

The distribution of wealth between households

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THE DISTRIBUTION OF WEALTH BETWEEN HOUSEHOLDS

RESEARCH NOTE 11/2013

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Abstract

This research note examines wealth-holding information collected by the new Household Finance and Consumption Survey (HFCS) managed by the European Central Bank (ECB), the first results of which were published in April 2013.

First, it compares the extent of inequality in holdings of wealth against the extent of inequality of income, and discusses how this varies across countries.

Next, wealth inequality is decomposed into different components, in order to try to identify the main factors underlying the results.

In the next part of the research note, the division between liquid and illiquid wealth is examined and compared across household types. This is of considerable importance in respect of the ability to maintain consumption in the event of a drop in income. It is, therefore, a significant factor that should be taken into account when assessing the effects of the crisis on living standards.

In the following section, the timing of the data collection is considered and possible impacts are discussed. Since the survey was carried out at different times in different countries, the substantial variations that have occurred in recent years in both house-price and stock-market indices are likely to have had a major effect on the measurement of wealth and its distribution between households within countries, as well as between countries. This needs to be taken explicitly into account in any analysis.

In the final section, income as recorded by the ECB survey is compared with that recorded by EU-SILC. This is done by first reviewing the differences in the collection methodology and then by comparing the distribution of gross household income and its components.

Introduction

The new Household Finance and Consumption Survey (HFCS) for the eurozone countries, managed by the European Central Bank (ECB), enables analysis to be carried out that was previously not possible. Traditional analysis – which considers income and labour market variables alone – can now be extended to other dimensions in the group of eurozone countries. Great attention has been devoted to collecting complete – and comparable – information on assets and liabilities, as well as on other factors contributing to well-being.

In this research note our focus will be on the results of analysis using the data collected in the first wave of the HFCS survey, during 2008–2011. First, we describe the data, and outline some methodological differences between the HFCS and the EU-SILC, particularly with respect to income. Next, we compare wealth levels and country rankings with rankings based on income. In the following section, we examine wealth inequality across countries and try to gauge the relationship with pension provisions. We also identify the wealth portfolio component that contributes most to inequality, and compare wealth inequality and income inequality.

The next section takes a look at the composition of the portfolio in a different way. It identifies the share of wealth that is more liquid and less liquid, and seeks to establish how this varies across households. The share of liquid assets in the portfolio is of considerable importance in terms of ability to maintain consumption in the face of a drop in income. It is, therefore, a significant factor that should be taken into account when assessing the effects of the crisis on living standards.

Our note also looks at two other important aspects of the HFCS survey. The first is the collection period: since countries collect data on income and wealth components at different times, stock-market and house-price fluctuations may need to be taken into account for comparability purposes. The second aspect is the reliability of income data in the HFCS, compared to EU-SILC.

Data sources

Household Finance and Consumption Survey

The data used in this research note comes from Eurosystem's Household Finance and Consumption Survey (HFCS).¹ This is a joint project run by the eurozone's central banks and national statistical institutes, and it provides harmonized information for 15 eurozone members on household balance sheets and related economic and demographic variables, including income, private pensions, employment, measures of consumption, gifts and inheritances. The sample contains over 62,000 households. The first wave was conducted between the end of 2008 and the middle of 2011, though most countries carried out data collection in 2010. (We discuss this later in the research note.) Each country covered by the dataset provides nationally representative information, and the surveys follow common methodological guidelines. This concerns, in particular, definition of the variables, imputations and the preparation of the data for analysis.

Since the main focus of the HFCS study is household wealth, most participating countries apply oversampling of wealthy households. The distribution of wealth is skewed in most societies; consequently it is important to have a relatively high proportion of wealthy households in the sample, in order to ensure adequate representation of the full wealth distribution. Nine countries used some type of

¹ Information about the survey can be found at
http://www.ecb.europa.eu/home/html/researcher_hfcn.en.html

oversampling procedure in the HFCS study (the exceptions were Italy, the Netherlands, Malta, Slovakia, Austria and Slovenia), but countries applied different strategies to oversample wealthy households, based on data availability. In Spain and France, oversampling was based on wealth data; while in Finland and Luxembourg, individual-level income data was used. In Cyprus, household-level electricity consumption was used as a proxy for wealth; in Belgium and Germany, the proxy for wealth was regional-level income; and in Greece it was regional real estate prices. Full details of the sampling methodology can be found in HFCN (2013a).

In the definition of wealth (or net worth) we include assets and liabilities. Assets consist of both financial and non-financial assets. Financial assets include assets used in transactions (e.g. sight and saving accounts), as well as those that form part of an investment portfolio (e.g. financial investment products such as bonds, shares and mutual funds, and insurance-type products such as voluntary private pension plans and whole life insurance). Five different categories of non-financial assets can be distinguished: main residence, other real estate property, vehicles, valuables and self-employment businesses.

For income, we use the HFCS-defined gross income measure (net income is not available), which consists of employee income, self-employment income, income from public, occupational and private pension plans, regular social and private transfers, rental income, income from financial investments, income from private businesses other than self-employment, and gross income from other sources.

All values are in euros and the collection dates are listed in the section below on "Collection periods".

HFCS versus EU-SILC

In terms of comparison of the HFCS and EU-SILC, both data sources use ex-ante harmonized data collections; both apply similar household definitions; and both collect data on gross household income. Given these basic similarities, the distribution of household income can be compared using these two studies. Despite the similarities, there are important methodological differences between the studies, which presumably must affect estimates of income distribution as well. In the following, a few of these methodological differences are highlighted.

First of all, unlike the HFCS, no oversampling of wealthy households takes place in EU-SILC.

Second, we need to look at the use of register data. Both EU-SILC and the HFCS allow for data-collection methods other than a survey, if it is thought they will provide better-quality data. Although most countries collect data on most variables through surveys, there are some that use administrative data sources for some of the required variables – e.g. in the case of the HFCS, Finland uses various types of register data, in combination with survey data from Statistics Finland's income and living conditions survey. Register data on income from the tax authorities is also combined with survey data in the case of France. These two countries also provide combined survey and register data for EU-SILC, but in EU-SILC the group of countries using register data is wider, and includes the Netherlands and Slovenia.

One issue to do with the comparability of register and survey data is that income concepts and definitions used in administrative registers might not match exactly those commonly applied in surveys. But even if income definitions do coincide perfectly, the two methods are still likely to give a different picture of household income. Register data provides more accurate information on taxable income than

does survey data, since the latter is subject to recall bias.² Some income types are especially difficult to remember, e.g. income from financial investments or income from an unincorporated business might be more susceptible to recall error. The result is that capital income is typically less accurately measured in household surveys, and aggregate estimates for capital income from household surveys are typically lower than those obtained from macro data. This difference in data-collection methods might affect comparability, especially for income types that are more susceptible to recall bias (such as capital income). Registers tend to record even small income values, but in personal interviews only the larger amounts are likely to be recorded. To conclude, the method of data collection used is likely to influence estimates of the distribution of income. This could raise issues of comparability in the case of the Netherlands and Slovenia, which use different data-collection methodologies in the two studies.

Another methodological issue is whether income data has been collected gross or net of tax. In both studies, some countries actually collect data on net income, and then net income is converted to gross using some simulation method. Countries in the HFCS study which collect income data fully or partly net of tax include Italy (all income net), Greece (employee income net), Austria and Slovenia (possibility for respondents to provide net data). In the case of EU-SILC, all the Southern European countries collect income data partly or wholly net of tax.

Wealth levels and income levels

In our previous research notes we provided a comparison of wealth levels based on whatever data was available from various summary statistics covering a handful of countries. The preparation of this data was a time-consuming undertaking, requiring harmonization and identification of the components collated. This time we were lucky enough to have a dataset that is already harmonized, collated and imputed in a comparable way, as far as possible.

In what follows, we compare wealth levels in the eurozone countries; then, by comparing income levels, we try to determine whether there are any group patterns. As was discussed in Research Note no. 9/2012, although the mean is a common way of presenting summary information on wealth, in fact the median may be a more appropriate measure, as it is not sensitive to outliers.

Table 1 presents the mean and median wealth levels for the eurozone. In each case, the countries are ranked according to their wealth level. In addition, their wealth levels are expressed relative to the middle country (i.e. with an index set to 100). In the case of median wealth, the Netherlands is the middle-wealth country (it, Finland, Slovenia, Greece and France represent the medium-wealth countries). Belgium, Italy, Spain, Malta, Cyprus and Luxembourg have at least 50% more than the median wealth of the middle country. Low-wealth countries would be Austria, Portugal, Slovakia and Germany, which have less than 75% of the wealth of the middle-wealth country. Using the mean as the summary statistic, the rankings change a bit, but mostly for the low-wealth countries. The most striking difference lies in the result for Germany (and Austria, to a lesser extent), which now becomes a middle-wealth country if we switch to using the mean, suggesting that it is a high-inequality country when it comes to wealth.

² On the other hand, tax registers provide no information on non-taxable income or households' undeclared income; in these cases, survey data might be the only source of information.

Table 1: Countries ranked according to mean and median wealth levels and mean equivalized income (Index=100 for middle country)

Net worth			Net worth			Eq. Income		
Mean	Index		Median	Index		Mean	Index	
SK	79,656	34	DE	51,500	50	SK	8,124	32
GR	147,757	63	SK	61,200	59	PT	12,584	50
SI	148,736	64	PT	75,300	73	SI	13,163	52
PT	152,920	66	AT	76,360	74	MT	15,875	62
FI	161,534	69	FI	85,750	83	GR	16,881	66
NL	170,244	73	SI	100,433	97	ES	19,265	76
DE	195,170	84	GR	102,000	98	IT	22,121	87
FR	233,399	100	NL	103,711	100	FR	25,406	100
AT	265,033	114	FR	115,808	112	CY	26,100	103
IT	275,205	118	IT	173,500	167	AT	30,544	120
ES	291,352	125	ES	182,753	176	DE	30,862	121
BE	338,647	145	BE	206,000	199	FI	31,282	123
MT	365,988	157	MT	216,938	209	NL	32,958	130
CY	670,910	287	CY	265,500	256	BE	33,391	131
LU	710,092	304	LU	398,473	384	LU	55,101	217

Note: High-wealth countries: 120% or more of middle country; Medium: 75–120% of middle country; Low: less than 75% of middle country.

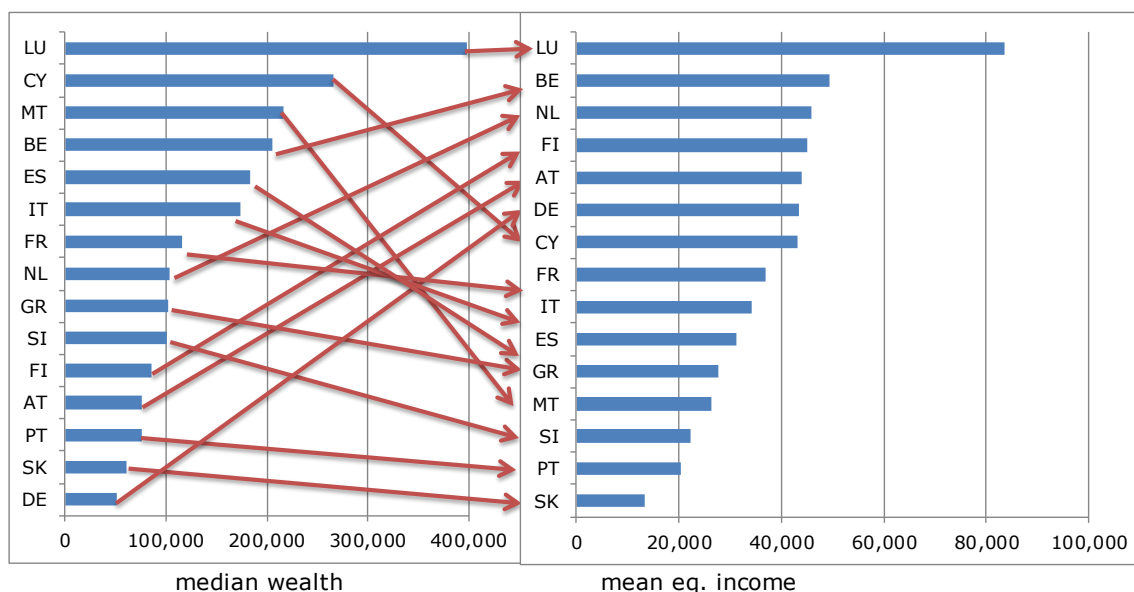
Source: HFCS.

Next, we explore the relationship between income and wealth by presenting country rankings according to the median wealth levels and the mean levels for equivalized income. We want to see the extent to which rankings differ, depending on the measure used. We rank according to median wealth because this measure is more appropriate in the case of wealth, since very rich (or very poor) households may affect the average results. In the case of income, the rankings according to mean and median are almost identical, and so we opt for the former.

Based on Figure 1, we identify the following groups of countries:

- high wealth and high income: Belgium and Luxembourg
- high wealth and medium/low income: Cyprus, Malta, Italy and Spain
- medium wealth and medium income: France
- low/medium wealth and high income: Austria, Finland, Germany and the Netherlands
- low/medium wealth and low income: Greece, Portugal, Slovenia and Slovakia.

Figure 1: Ranking reshuffling according to median wealth and mean equivalized income



Source: HFCS.

How can we explain this grouping? An analysis of Table 3 below on pension levels and pension wealth indicates that it is high-income countries – but not necessarily high-wealth countries – that have the largest average level of pension wealth (i.e. estimated lifetime values of pension payments). Hence, countries where there is an expectation of overall high pension wealth do not necessarily have high wealth levels. At the other end of the spectrum, we see no similar relationship – i.e. low-income countries do not accumulate high levels of wealth – or perhaps only in Italy, to some extent.³

Wealth inequality

The results of the previous section suggest that in some countries there is high wealth inequality. Depending on how the data is presented, different conclusions may be drawn with regards to the level of well-being in countries. In this section, we examine inequality in more depth, and compare basic inequality measures and decompose inequality to see what the main factors are that drive these results. Finally, we compare the results with those for income.

Gini and other measures

A popular way of measuring wealth inequality is by using the Gini coefficient. This is one of the most commonly used measures because it is well defined for negative values; also, since in wealth data many assumptions are made regarding the top and bottom of the distribution, it is a good measure because it is more sensitive than other measures in the middle of the distribution and not at the extremes. If everybody had the same level of wealth, the Gini coefficient would be 0; and it would be 1 if a single person had all the wealth. We supplement the results for Ginis with statistics on the share of total net worth held by various key groups of the population.

³ This non-perfect income-wealth relationship was also discussed in Research Note No. 9/2012.

Table 2: Gini wealth inequality index and share of wealth held by top wealth holders

	Gini *100	Top Share		
		1%	5%	10%
SK	45	0.08	0.22	0.33
SI	54	0.07	0.23	0.36
GR	56	0.08	0.26	0.39
ES	58	0.15	0.31	0.43
MT	60	0.20	0.35	0.46
BE	61	0.12	0.31	0.44
IT	61	0.14	0.32	0.48
NL	65	0.08	0.26	0.40
LU	66	0.21	0.40	0.51
FI	66	0.12	0.31	0.45
PT	67	0.21	0.41	0.53
FR	68	0.18	0.37	0.50
CY	70	0.16	0.43	0.57
DE	76	0.24	0.46	0.59
AT	77	0.24	0.49	0.62

Source: HFCS.

Table 2 indicates that wealth inequality varies considerably (as will be seen, by more than income inequality). The lowest inequality, with a Gini of 0.4–0.6, is to be found in Slovakia, Slovenia, Greece and Spain. The highest inequality (a Gini of over 0.7) is to be found in Germany and Austria. Thus, even though these two countries have low-to-median levels of wealth, the share of wealth held by the richest is quite high, giving rise to the high inequality levels. In these countries, the richest 10% hold about 60% of the wealth, while the share of wealth held by their counterparts in the more equal countries is about 40%. The richest 1% hold about a quarter of the wealth in the most unequal countries, but less than 10% in the least unequal eurozone countries.

What could be driving these results? The rate of wealth accumulation that occurs in countries is also governed by pension provisions, which determine the needs of people on retirement. If there are generous pension provisions, we would expect a lower rate of accumulation than in countries where the needs of pensioners are greater. In countries where there is a need to accumulate more, inequality is greater, since people accumulate at different rates – the poor more slowly than the rich. Thus, in what follows we compare the differences between countries in terms of collective (rather than individual) wealth holdings, in order to see how far those collective holdings might explain inter-country variations in the degree of inequality in the individual holdings. In Table 3 we combine the Gini wealth-inequality rates across countries with average pension levels and pension wealth, calculated by the OECD pension models. We find that the correlation is indeed negative for both the weighted average pension level and the weighted average pension wealth – i.e. the lower the pension provisions, the greater the wealth inequality. In the last column of the table, average pension wealth is given, calculated as the lifetime value of pension payments. This incorporates such factors as life expectancy, which makes comparison with inequality more difficult.

Table 3: Pension levels and pension wealth and inequality

	Wealth Gini	Weighted average pension level		Weighted average pension wealth		Average pension wealth (USD)	
		Men	Women	Men	Women	Men	Women
AT	0.766	67.9	67.9	9.8	10.7	557,000	608,000
BE	0.608	38.2	38.2	7.0	8.2	407,000	476,000
DE	0.758	39.3	39.3	7.7	9.3	466,000	563,000
ES	0.581	73.4	73.4	13.4	15.1	455,000	513,000
FI	0.664	59.6	59.6	9.7	11.6	529,000	632,000
FR	0.679	44.4	44.4	9.3	10.5	444,000	501,000
GR	0.561	81.8	81.8	15.1	17.4	528,000	609,000
IT	0.609	64.7	50.8	10.6	11.1	408,000	427,000
LU	0.661	82.7	82.7	21.8	25.3	1,542,000	1,789,000
NL	0.654	87.0	87.0	18.0	20.6	1,145,000	1,311,000
PT	0.670	52.1	52.1	8.7	10.0	205,000	235,000
SI	0.535	57.0	57.0	12.7	17.0	293,000	392,000
SK	0.448	56.3	56.3	9.2	11.3	82,000	101,000

Notes: Weighted average pension level: the level of the average retirement income, taking account of the different treatment of workers with different incomes. Weighted average pension wealth: total cost of providing old-age income.

Source: Own calculations based on HFCS and OECD (2011).

Decomposition by factor components

Another measure used to gauge inequality is half the coefficient of variation squared. This measure is sensitive to extreme values, but it is useful in that it is decomposable by factor components. Hence, we are able to identify the factors that contribute most to inequality, as well as those that could have the most equalizing effect. In Table 4, we rank countries from lowest to highest level of inequality in net worth, according to this measure. Slovakia, Slovenia, Greece and the Netherlands have the lowest inequality, with a coefficient of less than 1. Austria, Germany, Malta, France, Portugal and Spain have a coefficient of above 5.

We identify five components that make up net worth: financial assets net of unsecured loans, net non-financial assets, housing equity (value of real estate net of mortgages), life insurance, and business assets. We find that the greatest contribution to inequality is made by housing equity and business assets. The contribution of financial assets is high in only a few countries: in Belgium, Finland and the Netherlands they contribute 25% or more to inequality. Belgium is the only country where the contribution of financial assets is higher than the contribution of housing equity. Self-employment business assets also have a sizeable impact on inequality (with the Netherlands and Luxembourg being exceptions to this), with a contribution that is higher than their share in the total portfolio.

Table 4: Inequality and contribution to inequality by factor components

	SK	SI	GR	NL	BE	IT	FI	CY	LU	AT	DE	MT	FR	PT	ES
Coefficient of variation ($\frac{1}{2} CV^2$)	0.56	0.69	0.82	0.98	1.33	1.83	1.84	3.07	3.31	5.03	5.76	6.10	6.50	7.10	8.28
Contribution to inequality of:															
Fin. assets (net)	0.04	0.02	0.04	0.11	0.34	0.15	0.19	0.14	0.30	0.76	0.92	0.66	0.68	0.82	0.68
Non-fin. assets (net)	0.03	0.03	0.04	0.05	0.05	0.09	0.11	0.07	0.14	0.24	0.28	0.20	0.34	0.39	0.28
Housing equity	0.45	0.57	0.69	0.59	0.81	1.41	1.44	2.04	2.69	2.65	3.33	3.69	4.34	4.86	6.35
Life insurance	0.01	0.01	0.00	0.19	0.07	0.02	0.03	0.09	0.08	0.08	0.37	0.14	0.54	0.10	0.14
Business assets	0.03	0.07	0.04	0.03	0.06	0.16	0.07	0.73	0.11	1.30	0.86	1.41	0.61	0.94	0.83
Proportional contribution to inequality of:															
Fin. assets (net)	6	4	8	25	45	9	29	3	4	5	7	1	17	10	7
Non-fin. assets (net)	5	2	2	2	2	2	2	0	2	1	1	1	1	1	1
Housing equity	70	65	81	60	39	55	47	36	89	29	38	13	31	23	46
Life insurance	1	1	1	10	3	0	1	1	0	0	2	0	7	1	0
Business assets	18	28	9	3	12	34	21	60	5	65	52	85	44	65	46
	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Share in total portfolio of:															
Fin. assets (net)	7	3	5	12	25	8	10	5	9	15	16	11	10	12	8
Non-fin. assets (net)	6	4	5	5	3	5	6	2	4	5	5	3	5	5	3
Housing equity	81	83	84	60	61	77	78	66	81	53	58	60	67	68	77
Life insurance	1	1	1	19	5	1	2	3	2	2	6	2	8	1	2
Business assets	5	10	5	3	5	9	4	24	3	26	15	23	9	13	10
	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Note: The ranking for the least unequal countries is similar to the ranking done according to the Gini.

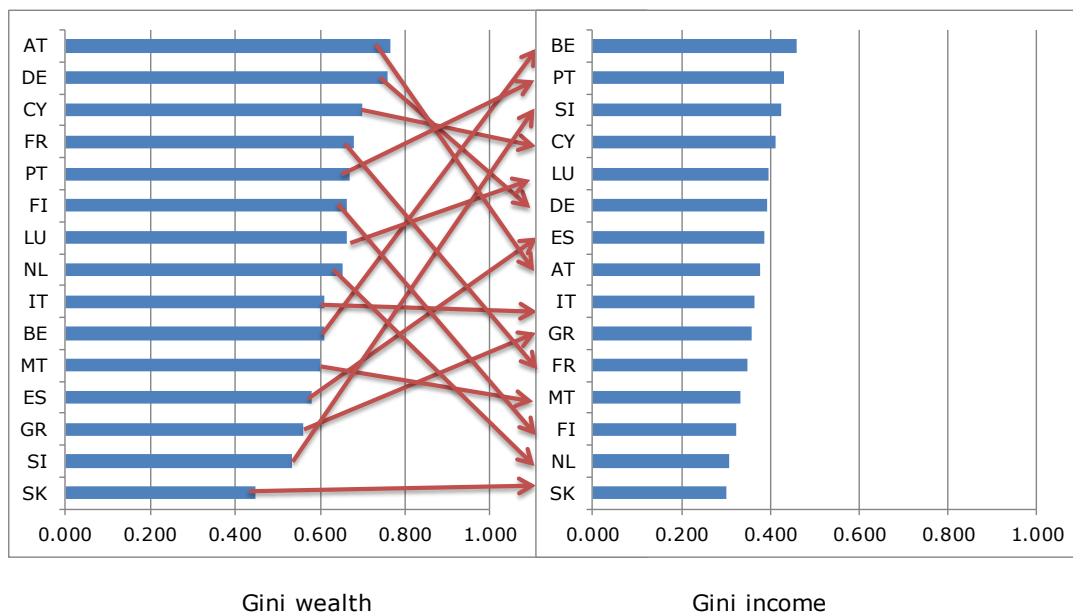
Source: HFCS.

Housing is the biggest component in the wealth portfolio in all countries, yet its contribution to inequality is lower than its share in the portfolio. Thus housing has, in fact, an equalizing effect, compared to its contribution in the portfolio. This is true of all countries bar one: Luxembourg, which has very high house prices. One reason for this is that not only does housing provide a flow of services to households, but it is also a way for them to save, and thus to accumulate wealth. Thus if wealth inequality is of concern, one way of reducing inequality would be to encourage homeownership throughout the wealth distribution.

Wealth and income inequality

Here we compare income inequality and wealth inequality. In Figure 2 we rank the sample countries according to the Gini for wealth and the Gini for income, and then compare the two to see the extent to which re-ranking occurs. In fact, we find no systematic relationship between income inequality and wealth inequality, and the correlation coefficient between the two is only 0.23.

Figure 2: Comparison of Gini indices for wealth and income



Source: HFCS.

Liquid versus illiquid wealth

Wealth can be more or less liquid. More-liquid wealth can be more easily converted into a stream of income and used to maintain consumption in the event of a sudden drop in regular income. The ability to use less-liquid wealth in order to smooth consumption will depend heavily on the institutional country environment and the availability of appropriate financial instruments to extract collateral. In this section, we explore the division between liquid and illiquid wealth and how this varies across households. This can be a significant factor that should be taken into account when assessing the effects of the crisis on living standards.

We use two definitions and compare the results across household types. In the first case, we take a more aggregated look at wealth. We define liquid wealth as financial assets (including deposit accounts, stocks, bonds, mutual funds and life insurance) less liabilities; and illiquid wealth as housing (principal residence and investment real estate) less mortgages and other home-secured debt, plus self-employment business. The picture in Table 5 is quite uniform. Most wealth is held in the form of non-financial assets (the proportion varies across countries from 69% to 96%). The share of financial assets in the total portfolio is 10% or less in countries such as Cyprus, Spain, Greece, Italy, Slovenia and Slovakia. This may be for two reasons. First, the absolute value held may be low (as in the case of Greece, Slovenia and Slovakia – less than 10,000 euros) or else home values may be very high (and there may be a large share of self-employment business) giving the impression of low financial assets. This is the case in Cyprus, Spain and Italy: in Cyprus, 50,000 euros in financial assets is less than 10% of the average value of non-financial assets; in Spain and Italy, 29,000 euros and 26,000 euros, respectively, are about 10% of average non-financial assets. We examine this in more detail by disaggregating household portfolios in Table 6.

Table 5: Liquid and illiquid portfolio values and composition across countries

	Values of portfolio components (in euros)			Portfolio composition (%)		
	Net financial assets	Net non-financial assets	Net worth	Financial assets	Non-financial assets	Net worth
AT	43,982	221,051	265,033	17	83	100
BE	104,116	234,532	338,647	31	69	100
CY	50,232	620,678	670,910	7	93	100
DE	43,814	151,356	195,170	22	78	100
ES	29,003	262,348	291,352	10	90	100
FI	19,435	142,099	161,534	12	88	100
FR	43,857	189,542	233,399	19	81	100
GR	8,557	139,200	147,757	6	94	100
IT	25,588	249,617	275,205	9	91	100
LU	80,375	629,717	710,092	11	89	100
MT	47,879	318,109	365,988	13	87	100
NL	52,967	117,277	170,244	31	69	100
PT	19,846	133,074	152,920	13	87	100
SI	5,536	143,200	148,736	4	96	100
SK	6,297	73,359	79,656	8	92	100

Source: HFCS.

In Table 6, we identify life insurance as a separate category of financial assets. This category refers to the value of voluntary pension scheme accounts and the worth of life insurance contracts. The values vary from a low of under 1,000 euros in Greece and Slovakia to over 10,000 euros in Belgium, Cyprus, Germany, France, Luxembourg and the Netherlands. In case of emergency, this category of assets would be more difficult to access than financial assets, but it gives some idea of how well households are preparing for retirement in terms of savings. For non-financial assets we identify three additional categories: housing equity (includes main and investment real estate), self-employment business and other non-financial assets. By disaggregating things in this way, we see more clearly the share of assets that is being held in real estate. Investment in real estate is encouraged in many countries; at the same time, it is a store of value that could potentially be seen as a form of savings for retirement, if the appropriate financial tools are in place to convert the real estate into cash if need be. The share of real estate in the portfolio now varies from about 50% in Austria to over 80% in Greece, Luxembourg, Slovakia and Slovenia. We find in some countries that self-employment business plays a large role in the portfolio: around a quarter in Austria, Cyprus and Malta, and over 10% in Germany and Portugal.

Table 6: Disaggregated portfolio values and composition across countries

	AT	BE	CY	DE	ES	FI	FR	GR	IT	LU	MT	NL	PT	SI	SK
Value of portfolio components (in thousand euros)															
Net-financial assets	40	86	31	31	24	17	24	8	23	64	39	20	18	4	6
Life insurance	4	18	19	13	5	3	19	1	3	17	9	33	2	1	1
Housing equity	140	207	446	113	223	126	156	124	213	576	221	103	105	123	65
Other non-financial assets	13	11	15	9	10	9	12	7	13	30	12	9	8	6	5
Self-employment business	68	16	159	29	29	7	22	8	24	24	85	6	20	14	4
Net worth	265	339	671	195	291	162	233	148	275	710	366	170	153	149	80
Portfolio composition (%)															
Net-financial assets	15	25	5	16	8	10	10	5	8	9	11	12	12	3	7
Life insurance	2	5	3	6	2	2	8	1	1	2	2	19	1	1	1
Housing equity	53	61	66	58	77	78	67	84	77	81	60	60	68	83	81
Other non-financial assets	5	3	2	5	3	6	5	5	5	4	3	5	5	4	6
Self-employment business	26	5	24	15	10	4	9	5	9	3	23	3	13	10	5
Net worth	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: HFCS.

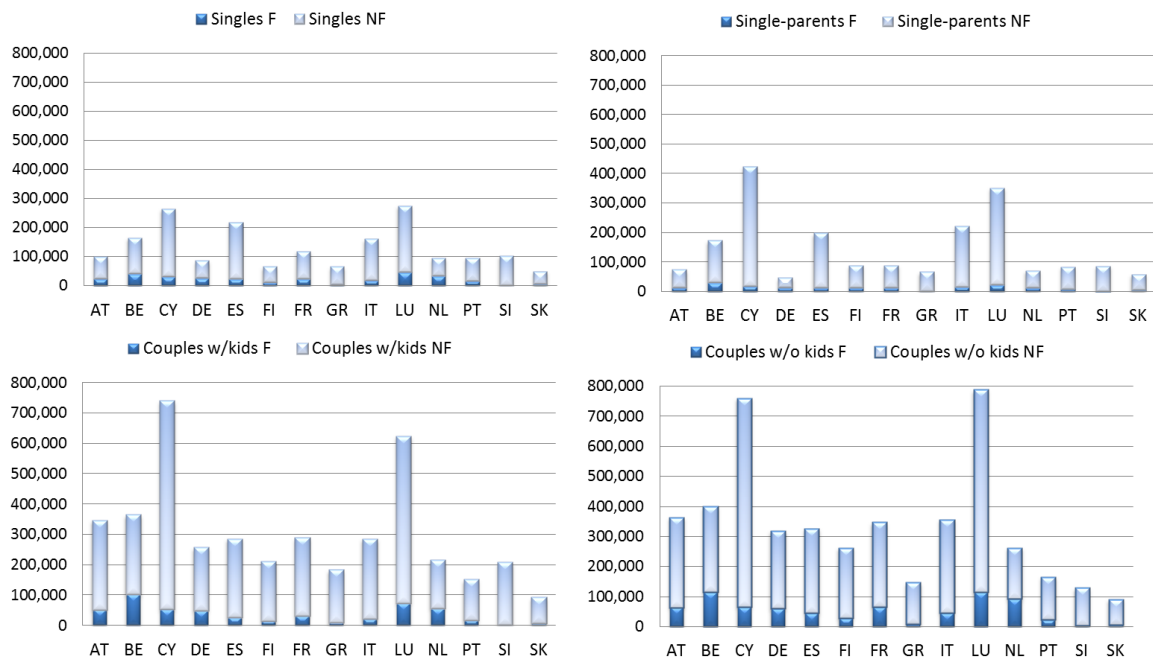
We now compare different household types and the share they hold in more-liquid and less-liquid assets. Here we look at the more aggregated categories, as in Table 5: net financial assets and net non-financial assets. The household types include singles (one-person households), single-parents, couple households with children, and couple households without children (two-person households).⁴

Figure 3 shows that the highest wealth levels are for couples without children, and the lowest are for single households (or in some countries for single parents). Belgium, Cyprus, Finland, Italy, Luxembourg and Slovakia are the countries where single parents have slightly more wealth than one-person households. These are countries where there is adequate provision for single-parent families or where divorce laws provide parents with adequate wealth. That said, a comparison of the wealth levels of couples with children and of single parents shows that one-parent households are at a big disadvantage.

Wealth levels of single parents are not necessarily the lowest of the household types, but their portfolio is not very liquid: single parents have the lowest levels of liquid wealth in all countries. This could be problematic if there is a need to supplement income using wealth. Couples without children, on the other hand, have the highest levels of liquid assets – some 50,000 to 100,000 euros, except in Finland, Greece, Portugal, Slovakia and Slovenia. Couples with children are not far behind (with similar exceptions). When we compare these levels across household types in terms of multiples of income (as in Table 7) the results are more striking.

⁴ Those over 65 and multi-family households (with or without children) are not included. Their asset ownership may become more complicated, as we might find a young family living with one set of parents. We are then unable to distinguish whether the home is owned by it or by the parents, as assets are recorded at the household level. The share of these types of households could potentially be quite extensive – and even larger as a result of the crisis.

Figure 3: Liquid (F) and illiquid (NF) asset levels by family type



Source: HFCS.

Table 7 shows net financial assets in terms of multiples of overall country household income. This gives us some idea of how long a household could continue to replace this income if had to rely on financial assets alone (1=1 year).

Table 7: Ratio of net financial assets and overall household income

	AT	BE	CY	DE	ES	FI	FR	GR	IT	LU	NL	PT	SI	SK
Singles	0.8	1.2	1.2	0.9	1.2	0.4	0.9	0.2	0.8	0.8	2.1	0.5	0.1	0.4
Single parents	0.4	0.9	0.7	0.4	0.6	0.4	0.5	0.0	0.7	0.4	0.7	0.2	-0.1	0.3
Couples with kids	1.8	3.1	2.1	1.7	1.4	0.5	1.3	0.6	1.0	1.4	3.7	0.6	0.2	0.6
Couples w/o kids	2.1	3.5	2.6	2.0	2.4	1.0	2.6	0.5	2.1	2.1	5.9	0.7	0.5	0.5

Source: HFCS.

The ratio is lowest in Greece, Portugal, Slovenia and Slovakia, representing 2–3 months in single and single-parent families and about half a year for couple households. In Western European countries (Austria, Belgium, Germany, Spain, France, Italy, Luxembourg and the Netherlands) and Cyprus, the levels are comfortably 1–2 years for couple households, and close to or more than six months for single parents.

Collection periods

One of the goals of the HFCS project is to achieve comparable data. Given the different environments in terms of markets, structures and cultures for so many countries, this was undeniably quite a challenging task. While some of the differences are hard to pinpoint, others are easier to identify. One of these is the extent to which the timing of data collection affected the results gathered. The surveys were carried out at different times in the sample countries, and thus the variations that occurred in house-price and stock-market indices may potentially have had an effect on the measurement of wealth, and consequently on its distribution between households

within countries, as well as between countries. Below we examine the extent to which this could be the case.

Table 8: Collection and reference periods, by country

	Abbreviation	Fieldwork	Length in months	Reference period Wealth	Income
Austria	AT	Sept 10–May 11	9	Time of interview	2009
Belgium	BE	Apr 10–Oct 10	7	Time of interview	2009
Cyprus	CY	Apr 10–Jan 11	10	Time of interview	2009
Finland	FI	Jan 10–May 10	5	31 Dec 2009	2009
France	FR	Oct 09–Feb 10	5	Time of interview	2009
Germany	DE	Sept 10–Jul 11	11	Time of interview	2009
Greece	GR	Jun 09–Sept 09	4	Time of interview	Last 12 months
Italy	IT	Jan 11–Aug 11	8	31 Dec 2010	2010
Luxembourg	LU	Sept 10–Apr 11	8	Time of interview	2009
Malta	MT	Oct 10–Feb 11	5	Time of interview	Last 12 months
Netherlands	NL	Apr 10–Dec 10	9	31 Dec 2009	2009
Portugal	PT	Apr 10–Jul 10	4	Time of interview	2009
Slovakia	SK	Sept 10–Oct 10	2	Time of interview	Last 12 months
Slovenia	SI	Oct 10–Dec 10	3	Time of interview	2009
Spain	ES	Nov 08–Jul 09	9	Time of interview	2007

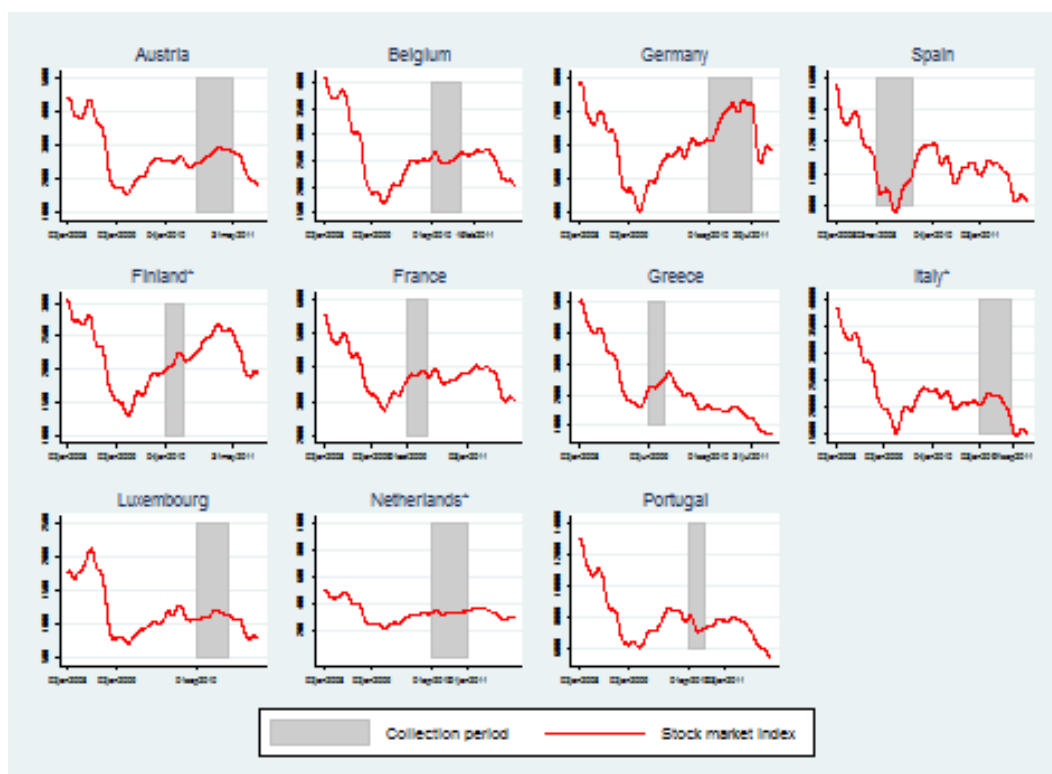
Source: HFCS.

The fieldwork took place between 2008 and 2011 and the timing for measuring assets and liabilities differed from country to country. In addition, the reference period for income differed. Information on income usually referred to income earned by the end of the previous year, while asset information was most often collected at the time of the interview. As Table 8 shows, in only three countries did the information collected on assets refer to the situation at the end of the previous December. The fieldwork took anywhere from 1 month to 11 months; thus if there were serious stock-market fluctuations or changes in house prices, that would affect the values collected for the purposes of the survey.

In order to check the extent to which this happened, we collated the stock-market and house-price indices for all the eurozone countries to plot the price trends against the collection periods.

In Figure 4, we plot the stock-market index from 2008 to 2012. The shaded area indicates the data-collection period. A close examination indicates that in most countries the index fluctuated by between 10% and 20% during the collection period. In Italy, the stock market dropped by over 20%, but the data on assets referred to the position at the end of the previous year, and so the reported values should not have been affected by the different collection periods. In Spain, during the fieldwork there was a dip of over 20% in the index, followed by a rise. The extent to which these changes will have affected the aggregate wealth values depends for the most part on the share of financial assets in the whole portfolio. In countries where financial assets – and riskier assets in particular – play no great role (such as Cyprus, Greece, Slovakia, Slovenia, Portugal or Finland), the effect will be quite small.

Figure 4: Stock-market index and collection periods for HFCS sample countries



Note: * wealth values collected as of the end of the previous year.

Source: Wall Street Journal (2013).

A graphical examination is useful, since – for example in the case of Spain – the index may undergo substantial fluctuation during the collection period. In Table 9, we show the change in the index from the start to the end of the collection period.

We see a large increase in the stock-market indices in Austria and Spain, and a large drop in Italy.

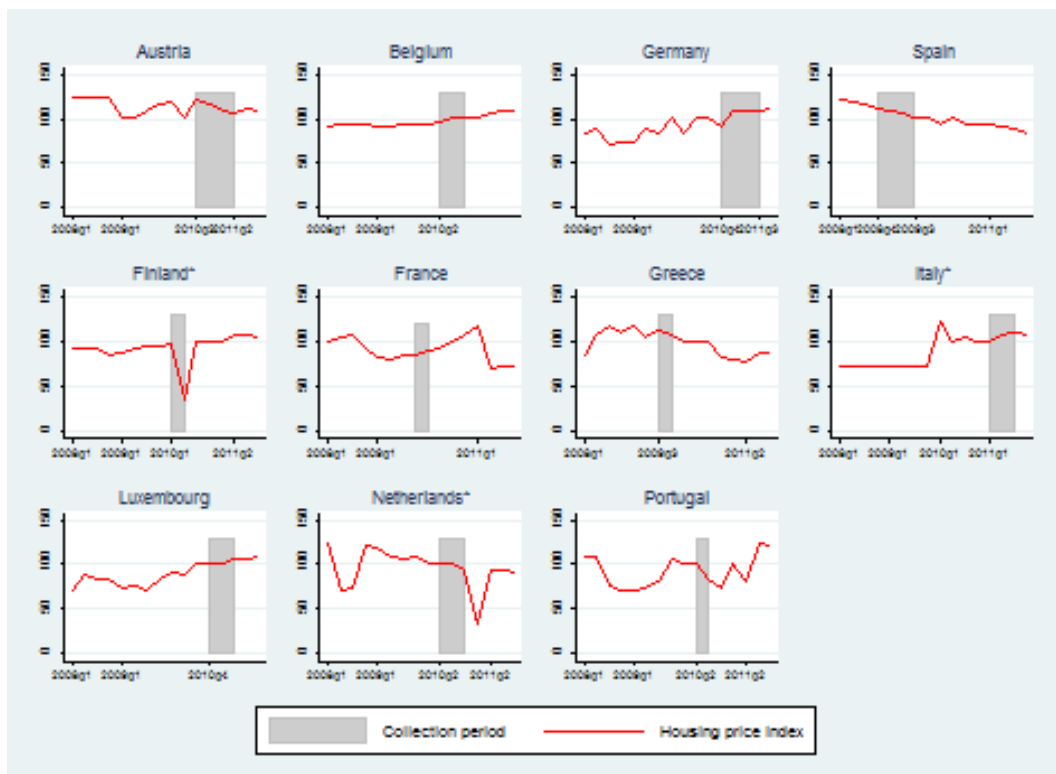
House-price changes during the collection periods may have had a larger effect on the portfolio, given that in most countries housing constitutes two-thirds of the wealth portfolio. Thus, in Figure 5 we also plot the changes in the house-price index. According to the index, the housing market in Finland saw a substantial drop in prices; but in that country all values were recorded as of the end of 2009, and so there is no need for correction. In some of the other countries, the house-price index seems to have been pretty stable, but in Austria, Germany, Spain and Portugal it changed by 11–18% during the collection period (see Table 9). What does this mean in practice? Essentially, a house valued at 100,000 euros at one point in the collection period could be valued at up to 15,000 euros more if the value was obtained at a different point in the same data-collection period. Thus potentially these could be non-negligible values and there is a need for some adjustment.

Table 9: Changes in house-price and stock-market indices over the collection period

	House-price index			Stock-market index		
	Start	End	Percentage point change	Start	End	Percentage point change
AT	121.07	105.75	-15.32	2456.62	2807.53	14.2843
BE	100.66	108.68	8.02	2599.4	2607.83	0.32407
CY	na	na		na	na	
DE	90.93	108.68	17.75	6128.5	6286.55	2.57902
ES	112.4	101.16	-11.24	8819.07	10822.7	22.7189
FI	97.58	34	-63.58	1964.88	2153.82	9.61576
FR	84.55	89.71	5.16	3820.33	3866.9	1.21906
GR	112.4	108.61	-3.79	2120.29	2287.58	7.8902
IT	100.66	109.04	8.38	38464.5	28459.9	-26.01
LU	101.16	105.75	4.59	1065.12	1060.28	-0.4542
MT	na	na		na	na	
NL	100.59	94.36	-6.23	334.752	346.927	3.63702
PT	101.16	83.41	-17.75	7894.66	7371.51	-6.6266
SI	na	na		na	na	
SK	na	na		na	na	

Source: Wall Street Journal (2013) and Eurostat (2013).

Figure 5: House-price index and collection periods for HFCS sample countries



Note: * wealth values collected as of the end of the previous year.

Source: Eurostat (2013).

Comparison of income distribution in the HFCS and EU-SILC

Methodology

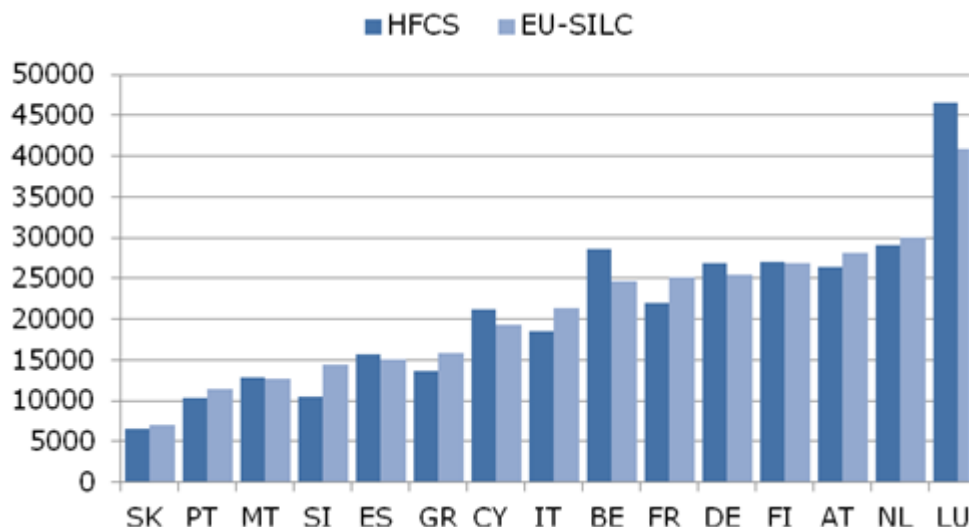
Income reference years in the HFCS survey vary by country (see Table 8 and HFCN 2013a). In the majority of countries, it was 2009, and for these we used data from EU-SILC user database (UDB) 2010 for comparison. In the case of Spain, the income reference year in the HFCS was 2007, so we used EU-SILC UDB 2008 as the comparison sample. In the case of Italy, Malta and Slovakia, the income reference year was 2010, so we used EU-SILC 2011 for comparison. We compared the distribution of equivalized gross household income and its components, where the number of consumption units in the household was calculated as N^e (N =household size) with $e=0.73$ parameter. Income inequality indicators were calculated for positive income values. No top coding was applied.

Comparison of income inequality and income structure

In what follows, first the distribution of total gross household income is compared for the two studies (HFCS and EU-SILC), and then the distribution of income types is presented. First of all, country averages and inequality indices are compared for total gross household income. As Figure 6 shows, the average gross household income was noticeably higher in the case of the HFCS data in Cyprus, Luxembourg and Belgium, while five countries showed markedly lower mean values in the HFCS. In seven countries, the difference in average gross household income between the two studies was relatively small ($\pm 5\%$).

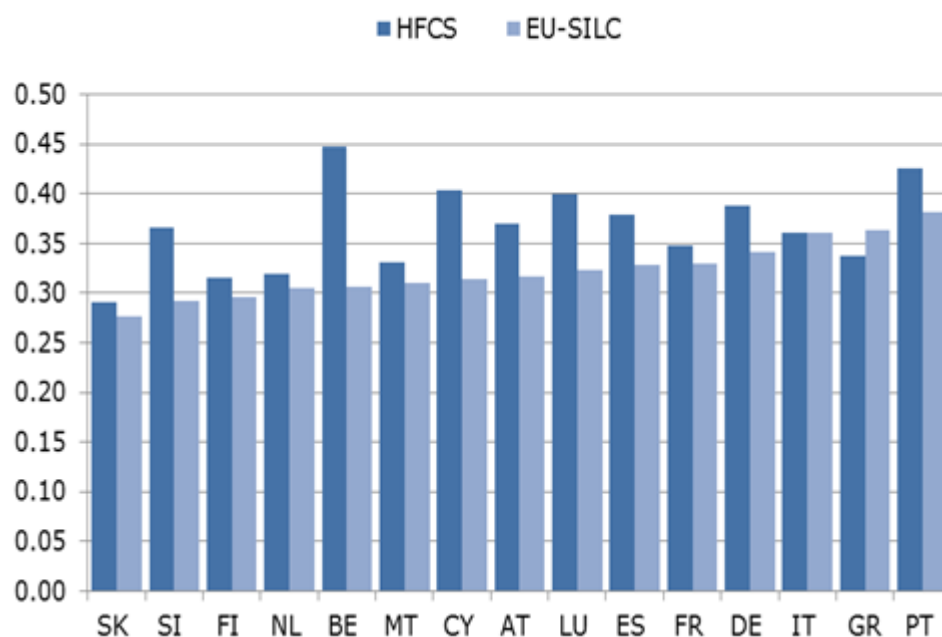
Comparison of the distribution of total gross household income shows that inequality, as measured by the Gini index, is higher in the HFCS survey in all countries except for Greece and Italy (see Figure 7). In Italy, the Gini equals 0.36 in both studies, while in Greece the Gini estimated from the HFCS study is lower than in the EU-SILC study. In four other countries – the Netherlands, Slovakia, Finland and France – the difference in the Gini indices is only small. In the other nine countries, however, income inequality seems to be significantly larger in the HFCS. The discrepancy is greatest in Belgium, where the Gini of gross income is 0.45 in the HFCS, but only 0.31 in EU-SILC. This has a major effect on Belgium's country ranking: on the basis of the EU-SILC data, it has the fifth-lowest Gini index, but according to the HFCS data it is the most unequal country. Cyprus, Slovenia and Luxembourg are also countries where the Gini index based on the HFCS is at least 20% higher than the EU-SILC estimates.

Figure 6: Comparison of averages of total gross household income (euro)



Source: Own calculations based on HFCS and EU-SILC UDB 2008, 2010, 2011.

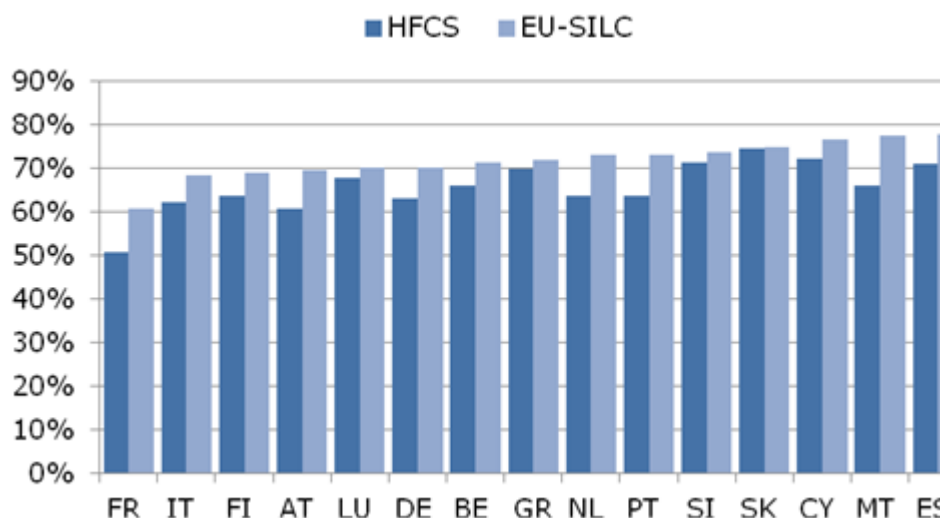
Figure 7: Gini indices of household gross income from HFCS and EU-SILC



Source: Own calculations based on HFCS and EU-SILC UDB 2008, 2010, 2011.

In order to understand the sources of these differences, there is a need to compare the structure of total household income. The share of labour income is lower in total gross income in the HFCS than it is in EU-SILC (see Figure 8). The difference is greatest for Malta, where, according to the HFCS, 66% of total gross household income comes from employment or self-employment, while in EU-SILC the corresponding figure is 78%. Also in Austria, the Netherlands, Portugal and France the difference is around 10 percentage points. The smallest difference is seen in Slovakia, where the shares are almost equal, while in Luxembourg, Slovenia, Greece and Cyprus the difference between the two studies is less than 5 percentage points.

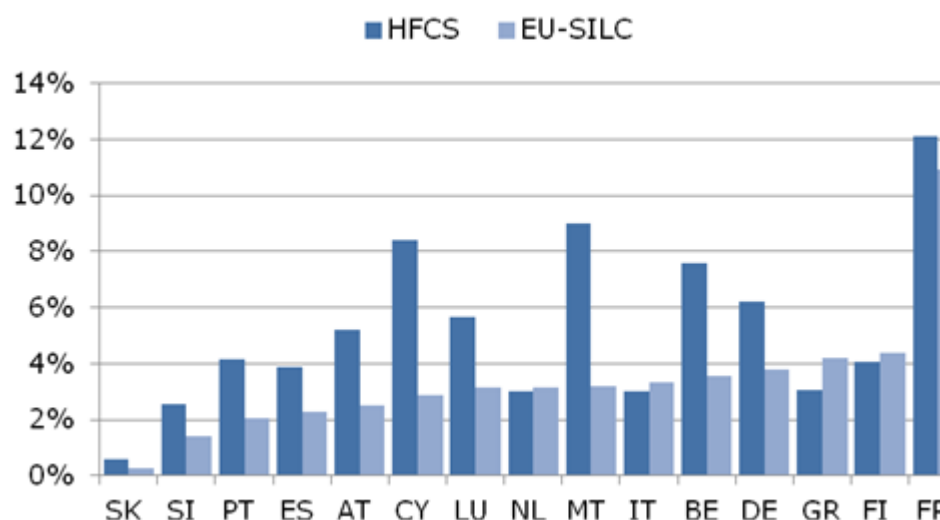
Figure 8: The share of labour income (from employment and self-employment) in gross household income



Source: Own calculations based on HFCS and EU-SILC UDB 2008, 2010, 2011.

The share of capital income is substantially higher in eight countries in the HFCS study (see Figure 9). The biggest difference can be seen in Malta, where the share is 9% in the HFCS, but only 3% in EU-SILC. The difference is similar in size in Belgium and Cyprus. In the remaining seven countries, the two studies provide a similar estimate of the share of capital income in total gross household income. The share of public pensions and other government transfers in total gross income is either much the same or higher according to the HFCS in the majority of countries, but the difference between the two studies is relatively small, exceeding 3 percentage points in only five countries: in Finland and the Netherlands, the share of government transfers is lower according to the HFCS, whereas in France, Portugal and Italy it is higher (see Table A3 of the Appendix).

Figure 9: The share of capital income (income from rent and investment) in gross household income



Source: Own calculations based on HFCS and EU-SILC UDB 2008, 2010, 2011.

Comparison of income distribution by income types

Now we compare the distribution of the most important income types: labour income from employment and self-employment, capital income from rents and investment, and income from public pensions and social transfers. Tables A1–A3 in the Appendix compare basic distributional features of income types between the two data sources: the percentage of individuals with positive income, average income and the Gini index of positive income.

The HFCS study seems to provide lower estimates of earnings from employment. The percentage of people with positive employment income is lower for every country using the HFCS – around 15 percentage points lower in Austria, Slovenia, Italy and France. The smallest difference is in Slovakia (-7 percentage points). Average earnings are markedly lower in the HFCS in 11 countries, while in the remaining four (Finland, Belgium, Cyprus and Luxembourg) the two studies' estimates are similar ($\pm 5\%$). The Gini indices of earnings inequality are reasonably close in eight of the countries. Of the remainder, in four cases earnings are less unequal in the HFCS than in EU-SILC, while in three cases (Germany, Luxembourg and Belgium) earnings inequality is larger in the HFCS study.

In the case of self-employment income, the HFCS shows 13 countries with a lower percentage of recipients of self-employment income (only in Luxembourg and Germany is the percentage higher). Average income from self-employment is lower in eight countries according to the HFCS and higher in seven. The comparison of inequality is also balanced: in seven countries the difference is small ($\pm 5\%$), while in four of the remaining countries inequality in self-employment income is lower according to the HFCS study, and in four cases it is higher.

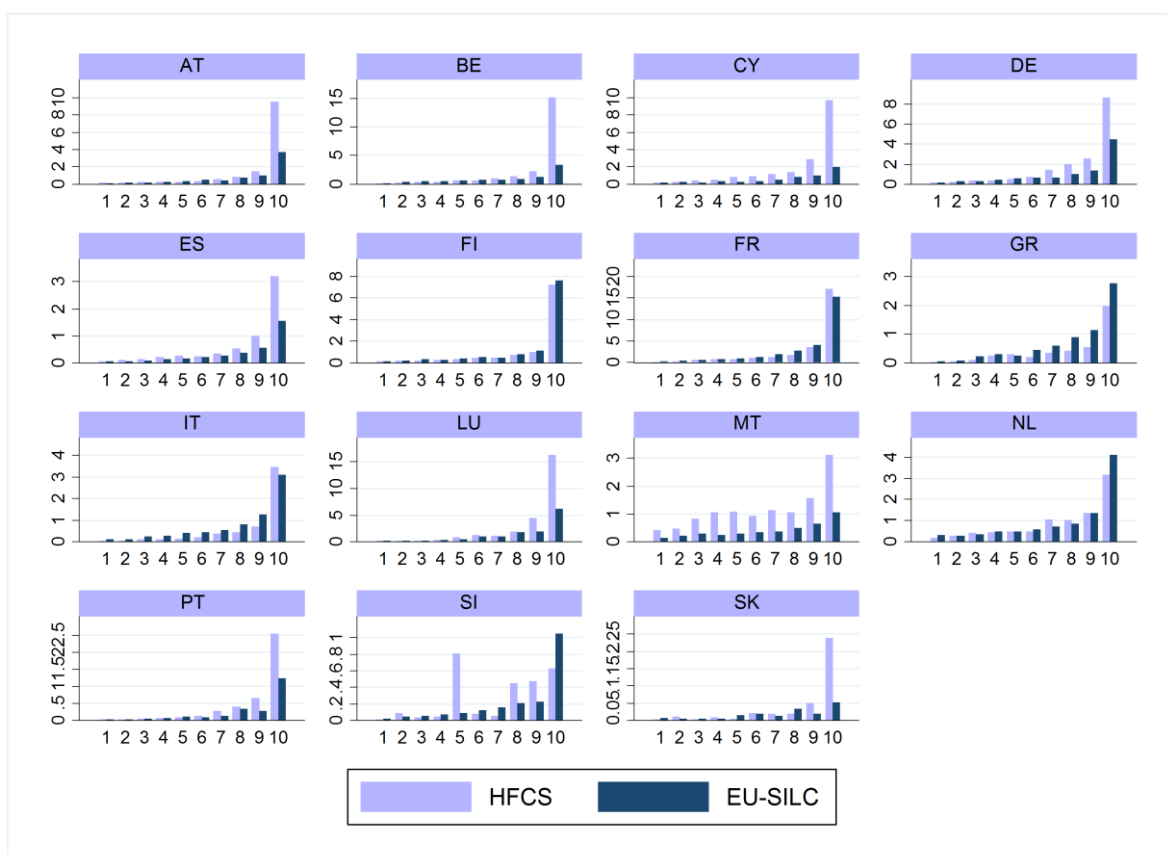
In the case of income from rents, the percentage of recipients is similar (± 2 percentage points) in eight of the 15 countries. Of the remainder, in three cases the HFCS shows a higher percentage of recipients of rental income, and in four cases a lower percentage – Greece (-9 percentage points), Italy (-8), the Netherlands (-3) and Slovenia (-3). Average income from rents is higher in the HFCS for ten of the 15 countries. In some countries the difference is substantial: in Germany average rental income is 176% higher according to the HFCS data, and in Luxembourg, Slovakia and Cyprus the value is at least 100% more. The estimates of average rental income are similar ($\pm 5\%$) in the case of France and Finland, the two countries for which both studies collect income data from registers. Average rental income is lower according to the HFCS in four countries, among them the Netherlands and Slovenia, which collect income data from registers in the case of EU-SILC, but use survey data for the HFCS. The Gini index for positive income values is similar in nine countries (including France and Finland). In three of the remaining countries, inequality of rental income is lower in the HFCS than in EU-SILC (especially in the Netherlands and Slovenia), while in three countries it is higher (in Belgium and Luxembourg around 20% higher).

Moving on to income from financial investment and from private business we see more or less the same pattern. There is less systematic difference in the percentage of recipients, but the average income from investment tends to be higher in the case of the HFCS, and inequality of positive income also tends to be higher. The percentage of recipients of investment income is similar in the two studies in six countries; in the remainder, it is lower according to the HFCS in five countries and higher in four. Average investment income is markedly higher in the HFCS in 11 countries, including Cyprus (where investment income is almost five times greater in the HFCS than in EU-SILC) and Belgium (where the estimates from HFCS are 229% higher than in EU-SILC). Average investment income is more or less the same in four countries: France, Finland, Germany and Netherlands. The Gini index of positive income is notably higher in the HFCS for seven countries, with the biggest difference in Italy. In six cases the difference

between the estimates from the two studies remains small ($\pm 5\%$), and in only two cases do we see markedly lower inequality of investment income in the HFCS.

Overall, average total capital income – defined as the sum of income from rent and income from investment – is higher in the HFCS study in ten countries. Estimates are broadly similar in France, Finland and the Netherlands, while in Greece and Italy capital income is a good deal lower in the case of the HFCS. The following figure (Figure 10) shows averages of capital income in deciles by total gross household income. It can be seen that, in countries where average capital income is higher in the HFCS, the difference between the two studies is especially large in the case of the top decile. The only exception to this pattern seems to be Slovenia, where the difference is greatest in the middle of the income distribution.

Figure 10: Means of capital income (income from rent and investment) in deciles defined by total gross household income (100 euros)



Source: Own calculations based on HFCS and EU-SILC UDB 2008, 2010, 2011.

In the case of public pensions, the comparability of the studies is limited by the fact that pensions from mandatory employer-based schemes are included in public pensions in EU-SILC, but not in the HFCS. Despite this methodological difference, the percentage of recipients of public pensions is similar (± 5 percentage points) in 11 of the countries. The HFCS shows a substantially lower figure for Finland (-12 percentage points), while for Germany, Austria and Malta it shows a considerably higher figure (6–7 percentage points). There are more important differences between the two studies in the average amount of public pensions. In two countries (Finland and the Netherlands), the average public pension is substantially lower according to the HFCS, while in nine countries it is a good deal higher than the average estimated by EU-SILC. The biggest differences are to be found for Finland (where the average public pension is only 16% of the amount estimated in EU-SILC) and Malta (where the

average public pension is 41% higher in the HFCS study. In terms of inequality of public pensions, the HFCS shows a significantly lower Gini index for ten countries, while in the remaining five the difference is relatively small. The biggest difference is seen in the case of the Netherlands, where the Gini index is 41% lower in the HFCS than in EU-SILC.

In the case of social transfers (other than public pensions), the HFCS records a lower percentage of recipients and lower averages than does EU-SILC in the majority of countries. The percentage of individuals living in households that receive some form of social transfer is lower in the HFCS in 13 countries. The biggest difference is observed in Malta, where the percentage of those receiving social transfers is 53 percentage points lower in the HFCS. The average amount of social transfers is significantly lower in the HFCS in 11 countries, and higher in only one (Spain), with the remaining three having similar averages in the two studies. The biggest difference is found in Italy, where the average amount of social transfers is only 17% of that measured in EU-SILC. The two studies are also different in terms of inequality of social transfers in 11 countries: the Gini index is markedly lower in the HFCS in five countries and notably higher in six. The biggest differences are to be seen in Slovakia, where the Gini index is 23% lower in the HFCS, and Austria, where it is 30% higher.

Concluding remarks

Examining wealth and income measures using a new eurozone survey, we find a great deal of variation in terms of levels and inequality. We are able to distinguish different types of country groupings, based on wealth and income levels. In all likelihood, these can at least partially be explained by pension wealth. The country rankings based on wealth measures do not correspond to the rankings based on income measures.

We find housing and business assets to be a large contributor to inequality in almost all countries. Housing is also the main component of wealth for many household types. Thus, whether a household owns its home outright or has a mortgage may prove important in determining whether it can rely on assets to smooth consumption in the case of a sudden drop in income.

For some countries, we find that data-collection periods may have had an impact on the collected asset, particularly in Austria, Germany and Portugal for housing wealth and in Austria and Spain for stock-market wealth. That said, in the case of the latter component the impact may not be substantial, due to the small proportion of stocks in the overall portfolio.

Comparison of the distribution of gross household income in the HFCS and EU-SILC reveals important differences between the two studies. In nine of the 15 eurozone countries, income inequality as measured by the Gini index is significantly larger in the HFCS, while in the other six countries the estimates are more or less equal. The analysis also shows differences in the structure of gross income between the two studies: the share of labour income in total gross income is lower in the HFCS than in EU-SILC in almost all countries. By contrast, the share of capital income tends to be higher in the HFCS study. The difference in the share of government transfers (public pensions and other transfers) is less pronounced.

A comparison by income type shows that the HFCS study provides lower estimates for the percentage of recipients of earnings from employment and for average earnings. There seems to be no systematic difference between the two studies in terms of the inequality of earnings from employment. In the case of income from rents and investment, average income tends to be higher in the HFCS and inequality of positive income also tends to be higher. Public pensions tend to be higher in the HFCS, and show less inequality, while other social transfers tend to be higher in EU-SILC.

References

Eurostat (2013). House price index: quarterly data.

http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/methodology/hps/house_price_index

Household Finance and Consumption Network (HFCN) (2013a). "The Eurosystem Household Finance and Consumption Survey: Methodological report for the first wave", Statistics Paper Series No. 1, April.

http://www.ecb.europa.eu/home/html/researcher_hfcn.en.html

Household Finance and Consumption Network (HFCN) (2013b). "The Eurosystem Household Finance and Consumption Survey: Results from the first wave", Statistics Paper Series No. 2, April.

http://www.ecb.europa.eu/home/html/researcher_hfcn.en.html

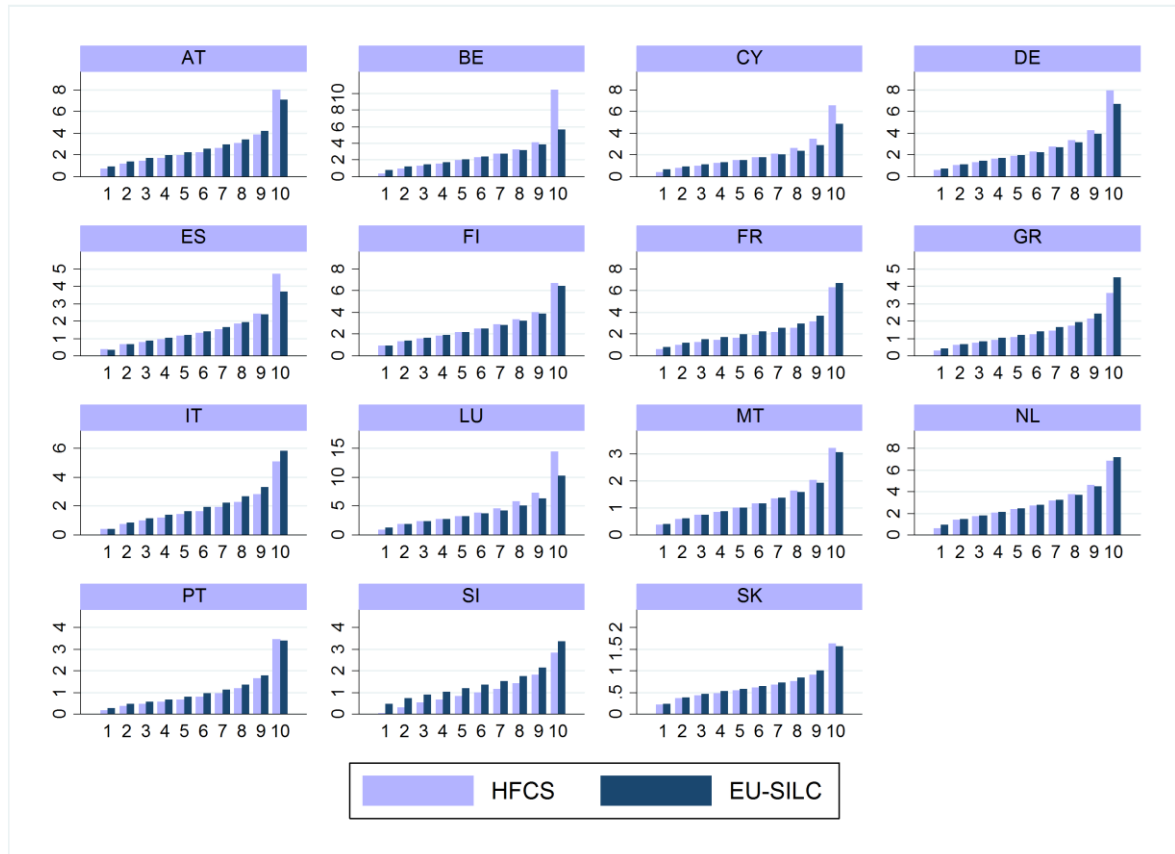
OECD (2011). *Pensions at a Glance*, Paris.

Wall Street Journal (2013). Stock market quotes (e.g. for Austria

<http://quotes.wsj.com/AT/XWBO/ATX/index-historical-prices>).

Appendix

Figure A1: Decile means of total gross household income



Source: Own calculations based on HFCS and EU-SILC UDB 2008, 2010, 2011.

Table A1: Distribution of earnings from employment and self-employment income

	% with positive income		Average income		Gini index of positive income	
	HFCS	EU-SILC	HFCS	EU-SILC	HFCS	EU-SILC
Earnings						
AT	60.8	76.3	13387	16794	0.378	0.398
BE	61.8	70.3	16680	15939	0.462	0.339
CY	69.0	82.6	13337	12731	0.390	0.374
DE	62.5	71.2	14597	16302	0.410	0.378
ES	67.1	77.9	9020	10534	0.366	0.363
FI	69.0	78.9	16046	17131	0.395	0.382
FR	61.4	76.5	10085	13980	0.401	0.381
GR	54.0	63.7	6614	7810	0.347	0.382
IT	55.3	69.3	8249	10295	0.350	0.401
LU	71.4	81.2	28197	26853	0.422	0.383
MT	65.5	76.8	7100	8550	0.354	0.358
NL	65.8	78.1	17196	19809	0.342	0.362
PT	61.6	74.0	5379	7272	0.439	0.422
SI	64.5	81.0	6879	9824	0.383	0.367
SK	74.0	80.6	3833	4644	0.274	0.349
Self-employment income						
AT	17.0	23.6	2667	2806	0.597	0.593
BE	9.0	12.4	2177	1640	0.661	0.439
CY	14.1	30.1	1967	2092	0.570	0.520
DE	13.4	9.7	2377	1558	0.599	0.666
ES	15.6	17.1	2117	1169	0.521	0.419
FI	14.7	18.6	1217	1417	0.696	0.666
FR	6.9	10.6	1075	1298	0.614	0.591
GR	27.8	35.7	2953	3659	0.465	0.546
IT	17.9	30.8	3265	4302	0.491	0.536
LU	10.3	8.8	3427	1890	0.605	0.637
MT	18.9	20.4	1386	1277	0.455	0.457
NL	12.7	19.5	1273	2111	0.534	0.677
PT	17.2	18.9	1187	1053	0.550	0.505
SI	8.8	26.8	623	793	0.612	0.612
SK	12.7	16.0	1089	586	0.463	0.454

Source: Own calculations based on HFCS and EU-SILC UDB 2008, 2010, 2011.

Table A2: Distribution of income from rent, investment and total capital income

	% with positive income		Average income		Gini index of positive income	
	HFCS	EU-SILC	HFCS	EU-SILC	HFCS	EU-SILC
Income from rent						
AT	4.8	6.7	516	379	0.777	0.703
BE	7.5	9.8	572	393	0.599	0.506
CY	12.9	9.2	722	337	0.537	0.538
DE	13.3	9.4	1022	370	0.591	0.668
ES	5.1	6.2	272	220	0.572	0.564
FI	7.6	8.6	282	268	0.596	0.596
FR	12.2	13.0	607	629	0.664	0.621
GR	8.4	17.3	289	592	0.550	0.535
IT	4.8	12.7	334	547	0.564	0.594
LU	13.3	9.6	1874	702	0.666	0.547
MT	6.6	5.6	137	86	0.630	0.733
NL	1.1	4.1	47	122	0.390	0.518
PT	4.8	4.5	203	136	0.638	0.599
SI	2.6	6.0	28	72	0.459	0.690
SK	1.9	3.1	28	11	0.673	0.769
Investment income						
AT	73.9	77.0	856	331	0.886	0.782
BE	39.7	66.8	1593	484	0.903	0.767
CY	25.0	10.7	1060	221	0.785	0.698
DE	41.6	82.7	647	591	0.788	0.770
ES	32.9	32.9	336	120	0.823	0.846
FI	75.5	80.0	814	906	0.922	0.931
FR	90.8	84.1	2047	2125	0.845	0.811
GR	8.1	8.2	127	74	0.823	0.697
IT	82.5	36.0	220	166	0.818	0.672
LU	45.2	59.3	756	578	0.844	0.851
MT	96.7	100.0	1018	316	0.653	0.813
NL	36.7	88.1	832	821	0.695	0.804
PT	18.7	10.6	224	98	0.805	0.710
SI	44.5	32.2	239	130	0.859	0.820
SK	2.9	16.9	9	6	0.740	0.672
Capital income: investment and rents						
AT	74.7	77.8	1371	710	0.907	0.858
BE	42.9	69.6	2165	877	0.878	0.788
CY	32.5	18.0	1782	558	0.720	0.633
DE	45.9	83.1	1669	961	0.780	0.813
ES	35.4	35.9	607	340	0.819	0.849
FI	75.9	80.5	1096	1174	0.908	0.915
FR	89.6	84.5	2654	2754	0.845	0.806
GR	15.5	22.6	416	666	0.694	0.596
IT	82.8	41.8	553	713	0.893	0.769
LU	49.6	61.3	2630	1280	0.858	0.852
MT	96.7	100.0	1155	402	0.664	0.830
NL	37.1	88.4	878	944	0.691	0.806
PT	21.2	13.9	427	234	0.795	0.715
SI	45.1	35.2	267	202	0.843	0.819
SK	4.6	19.2	37	17	0.773	0.829

Source: Own calculations based on HFCS and EU-SILC UDB 2008, 2010, 2011.

Table A3: Distribution of social transfers and total gross income of households

	% with positive income		Average income		Gini index of positive income	
	HFCS	EU-SILC	HFCS	EU-SILC	HFCS	EU-SILC
Public pensions						
AT	41.6	35.6	6964	5905	0.330	0.373
BE	33.6	30.7	5401	3901	0.315	0.354
CY	31.4	28.5	2983	2686	0.391	0.455
DE	38.0	32.1	5803	4611	0.334	0.355
ES	28.8	34.0	2349	2407	0.361	0.356
FI	23.0	34.7	734	4596	0.399	0.393
FR	41.1	35.9	6320	5223	0.332	0.397
GR	43.8	40.2	3407	3225	0.314	0.373
IT	48.0	42.7	6037	5195	0.333	0.381
LU	34.6	31.2	9393	7426	0.374	0.391
MT	43.3	36.7	2489	1767	0.286	0.317
NL	30.0	32.0	3266	5083	0.258	0.435
PT	45.1	39.8	2767	2258	0.447	0.441
SI	39.4	43.1	2267	2530	0.364	0.394
SK	42.4	43.4	1433	1382	0.268	0.346
Social transfers (pensions not included)						
AT	32.5	63.2	998	1731	0.482	0.371
BE	38.5	64.7	1432	2063	0.556	0.497
CY	28.4	69.9	500	1000	0.546	0.564
DE	39.4	57.5	1204	1625	0.469	0.463
ES	26.6	25.6	1003	449	0.466	0.545
FI	61.8	70.4	2393	2274	0.504	0.483
FR	54.3	62.8	1659	1831	0.521	0.476
GR	8.7	35.2	110	328	0.481	0.523
IT	5.7	48.5	98	707	0.545	0.643
LU	41.7	64.7	1677	3194	0.477	0.427
MT	34.2	87.4	199	596	0.617	0.597
NL	60.0	65.0	1586	1624	0.639	0.595
PT	37.0	52.4	344	473	0.662	0.589
SI	26.4	68.6	261	978	0.470	0.507
SK	15.4	63.1	113	300	0.423	0.549
Total gross household income						
AT	99.3	100.0	26459	28150	0.370	0.316
BE	97.2	100.0	28543	24660	0.448	0.307
CY	98.8	100.0	21202	19296	0.404	0.314
DE	99.0	100.0	26919	25410	0.388	0.342
ES	99.1	99.3	15687	15014	0.379	0.328
FI	99.1	100.0	27043	26830	0.315	0.297
FR	99.8	100.0	21913	25181	0.348	0.330
GR	96.6	99.4	13698	15910	0.337	0.363
IT	99.2	99.3	18471	21344	0.360	0.360
LU	99.3	99.8	46619	40929	0.400	0.323
MT	100.0	99.9	12831	12666	0.331	0.310
NL	98.7	99.9	29014	30020	0.319	0.305
PT	98.7	100.0	10292	11371	0.425	0.382
SI	94.4	100.0	10522	14424	0.366	0.292
SK	99.8	100.0	6597	6974	0.290	0.277

Source: Own calculations based on HFCS and EU-SILC UDB 2008, 2010, 2011.