



Households' real estate and financial asset holdings: what differences in investment behaviour within the euro area?

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Household wealth differs significantly across euro area countries, both in terms of real estate asset holdings and of the composition of financial portfolios. This issue of Rue de la Banque summarises the initial studies on the composition of household wealth conducted using the Eurosystem Household Finance and Consumption Survey. These show that the differences in investment behaviour are explained by individual household characteristics (age, qualifications, income, household composition, inheritance), the effects of which vary according to the economic, institutional and financial environment of each country.

How can we explain households' investment behaviour?

If we refer to the life-cycle theory, households build up their wealth during their working lives in order to finance their consumption needs when they retire and to hedge against future risks (unemployment, health, life span). In this context, current wealth depends on several household characteristics: its position in the life cycle, its resources, its time preferences, etc. In addition to the effects of individual characteristics, households' investment decisions are also influenced by the economic and institutional environment (real estate prices, taxation, unemployment, pension systems, etc.).

This issue of *Rue de la Banque* analyses the differences in households' investment behaviour from one country to another according to their socio-demographic characteristics. It also assesses the importance of their respective roles according to the economic and institutional environment.

We mainly look at two major components of household wealth: real estate and risky financial assets. In addition to accounting for the bulk of household wealth, real estate plays a specific role in their decisions: it is both a consumer good (housing) and an

investment good. It can also play a special role in the intergenerational transmission of wealth. As regards financial wealth, economic analyses generally distinguish financial assets according to their performance/risk characteristics, and look at the share of so-called risky financial assets (in particular equity instruments) in household portfolios. This depends in particular on investors' risk preferences, resources (which may be uncertain) and expectations. We draw on the Eurosystem's Household Finance and Consumption Survey (HFCS).¹

Heterogeneity of household wealth

For the purpose of statistical analysis, private household wealth is broken down into six main categories. Non-financial assets include: the main residence, other property (second home, buy-to-let) and professional assets. According to the literature on portfolio choices (see Guiso *et al.*, 1996), we consider a class of risky financial assets (equities, mutual funds, bonds) on the one hand, and so-called "risk-free" financial assets (cheque accounts, passbook accounts and

¹ The analysis is carried out using the first wave of the HFCS survey. It was conducted in 15 countries of the euro area and mainly concerns the year 2010. See Household Finance and Consumption Network (2013) and Arrondel *et al.* (2013).

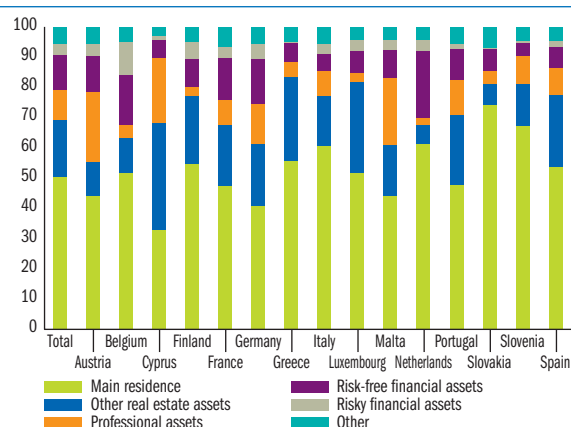
overnight deposits, voluntary private pension savings) on the other. Finally, an “other” category includes residual assets which are mainly durable goods (cars, jewellery, works of art).

For all the countries under review, real estate (household main residence and other real estate assets) accounts for close to 70% of the value of assets held by households and financial assets about 15%, of which only 4% are invested in risky assets.²

However, these shares vary from country to country (see Chart 1). The main residence represents close to 61% of the value of household assets³ in Italy, but only 41% in Germany (France stands halfway at 48%). Risky financial assets account for 11% of the value of household assets in Belgium, around 5% in Germany, about 3.5% in Italy and France and less than 2% in Spain.

C1 Structure of household assets in the euro area

(in %)



Source: Arrondel et al. (2014).

Diffusion of assets and wealth structure

These average structures may be viewed as resulting from two types of decisions: the “discrete” asset holding decision (which assets to hold?) and that of the conditional demand (what amount to invest in each asset held?). The countries under review differ in both of these dimensions.

In Germany, the rate of homeownership (44% of households) is the lowest in the euro area (60% overall). In contrast, over three-quarters of households own their main residence in Slovakia, Slovenia, Spain, Malta and Cyprus. France is in an intermediate position: 55% of households own their main residence.

T1 Percentage of households that own their main residence

Total population and by net wealth quintile

(in %)

	Total	Net wealth quintile				
		Q1	Q2	Q3	Q4	Q5
Total	60	5	29	79	93	95
Austria	48	3	4	52	88	92
Belgium	70	3	60	95	96	95
Cyprus	77	19	81	95	93	96
Finland	69	23	37	92	97	98
France	55	1	13	78	91	93
Germany	44	4	7	39	79	92
Greece	72	7	74	93	95	94
Italy	69	2	54	93	97	97
Luxembourg	67	4	48	94	96	94
Malta	78	13	85	97	99	96
Netherlands	57	25	23	55	87	96
Portugal	72	12	67	89	95	95
Slovakia	90	53	99	100	99	100
Slovenia	82	24	93	98	99	98
Spain	83	31	93	97	97	97

Note: Net wealth is defined as the sum of the real estate and financial assets held by households, minus debt.

Source: Arrondel et al. (2014).

In all countries, almost all households (over 90%) in the 5th net wealth quintile⁴ own their main residence. Disparities across countries are the largest at the bottom of the distribution: Slovakia, Spain and the Netherlands are the countries with the highest share of homeowners among the poorest households (in the 1st net wealth quintile, corresponding to the 20% least wealthy households in terms of net wealth).

These differences between countries may be attributed to a number of factors. They may be due to differences in population structure and characteristics (age, income, family situation, etc.). They may also be linked to various specificities: cultural (passing on of real estate assets within families, intergenerational cohabitation), historical (collectivisation of property in the former socialist countries, reconstruction policy after the war), and institutional (functioning of rental markets, construction sector, taxation, housing policy).

² See Household Finance and Consumption Network (2013) for the methodological information concerning the survey, in particular comparisons with other sources, including the financial balance sheets of the national accounts.

³ This is the gross wealth, calculated as the sum of the assets held by households, without taking account of their level of debt.

⁴ These are the 20% richest households in terms of wealth net of debt.

As regards financial wealth, the disparities shown in Chart 1 are also reflected in the share of households that hold risky assets: between one household in five and one household in four in Italy (20%), France (22%) and Germany (23%), compared with about one in three in Belgium (31%), Malta (34%), Cyprus (36%) and Finland (39%). Overall, the richest households (belonging to the 5th net wealth quintile) are 2.2 times as many as the average to hold risky assets. If one looks at the richest 5%, this ratio is close to 3 times the average.

Among the households that invest in financial markets, the median amount invested is around EUR 12,000, an order of magnitude observed in the four largest euro area countries (Germany, Italy, Spain and France) – see Table 2.

Among the countries with the highest share of households holding risky assets, the situations regarding the amounts invested are, however, very mixed: the median amounts invested are relatively small in certain countries (less than EUR 4,000 in Cyprus and Finland), but higher than EUR 20,000 in others (Malta and Belgium).

The amounts invested by the holders increase very significantly with the level of household wealth. In view of this relationship, which is generally more than proportional, these assets are described as “luxury goods”.

T2 Amounts held in risky assets in EUR thousands

Total holding population and by net wealth quintile

(in EUR thousands; median amounts)

	Total	Net wealth quintile					Top 5%
		Q1	Q2	Q3	Q4	Q5	
Total	12.1	1.7	5.0	8.2	11.2	28.2	50.4
Austria	12.3	3.0	4.5	10.3	11.5	22.0	107.3
Belgium	20.1	4.0	5.0	6.8	19.8	75.0	363.2
Cyprus	2.0	0.2	1.5	0.9	2.2	6.6	13.9
Finland	3.7	0.5	2.2	2.2	3.8	12.8	33.6
France	8.1	1.0	2.3	4.1	7.3	20.5	47.3
Germany	12.1	1.7	3.0	7.8	12.5	30.0	49.7
Greece	7.3	1.9	0.7	4.9	4.9	10.0	30.8
Italy	22.4	4.0	13.0	15.0	20.0	35.0	60.0
Luxembourg	28.5	10.2	9.6	15.3	26.9	87.8	282.6
Malta	21.6	8.9	10.0	16.5	24.1	45.6	57.0
Netherlands	8.2	4.2	2.9	5.3	10.8	21.7	105.9
Portugal	8.9	0.8	3.0	8.0	5.0	15.7	28.2
Slovakia	1.1	0.7	0.4	0.7	1.2	4.1	9.3
Slovenia	3.4	2.2	1.4	2.4	3.3	4.8	5.3
Spain	12.0	5.8	8.5	7.6	7.6	19.1	56.0

Note: “Top 5%”: the wealthiest 5%.

Source: Arrondel et al. (2014).

The individual determinants of wealth...

We estimate an econometric model explaining the amount invested in an asset held by the household (Tobit model) to study the role of socio-demographic factors in households’ investment decisions. The model is estimated for each country to then analyse the correlation between the differences in demographic effects across countries and environmental and institutional factors.

As shown by the descriptive statistics presented above, the probability of holding real estate assets on the one hand and risky financial assets on the other is strongly correlated with the overall level of wealth. We control by the household’s position on the wealth scale (and not by the level) to limit the endogeneity bias, and we interpret the effect in terms of correlation. The results show that this correlation is always positive, both for real estate and financial assets; however, it varies from country to country (see Chart 2 infra). For example, in Spain (in Austria, respectively), the value of the main residence, all other things being equal, is about 10 times (25 times, respectively) higher in the 5th quintile of net wealth than in the 1st quintile of net wealth.

It is interesting to note that, once the level of income and wealth have been taken into account, the coefficients of the demographic variables remain significant. Thus, in most countries, households comprised of a couple with children own, all other things being equal, a home of greater value than single households, which is consistent with their larger housing needs. In addition, households that have come into an inheritance have a main residence of greater value in most countries. The coefficients of the age variable are also significant, but their signs vary from country to country.

As regards risky financial assets, in addition to the positive correlation with the level of overall wealth mentioned above, we also obtain a positive correlation with income quintiles in most countries, but its level varies. For example, investment in risky assets is five times greater in the 5th income quintile in Malta than in the 1st quintile. In Luxembourg and Italy, this multiplier is more than fifteen (see Chart 3). This positive correlation between income, as well as wealth, and risky asset holdings can be explained by the existence of substantial transaction and information costs (King and Leape, 1998).

The general level of education is also positively correlated with the probability of holding risky assets, reinforcing the previous effect of information costs on investment diversification. The level of financial literacy, correlated

with the general level of education, could also explain this effect (Lusardi and Mitchell, 2014).

Single people invest, all other things being equal, more often and larger amounts in risky assets. Conversely, households with children (who require protection) face greater risks and invest less in risky assets. This risk management highlights a “temperance” behaviour (desire to attenuate the overall level of risk, Kimball, 1993).

... have more or less pronounced effects depending on the economic and institutional environment

In order to understand the differences between the effects of the socio-demographic variables illustrated in Charts 2 and 3, we analyse their correlation with economic and institutional environment indicators.

We thus find that the correlation between the overall level of wealth and the value of the main residence is linked to the functioning of credit markets, in particular the mortgage market. This correlation is weaker in countries where property-backed loans may be used for other purchases than the property itself.⁵ The differentiated effect of the wealth level may therefore be linked to differences in credit constraints faced by households or in the institutional and regulatory conditions for financing other expenses secured on the value of their property.

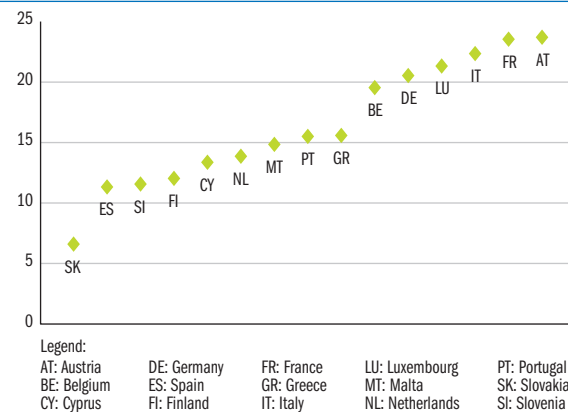
As regards the composition of financial wealth, we find that the positive correlation between the household’s income and its risky financial investments tends to rise as the average replacement rates of pension systems decline.⁶

⁵ Source of the mortgage market indicator: European Central Bank (2009).

⁶ Source of the replacement rate indicator: OECD (2011).

C2 Value of the main residence in the 5th quintile of net wealth (relative to the 1st quintile)

(in %)



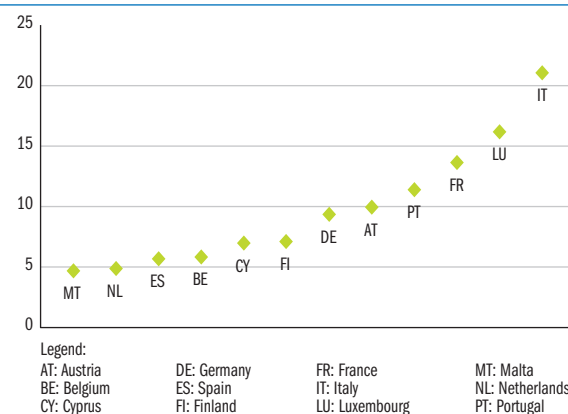
Note: Result of the Tobit model estimation, average marginal effects.

The reported effects are significantly different from zero at the 10% threshold.

Source: Arrondel et al. (2014).

C3 Value of the amount invested in risky financial assets in the 5th income quintile (relative to the 1st quintile)

(in %)



Note: Result of the Tobit model estimation, average marginal effects,

reported only if they are significantly different from zero at the 10% threshold.

Source: Arrondel et al. (2014).

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