

PRELIMINARY AND INCOMPLETE

ASSET-RELATED MEASURES OF POVERTY AND ECONOMIC STRESS

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Abstract

Poverty is generally defined as income or expenditure insufficiency, but the economic condition of a household also depends on its real and financial asset holdings as well as on the possibility to access the credit market. This paper investigates notions of poverty which rely on indicators of household net worth. We review and assess three main approaches followed in the literature: income-net worth measures, asset-poverty, financial vulnerability. We provide fresh cross-national evidence based on data from the Luxembourg Wealth Study and the European Union Survey of Income and Living Conditions.

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1. Introduction¹

Researchers in social sciences have growingly emphasised the importance of moving beyond income in the analysis of poverty and inequality, and many have contended that assets and liabilities also play a central role of (e.g., Bourguignon 2006). The global crisis exploded in 2008 has dramatically confirmed this assertion. The collapse of stock market values has hurt the wealthy by causing large capital losses on their wealth holdings, but has potentially harmed all retirees whose pensions are paid by private intermediaries suffering considerable losses in financial markets. Plummeting house prices have hit middle-class households for which owned homes account for large part of personal wealth, and has lessened their ability to borrow. As the financial crisis has infected the real economy, job losses and falling incomes have impaired the living conditions of many households, only in part offset by welfare states put under considerable stress (Atkinson 2009); they have also spread a sense of insecurity and vulnerability across families, which may have led them to reduce consumption and save more to cope with sudden negative income shocks. These cursory observations all point to the close link between stocks and flows, and to the need to better grasp how net worth affects the economic position and well-being of the households.

The standard approach, in research as well as policy analysis, is to define poverty as income, or expenditure, insufficiency relative to some minimally acceptable level. Many measurement aspects, prominently the choice between an absolute and a relative line, can be dealt with in different ways, but in both developed and developing countries a consumer unit is generally taken as poor if its income, expenditure or consumption falls below a predefined poverty threshold. In the United States (US), for instance, a family and every individual in it are considered in poverty if the family's total money income before taxes is less than a threshold that varies by family size and composition and is updated annually for inflation (US Census Bureau 2008). In the European Union (EU), the population at risk of poverty

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comprises all persons with equivalised disposable income below 60 per cent of the median value in each country (European Commission 2008a). In Italy, Istat (2008) classifies as poor all households whose equivalised expenditure falls below a line set on the basis of per capita expenditure.

These definitions account for household wealth only through the income flow it generates in the current year. Income generally includes rent, interests, dividends and other returns on financial assets, possibly net of interest paid on mortgages and other household debts; the inclusion of the imputed rent for owner-occupied dwellings is less common, although it has been made mandatory in EU statistics since 2007;² capital gains and losses are rarely included in the income concept, the more so in the calculation of poverty statistics. These income-flow measures are correctly defined, but fail to represent the full amount of resources on which a consumer unit can rely to cope with the needs of everyday life as well as of rainy days. This practice is somewhat at odds with the standard economic theory of consumption behaviour, where the budget constraint typically embodies current net worth together with the discounted value of current and future income streams.

There are two main reasons why we may want to go beyond a purely income-based measure of poverty. First, consumer units with total earnings below the poverty threshold may have considerably different standard of living depending on the value of their net assets. A sudden income drop need not result in lower living conditions if they can decrease accumulated wealth, or can borrow. As stressed by Morduch (1994), the case of a household with current consumption below the poverty line but permanent income above it is radically different from that of a household whose fundamental earning capacity has been impaired so that consumption and permanent income both fall below the poverty line: for the former poverty only occurs because it cannot borrow against future incomes, whereas for the latter is has a more structural nature. On the other hand, income can be above the poverty threshold, yet a family can feel vulnerable because of it lacks the financial resources to utilise in the case of an adverse income shock. Assets and liabilities are fundamental to smooth out consumption

² Imputed rent tend to benefit a wide range of low to high income units, especially the elderly, but their overall effect may vary across countries, depending on the level of housing prices and the diffusion of home-ownership (Frick and Grabka 2003).

patterns when income is volatile; their insurance role is intertwined with the existence of and access to private or public insurance mechanisms.

There is a second, somewhat deeper, reason to broaden our focus and embody wealth into the analysis of poverty and inequality. The chances in one's life much depends on the set of opportunities open to a person which are, in turn, a function of the person's endowment. Bowles and Gintis (2002) show the importance of material wealth in the intergenerational transmission of inequalities. Thus, whenever the policy objective is to level the playing field more than to ensure a decent standard of living, wealth redistribution may reveal more effective than income redistribution. This concern is at the basis of the idea to establish a capital endowment for the young entering adulthood, as proposed by Ackerman and Alstott (1999) and Livi Bacci (2004) or implemented by the Child Trust Fund (2008) in the United Kingdom. The advantage of an asset-based redistribution supposedly derives from the fact that an initial minimum endowment reinforces the sense of responsibility of individuals and their attitude to pursue more efficient behaviours (Bowles and Gintis 1998).

In this paper we examine the role of net worth in affecting household economic well-being from the first perspective. While the two perspectives are clearly not mutually independent, our main purpose here is to investigate measures that may help us to better monitor the social situation of a community more than to understand the causes, and the remedies, for structural economic inequalities. The paper is organised as follows. We first review, in the next Section, three lines of enquiry of asset-related measures of poverty and economic stress: income-net worth measures, asset-poverty, and financial vulnerability. We briefly describe the data at our disposal in Section 3, and present comparative results from applying the three approaches in Sections 4 to 6. In Section 7 we provide an assessment of these alternative approaches and draw some conclusions.

2. Asset-related measures of poverty and economic stress: some definitions

2.1. Income-net worth measures

It is standard to define the poverty status as the insufficiency of current income, CY_t , relative to a pre-fix threshold which represents the minimum acceptable level of command over resources. CY_t equals the sum of all incomes from labour, pensions and other transfers

received in year t , Y_t , plus property incomes r_tNW_{t-1} , where r_t is the rate of return on (beginning-of-the-period) net worth NW_{t-1} :

$$CY_t = Y_t + r_tNW_{t-1} \quad (2)$$

This definition underestimates the resources that an individual can use to meet his needs, in particular it ignores the possibility to decrease accumulated savings. Weisbrod and Hansen (1968) suggested that the economic position of a person is better captured by “income-net worth”, an augmented income definition where the yield on net worth in year t is replaced with the n -year annuity value of net worth:

$$AY_t = Y_t + \left[\frac{\rho}{1 - (1 + \rho)^{-n}} \right] NW_{t-1} \quad (2)$$

with n and ρ being the length and the interest rate of the annuity. In (2) net worth is converted into a constant flow of income, discounted at the rate ρ , over a period of n years. If n goes to infinity, the annuity consists entirely of interest, and (2) would coincide with (1) for ρ equal to r_t . At the other extreme, if the time horizon is one year, AY_t is simply the sum of current income and net worth. Weisbrod and Hansen proposed to equate n with the person’s life expectancy, under the assumption that no wealth is left at the death of the person—even though the formula could easily allow for a bequest. In their empirical application, they used different net worth concepts and took ρ equals to either 4 or 10 per cent.

Projector and Weiss (1969) criticised this approach on two grounds: first, the choice of n is arbitrary, as there is no way to judge the preferable span of time over which net worth should be spread evenly; second, the comparisons on the basis of a mechanical application of (2) of consumer units at different ages ignores the life-cycle patterns of saving and consumption, failing to account for the higher saving potential of young units. Possibly for these objections, possibly for the lack of suitable databases, few researchers have followed Weisbrod and Hansen: most applications focus on the elderly and relate to the United States. For instance, Moon (1976) used US data for 1967 to investigate households where the head or the spouse was 65 or older; she set the interest rate at 4 per cent and considered average life expectancies based on the age and sex of each aged family member (see also Crystal and Shea 1990).

Rendall and Speare Jr (1993) generalised (2) by singling out the component of Y_t that is not replaceable by pensions, X_t , and by decomposing the life expectancy of a consumer unit

into remaining working time, T_w , time to the death of the member in the couple who dies first, T_1 , and time to death of the survivor, T . Thus, the income-net worth indicator is rewritten as

$$AY_t = Y_t - X_t + \left[\frac{\rho}{1 - (1 + \rho)^{-n}} \right] \left[NW_{t-1} + \sum_{\tau=0}^{T_w} \frac{X_t}{(1 + r)^{-\tau}} \right] \quad (2a)$$

where r denotes the (average) real rate of return on net worth in future periods, and n is equal to T for an unmarried elderly person, and $T_1 + (T - T_1)b$ for a married elderly person, b being the reduction in the equivalence scale coefficient following the death of a member in the couple. For non elderly members of the consumer unit, (2a) was applied with n that goes to infinity. In their empirical analysis, Rendall and Speare Jr selected a sample of US households with at least a member over 65 in 1984; they set r equal to 2 or 4, and ρ equal to r minus 2.4 percentage points. On the contrary, Short and Ruggles (2005) considered all households and took n to refer to the remaining life span of the family head only. With regards to interest rates, they either applied 2 per cent on total assets (both financial and real), or 4 per cent on net worth, or a combined 2 per cent on total assets and 6 per cent on debts.

As made clear by Weisbrod and Hansen (1968, pp. 1316-7), expression (2) is a conceptually consistent way of combining current income and net worth which is independent of its practical feasibility: it does not imply "... either that people generally do purchase annuities with any or all of their net worth, that they necessarily *should* do so, or that they *can* do so".

2.2. Asset-poverty

Combining income and net worth may impose considerable structure on the measurement, starting with the need to choose the values of various parameters. An alternative approach may be to supplement income- or expenditure-based notions of poverty with asset-based measures. While the former refer to a static condition of insufficiency of economic resources in order to maintain a certain living standard, the latter capture a dynamic situation of exposure to the potential risk that such insufficiency arises. Following this distinction, asset-based measures may be better understood as referring to "vulnerability" more than "poverty". Indeed, according to the World Bank (2001, p. 139), "vulnerability measures the resilience against a shock—the likelihood that a shock will result in a decline in

well-being. ... [It] is primarily a function of a household's asset endowment and insurance mechanisms—and the characteristics (severity, frequency) of the shock”.

A straightforward application of these ideas is to consider a consumer unit as asset-poor whenever its wealth holdings are not sufficient to secure it the socially determined decent standard of living for a given, usually short, period of time. Haveman and Wolff (2004) take this period to be three months, and consequently set the asset-poverty threshold at one fourth of the expenditure-based absolute poverty line proposed by the US National Academy of Science panel. They use two different wealth concept: “net worth”, which includes all marketable assets net of all debts and is seen as an indicator of “the long-run economic security of families”; and “liquid assets”, which include only financial assets that can be easily monetised and are an indicator of “emergency fund availability” (Haveman and Wolff 2004, p. 151). Similar hypotheses are adopted by Brandolini (2005) and Short and Ruggles (2005).

2.3. Financially vulnerable households

A third strand of literature tries to identify financially vulnerable households. Given the strong increase in household debt observed in recent years, financial vulnerability has been frequently linked to indebted households, specifically those taking up a mortgage to buy the house of residence, the main asset in household wealth. In the literature, vulnerable households have been generally identified with those that experience difficulties in paying back their loans. In a recent paper written on behalf of the European Commission (2008), households are considered over-indebted if they are having difficulties meeting (or are falling behind with) their commitments, relating either to servicing secured or unsecured borrowing or to the payment of rent or utility.

The most important factor influencing the probability of households to be in arrears appears to be the debt-service ratio, i.e. the share of disposable income used to pay interests on debt and to pay back the principal. Dey, Djoudad and Terajima (2008) find a critical debt-service ratio threshold of 35 per cent, above which there is a significant increase in households' propensity to be delinquent on their mortgages. Many reports on financial stability and studies on this topic identify a similar threshold, in the range of 30-40 per cent (e.g., Dynan and Khon for the US, 2007; ...).

3. Data issues³

3.1. *The LWS database*

The Luxembourg Wealth Study (LWS) was a joint project of the Luxembourg Income Study (LIS) and institutions from ten countries (Austria, Canada, Cyprus, Finland, Germany, Italy, Norway, Sweden, the United Kingdom, and the United States) carried out between 2004 and 2007.⁴ The primary goal of the project was to assemble and to organize existing micro-data on household wealth into a coherent database, in order to provide a more sound basis for comparative research on household net worth, portfolio composition, and wealth distributions. After a testing phase, the ex-post-harmonised LWS database was released in December 2007 to the research community world-wide through the LIS remote access system (see <http://www.lisproject.org> for further details). The dataset will be maintained and updated as part of the regular LIS activities.⁵

The LWS project exposes the difficulties of conducting comparative analysis of household wealth. Although all LWS countries rely on sample surveys among households or individuals, there are important differences in collection methods. Some surveys have been designed for the specific purpose of collecting wealth data, whereas others cover different areas and have been supplemented with special wealth modules; in some countries, information from administrative records, mostly wealth tax registers, is also used. Some surveys over-sample the wealthy and provide a better coverage of the upper tail of the

³ This section draws on Sierminska, Brandolini and Smeeding (2008).

⁴ Sponsoring institutions included statistical offices (Statistics Canada, Statistics Norway), central banks (Central Bank of Cyprus, Banca d'Italia, Österreichische Nationalbank), research institutes (Deutsches Institut für Wirtschaftsforschung–DIW, U.K. Institute for Social and Economic Research–ISER, through a grant awarded by the Nuffield Foundation), universities (Åbo Akademi University), and research foundations (Finnish Yrjö Jahnsson Foundation, Palkansaajasäätiö–Finnish Labour Foundation, Swedish Council for Working Life and Social Research–FAS, U.S. National Science Foundation). Different stages of the project saw the participation of representatives from several other public institutions (Statistics Sweden, Banco de España, De Nederlandsche Bank, U.S. Federal Reserve Board, U.S. Internal Revenue Service, U.K. Department for Work and Pensions, Organisation for Economic Co-operation and Development, World Bank) as well as researchers from many universities.

⁵ The LWS project helped to establish a network of producers and experts of data on household net worth which could be important in promoting a much-needed process of ex ante standardization of definitions and

distribution, though at the cost of higher non-response rates. Others ask only a small number of broad wealth questions, but achieve good response rates. Definitions are also not uniform across surveys. In general, the unit of analysis is the household, but it is the individual in Germany, and the nuclear family (i.e. a single adult or a couple plus dependent children) in Canada. A household is defined as including all persons living together in the same dwelling, but sharing expenses is an additional requirement in Cyprus, Italy, Finland, Norway, Sweden and the United States. This implies that demographic differences reflect both the definition of the unit of analysis and true differences in the population structure. Other methodological differences relate to the way assets and liabilities are recorded (as point values, by brackets, or both), their accounting period (time of the interview vs. end of year) and the valuation criteria. In most cases, wealth components are valued on a “realization” basis, or the value which could be obtained in a sale on the open market as estimated by the respondent, but there are important exceptions, such as the valuation of real property on a taxable basis in Sweden and Norway.

A synthetic assessment of the information contained in the LWS database is provided by the comparison of LWS-based estimates with their aggregate counterparts in the national balance sheets of the household sector (which include non-profit institutions serving households and small unincorporated enterprises). This comparison is presented in Table 5, where all variables are transformed into euro at current prices by using the average market exchange rate in the relevant year, and are expressed in per capita terms to adjust for the different household size. The aggregate accounts provide a natural benchmark to assess the quality of the LWS database, but a proper comparison would require a painstaking work of reconciliation of the two sources, as discussed at length by Antoniewicz et al. (2005). The aim of Table 5 is more modestly to offer a summary view of how the picture drawn on the basis of the LWS data relate to the one that could be derived from the national balance sheets or the financial accounts. LWS estimates seem to represent non-financial assets and, to a lesser extent, liabilities better than financial assets. In all countries where the aggregate information is available, the LWS wealth data account for between 40 and 60 per cent of the aggregate

methodologies, and to the elaboration of guidelines for the collection of household wealth statistics, as done for income by the Expert Group on Household Income Statistics–The Canberra Group (2001).

wealth. Note that these discrepancies should not be attributed to the deficiency of the LWS data, since they reflect not only the under-reporting in the original micro sources, but also the dropping of some items in the LWS definitions to enhance cross-country comparability as well as the different definitions of micro and macro sources.

To sum up, despite the considerable effort put into standardizing wealth variables, there remain important differences in definitions, valuation criteria and survey quality that cannot be adjusted for at this time. Moreover, the degree to which LWS-based estimates match aggregate figures varies across surveys. These observations have to be borne in mind in reading the results discussed below.

3.2. *EU-SILC*

The EU Statistics on Income and Living Conditions (EU-SILC) provides comparative statistics on income distribution and social exclusion at the European level (Clemenceau and Museux 2007). In 2005 it covered the 25 EU member states plus Norway and Iceland; it has been extended to Bulgaria, Romania, Switzerland and Turkey since 2007. In our analysis we consider five countries from the EU-SILC database – Spain (ES), Finland (FI), Italy (IT), the Netherlands (NL), and the UK – for which we can calculate fairly well the households with either a mortgage or a consumer loans. We also add two countries for which we face more problems in the calculation such as Ireland (IE), for which we are more sure about the percentage of households with mortgages, and France (FR), for which both for mortgages and consumer loans the share is similar to what has been found in the survey by the Insee; for the time being we keep IE and FR in the analysis and therefore around 80,000 households are considered. This is an important methodological step of our analysis. More in detail, there are two types of variables in the EU-SILC data that can be used to classify households with a mortgage. First there is the variable interest repayment on mortgage (hy100g/hy100n), which is unfortunately missing for Spain. Secondly, there is the variable arrears on mortgage or rent payments in the last 12 months (hs010): as this question should not be applicable to outright owners or rent free⁶, it should be possible to identify households with mortgage by using the

⁶ From the Description of Silc user database variables, version 2006.2 from 20-10-08.

double condition that the household owns the house of residence and answers the question on the arrears on mortgage. For most of the countries the percentages of households with mortgage calculated on the basis of these two variables are identical or very similar (FI, IT, NL, UK and IE⁷). For ES only the second variable is available, though the share of households with mortgage obtained in this case is very similar to that based on the Household Survey run by the Bank of Spain. Only for FR the share calculated on the basis of the two variables are unfortunately different, with that based on interests payment that is lower: however, on the basis of the household survey run by the Insee, the share calculated on the second variable appears to be more reliable and has been used in the analysis.

As for the identification of the households with a consumer loan, we also rely on two variables, the first being the question on the arrears on hire purchase instalments or other loans payments in last 12 months (hs030): according to the description of the database, this question should not be applicable to households that have no hire purchase instalments and no other loan payments. The second variable under consideration is that concerning the financial burden of the repayment of debts from hire purchase or other non-housing related debts (hs150): for this variable as well, this question should not be applicable in the case the household has not consumer loan to repay. Therefore it is possible to identify households with a consumer loan by considering those households that do not answer these questions. For most of the countries under analysis (ES, FI, IT, NL) the share calculated on the basis of both questions are pretty similar and for other countries (FR, UK) the shares based on the second variable are analogous to those found by using other household surveys. We are therefore confident in having identified those households with a consumer loan.⁸

There is no problem in identifying households that pay a rent as there is a question (hh020) where the household is asked about the tenure status of the house of residence (owner, tenant paying a rent at market rates, tenant paying a rent at reduced rate and free

⁷ For Italy and the Netherlands for which there are small differences in the two percentages, we use the share based on the first variables, i.e. the interest repayment on mortgage.

⁸ For Ireland the two shares are different and we could not find an indication in other surveys; we decided to use the share based on the second variable, which is lower. It could be that in these questions there are also some missing values related to households that have a consumer loan and that do not want to answer the questions: in this case we underestimate the share of households with a consumer loan.

accommodation). As said before, the question concerning the arrears on rent is actually including also arrears on mortgage (hs010): therefore, as mentioned, it is crucial to distinguish between the relevant household population in order to obtain more detailed information. As for the arrears on utility bills (question hs020), as utilities are likely to be paid by each household owning a house (either renters or owners), all households should be considered for the calculation; actually, there are very few missing on this question.

4. Income-net worth measures

Table 1[...]

5. Asset-poverty

Tables 2 and 3, Figure 1 [...]

6. Households in arrears in their payments

In this Section we consider statistics on household financial vulnerability computed on the basis of the EU-SILC data. We analyze both the share of home-owners in arrears in repaying their mortgage, and the share of renters in arrears in paying the rent, in order to understand which of the household categories look more vulnerable. We also consider the share of households in arrears in paying utility bills and those that are in arrears in repaying consumer loans. Unlike European Commission (2008), we do not pool together all types of arrears and calculate the overall share of households in arrears, but we separately investigate each kind of arrears.

Arrears in the repayment of mortgage – Housing debt is spread differently across countries: the share of households with a mortgage ranges from 11 per cent in Italy to 47 per cent in the Netherlands, with Spain, Finland, France and Ireland around 30 per cent and the UK near 40 per cent (Table 4). This highest share is generally found in the age class 35-44, and then decreases with age; it is increasing with household income, and is typically low among households in the lowest income fourth (OECD, 2006; European Central Bank, 2009). The fraction of households in arrears on mortgage payments in the last 12 months is similarly heterogeneous across countries: almost 5 per cent in Spain and Italy, around 3 per cent in

Finland, France, and Ireland, and less than 2 per cent in the Netherlands and the UK (Table 5). This percentage is also decreasing with household income, but less variable across age classes. On the whole, Spain and Italy appear to be the countries where households indebted for the house of residence are most vulnerable.

Arrears on rent payments – Households are more likely to rent their house of residence in Finland, France, the Netherlands and the UK, where they account for 30 per cent or more of the total; this proportion falls to roughly 20 per cent in Italy and Ireland, and to 10 per cent in Spain (Table 6). (These figures include all tenants regardless of whether their rent are at market or lower rates.) The share of home-renters is much higher in the lowest income fourth, and among households with a single parent and dependent children, a young head, or a head who is unemployed or hired on a temporary contract.

The share of home-renters in arrears on rent payments is generally much higher than that of home-owners in arrears on mortgage repayment (Table 7). It goes from 5.3 per cent in the Netherlands to 8.9 per cent in Spain, 11-12 per cent in the UK, Finland and France, and around 14 per cent in Italy and Ireland. This share is also decreasing in household income, but it does not vary much with age, though it is generally lower in older classes. At about 20 per cent, the fraction of renters in arrears in the young class appears to be in Italy higher than in the other countries. Household size also matters, as the percentage of households in arrears rises roughly 25 per cent in Finland and Ireland and 20 per cent in Spain, Italy and France among households with five or more members. Lastly, the share of renters in arrears is almost double if the household head has a temporary job rather than a permanent job, with the exception of the UK; this is especially the case of France and Italy.

Arrears on utility bills – The percentage of households in arrears on utility bills varies a great deal across countries: from 0.2 per cent in the UK to 9.3 per cent in Italy, with the Netherlands, Spain and Finland at 3-4 per cent and France and Ireland at 6 per cent (Table 8). The correlation is strong with income and age: for the youngest households and those in the lowest income quartile, the share is particularly high, particularly in France, Finland and Italy. Arrears on utility bills occur more frequently among large households, with five or more members, households with single parents and children, and households where the head is in temporary employment. In some countries, the probability of home-renters to be in arrears in paying their utility bills is almost three times that of home-owners.

Arrears on repayment of consumer loans – Increasing household indebtedness in the last decade has been driven from the growth of consumer loans, not only of mortgages. Financial vulnerability can be closely linked with consumer loans, as they are frequently not guaranteed (personal loans) and in general very expensive. These loans are often the only credit available to households lacking the guarantees to borrow through other channels.

The share of households with consumer loans ranges from around 14-16 per cent in the Netherlands and Italy to roughly 50 per cent in the UK and Ireland; in France and Finland the share is roughly 40 per cent, and in Spain 23 per cent (Table 9). Consumer loans are widespread in the youngest age class and, unlike mortgages, also in the lowest income quartile. The proportion of households with consumer loans is increasing in household size, is a bit higher among renters than owners, is much higher among single parents or couple with children, is high also among unemployed or part-time workers and for employees with temporary contract. This evidence therefore confirms the fact that, compared to mortgages, consumer loans are certainly more widespread among households that use them as a sort of last option of getting money; they could therefore be more vulnerable to shocks such as losing jobs or increasing interest rates.

The percentage of households in arrears on repayment consumer loans is particularly high in Italy (13.1 per cent); in the Netherlands is roughly 9 per cent, in Spain 7 per cent and is between 4 and 6 per cent in the other countries (Table 10). As for other indicators previously commented, this percentage is strongly decreasing in income; it does not overly vary with age. The share is higher for very large households, for renters, for single parents with children, for unemployed and for employees with temporary job (in Italy the share reaches 30 per cent in this last group of households).

To sum up, if we consider the house of residence as the main service or asset that a household has to buy, renters appear to be more financially vulnerable than owners with a mortgage. This is a feature observable in most countries. Moreover, most of the indicators based on arrears surveyed in this section show that the households that are most vulnerable to external shocks, such as losing job, decreasing income, sudden disease or increasing interest rates for households with debt, are in the lowest income quartile, are single parents with children, work part-time and among employees have a temporary job. Italy often ranks as the

country with the highest share of financially vulnerable households; other countries that sometime rank similarly are Spain and Ireland.

6.1. Total housing cost ratio: an analysis of the extreme values of the distribution

A total debt-service ratio above some critical threshold is an important determinant of the probability of being in arrears in repaying debt. In the EU-SILC data the total debt-service ratio can not be calculated since only interests paid on mortgages are available and no information is provided on the payback of the principal. An indicator which could help us to understand the occurrence of arrears is how much households spend for their house of residence.

We focus on the ratio between total housing cost and household disposable income (THC); utilities are always included in this indicator; for people with mortgages only the payment of interests is included, while the payback of the principal is excluded. Rather than analyzing the median value of this ratio, which reflects the situation of the typical household, we prefer to focus on some extreme values of the total housing cost distribution, specifically the THC 90 percentile, as the households in arrears are more likely to find themselves in this position. (We drop all observations under the 1 percentile and above the 99 percentile.) We calculate this value for the whole sample of households, for some sub-groups such as owners, owners with mortgages and renters and other sub-groups based on household characteristics. The aim is to verify whether there is any association between this statistics and the frequency of households in arrears analyzed in the previous section.

The 90th percentile of the THC is very high in Italy and the Netherlands (50-53 per cent) and above all in the UK (59 per cent; Table 11); it is around 30 per cent in Ireland and Spain and 40 per cent in Finland and France. Therefore, when considering this indicator we can find an explanation for the high ranking of Italy in the previous statistics based on arrears; however, all in all, households in the Netherlands and the UK appear to face much better the very high cost for their house they need to pay, since the percentage of households in arrears in these two countries is often, though not always, on the lower side.

The most striking result, which is in line with the previous evidence that renters appear more frequently in arrears and hence particularly vulnerable, is that the 90th percentile of the THC is much higher for households renting their house than for homeowners (Tables 12 and

13); in most of the countries this statistics for renters (Table 13) is around 50-60 per cent, while in Italy is 73 per cent and in the UK it reaches 80 per cent.⁹ Actually Italy and the UK also show a very high percentage of renters in arrears on paying rent (Table 7), though this is true also for Ireland, France and Finland, countries for which the 90th percentile of THC for renters is lower, around 50 per cent.

The corresponding THC ratio for owners is always lower than 50 per cent and in Spain, Finland, France and Ireland it is roughly around 20 per cent (Table 12). Analogous results hold for owners that bought their house by taking up a mortgage with a bank (Table 14), although it should be kept in mind that the payback of the principal is not included in this ratio as not available in the Eu-silc data. A possible explanation is that mortgages are more widespread among high-income households (Table 4), which in general show a lower incidence of the total housing cost on the disposable income (Table 11). For people that have taken up a mortgage, the highest 90th percentile of THC is in the Netherlands and the UK (46-47 per cent; table 11), where nevertheless households are not very likely of being in arrears on mortgage (Table 5); the frequency of households in arrears on mortgage is the highest in Italy and Spain, where the corresponding value of the 90th percentile of THC ratio is a bit lower, around 33-34 per cent.

When looking at some other specific household characteristics new evidence emerges that helps explaining some of the evidence of the previous section. The 90th percentile of the THC is generally very high for the households in the lowest income quartile; in Italy and the UK this statistics is respectively above 80 and above 90 per cent (Table 11). The situation is even worse for renters in the lowest income quartile (Table 13): the 90 percentile of THC is above the value of 100 per cent both in Italy and the UK, while the values for the other countries are much lower. High value of this statistics can also be found in the youngest age class, specifically for renters (80 per cent in Italy and the UK Table 13; in this class Italy has also a high percentage of households in arrears), for household with just one member or single parent households, for part-time workers, unemployed and among employees with a temporary contract (in this last category Italy has again a very high frequency of arrears).

⁹ Italy also shows a very high value for this statistics for households who have had their house for free.

Overall, we can conclude that looking at the extreme values of the THC distribution helps in explaining some of the evidence on the frequency of households in arrears, specifically that concerning renters and Italy. However, it is not always true that countries where some households bear very high THC ratio are always more likely to have a higher percentage of households in arrears. One possible explanation, stressed in some empirical studies, is that the institutional and legal framework can also influence the probability that a household is on time in his payment related to the house of residence (Jappelli, Pagano and Di Maggio, 2008).

7. Discussion and conclusions

[...]

Table 1

Share of income-poor and income-net worth-poor households, selected countries

Country	National lines			US-PSID line		
	Income poor	Income-net worth poor	Difference	Income poor	Income-net worth poor	Difference
Annuity interest rate: 2%						
Finland (1998)	10.7	8.4	-2.3	39.8	30.8	-9.0
Germany (2002)	12.9	11.3	-1.6	30.5	25.8	-4.7
Italy (2002)	12.5	9.2	-3.3	42.3	29.8	-12.5
US-PSID (2001)	17.3	14.4	-2.9	17.3	14.4	-2.9
US-SCF (2001)	19.5	16.6	-2.9	27.6	23.7	-3.9
Annuity interest rate: 4%						
Finland (1998)	10.7	8.4	-2.3	39.8	30.5	-9.3
Germany (2002)	12.9	11.2	-1.7	30.6	25.6	-5.0
Italy (2002)	12.5	9.1	-3.4	42.3	29.4	-12.9
US-PSID (2001)	17.3	14.4	-2.9	17.3	14.4	-2.9
US-SCF (2001)	19.5	16.4	-3.1	27.5	23.5	-4.0

Source: authors' elaborations on LWS data (as of 27 February 2009).

Table 2

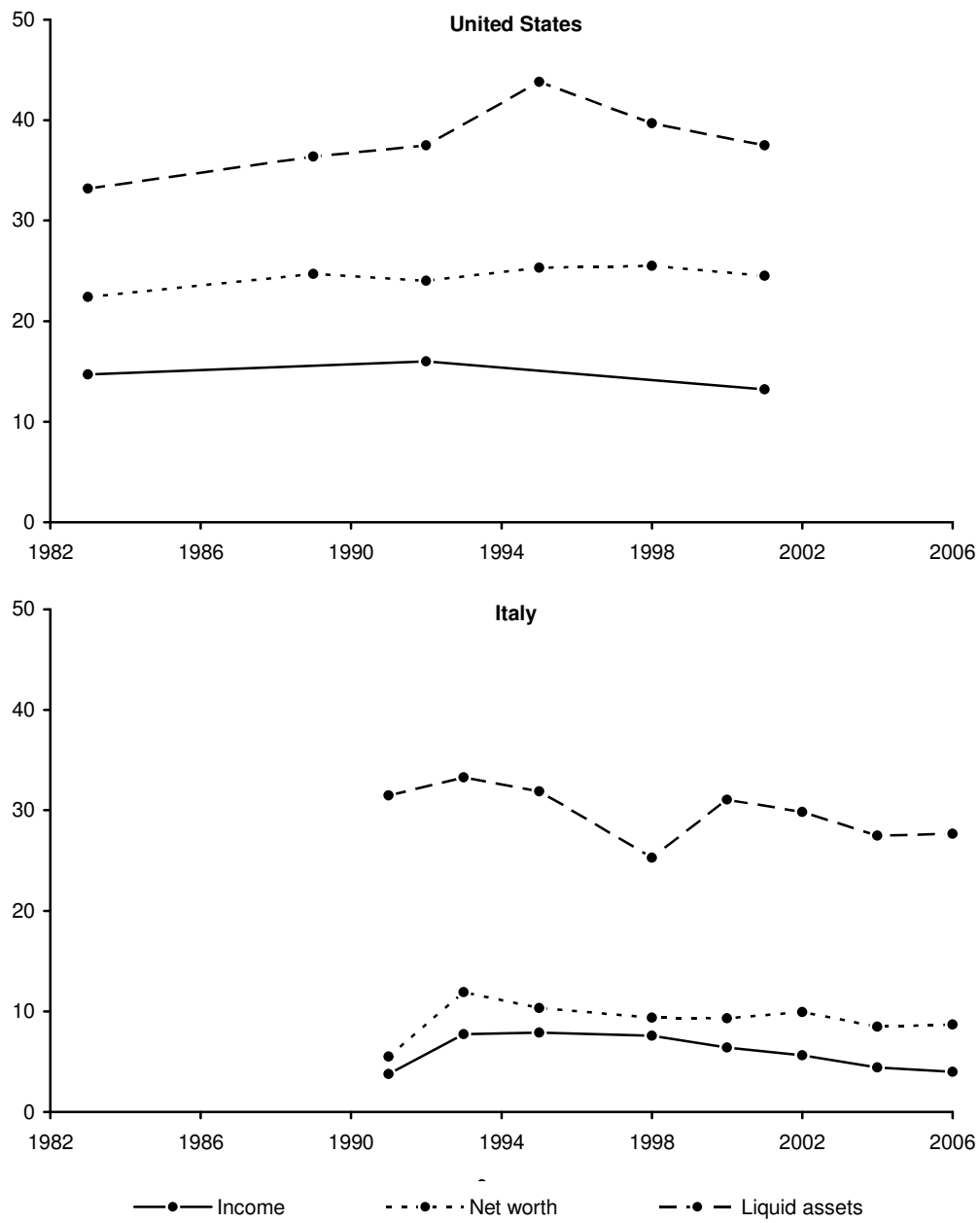
Share of income-poor and asset-poor households, Italy and the United States

Country and year	Income poor	Net worth poor	Income and net worth poor	Liquid asset poor	Income and liquid asset poor
Italy					
1991	3.8	5.5	1.1	31.5	3.1
1993	7.7	11.9	3.0	33.3	5.8
1995	7.9	10.3	3.2	31.9	6.1
1998	7.6	9.4	2.6	25.3	4.8
2000	6.4	9.3	2.5	31.1	5.2
2002	5.6	9.9	2.4	29.8	4.7
2004	4.4	8.5	2.0	27.5	3.6
2006	4.0	8.7	1.4	27.7	2.9
United States					
1983	14.7	22.4	7.6	33.2	
1989		24.7		36.4	
1992	16.0	24.0		37.5	
1995		25.3		43.8	
1998		25.5		39.7	
2001	13.2	24.5	7.9	37.5	

Source: Italy: authors' elaborations on SHIW data; United States: Haveman and Wolff (2004).

Figure 1

Share of income-poor and asset-poor households, Italy and the United States



Source: Italy: authors' elaborations on SHIW data; United States: Haveman and Wolff (2004).

Table 3

Share of income-poor and asset-poor households, selected countries

Country	Poverty line	Income poor	Net worth poor	Income and net worth poor	Liquid asset poor	Income and liquid asset poor
National lines						
Austria (2004)	10,013	–	–	–	13.8	–
Canada (1999)	10,327	16.5	33.8	11.3	56.5	13.4
Finland (1998)	7,956	10.6	28.3	5.7	49.0	7.7
Germany (2002)	8,736	12.9	38.0	8.4	52.3	10.4
Italy (2002)	7,591	12.5	14.3	4.4	31.7	9.2
Norway (2002)	12,123	12.0	–	–	36.1	6.8
Sweden (2002)	8,934	10.2	37.2	5.9	42.8	6.0
UK (2000)	8,979	14.6	24.7	5.4	46.0	9.7
US-PSID (2001)	12,989	17.4	33.2	11.0	52.6	14.7
US-SCF (2001)	10,562	19.5	31.7	11.2	44.6	15.1
US-PSID line						
Austria (2004)	12,989	–	–	–	17.8	–
Canada (1999)	12,989	26.8	18.4	16.5	60.1	21.0
Finland (1998)	12,989	39.8	11.3	19.1	57.9	29.0
Germany (2002)	12,989	30.6	20.9	18.8	55.8	23.6
Italy (2002)	12,989	42.3	5.2	11.1	40.3	26.8
Norway (2002)	12,989	14.8	–	–	37.5	8.2
Sweden (2002)	12,989	32.3	21.8	16.8	47.4	19.6
UK (2000)	12,989	31.8	13.2	12.6	50.4	21.3
US-PSID (2001)	12,989	17.4	22.2	11.0	52.6	14.7
US-SCF (2001)	12,989	27.5	17.0	15.4	47.2	21.1

Source: authors' elaborations on LWS data (as of 27 February 2009).

Table 4

Percentage share of households with mortgage

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	28.6	32.1	28.2	27.5	11.3	47.4	39.0
Age							
Less than 35	44.6	32.4	24.8	29.8	16.3	37.5	43.4
35-44	47.2	54.8	47.2	51.2	20.8	62.3	64.6
45-54	31.8	44.8	40.1	38.9	14.2	62.1	58.5
55-64	16.1	27.8	26.0	14.3	8.6	55.4	32.2
65 and over	3.5	8.6	11.2	3.2	1.6	24.2	5.4
Income quartiles (1)							
1st	14.8	9.5	14.4	10.9	4.9	18.6	16.1
2nd	23.2	24.8	22.5	19.6	8.4	37.6	29.3
3rd	32.4	41.3	34.8	34.5	14.1	59.8	48.4
4th	44.4	52.6	41.2	45.2	17.6	73.7	62.4
Household size							
1	16.4	17.5	13.7	11.3	6.3	22.5	21.7
2	25.4	29.1	21.2	20.6	9.2	52.0	35.2
3	32.4	48.1	39.5	34.6	15.2	62.7	51.9
4	36.7	59.8	55.2	42.2	17.3	72.8	65.7
5 or more	28.2	66.7	53.5	38.3	12.5	75.1	53.7
Household type							
One adult, no children	16.4	17.5	13.7	11.3	6.3	22.5	21.7
Two adults, no children	24.9	28.8	21.5	20.9	8.9	53.3	35.5
Single parent	34.4	43.4	25.5	37.3	13.1	33.0	41.9
Couple with children	48.4	63.2	53.9	50.5	21.4	74.6	68.8
Other households	18.3	33.2	29.9	17.2	8.9	54.6	37.7
Working status							
Full-time	40.4	49.4	40.1	41.0	17.6	67.1	61.8
Part-time	25.5	19.0	25.3	21.7	12.3	44.7	30.3
Unemployed	24.8	12.8	13.3	15.8	5.9	22.0	11.6
Retired	5.3	10.0	14.8	5.3	3.4	33.3	4.8
Other non working	10.8	12.6	9.5	5.9	2.4	15.2	12.1
Job contract (2)							
Permanent	33.7	47.0	38.3	32.3	13.5	60.0	60.2
Temporary	25.1	17.1	16.2	18.2	6.1	25.8	31.1
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902
Households with mortgage	3,187	4,017	3,099	1,318	2,429	5,572	3,843

Source: Eu-silc data, 2006. (1) equivalised disposable income; (2) only for employees. Sample weights are used.

Table 5

Percentage share of households with mortgage in arrears on mortgage

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	4.7	3.1	2.6	2.7	4.7	1.1	1.6
Age							
Less than 35	5.1	3.6	3.1	4.4	5.9	1.0	1.8
35-44	3.5	2.8	3.4	1.9	4.0	1.7	1.9
45-54	5.9	2.5	2.6	2.1	4.1	1.3	1.2
55-64	5.2	3.8	1.6	3.0	7.0	0.7	1.5
65 and over	4.4	3.2	1.0	1.7	2.3	0.3	1.6
Income quartiles (1)							
1st	8.2	11.3	4.4	8.4	12.0	4.2	5.5
2nd	5.3	5.0	3.9	6.3	6.8	1.3	2.1
3rd	5.3	2.3	2.8	0.8	4.2	0.9	1.3
4th	2.7	1.3	1.2	1.1	2.1	0.4	0.7
Household size							
1	4.5	4.9	2.3	3.2	4.0	1.4	2.0
2	3.7	1.5	1.6	3.1	3.6	0.8	1.2
3	4.6	3.8	2.3	3.9	3.9	1.2	1.0
4	4.6	2.4	3.3	2.9	4.8	1.6	1.8
5 or more	9.0	3.8	4.9	0.4	13.8	0.9	3.5
Household type							
One adult, no children	4.5	4.9	2.3	3.2	4.0	1.4	2.0
Two adults, no children	2.9	1.4	1.1	0.4	3.7	0.7	1.1
Single parent	11.2	5.3	1.1	10.8	2.5	3.9	3.0
Couple with children	4.2	3.2	3.1	1.7	5.2	1.3	1.9
Other households	7.7	2.4	4.6	6.3	5.5	1.0	1.4
Working status							
Full-time	4.2	2.2	2.8	1.4	4.6	1.1	1.2
Part-time	14.5	7.5	1.3	7.4	3.4	1.5	2.6
Unemployed	8.9	20.8	8.0	7.8	12.6	0.0	15.8
Retired	6.0	3.6	1.0	1.6	6.2	0.3	1.1
Other non working	3.1	7.8	7.0	22.3	0.4	2.7	8.2
Job contract (2)							
Permanent	3.3	1.8	2.4	2.5	3.8	1.4	1.0
Temporary	8.9	11.8	4.6	0.4	5.5	2.2	4.9
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902
Households with mortgage	3,187	4,017	3,099	1,318	2,429	5,572	3,843
Households with mortgage in arrears	154	127	93	33	96	50	65

(1) Source: Eu-silc data, 2006 equivalised disposable income; (2) only for employees. Sample weights are used.

Table 6

Percentage share of households renting their house of residence (1)

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	10.4	31.8	36.8	21.4	18.2	44.1	29.3
Age							
Less than 35	14.1	61.9	64.9	47.9	26.8	57.7	48.3
35-44	13.5	31.8	39.8	20.6	21.7	33.4	26.7
45-54	8.2	25.4	31.0	10.4	18.1	33.0	23.0
55-64	8.9	19.5	27.4	12.6	13.9	36.2	19.1
65 and over	7.2	19.6	23.8	11.1	13.9	57.0	26.2
Income quartiles (1)							
1st	13.5	51.3	50.2	33.8	25.0	70.5	43.1
2nd	11.0	37.5	44.7	27.2	19.7	55.2	38.3
3rd	9.6	25.8	31.0	14.5	16.2	33.2	24.0
4th	7.6	12.6	21.3	9.9	12.1	17.4	11.9
Household size							
1	14.6	46.3	48.5	22.6	22.8	69.3	38.7
2	10.1	24.5	31.1	20.5	15.5	37.2	24.0
3	9.2	23.4	35.9	27.2	16.7	29.2	28.7
4	8.6	19.1	27.7	16.5	15.1	22.2	21.0
5 or more	12.4	16.0	35.2	20.3	24.6	17.9	32.3
Household type							
One adult, no children	14.6	46.2	48.5	22.6	22.8	69.3	38.7
Two adults, no children	9.9	22.7	27.3	14.5	15.1	35.6	20.2
Single parent	17.6	42.0	61.3	39.6	29.9	63.7	50.5
Couple with children	9.7	20.2	32.4	14.9	19.2	20.0	20.3
Other households	8.6	24.1	37.9	35.1	13.6	35.5	37.7
Working status							
Full-time	10.9	27.0	39.6	16.2	19.6	27.8	21.4
Part-time	17.1	50.4	49.5	31.8	28.3	48.6	37.4
Unemployed	19.4	67.3	68.5	43.4	33.4	71.7	77.9
Retired	7.0	19.2	23.5	10.4	12.9	50.6	25.6
Other non working	10.2	60.3	58.6	37.8	19.2	74.1	70.9
Job contract (2)							
Permanent	8.5	30.6	38.1	19.4	18.1	37.0	23.3
Temporary	19.6	69.7	71.8	46.7	29.5	69.8	48.7
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902
Home-renters households	1,255	2,551	3,347	1,012	3,417	2,689	2,604

Source: Eu-silc data, 2006. (1) Renters either at market price or at reduced rate. (2) equivalised disposable income; (3) only for employees. Sample weights are used.

Table 7

Percentage share of renter households in arrears on rent (1)

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	8.9	11.5	12.1	14.1	14.3	5.3	11.3
Age							
Less than 35	9.9	12.2	13.7	13.1	20.2	8.1	14.0
35-44	9.1	14.2	12.0	19.0	14.9	8.5	19.6
45-54	15.7	15.2	14.2	17.2	14.9	6.2	10.1
55-64	4.2	14.2	13.2	20.1	10.9	5.4	7.3
65 and over	4.5	0.9	6.8	2.7	9.1	0.6	2.9
Income quartiles (1)							
1st	16.7	17.4	18.8	20.2	21.3	7.8	15.4
2nd	9.8	9.9	13.1	12.3	14.9	4.4	10.8
3rd	3.4	6.3	5.4	9.1	8.9	3.0	8.1
4th	1.8	2.8	4.1	6.5	5.9	2.6	4.8
Household size							
1	2.8	10.1	10.4	10.3	15.7	5.0	8.7
2	9.0	10.3	10.3	11.0	8.5	3.6	10.8
3	6.7	16.1	15.3	12.9	16.0	8.0	14.3
4	13.6	17.0	16.7	16.5	15.2	8.9	15.5
5 or more	21.5	24.9	18.5	25.2	19.5	9.4	15.7
Household type							
One adult, no children	2.8	10.1	10.4	10.3	15.7	5.0	8.8
Two adults, no children	8.1	8.7	8.7	9.4	7.9	2.9	7.5
Single parent	14.4	17.4	11.4	22.9	21.8	4.4	18.4
Couple with children	15.7	15.5	17.6	17.6	16.6	7.8	16.1
Other households	7.6	25.4	15.3	15.0	14.8	12.3	15.3
Working status							
Full-time	8.0	9.2	10.7	10.7	13.8	5.4	10.9
Part-time	7.8	9.5	21.4	12.0	22.5	9.3	20.2
Unemployed	30.1	29.1	25.2	30.7	30.8	15.0	28.6
Retired	5.0	1.0	6.8	5.0	6.3	0.9	2.6
Other non working	6.8	16.4	15.3	17.5	20.2	5.0	12.6
Job contract (2)							
Permanent	7.9	7.6	10.1	13.3	10.4	4.2	12.7
Temporary	11.5	14.6	20.0	16.3	25.9	11.6	9.6
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902
Home-renter households	1,255	2,551	3,347	1,012	3,417	2,689	2,604
Home-renter households with arrears on rent	98	274	407	137	436	120	288

Source: Eu-silc data, 2006. (1) Renters either at market price or at reduced rate. (2) equivalised disposable income; (3) only for employees. Sample weights are used.

Table 8

Percentage share of households in arrears on utility bills

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	3.4	4.0	6.0	6.2	9.3	2.7	0.2
Age							
Less than 35	4.1	6.9	10.2	12.0	14.0	5.1	0.1
35-44	4.7	5.9	7.5	7.2	11.1	2.7	0.2
45-54	3.7	3.8	6.7	5.0	11.3	3.6	0.1
55-64	2.2	2.6	4.7	4.2	8.5	2.2	0.1
65 and over	1.9	1.3	2.3	1.5	5.1	0.3	0.4
Income quartiles (1)							
1st	4.8	6.8	12.5	11.4	18.4	5.5	0.3
2nd	4.8	5.0	6.9	7.9	9.2	3.5	0.1
3rd	2.4	3.0	3.2	3.9	5.9	1.3	0.2
4th	1.7	1.3	1.5	1.7	3.9	0.6	0.1
Household size							
1	3.5	4.0	5.5	4.3	7.7	3.5	0.2
2	2.1	2.7	4.9	5.3	6.4	1.5	0.3
3	3.4	4.7	8.2	8.6	9.5	3.2	0.1
4	4.1	6.0	6.1	7.3	12.3	2.8	0.2
5 or more	6.3	7.1	11.6	6.4	22.1	3.3	0.2
House tenure (2)							
Owner	2.8	3.3	2.4	2.9	6.7	1.1	0.2
Renter	7.3	5.4	11.9	17.9	19.3	4.8	0.2
Free house	4.5	4.8	4.9	6.5	10.5	0.0	0.0
Household type							
One adult, no children	3.5	4.0	5.5	4.3	7.7	3.5	0.2
Two adults, no children	1.9	2.4	3.7	2.9	6.1	1.2	0.3
Single parent	8.0	13.7	16.4	12.1	19.1	6.9	0.0
Couple with children	4.7	5.1	7.3	5.8	13.1	2.5	0.1
Other households	3.2	5.2	10.0	11.8	10.6	4.8	0.3
Working status							
Full-time	0.0	0.0	0.1	0.0	0.1	0.0	0.0
Part-time	0.1	0.1	0.1	0.1	0.2	0.0	0.0
Unemployed	0.0	0.1	0.2	0.2	0.3	0.1	0.0
Retired	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Other non working	0.0	0.1	0.1	0.1	0.1	0.0	0.0
Job contract (2)							
Permanent	2.6	3.9	5.2	5.3	7.8	2.3	0.1
Temporary	6.3	6.8	15.9	14.4	20.1	8.7	0.0
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902
Households with arrears on utility bills	324	426	603	281	1,732	167	18

Source: Eu-silc data, 2006. (1) equivalised disposable income; (2) renters either at market price or reduced rate. (3) only for employees. Sample weights are used.

Table 9

Percentage share of households with consumer loans

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	22.9	38.8	35.7	48.5	16.5	14.5	50.4
Age							
Less than 35	30.3	58.2	45.6	62.6	21.7	22.5	60.4
35-44	31.9	54.7	48.1	60.6	25.2	17.3	63.6
45-54	27.9	44.5	47.0	57.4	22.8	16.7	59.1
55-64	20.8	33.7	36.3	43.8	15.3	14.3	48.5
65 and over	6.5	9.9	12.3	17.5	4.7	2.8	26.4
Income quartiles (1)							
1st	16.6	28.5	25.9	33.3	13.3	17.9	36.8
2nd	23.2	37.5	35.8	46.7	15.7	14.6	44.2
3rd	24.6	45.4	41.1	57.0	18.1	14.6	58.3
4th	27.2	43.9	40.0	56.9	18.9	10.7	62.2
Household size							
1	11.9	29.1	23.5	24.8	8.5	14.2	36.5
2	18.2	37.2	31.7	42.3	13.1	11.5	50.0
3	26.3	51.4	49.0	57.6	21.4	19.3	60.4
4	30.2	54.6	52.6	61.6	25.7	17.0	65.5
5 or more	30.3	60.1	50.4	68.0	27.1	15.1	61.5
House tenure (2)							
Owner	22.1	34.1	31.9	48.4	14.8	10.2	52.9
Renter	26.8	49.0	40.9	49.3	21.5	19.9	45.0
Free house	25.8	27.4	44.0	37.5	19.6	10.6	41.0
Household type							
One adult, no children	11.9	29.1	23.5	24.8	8.5	14.2	36.5
Two adults, no children	17.8	36.8	30.6	40.1	12.5	11.1	49.7
Single parent	30.4	47.4	42.4	59.6	25.6	25.5	54.3
Couple with children	32.7	57.6	53.0	62.5	28.3	16.6	67.3
Other households	23.9	44.0	45.2	62.0	18.1	19.3	55.0
Working status							
Full-time	29.8	51.8	48.9	60.7	23.3	16.8	64.9
Part-time	26.6	45.1	39.6	53.4	22.0	16.7	48.9
Unemployed	24.2	36.2	33.6	40.9	18.1	18.0	33.4
Retired	8.1	10.4	17.2	20.0	6.8	4.0	26.5
Other non working	12.3	39.7	20.7	30.3	7.2	17.5	40.2
Job contract (2)							
Permanent	24.4	46.9	45.7	50.1	18.1	16.1	64.0
Temporary	26.5	49.5	36.6	49.1	17.0	29.2	59.5
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902
Households with consumer loans	2,635	4,808	3,716	2,382	3,479	1,165	4,985

Source: Eu-silc data, 2006. (1) equivalised disposable income; (2) renters either at market price or reduced rate. (3) only for employees. Sample weights are used.

Table 10

Percentage share of households with consumer loans in arrears on consumer loans

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	7.0	5.6	6.2	5.2	13.1	9.1	4.2
Age							
Less than 35	10.1	5.1	8.3	7.2	15.2	12.4	6.2
35-44	5.9	5.6	7.0	5.2	14.1	10.8	5.9
45-54	7.2	5.8	6.0	2.9	11.6	8.0	3.4
55-64	4.6	6.5	3.7	6.2	10.2	4.0	1.5
65 and over	4.0	5.4	3.5	2.6	13.4	0.0	1.5
Income quartiles (1)							
1st	13.7	13.7	12.5	14.2	25.1	11.0	9.1
2nd	8.7	6.3	9.1	7.5	14.6	14.0	5.3
3rd	5.4	3.6	4.3	2.0	9.9	7.4	3.5
4th	3.0	1.7	1.5	0.8	6.5	1.4	1.3
Household size							
1	7.7	8.0	9.8	3.5	15.2	11.1	3.8
2	6.2	3.4	4.5	5.8	10.8	5.0	3.7
3	3.7	5.2	6.9	6.2	11.8	9.1	4.5
4	8.2	4.7	4.7	3.6	12.9	10.6	4.0
5 or more	14.1	7.7	7.0	6.1	19.8	10.2	7.6
House tenure (2)							
Owner	5.7	2.6	3.0	2.7	10.5	5.2	2.0
Renter	17.0	9.8	10.7	14.5	19.9	11.6	10.7
Free house	4.6	13.0	3.1	0.0	13.7	0.0	0.0
Household type							
One adult, no children	7.7	8.0	9.8	3.5	15.2	11.1	3.8
Two adults, no children	5.9	2.9	4.0	3.2	10.1	4.8	2.3
Single parent	16.1	8.1	3.3	5.6	17.3	16.0	16.6
Couple with children	7.1	4.9	5.9	4.6	13.8	9.4	3.4
Other households	6.9	8.2	7.0	8.4	12.5	9.1	7.0
Working status							
Full-time	7.3	3.6	5.7	3.2	11.7	8.4	3.0
Part-time	9.8	7.0	12.6	5.7	18.0	14.9	9.1
Unemployed	6.3	27.2	12.1	22.7	31.5	4.5	19.8
Retired	2.8	4.1	3.6	2.1	11.9	0.0	1.0
Other non working	7.7	9.6	15.4	15.0	23.0	9.2	13.1
Job contract (2)							
Permanent	5.4	3.3	5.2	4.2	10.4	9.0	3.3
Temporary	11.1	8.4	15.2	13.9	30.6	20.6	8.3
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902
Households with consumer loans	2,635	4,808	3,716	2,382	3,479	1,165	4,985
Household with arrears on consumer loans	165	253	205	106	419	86	201

Source: Eu-silc data, 2006. (1) equivalised disposable income; (2) renters either at market price or reduced rate. (3) only for employees. Sample weights are used.

Table 11

Total housing cost (90 percentile - percentages)

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	30.8	39.0	41.0	27.8	50.0	53.2	59.3
Age							
Less than 35	37.5	47.6	50.2	41.6	56.1	58.9	64.3
35-44	33.5	35.0	38.7	25.0	48.1	50.5	55.4
45-54	26.6	35.0	35.4	20.0	39.5	49.0	59.1
55-64	25.5	33.5	36.6	23.8	36.7	50.1	58.5
65 and over	25.9	36.0	39.8	25.2	57.0	53.9	59.0
Income quartiles (1)							
1st	47.3	53.6	56.3	35.7	83.3	66.7	94.8
2nd	32.4	37.8	40.9	33.9	49.3	50.3	55.9
3rd	25.2	26.8	31.7	21.2	35.4	43.2	41.4
4th	19.5	19.7	22.9	19.7	24.6	39.2	32.9
Household size							
1	39.5	47.2	50.8	33.6	70.8	60.6	75.0
2	30.2	30.8	36.1	26.9	42.1	45.3	50.6
3	29.1	28.7	35.1	30.1	38.7	44.3	54.5
4	27.0	26.6	29.8	21.0	37.4	43.0	46.7
5 or more	25.2	27.5	31.5	18.1	37.3	45.3	44.4
House tenure (2)							
Owner	25.4	22.6	20.4	21.4	32.1	45.3	44.2
Renter	62.4	50.1	54.0	48.7	73.1	57.8	80.2
Free house	18.9	9.4	21.1	17.3	74.8	41.6	40.2
Household type							
One adult, no children	39.5	47.2	50.8	33.6	70.8	60.6	75.0
Two adults, no children	29.7	27.8	33.1	22.5	39.5	45.1	44.8
Single parent	43.2	40.9	48.8	31.3	66.6	50.6	70.4
Couple with children	31.3	27.2	31.4	22.1	42.9	45.2	46.0
Other households	21.6	34.4	40.7	33.4	28.9	40.2	59.5
Working status							
Full-time	30.7	30.7	36.7	23.4	41.9	45.5	44.3
Part-time	41.1	48.6	52.7	27.9	75.6	52.6	77.7
Unemployed	46.4	56.3	56.8	46.5	84.0	62.9	136.5
Retired	23.8	36.6	38.3	23.4	50.1	51.9	60.1
Other non working	40.7	50.7	60.7	44.4	73.8	60.5	91.1
Job contract (2)							
Permanent	26.1	33.3	36.9	25.7	43.0	47.8	45.2
Temporary	39.1	50.7	55.6	35.7	65.0	64.7	58.8
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902

Source: Eu-silc data, 2006(1) equivalised disposable income; (2) renters either at market price or reduced rate.
(3) only for employees. Sample weights are used.

Table 12

Total housing cost for homeowners (90 percentile - percentages)

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	25.4	22.6	20.4	21.4	32.1	45.3	44.2
Age							
Less than 35	31.3	27.1	21.4	24.2	33.0	50.4	46.1
35-44	26.9	21.2	18.1	19.9	29.1	49.7	43.4
45-54	22.7	19.9	15.8	16.8	23.9	44.6	44.1
55-64	21.9	20.3	17.3	20.2	26.1	41.3	43.5
65 and over	22.9	24.2	23.1	24.8	41.0	36.8	44.9
Income quartiles (1)							
1st	40.7	31.8	32.3	32.0	58.5	64.2	79.8
2nd	25.5	22.1	20.2	18.6	31.9	47.1	42.6
3rd	20.6	19.1	16.4	15.9	24.4	45.2	36.2
4th	17.6	16.3	13.1	16.3	17.4	40.8	31.4
Household size							
1	32.2	27.4	25.6	30.4	52.6	51.6	54.5
2	25.7	18.2	18.4	18.3	29.9	42.8	38.9
3	24.2	19.3	18.9	18.1	23.7	44.4	40.6
4	22.9	19.5	16.1	17.3	24.3	43.9	39.2
5 or more	19.4	20.2	15.2	14.9	24.2	49.6	41.0
Household type							
One adult, no children	32.2	27.4	25.6	30.4	52.6	51.6	54.5
Two adults, no children	25.3	17.7	18.2	17.9	29.2	42.5	37.6
Single parent	32.8	24.0	22.5	21.4	42.1	50.6	58.2
Couple with children	27.6	20.3	17.5	18.2	27.5	47.1	40.7
Other households	16.8	17.5	14.0	13.9	20.3	35.9	33.7
Working status							
Full-time	25.2	20.7	17.5	18.1	26.1	47.0	39.6
Part-time	35.3	20.7	22.5	20.6	42.9	45.9	57.2
Unemployed	39.6	27.4	24.5	34.1	37.2	51.6	161.7
Retired	21.6	24.3	21.9	22.6	35.7	38.1	45.7
Other non working	37.5	23.2	25.8	29.5	53.3	43.2	81.0
Job contract (2)							
Permanent	22.8	22.0	17.7	20.7	27.3	48.2	39.6
Temporary	29.6	29.2	21.4	29.5	35.5	59.9	46.0
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902

Source: Eu-silc data, 2006. (1) equivalised disposable income; (2) only for employees. Sample weights are used.

Table 13

Total housing cost for renters (90 percentile - percentages)

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	62.4	50.1	54.0	48.7	73.1	57.8	80.2
Age							
Less than 35	63.7	52.8	55.6	50.5	82.8	64.7	78.9
35-44	62.4	45.0	50.7	50.7	62.6	52.5	73.3
45-54	65.8	46.1	51.4	43.2	56.3	56.8	79.8
55-64	47.2	52.1	52.5	33.5	65.6	58.5	95.4
65 and over	63.1	49.6	56.1	29.2	82.7	57.1	80.1
Income quartiles (1)							
1st	81.3	59.1	65.3	49.1	106.3	67.5	105.7
2nd	64.5	42.7	47.5	54.9	61.2	50.8	66.3
3rd	57.7	33.7	42.9	36.4	48.1	40.8	53.8
4th	36.3	24.9	34.3	28.5	38.7	32.5	40.9
Household size							
1	71.3	54.5	60.5	44.0	88.0	62.3	93.5
2	57.7	42.8	50.9	55.8	61.6	47.9	64.8
3	59.7	39.9	47.6	56.0	75.3	44.1	74.7
4	64.0	37.4	42.0	42.4	52.5	41.7	64.1
5 or more	43.9	37.8	38.7	35.7	51.6	38.9	50.8
Household type							
One adult, no children	71.3	54.5	60.5	44.0	88.0	62.3	93.5
Two adults, no children	57.7	41.0	47.7	43.6	58.9	46.9	61.3
Single parent	68.2	48.2	51.1	40.7	77.8	54.1	82.1
Couple with children	62.4	37.6	41.0	38.6	62.8	42.6	59.7
Other households	57.3	46.7	53.7	58.5	49.7	44.5	86.0
Working status							
Full-time	59.7	37.8	47.2	36.6	58.7	43.0	56.9
Part-time	80.6	53.7	59.5	50.7	108.1	59.0	93.4
Unemployed	81.3	59.5	62.0	51.2	101.0	66.1	135.1
Retired	57.9	49.6	55.4	34.3	77.9	55.8	81.9
Other non working	71.3	57.5	69.3	59.4	92.8	61.3	94.8
Job contract (2)							
Permanent	57.1	39.4	47.8	42.9	62.8	47.3	58.8
Temporary	63.7	54.5	58.7	50.7	85.8	64.7	65.6
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902

Source: Eu-silc data, 2006. (1) equivalised disposable income; (2) only for employees. Sample weights are used.

Table 14

Total housing cost for homeowners with mortgage (90 percentile - percentages)

Household characteristics	Spain	Finland	France	Ireland	Italy	Netherlands	United Kingdom
Total	33.8	24.3	19.4	22.2	33.0	47.2	46.0
Age							
Less than 35	37.5	30.1	21.6	30.4	37.5	52.7	47.5
35-44	31.1	22.6	18.9	20.4	33.0	50.2	45.2
45-54	32.4	22.3	15.0	18.9	28.8	44.6	45.6
55-64	31.5	22.4	16.4	24.4	29.4	43.6	47.1
65 and over	48.7	28.8	22.5	17.7	34.5	44.0	46.6
Income quartiles (1)							
1st	73.4	42.3	32.5	38.2	56.6	69.6	103.0
2nd	36.3	27.1	20.6	20.9	38.6	50.2	49.8
3rd	27.5	22.5	17.3	18.9	30.5	46.0	39.6
4th	22.6	19.0	14.9	20.4	21.9	41.9	33.3
Household size							
1	55.1	30.8	22.0	32.1	46.7	57.7	54.3
2	33.8	23.1	20.3	21.3	30.9	44.4	43.0
3	33.9	20.8	20.6	21.8	31.2	45.3	46.7
4	29.7	21.1	16.4	19.9	28.7	43.7	40.5
5 or more	28.9	22.1	15.8	17.8	28.4	49.7	41.6
Household type							
One adult, no children	55.1	30.8	22.0	32.1	46.7	57.7	54.3
Two adults, no children	33.2	21.3	20.1	19.8	29.5	44.3	41.6
Single parent	47.3	26.8	22.5	21.4	47.7	52.2	59.9
Couple with children	33.5	21.6	18.2	20.1	30.4	47.2	41.9
Other households	25.7	24.5	14.4	18.1	28.6	38.6	38.1
Working status							
Full-time	31.3	22.9	18.8	20.8	32.0	47.5	40.8
Part-time	63.6	25.3	22.2	24.0	47.7	46.9	69.9
Unemployed	52.0	25.5	20.4	34.1	33.7	51.6	173.4
Retired	37.3	28.8	20.3	34.3	34.3	43.5	54.8
Other non working	85.6	31.3	24.0	43.2	57.9	55.3	100.9
Job contract (2)							
Permanent	29.1	24.5	18.8	22.2	30.1	48.8	40.8
Temporary	39.6	30.5	21.7	34.1	33.7	65.5	52.3
All households	12,205	10,868	10,036	5,836	21,499	8,986	9,902

Source: Eu-silc data, 2006. (1) equivalised disposable income; (2) only for employees. Sample weights are used.

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