	14	18	43	46	24	4	34	24	50	18	15
Bonds	2	5	1	15	0	4	7	3	1	0	4	22	6	1	1
Traded shares	15	11	10	5	4	5	15	35	22	3	10	13	10	10	1
Mutual funds	11	17	6	6	3	10	18	1	27	1	19	8	18	12	3
		Panel B: Differences in participation rates relative to France (France – country)													
		German	Spanish	Italian	Portug.	Austrian	Belgian	Cypriot	Finnish	Greek	Lux.	Maltese	Dutch	Slovenian	Slovak
Property		12	-25	-12	-14	9	-12	-23	-10	-18	-14	-19	3	-23	-30
Self-emp. business		0	-5	-9	1	0	2	-11	-5	-1	4	-3	4	-3	-2
Illiquid fin. assets		-11	4	8	3	0	1	1	11	7	3	6	1	6	2
Private pensions		-9	14	19	23	20	-6	-8	14	34	3	13	-12	19	22
Bonds		-4	0	-13	1	-2	-6	-2	1	1	-3	-20	-4	1	1
Traded shares		4	4	10	10	9	0	-20	-7	12	5	1	4	5	14
Mutual funds		-6	5	4	8	1	-7	10	-17	9	-8	3	-7	-1	8
		Panel C: Differences in participation rates due to household structure (%-points)													
		German	Spanish	Italian	Portug.	Austrian	Belgian	Cypriot	Finnish	Greek	Lux.	Maltese	Dutch	Slovenian	Slovak
Property		-0	-2~	-4~	-6~	2~	-0~	-3~	3	-1~	0	-2~	2~	-1~	0
Self-emp. business		-0	-2~	-1~	-1	0~	-0	-3	1	-1~	-0	-1~	0~	0	-0~
Illiquid fin. assets		-0	-0	-0	0~	-1	-0	0~	0~	0~	0~	-0	-0	0~	-1
Private pensions		-0~	-2	-1	-1	0~	-1~	-4~	1~	-0~	-3	-3	-0~	-0	-1
Bonds		0	0	-2~	-0	0~	-0~	-1~	0~	0~	0	-2~	0	1~	0~
Traded shares		-0~	-1	-1	-0	0~	-0	-2~	1	0~	-1	1~	0~	0~	0~
Mutual funds		-0	-0	-1	0	0~	-0~	-0	0	0~	-1~	-1	-1~	-0~	0~

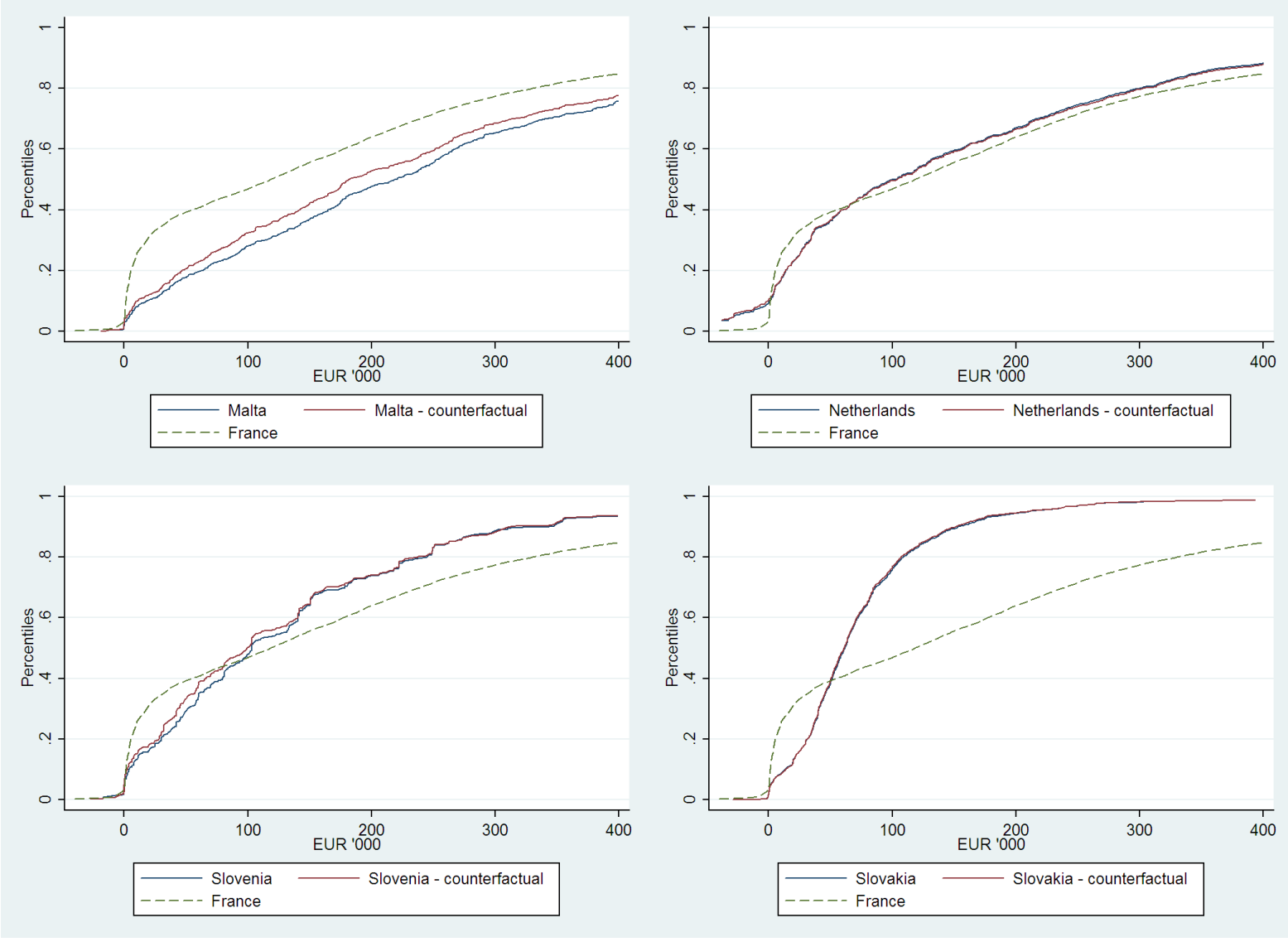
Note: ~ indicates that the counterfactual household structure moves the participation rate closer to the French participation rate. Zero stands for less than 0.5%.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.

Annex B – Counterfactual distribution of remaining HFCS countries.

Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.




Percentiles
0
.2
.4
.6
.8
1
0
100
200
300
400
EUR '000
Cyprus
Cyprus - counterfactual
France
Finland
Finland - counterfactual
France
Greece
Greece - counterfactual
France
Luxembourg
Luxembourg - counterfactual
France


Percentiles
0
.2
.4
.6
.8
1
0
100
200
300
400
EUR '000
Malta
Malta - counterfactual
France
Netherlands
Netherlands - counterfactual
France
Slovenia
Slovenia - counterfactual
France
Slovakia
Slovakia - counterfactual
France

Annex C: Defininition of the asset variables (source : ECB 2013, some groupings are due to the authors)

Reference person: the reference person is chosen accordingly to the international standards which use the following sequential steps to determine a unique reference person in the household:

- Household type determined by:
    - One of the partners in a registered or de facto marriage with dependent children
    - One of the partners in a registered or de facto marriage without dependent children
    - A lone parent with dependent children
- The person with the highest income
- The eldest person

Real assets:

- Value of the main residence (owners)
- Value of other real estate property
- Vehicles
- Valuables
- Value of self-employed business of household members

Financial assets consist of:

- Liquid assets i.e.:
    - Deposits (sight accounts, saving accounts)
    - Investment in mutual funds
    - Bonds
    - Publicly traded shares
    - Managed investment accounts

- Illiquid assets i.e.:
    - Investment held in non self-employment private businesses
    - Money owed to households as private loans
    - Other financial assets: option, futures, index certificates, precious metal, oil and gaz leases, future proceeds from a lawsuit or estate that is being settled, royalties or any other.

- Private pension plans and whole life insurance policies

Total liabilities /debt consist of:

- Real estate properties mortgages (main residence and other residence)
- Debt on credit cards and credit lines/bank overdrafts
- Other, non-collaterized loans, commercial and private loans.

Annex D – Differences due to household structure relative to France at different points in the distribution, '000 Euro

		Panel A				Differences to France (Country – France)									
	True France	German	Spanish	Italian	Portug.	Austrian	Belgian	Cypriot	Finnish	Greek	Luxem.	Maltese	Dutch	Slovenian	Slovak
p5	0.4	-2.0	-0.1	0.6	-0.3	-0.6	-0.1	-0.4	-8.8	-0.4	-0.2	3.6	-35.0	-0.1	1.1
p10	1.6	-1.5	4.1	3.4	-0.5	-0.6	1.2	5.7	-2.2	0.4	3.5	14.5	-5.4	2.6	11.3
p25	9.8	-3.2	68.1	24.4	8.6	0.5	30.4	81.5	-3.4	20.2	49.4	78.7	4.3	31.0	26.6
p50	115.8	-64.4	66.9	57.7	-40.6	-39.4	90.4	151.1	-30.1	-13.9	282.0	100.1	-12.2	-15.1	-54.6
P75	279.1	-69.3	51.9	42.3	-119.0	-28.6	138.3	339.0	-58.9	-85.8	459.0	115.0	-20.0	-67.0	-180.4
P90	511.6	-69.3	96.1	65.6	-214.3	30.6	193.6	958.3	-114.3	-179.8	863.8	181.5	-83.9	-194.4	-359.7
P95	775.4	-114.2	103.1	79.6	-293.0	159.1	297.9	1636.4	-221.9	-306.1	1248.5	273.9	-194.3	-341.0	-568.0

	Panel B				Differences due to household structure									
	German	Spanish	Italian	Portug.	Austrian	Belgian	Cypriot	Finnish	Greek	Lux.	Maltese	Dutch	Slovenian	Slovak
p5	-0.3	0.2	0.0	0.1	0.3	0.1	0.0	-0.7	0.0	0.0	1.9	14.3	0.3	-0.5
p10	0.0	2.6	1.4	0.7	0.0	0.3	4.2	-0.6	0.8	-0.1	5.9	5.8	1.4	-0.4
p25	0.0	11.3	13.7	9.5	-0.8	2.5	24.4	-3.4	3.2	-5.9	17.5	1.4	8.5	0.2
p50	1.4	6.0	20.2	12.0	-10.7	1.5	55.0	-13.4	7.5	-13.1	28.9	2.1	11.0	0.5
P75	3.3	10.9	25.3	16.5	-9.0	2.3	100.1	-12.5	13.1	5.1	28.1	-1.4	6.8	1.9
P90	8.1	7.0	46.1	23.1	-19.7	3.2	227.1	-13.5	18.1	-11.9	66.4	-2.3	4.3	2.3
P95	15.1	20.4	69.0	65.8	-51.9	0.7	258.0	-17.4	9.7	-33.7	78.3	-3.0	1.9	2.9

	Panel C				Differences due to household structure in % of total difference									
	German	Spanish	Italian	Portug.	Austrian	Belgian	Cypriot	Finnish	Greek	Lux.	Maltese	Dutch	Slovenian	Slovak
p5	13	-121	0	-15	-48	-138	0	8	0	0	54	-41	-255	-41
p10	1	64	41	-135	4	22	73	29	182	-2	41	-108	54	-4
p25	-1	17	56	111	-166	8	30	101	16	-12	22	33	27	1
p50	-2	9	35	-30	27	2	36	44	-54	-5	29	-17	-72	-1
P75	-5	21	60	-14	31	2	30	21	-15	1	24	7	-10	-1
P90	-12	7	70	-11	-64	2	24	12	-10	-1	37	3	-2	-1
P95	-13	20	87	-22	-33	0	16	8	-3	-3	29	2	-1	-1

Note: A negative value in panel C indicates that adjusting for differences in household structure moved the distributions further apart. Zero means less and 500 euro or 0.5%.
Source: Eurosystem Household Finance and Consumption Survey (ECB, 2013). Own calculations.