

Distributional Consequences of Asset Price Inflation in the Euro Area

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Abstract

We study the distributional consequences of housing price, bond price and equity price increases for Euro Area households using data from the Household Finance and Consumption Survey (HFCS). The capital gains from bond price and equity price increases turn out to be concentrated among relatively few households, while the median household strongly benefits from housing price increases. The capital gains from bond price increases (relative to household net wealth) do not correlate with household net wealth (or income). Bond price increases thus leave net wealth inequality largely unchanged. In contrast, equity price increases largely benefit the top end of the net wealth (and income) distribution, thus amplify net wealth inequality. Housing price increases display a hump shaped pattern over the net wealth distribution, with the poorest and richest households benefitting least, but there exists considerable heterogeneity across Euro Area countries. The ECB's OMT announcements over the summer of 2012 had quantitatively similar distributional implications as an unexpected loosening of the policy rate by about 175 basis points.

Keywords: asset price inflation, wealth redistribution

JEL codes: D31, E21, E52, E58.

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1 Introduction

The unconventional monetary policy measures recently introduced in the Euro area have been accompanied by strong movements in a number of important financial market prices. Equity and sovereign bond markets in particular have witnessed strong price increases over relatively short periods of time. The EuroStoxx 50 Index, for example, surged by approximately 24 percentage points over the six months window starting three months prior to the ECB announcement of sovereign bond purchases on January 22, 2015. Over the same period, the price of the benchmark 10 year German Bund increased by approximately 6 percentage points.¹ Capital gains were even larger for sovereign bonds of Euro Area periphery countries (Italy, Spain, Portugal). Corporate bond prices also increased and mortgage rates significantly declined, thereby supporting housing demand and housing prices in the Euro Area.

This paper seeks to document and quantify the distributional consequences associated with asset price inflation in the Euro Area. To do so it uses the Household Finance and Consumption Survey (HFCS), which surveys Euro Area households and provides detailed, harmonized and representative information about households' balance sheets in the Euro Area countries. The paper thus adds to recent discussions about the distributional consequences of asset price increases, which have received increasing attention among policymakers, e.g., Mario Draghi (2015) or Andrew Haldane (2014).

We find that only a fairly small subset of the population benefits from capital gains in bond and equity markets; three quarters of the population fail to benefit at all from bond price or equity price increases. While the winners from bond price increases are evenly spread across the household net wealth distribution, equity price increases are highly concentrated within the top 5% of the net wealth distribution. As a result, equity price increases strongly increase net wealth inequality in the Euro Area. Bond price increases, however, leave net wealth inequality largely unchanged, even though only a small subset of the population is benefitting from these. These findings for the Euro Area as a whole are rather robust and apply similarly to individual Euro Area countries.²

The situation differs significantly when considering housing price increases in the Euro

¹The Bund with the ISIN DE0001102358 increased from 106.175 on October 22, 2014 to 112.58 on April 22, 2015, not accounting for accumulated coupon payments (1.5% per year).

²In some countries, e.g., Germany and the Netherlands, net wealth inequality even decreases following a bond price increase.

Area. First, housing price increases affect a much larger part of the population than bond price or equity increases, with the median household benefitting considerably from housing price increases. Second, housing price increases tend to be concentrated among the middle class and upper middle class of the Euro Area net wealth distribution.³ Poor and rich households benefit (relative to their net wealth position) less from housing price increases; among the poor fewer households own houses and rich households hold a smaller proportion of their wealth in housing. Third, there exists a considerable amount of heterogeneity between Euro Area countries. In particular, in some countries (Finland, Netherlands, Portugal, Spain), poor households own more often a house and are highly leveraged. As a result, in these countries poor households benefit more (relative to their net wealth) from housing price increases than any other wealth class. The opposite is true in Austria, Germany, France and Italy, where the poor own more rarely houses and thus benefit the least from housing price increases amongst all net wealth classes. Indeed, in Germany where home ownership rates are particularly low, the median household fails to benefit at all from housing price increases.

We also compare how capital gains spread over the household income and age distribution. While low income households profit most from housing price increases, capital gains from equity price increases accrue largely to the group of top income earners. Bond price appreciations spread approximately evenly across the income distribution.

We then investigate the distributional consequences associated with a surprise drop in the monetary policy rate. We find that an unexpected loosening of monetary policy leads to disproportionately large capital gains at the top end of the net wealth distribution: the 5% richest households gain on average about 5 times as much as the remaining households. Correspondingly, of course, these households experience 5 times larger capital losses following an unexpected monetary tightening.

We also assess the distributional implications associated with the announcement of the ECB's Outright Monetary Transactions (OMT) program. We find that in terms of its distributional consequences, the OMT announcements had qualitatively very similar effects as an unexpected loosening of the monetary policy rate. Again the main beneficiaries are located at the top end of the net wealth distribution. In quantitative terms, the OMT

³We define poor households as those in the bottom 20% of the net wealth distribution, middle class households as those in the next 50%, upper middle class as the next 25% and rich households as the top 5% of the distribution.

announcements had an approximately similar distributional effect as a 175 basispoints surprise reduction in the monetary policy rate.

In a final step, we identify a set of households that largely fails to benefit from asset price increases, as they fall short of investing a significant share of net wealth in long dated assets. This group comprises more than 20% of Euro Area households. We show that these households have rather low net wealth and fairly low income levels.

A number of papers discusses the distributional consequences of monetary policy decisions. Most studies focus on the distributional effects of inflation. Doepke and Schneider (2006b), for example, study the distributional implications of the U.S. Great Inflation episode in the 1970's. Adam and Zhu (2016) report results for the redistributive effects of surprise deflation and inflation in the Euro Area; Meh and Terajima (2008) report results for Canada. Meh, Ríos-Rull and Terajima (2010) analyze the welfare implications of inflation targeting and price-level targeting strategies, calibrating their model to the nominal wealth positions documented for Canadian data. Brunnermeier and Sannikov (2013) discuss the redistributive effects of monetary policy in a setting with financial frictions and how policy can occasionally use these effects to avoid liquidity and deflationary spirals. Coibion et al. (2012) analyze the effects of monetary policy shocks for inequality. While not providing direct implications for wealth inequality, they show that a contractionary monetary policy shock in the U.S. raises the inequality of income, labor earnings, expenditures and consumption across households. Gornemann, Kuester and Nakajima (2014) study the distributional effects associated with changes in the systematic conduct of monetary policy. Albanesi (2007) documents the positive cross-country relationship between inflation rates and inequality and rationalizes it using a political economy model in which low income households are more exposed to inflation than high income households. Doepke and Schneider (2006a, 2006c) show how inflation induced redistribution can have long-lasting negative real effects because winners and losers tend to have different age and employment status, but that average household welfare might nevertheless increase. The present paper adds to this literature by quantifying the distributional effects of asset price increases and of monetary policy actions in the Euro area.

The paper is structured as follows. After presenting the data set and the accounting methodology in the next two sections, section 4 presents our main quantitative findings. It starts by presenting the distribution of individual gains for bond price, equity price and housing price increases, then discusses how these gains covary with the net wealth and

income distributions and with household age. Section 4 also discusses the capital gain implications of standard monetary policy shocks and of the ECB's Outright Monetary Transactions (OMT) announcements over the summer of 2012. Finally, it discusses which set of households fails to gain from asset price increases. The main text often focuses on results for the Euro Area as a whole, but detailed data tables for individual Euro Area countries are provided in the Appendix.

2 The Data Set

The Household Finance and Consumption Survey (HFCS) is a coordinated household survey collecting detailed information on the households' balance sheet items. Financial variables are all reported at market value. The reference year for the first and latest available survey wave is 2010. The survey covers about 62,000 households from all Euro Area countries at the time, except for Ireland.

Data is collected using a harmonized methodology to insure country-level representativeness. To maximize comparability across countries, the survey output is harmonized through usage of a common set of target variables. The survey also employs a common blueprint questionnaire to foster input harmonization. The survey is multiply imputed to account for missing data and oversamples wealthier households. Household weights are adjusted for unit non-response and calibrated to external information such as population distributions. Basic stylized facts of the survey are documented in HFCN (2013a, 2013b).

As is well known, when aggregating the household sector financial assets and liabilities from HFCS data, one obtains discrepancies relative to the household sector aggregates from Euro Area Accounts (EAA). This fact is documented, for example, in Table A.1 in Adam and Zhu (2016). It shows, in line with results reported in table 10.5 in HFCN (2013a), that aggregate HFCS household net wealth typically reaches 70-80% of the EAA net wealth number, with the only exception being the Netherlands, where the net wealth coverage is only around 50%. The shortfall occurs for a number of reasons, discussed in Kavonius and Törmälehto (2010), Honkkila and Kavonius (2013) and HFCN (2013a), one of which is that the HH sector in the EAA comprises non-profit institutions, e.g., private foundations, while these institutions are not part of the HFCS data set.

3 Methodology

We use the portfolio information available from the HFCS to compute household net wealth, which is defined as the difference between all household assets minus all liabilities. We then scale the household’s bond, housing and equity holdings by its net wealth position.⁴ Multiplying the resulting ratios with the considered 10% price increase delivers the household’s capital gain of the considered asset class in relation to its net wealth position. We define housing wealth as the sum of privately owned real estate and mutual fund holdings for funds that predominantly invest in real estate. Bond holdings are defined as the sum of outright bond holding, holdings of mutual funds predominantly investing in bonds and 79% of private pension holdings.⁵ Equity holdings are the sum of holdings of stocks and business wealth, mutual funds investing predominantly in equities, and 21% of private pension holdings.⁶

While our baseline approach imputes the same bond and equity share in pension wealth across all countries, appendix D shows that our baseline results are very robust towards using country specific bond and equity shares in pension wealth. Furthermore, the standard wealth definition in the HFCS does not include account-based public and

⁴For households that hold a negative net wealth position, we set the ratio to zero, whenever considering individual household distributions. When considering household groups, say the bottom x% of the net wealth distribution, we sum the gains and net wealth holdings of all households in that group, provided household net wealth is positive.

⁵Of the € 6.7 trn of financial assets held by insurance corporations and pension funds in the EA, according to the Euro Area Accounts, only about € 0.85 trn are invested in equities. A further € 1.6 trn is invested in mutual funds, but these are to a large extent themselves invested in bonds: the other financial intermediaries sector, which consists mainly of mutual, private equity and hedge funds, holds only about 36% of its assets in quoted and unquoted shares. This suggests that of the € 6.6. trn of pension assets in the insurance sector only about € 1.4trn (= € 0.85 trn+36%·€ 1.7trn), i.e., only about 21% are invested in equities, with the rest being invested in bonds.

⁶ The break-down of mutual funds into those predominantly investing in bonds, equities and real estate is not available for Finland, Germany, Greece, the Netherlands and Portugal. For Germany, we use additional country-specific HFCS data available at the Bundesbank to classify the mutual funds into these subcategories. For Greece, the Netherlands and Portugal we observe whether or not households held a particular mutual fund category, but not the amounts in each category. For these countries we assign the total reported mutual fund amount in equal proportions to the categories held. For Finland no breakdown is available; here we use the averages of the other Euro Area countries to impute the category shares. The same procedure is used to impute category amounts when households declared that they do not know the type of mutual funds they hold.

occupational pension claims. For this reason appendix C considers the robustness of our baseline findings towards including also such pension claims, showing that doing so has only quantitatively small effects.

4 Results

4.1 The Distribution of Gains Across the Population

Figures 1, 2 and 3 depict the distribution of capital gains relative to household net wealth for a 10 % increase in bond, equity and housing prices, respectively.⁷ The figures show how gains are distributed across the population, where households are ordered from left to right according to the size of their gains (relative to household net wealth).⁸

Figures 1 and 2 show that the median household does not benefit at all from bond price or equity price appreciations, while the top 5% winners experience substantial net wealth gains of approximately 3-4%. The latter gains are rather large given the considered 10% increase in bond and equity prices. Overall, Figures 1 and 2 show that the capital gains from bond and equity price appreciations are concentrated among a relatively small subset of Euro Area households.

The situation differs notably for housing price appreciations, as depicted in Figure 3. While 25% of households experience no capital gains, the median household now experiences large gains close to 8% of net wealth. The top 5% and 10% winners experience net wealth increases that are even larger than the considered increase in housing prices. The latter occurs because these households have net wealth levels below the housing value, i.e., have used mortgages to finance their real estate holdings.

Appendix B.1 provides information about the distribution of bond, equity and housing price increases for individual Euro Area countries. It shows that the findings for the Euro Area as a whole extend in a similar way to individual Euro Area countries. The only notable exception is Germany, where - due to low home ownership rates - the median household fails to gain from housing price increases.

⁷Readers interested in assessing the quantitative effects of smaller or larger price changes should simply proportionately rescale the quantitative findings reported below.

⁸Figures 1-3 report the gains of households in a certain position in that ordering. For example, the gain reported for the top 5% household is such that 95% of households experience lower gains and 5% of households larger gains.

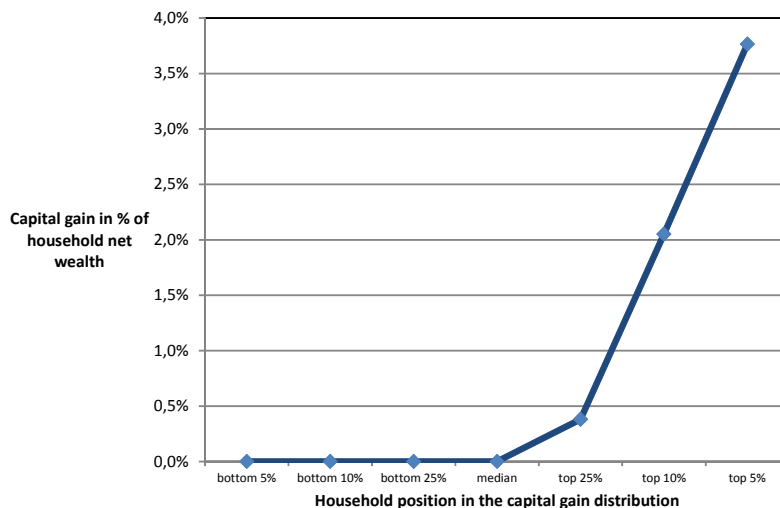


Figure 1: Capital gains associated with a 10% bond price increase

While the distribution of capital gains, especially those associated with equity and bond price increases, is rather uneven across Euro Area households, this finding remains uninformative about whether or not the gains are systematically related to household net wealth or household income. We explore these issues in the subsequent sections.

4.2 Capital Gains Across the Net Wealth Distribution

Figure 4 depicts the capital gains experienced by different household groups in the net wealth distribution.⁹ It considers ‘poor households’, defined as those in the bottom 20% of the Euro Area net wealth distribution, ‘middle class households’, defined as the 50% of households above the poor, ‘upper middle class households’, defined as the next 25% of households, and ‘rich households’, defined as 5% richest households according to the net wealth distribution. The figure then displays for each household group the average group gains divided by the average net wealth holdings.¹⁰

Figure 4 shows that the gains from bond price appreciations display no important variation across the four different wealth classes considered. Thus, while only relatively few households benefit from bond price increases, see Figure 1, these households are

⁹The online appendix to this paper provides a more detailed numerical breakdown of the household asset positions by country and by net wealth percentile.

¹⁰Appendix E reports instead the mean of the household level gains to net wealth ratios for the considered net wealth group. It shows that this leads to very similar conclusions.

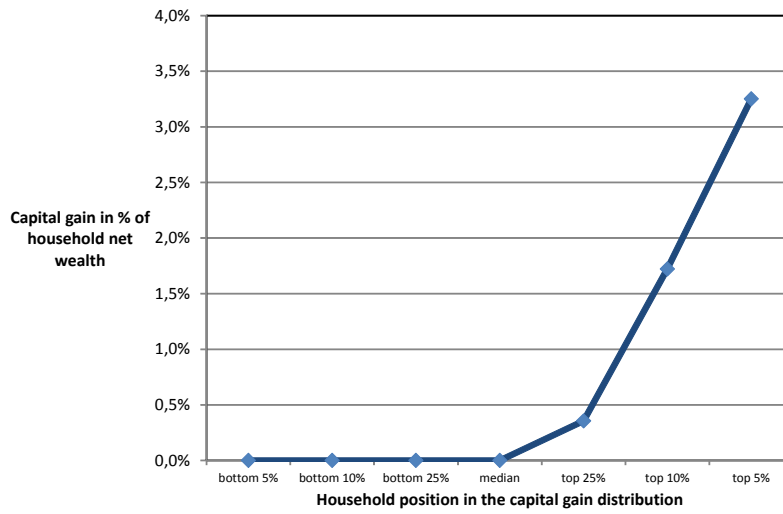


Figure 2: Capital gains associated with a 10% equity price increase

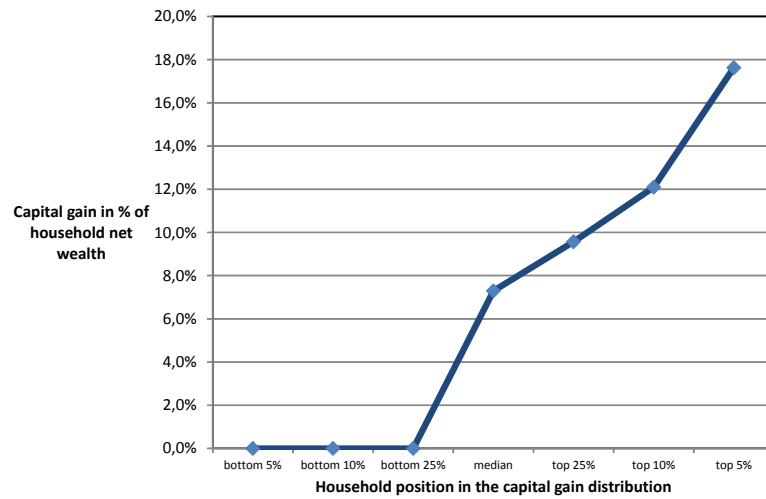


Figure 3: Capital gains associated with a 10% housing price increase

approximately evenly spread out across the net wealth distribution. Figure 5 shows that the flat capital gains profile across net wealth groups arises from two opposing trends: poorer households' private pension wealth increases more than that of richer households because poorer households hold (relative to their net wealth) more private pensions; richer households, however, own more bonds outright or via mutual funds (again relative to net wealth) and thus benefit more via this channel from bond price increases.

The situation differs noticeable for equity price increases. Equity gains are heavily concentrated among rich households. The fact that the 5% richest households experience capital gains from equity price increases in the same order as the top 5% household when ordering households according to the size of capital gains, see Figure 2, illustrates the existence of a strong positive correlation between households' net wealth position and equity holdings. Figure 6 decomposes the equity gains into those arising from business wealth and those arising from other sources. It shows that the strong gains of the 5% richest households arise mainly because they own business wealth.

The distribution of real estate gains displayed in Figure 4 has a hump shape. Poor households benefit approximately as much as the group of rich households (relative to group net wealth), while substantially larger gains are experienced by middle class and upper middle class households. This is due to the fact that among poor households there are fewer homeowners. Furthermore, rich households are (relative to their net wealth holdings) more invested in equities (business wealth, stocks and stock mutual funds).

While the Euro Area results regarding the distribution of bond and equity price increases across the four wealth groups also hold up for individual Euro Area countries, see the tables provided in Appendix B.2, we find that housing price increases generate considerably more heterogeneous effects across Euro Area countries. We explore this issue in the next subsection.

4.2.1 Heterogeneity Across Euro Area Countries

This section documents that housing price increases generate rather heterogeneous effects across individual countries.¹¹ Figure 7 shows that in Austria, Germany, France, Italy and Malta the poor benefit relatively little from housing price increases when compared to the Euro Area average. The opposite is true in Finland, the Netherlands, Portugal

¹¹See Table A6 in Appendix B.2 for detailed numbers.

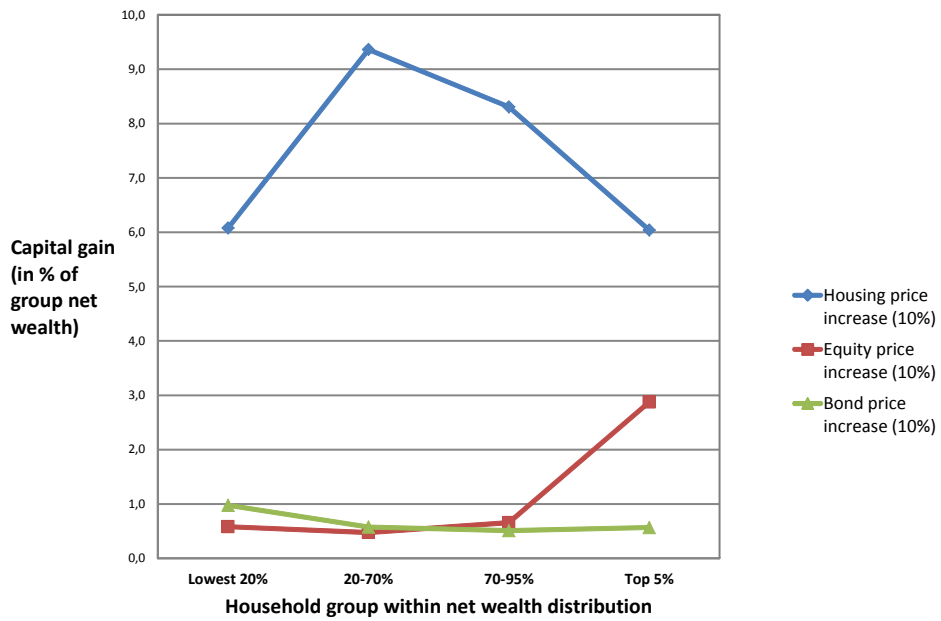


Figure 4: Capital gains across Euro Area net wealth groups

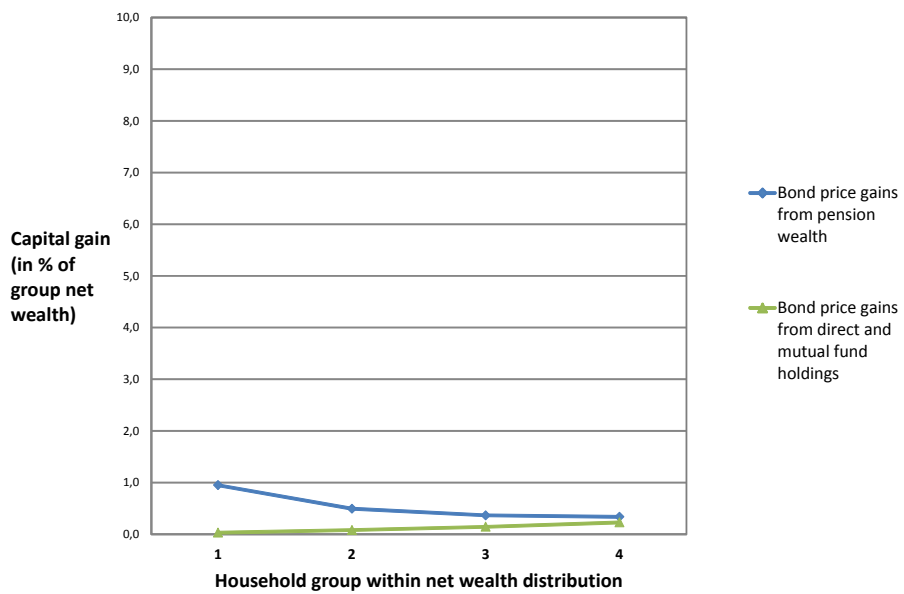


Figure 5: Capital gains across Euro Area net wealth groups, decomposition of bond price gains

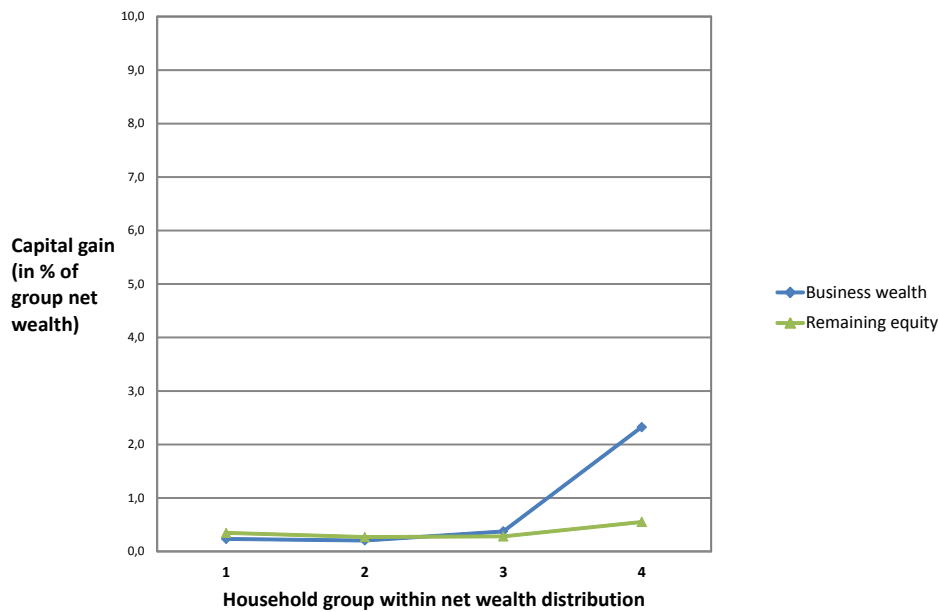


Figure 6: Capital gains across Euro Area net wealth groups, decomposition of equity gains and Spain, where the poor benefit disproportionately much from housing price increases, indeed much more than any other net wealth group, see Figure 8. These findings are obtained because in the latter set of countries, poor households are more likely to be homeowners. Since poor households tend to be more heavily leveraged, housing price increases then lead to disproportionately large increases in the poor’s net wealth. Clearly, this finding also points towards a potential fragility of the poor’s net wealth position with respect to possible house price decreases.

4.2.2 Effects on Net Wealth Inequality

Table 1 reports the Gini coefficients for the net wealth distribution.¹² It reports the coefficient prior to any capital gain realization and after a 10% increase in housing, equity and bond prices, respectively. Table 1 shows that housing price increases lead to a significant decrease in the Gini coefficient, especially for countries where poor households benefit disproportionately much (see Figure 8). Equity price increases, however, lead to a significant increase in the Gini coefficient, while bond price increases leave net wealth

¹²The Gini coefficient is a measure for the degree of inequality in the distribution and varies from zero (no inequality) to 1 (maximum inequality/complete concentration). Computations are based on households with positive net wealth.

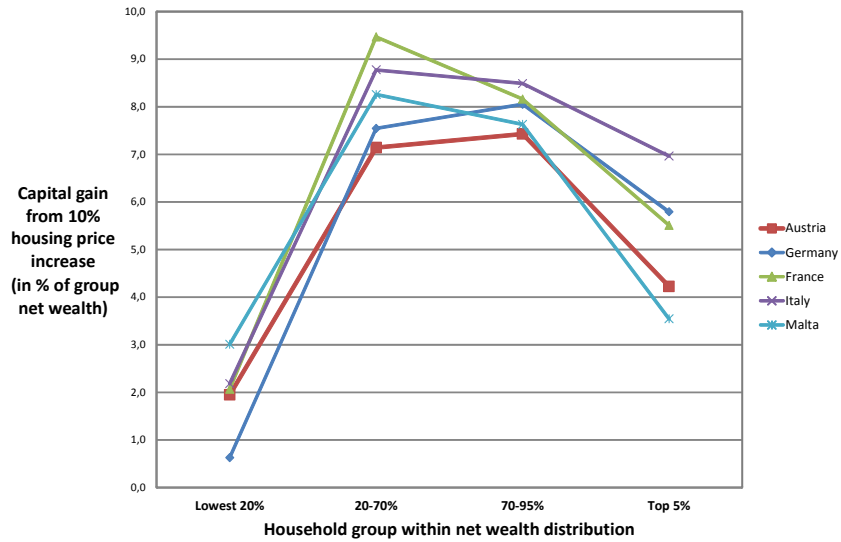


Figure 7: Euro Area countries where low wealth HHs benefit least from housing price increases

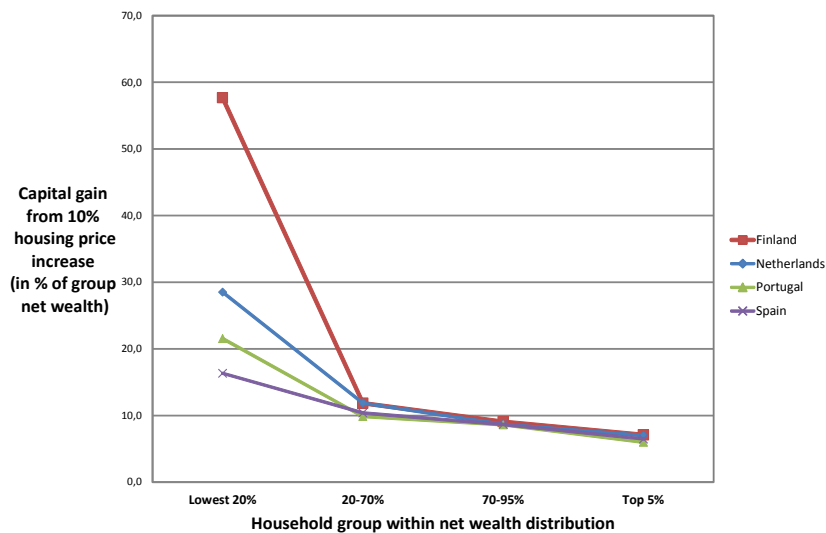


Figure 8: Euro Area countries where low wealth HHs benefit most from housing price increases

inequality largely unchanged. The implied changes in the Gini coefficients thus confirm the analysis based on wealth groups in the previous section.

	Prior to increase	Housing increase	Diff. Gini (%)	Equity increase	Diff. Gini (%)	Bond Increase	Diff. Gini (%)
Euro Area	0.651	0.647	-0.6	0.654	0.5	0.651	0.0
Austria	0.735	0.732	-0.4	0.740	0.7	0.735	0.0
Belgium	0.592	0.585	-1.2	0.595	0.4	0.593	0.2
Cyprus	0.676	0.670	-1.0	0.682	0.8	0.676	-0.1
Finland	0.603	0.596	-1.2	0.605	0.4	0.603	0.0
France	0.662	0.658	-0.6	0.665	0.5	0.663	0.1
Germany	0.724	0.722	-0.2	0.727	0.4	0.723	-0.1
Greece	0.531	0.529	-0.4	0.532	0.2	0.531	0.0
Italy	0.598	0.596	-0.3	0.600	0.4	0.598	0.0
Luxemburg	0.644	0.640	-0.6	0.645	0.2	0.644	0.0
Malta	0.593	0.587	-1.0	0.601	1.4	0.592	-0.1
Netherlands	0.546	0.539	-1.2	0.546	0.0	0.544	-0.4
Portugal	0.652	0.646	-0.9	0.656	0.6	0.652	0.0
Slovakia	0.438	0.435	-0.7	0.441	0.5	0.438	0.0
Slovenia	0.512	0.508	-0.8	0.516	0.7	0.512	0.0
Spain	0.557	0.550	-1.2	0.561	0.7	0.557	0.0

Table 1: Gini coefficients for the net wealth distribution

4.3 Capital Gains Across the Income Distribution

Figure 9 depicts how capital gains are distributed across the household income distribution.¹³ The figure considers four broad household income groups: low income households (bottom 20% of the distribution), middle income households (the next 50% of the distribution), upper middle income group (the next 25%) and high income households (the top 5% of the distribution). In line with Figure 4, Figure 9 reports the sum of capital gains of

¹³The online appendix to this paper provides a more detailed numerical breakdown of the household asset positions by country and by income percentile.

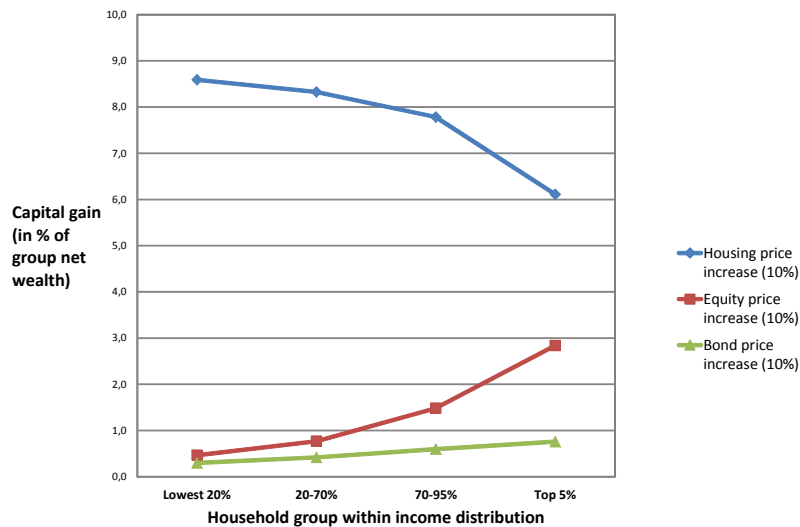


Figure 9: Capital gains across Euro Area income groups

a considered group divided by the sum of group net wealth. Figure 9 thus shows that the capital gains (relative to net worth) from housing price increases are larger the lower is the income group. The opposite is the case for equity price increases, while for bond price increases, the schedule is relatively flat. This shows that housing price increases tend to be larger (in relative terms) for low income households, while equity price are larger for high income households.

Appendix B.3 reports the capital gain numbers for individual Euro Area countries. It shows that the findings for individual Euro Area countries are very similar to that for the Euro Area as a whole.

4.4 Capital Gains Across the Age Distribution

Figure 10 depicts the capital gains for different asset classes across different household age groups, using the age of the household head to place households into the respective groups.¹⁴ It shows that bond price increases are flat across age groups, while gains from housing price increases tend to be downward sloping in the age profile, presumably because household leverage is decreasing with age. Equity gains are mostly located in the middle aged cohort groups and turn out to be lowest for the age cohort in retirement age. If

¹⁴As before, the figure displays for each considered household group the average group gains divided by the average net wealth holdings.

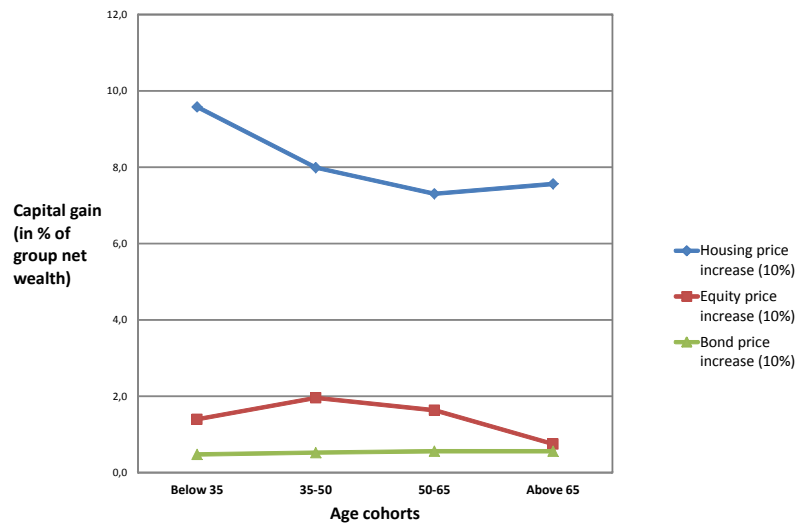


Figure 10: Capital gains across Euro Area household age groups

households above age 65 are most likely to actually realize their capital gains, then figure 10 shows that it is precisely this age group which tends to have the lowest capital gains from house price and equity price increases.

4.5 Distributional Consequences of the ECB's OMT Announcements

The previous sections studied the distributional consequences of isolated hypothetical 10% price movements of equities, bonds and houses. The present section studies the distributional consequences of the ECB's Outright Monetary Transactions (OMT) program announcements. The OMT program was announced over the summer of 2012 but subsequently never activated. It nevertheless had large and persistent effects on a range of financial market prices.

Following Krishnamurthy et al. (2015), we identify the announcement effects using a high frequency approach. Specifically, we consider the closing price changes in the Barclays Euro Aggregate Bond Index and in the EuroStoxx 50 Index between the day preceding an OMT announcement and the day following an OMT announcement day. Since housing prices cannot be observed at high frequency, we cannot compute the distributional effects stemming from house price movements.

In line with Krishnamurthy et al. (2015), we consider three OMT announcement

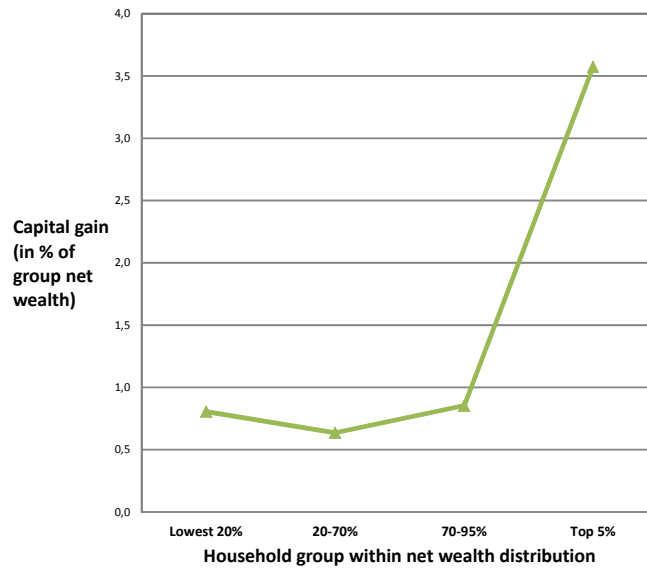


Figure 11: Capital gains associated with OMT announcements

dates: July 26, 2012, which was the day on which ECB President Mario Draghi gave his ‘whatever-it-takes’ speech in London; August 2, 2012 and September 6, 2012, which were ECB press conference days following ECB Governing Council meetings on which further details of the program were released. Table 2 below reports the effects on bond and stock prices around these announcement days and figure 11 depicts the cumulative distributional effects from all three announcements. Perhaps not surprisingly, given the relatively strong movements in stock prices and the somewhat more muted response of bond prices, the distributional effects in figure 11 are strongly skewed to the top 5% wealth group and overall resemble strongly the distributional effects associated with a 10% equity price increase reported in figure 4. The distributional effects of the OMT across income classes (not reported here) also resemble closely those reported in figure 9 for a 10% equity price increase.

	Barclays Euro Aggregate	EuroStoxx 50
Announcement Day	Bond Index	Index
July 26, 2012	+0.55%	+6.58%
August 2, 2012	+0.04%	+1.68%
September 6, 2012	+0.38%	+3.96%
Cumulative effects	+0.97%	+12.23%

Table 2: Bond and Equity Price Movements around OMT Announcement Days

4.6 Distributional Consequences of Euro Area Monetary Policy Shocks

This section quantifies the distributional implications of Euro Area monetary policy shocks. Such shocks affect simultaneously bond, equity and housing prices. The analysis in Peersman and Smets (2003) is one of the few studies simultaneously determining the response of all three asset classes to a Euro Area monetary policy shock. According to their point estimates, an exogenous 25 basispoints reduction in the policy rate causes a 1.8% increase in stock prices, no movement in the long-term bond price, and a 0.025% increase in housing prices over the subsequent 4 quarters. Based on these estimates, figure 12 illustrates the distribution of capital gains after four quarters over the household net wealth distribution. The figure illustrates that capital gains are again skewed in favor of the top end of the wealth distribution, which has to do with the fact that housing prices move only very little in response to the monetary policy shock. Overall the distributional implications of a loosening of policy rate are - in terms of their distributions implications over net wealth classes - surprisingly similar to those of the OMT announcement, see figure 11. In fact, scaling up the monetary policy shock by factor of 7, i.e., considering a surprise 175 basispoints reduction in the monetary policy rate has quantitatively very similar distributional effects as those generated by the OMT announcements.

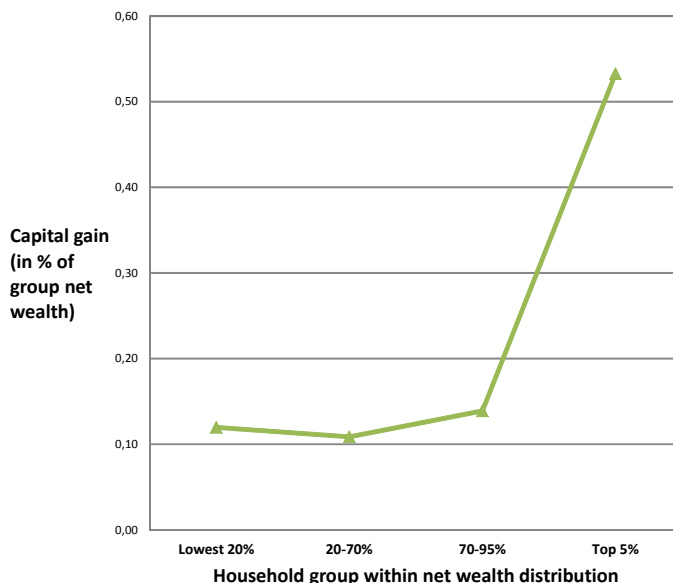


Figure 12: Effects of exogenous 25 basispoint reduction in the Euro Area monetary policy rate

4.7 Households' Asset Duration and the Distribution of Capital Gains

While the distribution of capital gains is of interest to understand whether or not households benefit from asset price increases, some of the considered wealth increases may not be relevant in welfare terms. This occurs, for example, whenever households do not intend to realize the capital gains and whenever the capital gains are ultimately temporary in nature, e.g., because monetary policy will eventually terminate purchase programs and normalize interest rates.

Long investment horizons may be particularly relevant for housing price increases, increases in the value of pension assets, and increases in business wealth. The long investment horizons associated with these assets implies that persistent but ultimately temporary capital gains only compensate households for the low returns following the asset price increases, but leave household wealth at the time of the termination of the investment largely unchanged.¹⁵ Similarly, households who just do not hold long dated assets also fail to benefit from capital gains.

¹⁵Obviously, households still face a relative price change in terms of lower subsequent returns/interest rates, which can affect welfare.

Table 3 identifies households which do and do not invest significant amounts in long dated assets.¹⁶ Long dated assets are defined as the sum of bond, equity and real estate holdings and ‘significant’ refers to an asset share above/below 10% of household net worth. As it turns out, more than 28 million households in the Euro Area fail to be significantly invested in long dated assets. These households fail to benefit from capital gains in noticeable amounts and have low median income and low median wealth. This contrasts to the sizable capital gains of households with larger exposure to long dated assets and their high median income and net wealth levels.¹⁷ Overall, this shows that wealth and income poor households fail to benefit from asset price increases.

Euro Area	All HHs	HHs with long assets \leq 10%	HHs with long assets $>$ 10%
Number of HHs (in mlns)	130.1	28.2	101.9
Household characteristics			
Median HH net wealth (euro)	125,018	5,938	185,233
Median HH income (euro)	29,160	19,131	33,112
Median HH age	52	47	54
Capital gains (in % of net wealth)			
Real estate price increase (10%)	7.68	0.03	7.78
Equity price increase (10%)	1.44	0.04	1.46
Bond price increase (10%)	0.55	0.06	0.55

Table 3: Asset duration, capital gains and household characteristics

¹⁶ As before, we exclude households with negative net wealth from the analysis.

¹⁷ There is little heterogeneity amongst the HH group with more than 10% in long dated assets. The capital gain, wealth and income numbers for household groups with 10%-90% and 90%-100% of long dated assets look very similar to that of the 10%-100% group.

5 Conclusions

The capital gains from bond price, equity price and housing price increases have fairly different distributional implications in the Euro Area. The capital gains from equity and bond price increases tend to be highly concentrated among a fairly small set of households, while the capital gains from housing price increases are more widespread. While highly concentrated, the gains from bond price increases do not covary with the households net wealth or income position, unlike the capital gains from equity price increases. The latter are concentrated predominantly among high net worth and high income households. As a result, equity price increases significantly increase net wealth inequality in the Euro Area, while bond price increases leave net wealth inequality unchanged. Housing price increases significantly reduce net wealth inequality.

While the distribution of capital gains are of interest for assessing how they affect wealth inequality, it remains an open issue as to whether these gains actually lead to increased welfare dispersion among households. If households have long investment horizons, as may plausibly be assumed for prime residences, pension wealth or business wealth, then capital gains may be partly or fully compensated by lower future holding period returns. Changes in net wealth inequality then overstate the effects of capital gains on the dispersion of household utility. Investigating this issue further requires formal economic modeling of household consumption and investment decisions, which is beyond the scope of the present paper, but appears to be a fruitful avenue for further research.

A Data Definitions

The Household Finance and Consumption Survey collects detailed information on the households' assets and liabilities. From the assets side it covers the household main residence, other real estate, other real assets such as vehicles and valuables, business wealth, deposits, shares, bonds, private pension accounts, and mutual funds. The latter are further broken into categories according to the type of asset they predominantly invest in.¹⁸ All computations are based on the user's database version UDB_1_8, as available through the European Central Bank.

For the purposes of our analysis, we define housing wealth the value of the household main residence, other real estate held by the household and the value of mutual funds investing predominantly in real estate. As equity holdings we consider the value of business wealth held by the household, the value of direct holdings in listed shares, the value of mutual funds investing predominantly in shares, and 21% of the value of private pension accounts. We define the value of bonds as the direct holdings of bonds, the value of the mutual funds investing predominantly in bonds plus 79% of the private pension accounts.

Household net wealth is provided in the survey data, as a derived variable, and has been computed as the value of total assets minus total liabilities.

¹⁸See further details mentioned in footnote 6.

B Tables for Individual Euro Area Countries

B.1 The distribution of individual capital gains

Country	bottom 5%	bottom 10%	bottom 25%	median	top 25%	top 10%	top 5%
Euro Area	0.0	0.0	0.0	0.0	0.4	2.1	3.8
Austria	0.0	0.0	0.0	0.0	0.0	0.7	1.9
Belgium	0.0	0.0	0.0	0.0	0.9	2.7	4.8
Cyprus	0.0	0.0	0.0	0.0	0.3	1.0	2.1
Finland	0.0	0.0	0.0	0.0	0.1	0.5	1.1
France	0.0	0.0	0.0	0.0	0.3	1.7	3.3
Germany	0.0	0.0	0.0	0.0	1.2	3.5	5.3
Greece	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy	0.0	0.0	0.0	0.0	0.2	0.9	1.7
Luxemburg	0.0	0.0	0.0	0.0	0.3	1.3	2.7
Malta	0.0	0.0	0.0	0.0	0.5	1.6	2.4
Netherlands	0.0	0.0	0.0	0.1	2.6	6.2	7.8
Portugal	0.0	0.0	0.0	0.0	0.0	0.1	0.6
Slovakia	0.0	0.0	0.0	0.0	0.0	0.2	0.6
Slovenia	0.0	0.0	0.0	0.0	0.0	0.2	0.4
Spain	0.0	0.0	0.0	0.0	0.0	0.3	0.8

Table A1: Individual gain distribution (in % of net wealth),
10% bond price increase

Country	bottom 5%	bottom 10%	bottom 25%	median	top 25%	top 10%	top 5%
Euro Area	0.0	0.0	0.0	0.0	0.4	1.7	3.3
Austria	0.0	0.0	0.0	0.0	0.0	1.4	3.8
Belgium	0.0	0.0	0.0	0.0	0.5	1.5	2.4
Cyprus	0.0	0.0	0.0	0.0	0.4	2.6	5.9
Finland	0.0	0.0	0.0	0.0	0.2	1.3	2.9
France	0.0	0.0	0.0	0.0	0.4	1.7	3.3
Germany	0.0	0.0	0.0	0.0	0.8	2.1	3.7
Greece	0.0	0.0	0.0	0.0	0.0	0.5	2.5
Italy	0.0	0.0	0.0	0.0	0.1	1.1	2.8
Luxemburg	0.0	0.0	0.0	0.0	0.2	1.2	2.1
Malta	0.0	0.0	0.0	0.0	0.2	1.5	4.5
Netherlands	0.0	0.0	0.0	0.1	1.0	2.1	3.1
Portugal	0.0	0.0	0.0	0.0	0.0	0.5	2.0
Slovakia	0.0	0.0	0.0	0.0	0.0	0.3	1.0
Slovenia	0.0	0.0	0.0	0.0	0.1	0.7	3.0
Spain	0.0	0.0	0.0	0.0	0.1	1.3	3.1

Table A2: Individual gain distribution (in % of net wealth),
10% equity price increase

Country	bottom 5%	bottom 10%	bottom 25%	median	top 25%	top 10%	top 5%
Euro Area	0.0	0.0	0.0	7.3	9.6	12.1	17.6
Austria	0.0	0.0	0.0	1.8	8.6	9.8	11.2
Belgium	0.0	0.0	0.0	7.5	9.6	13.4	17.8
Cyprus	0.0	0.0	5.7	9.3	10.5	14.6	20.1
Finland	0.0	0.0	0.0	8.2	10.0	18.2	31.4
France	0.0	0.0	0.0	6.6	9.4	12.3	17.8
Germany	0.0	0.0	0.0	0.0	8.5	11.4	16.6
Greece	0.0	0.0	5.1	9.1	9.9	11.4	15.4
Italy	0.0	0.0	0.0	8.3	9.4	10.0	11.8
Luxemburg	0.0	0.0	0.0	8.9	10.1	16.8	24.7
Malta	0.0	0.0	4.1	7.9	9.2	9.9	11.4
Netherlands	0.0	0.0	0.0	5.5	10.9	20.7	36.0
Portugal	0.0	0.0	0.0	8.5	9.9	14.1	21.0
Slovakia	0.0	1.9	7.3	9.0	9.8	10.0	12.4
Slovenia	0.0	0.0	7.1	9.4	9.9	10.3	12.1
Spain	0.0	0.0	7.1	9.4	10.0	14.2	19.8

Table A3: Individual gain distribution (in % of net wealth),
10% housing price increase

B.2 Capital gains distribution across net wealth groups

	HH net wealth position			
	Lowest 20%	20-70%	70-95%	Top 5%
Euro Area	1.0	0.6	0.5	0.6
Austria	0.2	0.3	0.3	0.5
Belgium	1.1	0.7	0.9	1.6
Cyprus	1.0	0.4	0.3	0.1
Finland	0.7	0.2	0.2	0.3
France	0.5	0.5	0.5	1.0
Germany	2.2	1.2	0.7	0.5
Greece	0.0	0.0	0.1	0.1
Italy	0.3	0.3	0.3	0.4
Luxemburg	1.0	0.4	0.3	0.3
Malta	0.9	0.4	0.6	0.2
Netherlands	3.5	2.5	1.4	1.3
Portugal	0.2	0.1	0.1	0.2
Slovakia	0.1	0.1	0.1	0.1
Slovenia	0.3	0.1	0.1	0.1
Spain	0.2	0.1	0.2	0.2

Table A4: Capital gains (in % of net wealth) across net wealth groups,
10% bond price increase

HH net wealth position				
	Lowest 20%	20-70%	70-95%	Top 5%
Euro Area	0.6	0.5	0.7	2.9
Austria	0.1	0.3	0.9	4.6
Belgium	0.4	0.3	0.8	2.3
Cyprus	0.5	0.5	1.4	4.6
Finland	1.0	0.3	0.5	2.4
France	0.5	0.5	0.8	2.9
Germany	0.8	0.8	0.6	3.4
Greece	0.4	0.3	0.6	0.9
Italy	0.3	0.3	0.6	2.1
Luxemburg	0.7	0.3	0.4	1.0
Malta	0.2	0.3	1.0	5.8
Netherlands	1.7	1.1	0.8	1.2
Portugal	0.1	0.2	0.6	2.9
Slovakia	0.1	0.1	0.3	1.8
Slovenia	0.4	0.2	0.7	2.9
Spain	0.4	0.3	0.8	2.8

Table A5: Capital gains (in % of net wealth) across net wealth groups,
10% equity price increase

HH net wealth position				
	Lowest 20%	20-70%	70-95%	Top 5%
Euro Area	6.1	9.4	8.3	6.0
Austria	1.9	7.1	7.4	4.2
Belgium	4.6	9.6	7.0	4.6
Cyprus	12.9	10.5	8.6	5.3
Finland	57.6	11.8	9.1	7.1
France	2.1	9.5	8.2	5.5
Germany	0.6	7.5	8.1	5.8
Greece	7.4	9.9	8.8	8.3
Italy	2.2	8.8	8.5	7.0
Luxemburg	9.8	10.9	8.7	8.5
Malta	3.0	8.3	7.6	3.5
Netherlands	28.5	11.9	8.7	7.0
Portugal	21.6	9.9	8.6	6.0
Slovakia	10.4	9.1	8.4	7.3
Slovenia	7.1	9.6	8.6	6.5
Spain	16.3	10.4	8.7	6.5

Table A6: Capital gains (in % of net wealth) across net wealth groups,
10% housing price increase

B.3 Capital gains distribution across income groups

	HH income position			
	Lowest 20%	20-70%	70-95%	Top 5%
Euro Area	0.3	0.4	0.6	0.8
Austria	0.3	0.3	0.4	0.4
Belgium	1.0	1.1	1.1	1.1
Cyprus	0.1	0.3	0.3	0.2
Finland	0.0	0.1	0.2	0.3
France	0.3	0.5	0.7	1.2
Germany	0.6	0.6	0.7	0.7
Greece	0.0	0.1	0.1	0.1
Italy	0.1	0.3	0.4	0.5
Luxemburg	0.2	0.2	0.5	0.2
Malta	0.3	0.5	0.4	0.5
Netherlands	1.9	1.8	1.4	1.5
Portugal	0.0	0.1	0.2	0.3
Slovakia	0.0	0.1	0.1	0.1
Slovenia	0.0	0.1	0.1	0.1
Spain	0.1	0.1	0.2	0.2

Table A7: Capital gains (in % of net wealth) across income groups,
10% bond price increase

HH income position				
	Lowest 20%	20-70%	70-95%	Top 5%
Euro area	0.5	0.8	1.5	2.8
Austria	1.2	2.1	2.6	3.7
Belgium	0.2	1.0	1.2	2.4
Cyprus	1.0	2.3	2.1	4.6
Finland	0.2	0.4	0.8	2.9
France	0.9	0.8	1.2	3.0
Germany	0.9	0.7	2.3	2.9
Greece	0.2	0.4	0.5	1.3
Italy	0.4	0.3	0.8	2.7
Luxemburg	0.6	0.3	0.8	0.8
Malta	0.6	1.1	4.3	2.1
Netherlands	0.9	1.0	0.8	1.4
Portugal	0.2	0.7	1.1	3.4
Slovakia	0.0	0.2	0.7	2.5
Slovenia	0.8	1.0	0.9	1.7
Spain	0.2	0.9	1.2	2.6

Table A8: Capital gains (in % of net wealth) across income groups,
10% equity price increase

	HH income position			
	Lowest 20%	20-70%	70-95%	Top 5%
Euro area	8.6	8.3	7.8	6.1
Austria	6.9	6.3	5.8	4.9
Belgium	7.8	6.8	7.2	5.9
Cyprus	9.1	7.9	7.8	5.6
Finland	8.8	9.5	9.8	7.3
France	7.9	8.2	8.1	5.5
Germany	6.6	7.6	6.9	6.4
Greece	9.6	9.2	9.1	7.8
Italy	9.0	8.7	8.2	6.3
Luxemburg	8.9	9.9	8.8	8.8
Malta	8.0	7.4	4.8	6.9
Netherlands	8.8	9.0	9.9	7.8
Portugal	8.9	8.9	8.4	5.4
Slovakia	9.4	9.1	8.0	5.9
Slovenia	8.8	8.5	8.5	7.4
Spain	9.3	9.2	8.6	6.7

Table A9: Capital gains (in % of net wealth) across income groups,
10% housing price increase

C Gains Tables when Including Public and Occupational Pension Wealth

The baseline HFCS net wealth definition (HFCS code dn3001) does not include public and occupational pension wealth. To assess the robustness of our baseline findings to the inclusion of pension wealth, we add HFCS reported pension wealth (HFCS variable dn3002 minus variable dn3001) to the households' bond holdings and net wealth and recompute tables A1, A4 and A7 using these adjusted variables. Comparing table A1 to A10, table A4 to A11 and table A7 to A12 shows that the inclusion of pension wealth results only in minor differences. The most notable changes occur for German workers in the lowest wealth category, see tables A4 and A11.

Country	bottom 5%	bottom 10%	bottom 25%	median	top 25%	top 10%	top 5%
Euro Area	0.0	0.0	0.0	0.0	0.4	2.2	4.2
Austria	0.0	0.0	0.0	0.0	0.0	0.7	1.7
Belgium	0.0	0.0	0.0	0.0	0.7	2.4	4.0
Cyprus	0.0	0.0	0.0	0.0	0.3	1.1	2.1
Finland	0.0	0.0	0.0	0.0	0.1	0.4	0.9
France	0.0	0.0	0.0	0.0	0.4	1.8	3.5
Germany	0.0	0.0	0.0	0.0	1.4	4.1	6.3
Greece	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy	0.0	0.0	0.0	0.0	0.2	0.9	1.8
Luxemburg	0.0	0.0	0.0	0.0	0.4	1.3	2.9
Malta	0.0	0.0	0.0	0.0	0.5	1.6	2.5
Netherlans	0.0	0.0	0.0	0.1	2.6	6.3	7.9
Portugal	0.0	0.0	0.0	0.0	0.0	0.1	0.6
Slovakia	0.0	0.0	0.0	0.0	0.0	0.3	0.8
Slovenia	0.0	0.0	0.0	0.0	0.0	0.2	0.5
Spain	0.0	0.0	0.0	0.0	0.0	0.4	0.8

Table A10: Individual gain distribution, including pension information
(in % of net wealth), 10% bond price increase

HH net wealth position				
	Lowest 20%	20-70%	70-95%	Top 5%
Euro area	1.2	0.7	0.6	0.7
Austria	0.3	0.4	0.3	0.5
Belgium	1.4	0.8	1.2	1.9
Cyprus	1.0	0.4	0.3	0.1
Finland	0.7	0.2	0.2	0.3
France	0.6	0.5	0.6	1.3
Germany	2.8	1.5	1.0	0.7
Greece	0.0	0.0	0.1	0.1
Italy	0.4	0.3	0.4	0.4
Luxemburg	0.8	0.5	0.4	0.3
Malta	0.9	0.4	0.6	0.2
Netherlands	3.5	2.5	1.4	1.3
Portugal	0.2	0.1	0.1	0.2
Slovakia	0.5	0.2	0.2	0.1
Slovenia	0.5	0.2	0.1	0.6
Spain	0.2	0.1	0.2	0.3

Table A11: Capital gains, including pension wealth (in % of net wealth)
across net wealth groups, 10% bond price increase

	HH income position			
	Lowest 20%	20-70%	70-95%	Top 5%
Euro area	0.3	0.5	0.7	1.0
Austria	0.3	0.4	0.5	0.5
Belgium	1.1	1.2	1.4	1.9
Cyprus	0.1	0.3	0.3	0.2
Finland	0.1	0.1	0.2	0.3
France	0.3	0.5	0.7	1.5
Germany	0.7	0.8	1.0	1.0
Greece	0.0	0.1	0.1	0.1
Italy	0.1	0.3	0.4	0.5
Luxemburg	0.2	0.3	0.5	0.3
Malta	0.3	0.5	0.4	0.5
Netherlands	1.9	1.8	1.4	1.5
Portugal	0.0	0.1	0.2	0.3
Slovakia	0.1	0.2	0.3	0.2
Slovenia	0.0	0.2	0.2	0.6
Spain	0.1	0.1	0.3	0.3

Table A12: Capital gains, including pension wealth (in % of net wealth)
across income groups, 10% bond price increase

D Gains Distribution with Country Specific Equity Shares in Private Pension Wealth

This appendix shows that the main message of the paper is robust towards including country specific information on the share of equities in private pension wealth. The analysis in the main text assumes that in all considered countries 79% of private pensions are invested in bonds and the remaining 21% is invested in equities, see section 3.

To incorporate country specific information, we use information from OECD Global Pension Statistics, in particular OECD (2011, 2012), which report the structure of pension

investments for the years 2010 and 2011. In particular, we use the reported country information on investments in ‘shares’ as our baseline percentage of equity investments and assume that all other investments are in bonds. Doing so may actually overstate the cross-country variation in equity investments because hedge fund and private equity investments are included in the so-called ‘other investment category’ (together with investments in land and insurance instruments), but the latter category cannot be decomposed based on the provided information.

For Austria, Belgium, Finland, Germany, Greece, Portugal, Spain, we use the share percentages reported for 2010, while for Luxembourg, Slovakia, Slovenia we take the share percentages reported for 2011, as data for 2010 is not available. For Cyprus, France and Malta, where no information is reported by the OECD, we take the average percentage of ‘shares’ across countries for which information is available. The resulting equity shares are (with bonds making up the remaining part): Austria 32.2%, Belgium 37.7%, Cyprus 17.3%, Finland 47.6%, France 17.3%, Germany 5.2%, Greece 3.3%, Italy 11.4%, Luxembourg 13.4%, Malta 17.3%, Netherlands 19.5%, Portugal 21.7%, Slovakia 1.3%, Slovenia 1.5% and Spain 12.1%.

Figure 13 reports the outcome for how capital gains vary with the net wealth groups across the Euro Area. A comparison to the baseline figure 4 reported in the main text shows that this leads to almost indistinguishable differences. Figure 14 reports how capital gains vary with income groups across the Euro Area. A comparison with figure 9 in the main text shows, that results are largely unchanged, except for the somewhat more elevated capital gains from bond price increases in the lowest income group.

Table A13 reports how equity and bond price increases affect the net wealth Gini coefficient at the country level when using the country specific equity and bond shares in private pensions. A comparison to Table 1 in the main text shows that using country specific information has hardly any affect on the reported numbers. Comparing tables A14 and A15 to tables A5 and A8, respectively, shows that equity gains are remarkably stable at the country level when using country specific information on pension wealth.

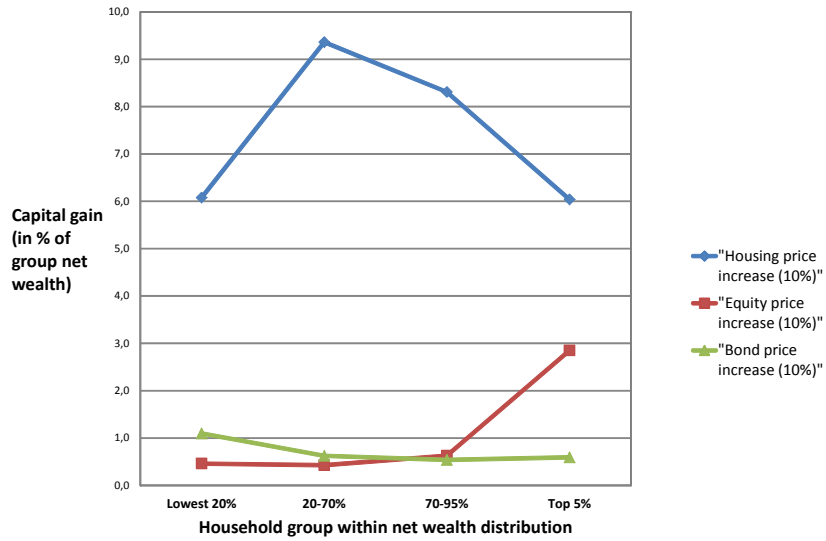


Figure 13: Capital gains across Euro Area net wealth groups, country specific equity and bond shares in private pensions

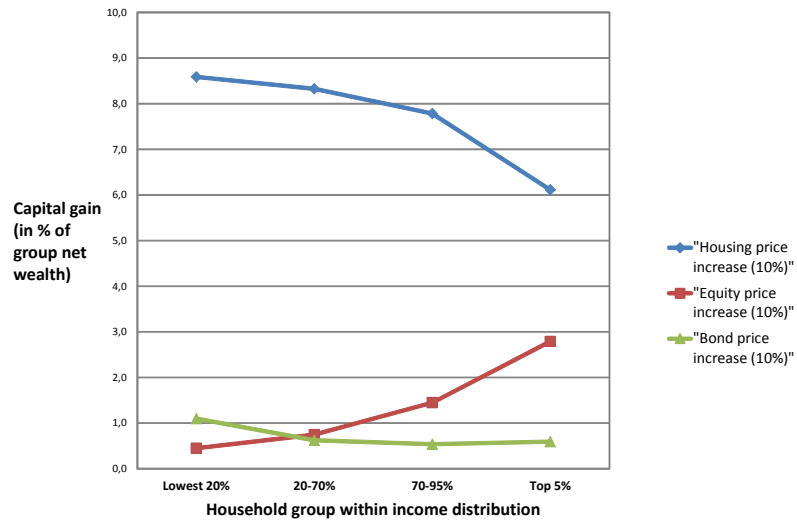


Figure 14: Capital gains across Euro Area income groups, country specific equity and bond shares in private pensions

	Prior to increase	Equity increase	Diff. Gini (%)	Bond Increase	Diff. Gini (%)
EA	0.651	0.654	0.5	0.651	0.0
Austria	0.735	0.740	0.7	0.735	0.0
Belgium	0.592	0.594	0.4	0.593	0.2
Cyprus	0.676	0.682	0.8	0.676	-0.1
Finland	0.603	0.605	0.4	0.603	0.0
France	0.662	0.665	0.5	0.663	0.1
Germany	0.724	0.727	0.5	0.723	-0.1
Greece	0.531	0.532	0.2	0.531	0.0
Italy	0.598	0.600	0.4	0.598	0.0
Luxemburg	0.644	0.645	0.2	0.644	0.0
Malta	0.593	0.601	1.4	0.592	-0.1
Netherlands	0.546	0.546	0.0	0.544	-0.4
Portugal	0.652	0.656	0.6	0.652	0.0
Slovakia	0.438	0.441	0.5	0.438	0.0
Slovenia	0.512	0.516	0.7	0.512	0.0
Spain	0.557	0.561	0.7	0.557	0.0

Table A13: Gini coefficients for the net wealth distribution, country specific equity and bond shares in private pension wealth

Net wealth position				
	Lowest 20%	20-70%	70-95%	Top 5%
Euro area	0.5	0.4	0.6	2.9
Austria	0.1	0.4	0.9	4.6
Belgium	0.6	0.5	0.9	2.3
Cyprus	0.5	0.5	1.4	4.6
Finland	1.2	0.4	0.5	2.4
France	0.4	0.4	0.8	2.9
Germany	0.4	0.6	0.5	3.3
Greece	0.4	0.3	0.6	0.8
Italy	0.2	0.3	0.6	2.1
Luxemburg	0.6	0.2	0.4	1.0
Malta	0.2	0.2	1.0	5.8
Netherlands	1.7	1.0	0.8	1.2
Portugal	0.1	0.2	0.6	2.9
Slovakia	0.1	0.1	0.3	1.8
Slovenia	0.3	0.1	0.7	2.8
Spain	0.4	0.2	0.8	2.8

Table A14: Capital gains (in % of net wealth) across net wealth groups, 10% equity price increase, country specific equity and bond shares in private pension wealth

	Income position			
	Lowest 20%	20-70%	70-95%	Top 5%
Euro area	0.4	0.7	1.4	2.8
Austria	1.2	2.1	2.6	3.7
Belgium	0.3	1.0	1.3	2.5
Cyprus	1.0	2.3	2.1	4.6
Finland	0.2	0.4	0.9	2.9
France	0.8	0.8	1.1	3.0
Germany	0.8	0.6	2.2	2.8
Greece	0.2	0.4	0.5	1.3
Italy	0.4	0.3	0.8	2.7
Luxemburg	0.6	0.3	0.8	0.8
Malta	0.6	1.1	4.2	2.1
Netherlands	0.8	0.9	0.8	1.4
Portugal	0.2	0.7	1.1	3.4
Slovakia	0.0	0.2	0.6	2.4
Slovenia	0.8	0.9	0.9	1.7
Spain	0.2	0.9	1.2	2.5

Table A15: Capital gains (in % of net wealth) across income groups, 10% equity price increase, country specific equity and bond shares in private pension wealth

E Reporting the Group Mean of Individual Gains

The analysis in the main text considers group specific capital gains and divides these by the group specific net wealth. Given that there is heterogeneity across households within a considered group, this leads to different gain measures than are obtained by reporting instead the mean of the *household level* capital gains to net wealth ratios within a considered group. Figure 15 reports precisely this average of household level capital gain ratios for the same net wealth groups as considered in figure 4. It shows that the conclusions are rather robust towards using this alternative measure. The main difference concerns the housing price gains for the lowest net wealth group, which displays a lot of

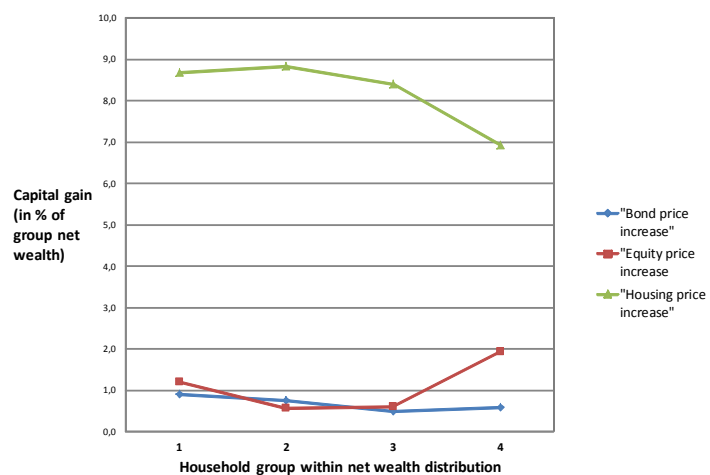


Figure 15: Capital gains across Euro Area net wealth groups, group specific mean of individual gains to net wealth ratios

heterogeneity, as it contains relatively few but highly leveraged homeowners.

ONLINE APPENDIX - NOT FOR PUBLICATION

A Asset Positions of Households by Country and Net Wealth Group

The table below reports the asset position of the considered net wealth group relative to the net wealth position of the considered group. All numbers are expressed in percent.

Table O.1: Asset position (in percent of net wealth) by country and net wealth group

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Net wealth position: Lowest 10%								
Euro area	105.12	3.65	1.99	5.16	10.8	0.07	19.41	19.49
Austria	0	0	0	1.12	1.12	0	4.21	4.21
Belgium	0	0	0.1	0.57	0.67	0	2.13	2.13
Cyprus	12.14	1.4	0.63	0.32	2.36	1.05	1.22	2.27
Finland	0	0	0	0	0	0	0	0
France	72.56	1.52	3.95	2.11	7.59	0.11	7.95	8.06
Germany	0	0	0	8.87	8.87	0	33.38	33.38
Greece	120.74	4.9	0.26	0	5.16	0	0	0
Italy	4.32	0.44	0	0.07	0.51	0.11	0.27	0.38
Luxemburg	82.63	0	0	1.88	1.88	0	7.06	7.06
Malta	0	0	0.62	0.14	0.76	0.37	0.52	0.89
Netherlands	0	0	0	0	0	0	0	0
Portugal	301.14	0	0	0.08	0.08	0	0.3	0.3
Slovakia	103.43	2.17	0.02	1	3.18	0.21	3.75	3.96
Slovenia	0	0	0	2.81	2.81	0	10.58	10.58
Spain	402.8	1.98	0.07	0.93	2.98	0	3.51	3.51
Net wealth position: 10% - 20%								
Euro area	58.4	2.26	0.9	2.38	5.55	0.31	8.96	9.26
Austria	20.48	0.08	0.14	0.34	0.56	0.14	1.3	1.44
Belgium	50.39	0.19	1.79	2.73	4.72	1.76	10.28	12.04
Cyprus	135.58	2.36	0.67	2.51	5.53	1.09	9.42	10.52

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Table O.1 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Finland	576.55	3.61	4.93	1.54	10.08	0.7	5.81	6.51
France	12.62	1.67	1.15	1.3	4.12	0.19	4.88	5.07
Germany	6.29	1.15	0.97	5.8	7.93	0.09	21.83	21.92
Greece	70.99	4.12	0.13	0.14	4.39	0	0.53	0.53
Italy	24.88	1.98	0.2	0.66	2.85	0.58	2.49	3.07
Luxemburg	99.07	0.55	4.13	2.76	7.45	0.12	10.4	10.52
Malta	34.18	0.08	1.19	1.24	2.51	5.21	4.68	9.89
Netherlands	285.08	7.96	0.04	9.23	17.23	0.36	34.73	35.09
Portugal	211.05	0.51	0.06	0.49	1.06	0.08	1.86	1.94
Slovakia	103.61	0.74	0	0.27	1.01	0.02	1.01	1.03
Slovenia	75.33	0.78	2.57	0.62	3.97	0.14	2.33	2.47
Spain	152.84	2.81	1.03	0.47	4.31	0	1.79	1.79
Net wealth position: 20% - 30%								
Euro area	60.02	2.08	1.95	2.61	6.63	0.6	9.81	10.41
Austria	17.47	0.08	0.4	0.68	1.16	0.11	2.55	2.66
Belgium	107.99	1.07	2.08	4.12	7.27	1.91	15.49	17.4
Cyprus	120.83	3.57	1.37	1.36	6.3	3.04	5.11	8.15
Finland	179.78	1.1	6.9	1.06	9.06	1.5	3.99	5.49
France	38.34	1.82	1.52	2.21	5.54	0.2	8.3	8.51
Germany	33.04	3.08	4.08	3.36	10.52	0.24	12.65	12.89
Greece	108.23	3.99	0.17	0.09	4.25	0.22	0.32	0.55
Italy	65.07	5.24	0.77	1.06	7.07	3.2	3.98	7.18
Luxemburg	190.51	3.39	1.36	3.16	7.91	0.52	11.91	12.43
Malta	75.33	0.74	0.67	0.66	2.07	3.36	2.49	5.85
Netherlands	196.05	1.42	1.33	7.56	10.31	0.59	28.45	29.04
Portugal	140.12	1.19	0.27	0.46	1.93	0.08	1.74	1.82
Slovakia	93.67	0.25	0	0.16	0.42	0.05	0.62	0.66
Slovenia	95.81	0.34	0.45	0.08	0.87	0.64	0.29	0.93
Spain	131.9	1.98	0.37	0.19	2.54	0.17	0.71	0.88
Net wealth position: 30% - 40%								
Euro area	94.21	2.06	2.95	2.45	7.46	1.36	9.22	10.58
Austria	17.26	1.76	1.31	1.19	4.25	0.34	4.47	4.82

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Table O.1 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Belgium	123.3	0.78	0.96	2.6	4.35	0.51	9.79	10.3
Cyprus	109.3	1.09	0.76	0.89	2.74	0.57	3.36	3.92
Finland	186.18	1.55	5.02	0.68	7.25	1.5	2.57	4.07
France	88.81	2.75	2.55	2.45	7.75	0.3	9.21	9.51
Germany	35.1	1.25	2.5	3.74	7.48	0.53	14.07	14.6
Greece	107.54	2.96	0.01	0.05	3.02	0	0.17	0.17
Italy	91.93	2.39	0.39	0.32	3.1	2.22	1.19	3.4
Luxemburg	132.1	0.9	1.86	1.17	3.93	0.36	4.4	4.75
Malta	83.8	0.37	0.46	0.51	1.34	1.33	1.93	3.26
Netherlands	157.86	0.95	1.12	9.3	11.38	0.19	35	35.19
Portugal	113.99	0.7	0.04	0.26	1	0	0.97	0.97
Slovakia	91.32	0.64	0.01	0.19	0.84	0.02	0.71	0.73
Slovenia	107.58	0.83	0.21	0.11	1.15	0.03	0.41	0.44
Spain	107.2	1.14	0.35	0.16	1.66	0.23	0.62	0.84
Net wealth position: 40% - 50%								
Euro area	98.68	2.15	1.53	1.72	5.4	1.01	6.48	7.48
Austria	52.46	0.99	1.89	1.1	3.98	0.69	4.13	4.82
Belgium	100.7	0.74	0.65	1.05	2.44	1	3.93	4.93
Cyprus	102.74	4.04	0.5	1.15	5.68	0.17	4.32	4.48
Finland	134.29	0.78	2.57	0.34	3.69	0.51	1.28	1.79
France	108.4	3.17	1.69	1.37	6.24	0.34	5.16	5.5
Germany	72.18	1.91	4.89	3.62	10.43	1.85	13.63	15.49
Greece	99.38	1.3	0.06	0.04	1.4	0.04	0.14	0.18
Italy	88.32	3.8	0.4	0.24	4.44	1.23	0.9	2.13
Luxemburg	115.19	0.67	1.01	0.87	2.55	0.41	3.27	3.68
Malta	85.99	1.01	0.41	0.39	1.81	2.78	1.45	4.23
Netherlands	113.11	4.17	2.44	8.56	15.17	1.14	32.2	33.35
Portugal	97.25	1.76	0.23	0.19	2.17	0.07	0.71	0.79
Slovakia	90.95	0.43	0.04	0.22	0.69	0.03	0.84	0.87
Slovenia	96.89	0.73	0.35	0.25	1.32	0.08	0.94	1.02
Spain	103.05	1.99	0.44	0.29	2.73	0.15	1.09	1.24
Net wealth position: 50% - 60%								

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Table O.1 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Euro area	95.05	2.15	1.04	1.21	4.4	0.78	4.54	5.32
Austria	81.72	1.46	1.48	0.55	3.49	0.69	2.06	2.75
Belgium	89.23	0.66	0.93	1.38	2.97	1.42	5.19	6.62
Cyprus	103.87	3.34	0.77	1.02	5.14	0.29	3.85	4.14
Finland	113.61	0.83	1.78	0.26	2.88	0.29	0.99	1.28
France	97.94	1.68	0.87	0.96	3.51	0.21	3.62	3.83
Germany	82.21	1.72	4.48	3.17	9.37	1.9	11.94	13.84
Greece	96.94	2.62	0.26	0.02	2.9	0.01	0.08	0.09
Italy	89.44	2.12	0.2	0.19	2.51	1.24	0.71	1.96
Luxemburg	101.34	0.55	0.82	0.65	2.01	0.54	2.43	2.97
Malta	83.9	1.93	0.6	0.57	3.1	2.33	2.14	4.47
Netherlands	115.18	0.9	1.06	7.59	9.54	0.66	28.55	29.22
Portugal	94.53	1.75	0.41	0.41	2.56	0.05	1.54	1.59
Slovakia	90.26	0.72	0.12	0.18	1.02	0.07	0.69	0.76
Slovenia	92.69	2.09	0.3	0.27	2.67	0.03	1.03	1.06
Spain	103.83	1.9	0.34	0.29	2.53	0.47	1.08	1.55
Net wealth position: 60% - 70%								
Euro area	92.97	1.92	1.16	0.87	3.95	0.65	3.27	3.92
Austria	81.26	1.67	1.12	0.39	3.18	1.17	1.48	2.65
Belgium	86.83	1.28	1.21	1.12	3.62	0.86	4.22	5.08
Cyprus	101.38	2.61	0.88	0.78	4.27	0.75	2.92	3.67
Finland	99.72	0.74	1.88	0.24	2.86	0.49	0.91	1.4
France	90.48	1.51	1.77	1.02	4.3	0.25	3.83	4.08
Germany	81.04	2.15	2.45	2.25	6.85	1.83	8.48	10.31
Greece	93.99	3.34	0.15	0.08	3.57	0.02	0.32	0.34
Italy	87.75	2.24	0.31	0.19	2.73	1.65	0.71	2.36
Luxemburg	93.51	0.49	1.1	0.58	2.17	0.8	2.17	2.97
Malta	80.9	1.3	1.61	0.33	3.24	3.37	1.25	4.61
Netherlands	108.64	4.34	1.14	4.01	9.49	1.16	15.07	16.23
Portugal	89.87	1.44	0.52	0.25	2.22	0.34	0.95	1.29
Slovakia	88.66	0.72	0.07	0.17	0.96	0.04	0.66	0.7
Slovenia	92.34	0.89	0.51	0.13	1.53	0.06	0.51	0.57
Spain	94.25	1.96	0.56	0.24	2.75	0.23	0.9	1.14

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Table O.1 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Net wealth position: 70% - 80%								
Euro area	86.28	2.51	1.19	0.92	4.62	1.02	3.46	4.49
Austria	82.37	1.18	0.6	0.4	2.18	0.85	1.52	2.37
Belgium	77.04	1.68	1.95	1.39	5.01	2.16	5.22	7.38
Cyprus	88.92	9.54	1.12	1.02	11.67	0.51	3.82	4.33
Finland	96.61	0.79	2.2	0.33	3.32	0.34	1.24	1.58
France	85.74	2.33	1.63	1.08	5.04	0.34	4.07	4.41
Germany	84.21	1.59	2.21	1.53	5.33	0.87	5.75	6.62
Greece	91.9	3.02	0.4	0.18	3.6	0.04	0.67	0.7
Italy	86.39	2.75	0.73	0.15	3.63	2.69	0.58	3.27
Luxemburg	90.72	0.77	1.36	0.54	2.67	0.9	2.03	2.92
Malta	81.94	2.35	1.69	1.15	5.18	2.31	4.31	6.62
Netherlands	90.01	4.26	1.77	3.69	9.72	1.03	13.89	14.93
Portugal	93.95	1.22	0.32	0.26	1.8	0.04	0.97	1.01
Slovakia	86.96	0.75	0.18	0.21	1.14	0.1	0.8	0.91
Slovenia	95.13	0.72	0.52	0.11	1.35	0.04	0.41	0.45
Spain	90.09	3.92	0.53	0.45	4.9	0.28	1.71	1.98
Net wealth position: 80% - 90%								
Euro area	83.52	3.49	1.7	0.99	6.17	1.22	3.73	4.95
Austria	74.31	4.24	1.16	0.64	6.04	1.02	2.42	3.44
Belgium	69.51	1.84	4.55	1.27	7.65	5.29	4.76	10.06
Cyprus	87.37	11.69	1.49	0.67	13.85	0.35	2.51	2.86
Finland	90.98	0.85	2.72	0.33	3.9	0.44	1.22	1.66
France	81.3	3.98	2.24	1.39	7.61	0.31	5.24	5.56
Germany	79.61	2.14	2.55	1.39	6.08	1.42	5.21	6.63
Greece	86.92	6.28	0.68	0.14	7.1	0.04	0.53	0.57
Italy	86.37	3.4	0.84	0.25	4.49	2.14	0.93	3.07
Luxemburg	86.06	0.98	2.59	0.45	4.03	1.25	1.71	2.96
Malta	77.21	8.46	1.55	0.53	10.54	3.41	2.01	5.41
Netherlands	85.57	2.68	1.35	3.16	7.19	1.44	11.87	13.31
Portugal	84.14	5.33	0.69	0.36	6.37	0.12	1.35	1.47
Slovakia	83.14	2.59	0.09	0.29	2.97	0.05	1.09	1.14

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Table O.1 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Slovenia	89.28	1.07	0.6	0.13	1.8	0.08	0.48	0.56
Spain	88.43	5.04	1.73	0.44	7.21	0.44	1.65	2.09
Net wealth position: 90% - 95%								
Euro area	79.64	5.23	2.61	0.99	8.82	2.1	3.72	5.82
Austria	68.38	14.53	2.06	0.26	16.85	1.67	0.98	2.65
Belgium	64.18	4.65	5.68	1.21	11.55	5.6	4.57	10.17
Cyprus	81.29	12.32	2.25	0.86	15.43	0.09	3.23	3.33
Finland	84.82	1.7	4.39	0.38	6.47	0.66	1.41	2.07
France	78.3	7.31	2.88	1.67	11.86	0.38	6.3	6.67
Germany	78.72	2.87	3.6	1.35	7.83	1.85	5.08	6.94
Greece	86.61	6.05	0.12	0.06	6.23	0.34	0.21	0.55
Italy	81.46	8.15	1.05	0.24	9.44	2.79	0.92	3.71
Luxemburg	85.06	2.43	3.19	0.61	6.23	1.2	2.3	3.51
Malta	69.87	12.36	2.1	0.67	15.12	4.2	2.5	6.71
Netherlands	85.2	1.75	2.26	2.78	6.79	2.76	10.46	13.22
Portugal	81.15	8.04	0.89	0.44	9.36	0.13	1.64	1.77
Slovakia	80.29	4.91	0.24	0.21	5.35	0.03	0.77	0.81
Slovenia	71.19	20.66	0.96	0.21	21.82	0.06	0.78	0.84
Spain	81.26	10.09	2.16	0.32	12.57	0.22	1.21	1.43
Net wealth position: Top 5%								
Euro area	60.39	23.23	4.63	0.9	28.76	2.29	3.37	5.67
Austria	42.23	43.86	1.82	0.15	45.82	4.6	0.55	5.15
Belgium	45.81	10.69	11.32	0.52	22.53	13.58	1.95	15.53
Cyprus	52.69	43.88	1.76	0.19	45.82	0.22	0.71	0.93
Finland	70.87	10.81	12.36	0.39	23.56	1.14	1.47	2.61
France	55.09	19.08	7.78	2.48	29.35	0.9	9.34	10.24
Germany	57.92	29.92	3.18	0.82	33.92	2.18	3.09	5.26
Greece	83.3	7.7	0.74	0.19	8.63	0.64	0.71	1.35
Italy	69.62	18.55	2.64	0.1	21.3	3.18	0.36	3.54
Luxemburg	85.05	6.6	3.22	0.25	10.07	1.93	0.95	2.88
Malta	35.44	56.38	1.83	0.22	58.43	0.9	0.82	1.71

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Table O.1 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Netherlands	69.96	3.31	6.43	2.24	11.98	4.24	8.43	12.67
Portugal	59.92	27.12	2.01	0.26	29.4	0.71	0.97	1.67
Slovakia	73.38	15.67	2.22	0.13	18.02	0.12	0.49	0.61
Slovenia	64.55	27.65	0.75	0.29	28.69	0.06	1.09	1.15
Spain	64.75	22.3	5.03	0.4	27.73	0.54	1.51	2.05

B Asset Positions of Households by Country and Income Group

The table below reports the asset position of the considered income group relative to the net wealth position of the considered group. All numbers are expressed in percent.

Tabel O.2: Asset position (in percent of net wealth) by country and income group

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Income position: Lowest 10%								
Euro area	86.05	3.58	1.14	0.55	5.26	1.28	2.06	3.34
Austria	68.38	14.59	0.38	0.2	15.16	0.24	0.75	0.99
Belgium	73.93	0.89	1.14	0.45	2.48	12	1.69	13.7
Cyprus	95.96	8.74	0.06	0.22	9.02	0.03	0.82	0.85
Finland	87.02	0.1	1.81	0.07	1.98	0.47	0.25	0.71
France	79	8.22	1.07	0.65	9.93	0.31	2.43	2.74
Germany	63.31	7.56	4.22	1.22	13.01	2.01	4.6	6.61
Greece	94.63	1.93	0.01	0.02	1.96	0.01	0.07	0.08
Italy	91.89	2.41	0.07	0.08	2.56	0.42	0.29	0.71
Luxemburg	88.67	0.37	2.48	0.27	3.12	1.18	1.02	2.19
Malta	73.12	9.47	2.25	0.21	11.93	3.45	0.8	4.25
Netherlands	93.14	2.18	1.8	4.56	8.54	1.33	17.17	18.5
Portugal	87.84	2.58	0.13	0.09	2.8	0.04	0.33	0.37

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Table O.2 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Slovakia	94.47	0.55	0	0.02	0.57	0	0.06	0.06
Slovenia	87.21	10.33	0.38	0.02	10.72	0.02	0.06	0.08
Spain	93.47	0.63	1.31	0.09	2.02	1.01	0.32	1.33
Income position: 10%-20%								
Euro area	85.72	2.81	0.77	0.48	4.05	0.85	1.79	2.64
Austria	69.48	7.64	0.46	0.24	8.35	2.83	0.92	3.75
Belgium	81.05	0.46	1.04	0.55	2.06	3.84	2.08	5.92
Cyprus	87.45	9.88	0.8	0.26	10.93	0.35	0.96	1.31
Finland	88.09	0.24	1.63	0.06	1.93	0.35	0.24	0.59
France	78.1	4.78	1.47	0.95	7.2	0.12	3.57	3.69
Germany	67.67	3.93	1.15	1.2	6.28	0.94	4.53	5.47
Greece	96.63	1.06	0.07	0.1	1.23	0.01	0.38	0.4
Italy	88.06	4.33	0.11	0.05	4.49	0.86	0.19	1.05
Luxemburg	88.92	8.3	0.95	0.31	9.56	0.17	1.17	1.34
Malta	85.31	0.07	0.5	0.09	0.65	2.17	0.32	2.49
Netherlands	82.32	2.77	1.83	3.96	8.57	4.92	14.9	19.82
Portugal	90.64	0.71	0.11	0.08	0.9	0	0.3	0.31
Slovakia	93.31	0.26	0.05	0.06	0.37	0.11	0.22	0.33
Slovenia	88.17	0	0.56	0.03	0.6	0.01	0.13	0.14
Spain	93.5	1.36	0.86	0.28	2.5	0.28	1.05	1.34
Income position: 20%-30%								
Euro area	86.11	3.71	1	0.43	5.15	0.92	1.63	2.55
Austria	59.8	23.9	0.73	0.28	24.9	1.56	1.04	2.61
Belgium	69.29	0.02	4.56	0.59	5.17	7.09	2.21	9.3
Cyprus	81.41	18.13	0.25	0.37	18.75	0.35	1.39	1.74
Finland	90.9	0.2	1.92	0.11	2.23	0.28	0.43	0.7
France	80.26	3.48	0.74	0.93	5.15	0.16	3.49	3.65
Germany	78.67	2.3	2.26	0.41	4.98	0.51	1.55	2.06
Greece	92.89	1.25	0.01	0.23	1.49	0.65	0.87	1.52
Italy	90.25	1.39	0.09	0.08	1.55	1.11	0.29	1.4
Luxemburg	102.18	0.66	0.22	0.45	1.32	0.23	1.68	1.9

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Table O.2 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Malta	76.71	6.84	1.25	0.18	8.27	3.83	0.69	4.52
Netherlands	83.79	3.81	1.7	3.72	9.24	3.56	14.01	17.57
Portugal	89.25	2.33	0.17	0.14	2.63	0.01	0.53	0.53
Slovakia	93.44	0.26	0.16	0.13	0.55	0.1	0.48	0.58
Slovenia	98.71	0	0.16	0	0.16	0.02	0.01	0.03
Spain	95.22	1.95	0.58	0.12	2.65	0.34	0.45	0.79
Income position: 30%-40%								
Euro area	82.61	6	1.07	0.62	7.7	1.1	2.34	3.44
Austria	68.41	11.42	2.04	0.24	13.7	3.21	0.9	4.11
Belgium	75.45	2.8	3.87	0.77	7.44	5.51	2.9	8.42
Cyprus	86.71	14.85	0.85	1.21	16.91	0.11	4.55	4.66
Finland	92.04	0.21	2.95	0.14	3.3	0.48	0.53	1.01
France	77.19	7.29	1.61	1.17	10.07	0.22	4.4	4.62
Germany	70.36	4.89	1.74	1.05	7.68	0.61	3.96	4.57
Greece	92.4	4.71	0.03	0.01	4.75	0.49	0.02	0.51
Italy	89.34	2.21	0.17	0.11	2.48	1.31	0.4	1.71
Luxemburg	98.17	1.7	0.81	0.48	2.99	0.09	1.8	1.89
Malta	72.43	9.82	2.2	0.62	12.64	1.41	2.32	3.73
Netherlands	91.41	2.03	2.01	4.5	8.54	1.91	16.94	18.85
Portugal	89.98	5.21	0.08	0.09	5.38	0.03	0.36	0.39
Slovakia	91.93	0.27	0.44	0.16	0.86	0.24	0.58	0.82
Slovenia	93.72	0.28	0.75	0.21	1.24	0	0.79	0.79
Spain	92.51	6.57	1.09	0.18	7.84	0.33	0.69	1.02
Income position: Lowest 40%-50%								
Euro area	82.29	5.17	1.26	0.73	7.15	1.29	2.74	4.03
Austria	67.16	16.53	0.96	0.19	17.69	0.78	0.72	1.5
Belgium	57.5	3.66	5.47	0.78	9.91	9.5	2.93	12.43
Cyprus	70.08	29.28	2.77	0.41	32.45	0.56	1.53	2.09
Finland	93.37	0.58	3.31	0.23	4.12	0.58	0.87	1.45
France	80.77	4	1.56	1.48	7.05	0.21	5.59	5.79
Germany	70.7	5.52	1.24	0.98	7.74	1.58	3.68	5.26
Greece	91.14	3.93	0.14	0.01	4.08	0.04	0.04	0.08

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Table O.2 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Italy	88.1	2.25	0.43	0.15	2.83	1.74	0.58	2.32
Luxemburg	99.23	0.94	0.41	0.39	1.74	0.75	1.47	2.22
Malta	74.06	10.06	0.98	0.48	11.52	3.21	1.82	5.03
Netherlands	86.55	4.8	1.05	5.34	11.19	0.73	20.08	20.81
Portugal	91.59	5.62	0.14	0.12	5.88	0.02	0.44	0.46
Slovakia	90.6	1.62	0.03	0.19	1.84	0.01	0.71	0.73
Slovenia	71.49	22.66	0.5	0.25	23.41	0.09	0.93	1.03
Spain	94.47	7.42	0.65	0.23	8.3	0.29	0.85	1.14
Income position: 50%-60%								
Euro area	82.9	5.9	1.54	0.82	8.26	1.58	3.09	4.67
Austria	62.86	20.82	1.16	0.23	22.21	3.99	0.85	4.84
Belgium	73.2	4.65	7.21	1.54	13.4	6.18	5.8	11.98
Cyprus	86.29	15.68	1.06	0.51	17.25	0.16	1.93	2.09
Finland	95.29	0.59	3.01	0.27	3.86	0.44	1	1.44
France	84.43	5.67	1.36	1.11	8.14	0.23	4.18	4.41
Germany	80.01	2.96	2.16	1.49	6.61	1.54	5.59	7.13
Greece	93.08	4.05	0.42	0.02	4.49	0.02	0.08	0.1
Italy	84.96	2.96	0.52	0.16	3.64	2.05	0.59	2.64
Luxemburg	97.27	1.06	1.44	0.43	2.93	1.22	1.62	2.84
Malta	74.33	9.25	1.03	0.64	10.92	2.15	2.4	4.55
Netherlands	96.89	4.81	2.8	4.21	11.83	0.78	15.85	16.63
Portugal	87.12	12.6	0.26	0.26	13.12	0.13	0.99	1.12
Slovakia	92.34	1.1	0.12	0.28	1.5	0.07	1.05	1.12
Slovenia	84.97	4.74	0.65	0.12	5.51	0.29	0.44	0.73
Spain	91.99	10.33	1.06	0.23	11.62	0.2	0.85	1.05
Income position: 60%-70%								
Euro area	83.29	5.8	1.96	1.02	8.78	1.37	3.83	5.2
Austria	60.44	22.32	1.04	0.27	23.63	2.84	1.03	3.87
Belgium	70.77	5.71	3.79	1.17	10.68	5.63	4.42	10.05
Cyprus	77.71	22.24	1.41	0.91	24.55	0.76	3.41	4.17
Finland	98.55	0.73	3.19	0.28	4.2	0.42	1.07	1.49
France	85.59	6.06	2.03	1.11	9.19	0.31	4.18	4.49

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Table O.2 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Germany	80.23	2.47	1.87	1.63	5.96	1.36	6.13	7.49
Greece	90.78	5.1	0.27	0.19	5.56	0.76	0.7	1.46
Italy	86.14	3.29	0.46	0.18	3.93	2.9	0.68	3.57
Luxemburg	96.99	2.27	1.89	0.63	4.78	0.62	2.36	2.99
Malta	73.55	9.46	0.7	0.66	10.81	2.65	2.48	5.13
Netherlands	91.72	1.47	2.43	3.63	7.52	2.53	13.65	16.19
Portugal	87.1	6.84	0.51	0.22	7.57	0.07	0.81	0.88
Slovakia	87.55	3.04	0.23	0.26	3.53	0.07	0.97	1.04
Slovenia	83.69	11.48	0.55	0.08	12.12	0.07	0.31	0.39
Spain	88.36	9.47	1.56	0.43	11.46	0.34	1.63	1.97
Income position: Lowest 70%-80%								
Euro area	83.41	7.13	1.88	1.06	10.06	1.3	3.99	5.28
Austria	54.17	27.34	1.44	0.38	29.16	3	1.42	4.42
Belgium	72.37	3.31	5.4	1.23	9.94	7.63	4.64	12.27
Cyprus	75.18	24.58	1.15	0.55	26.28	0.49	2.07	2.57
Finland	100.36	1.18	4.3	0.36	5.84	0.59	1.37	1.96
France	84.56	7.76	2.09	1.26	11.11	0.48	4.74	5.22
Germany	78.57	9	2.07	1.31	12.38	2.69	4.94	7.63
Greece	93.08	4.04	0.7	0.04	4.78	0.16	0.16	0.33
Italy	86.1	4.89	0.68	0.22	5.79	1.86	0.82	2.67
Luxemburg	92.94	0.96	3.78	0.43	5.17	1.64	1.63	3.27
Malta	70.9	17.83	1.01	0.62	19.46	3.4	2.32	5.72
Netherlands	96.39	1.86	2.85	3.14	7.85	2.55	11.81	14.37
Portugal	85.15	5.16	0.53	0.36	6.04	0.14	1.35	1.5
Slovakia	81.28	1.45	3.98	0.33	5.76	0.06	1.23	1.3
Slovenia	91.99	4.06	0.47	0.14	4.67	0.07	0.51	0.59
Spain	88.83	7.38	2.62	0.42	10.42	0.24	1.57	1.81
Income position: 80%-90%								
Euro area	78.61	10.48	2.57	1.15	14.21	1.86	4.34	6.2
Austria	63.53	18.49	1.01	0.4	19.91	2.21	1.52	3.73
Belgium	76.81	4.01	5.55	1.72	11.28	2.23	6.49	8.72
Cyprus	78.19	19.47	1.17	0.35	20.99	0.22	1.31	1.54

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Table O.2 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Finland	101.51	1.69	5.79	0.46	7.95	0.55	1.74	2.28
France	81.58	4.97	4.08	1.77	10.82	0.45	6.64	7.09
Germany	61.48	26.88	2.39	1.41	30.68	1.31	5.32	6.63
Greece	88.72	4.88	0.58	0.21	5.67	0.14	0.77	0.92
Italy	81.96	7.36	1.14	0.26	8.76	2.39	0.99	3.38
Luxemburg	87.32	2.36	3.96	0.32	6.64	2.79	1.19	3.98
Malta	59.88	21.37	2.87	0.89	25.13	2.48	3.36	5.84
Netherlands	99	3.57	2.96	3.12	9.65	1.58	11.75	13.33
Portugal	87.17	9.62	0.65	0.46	10.73	0.16	1.74	1.91
Slovakia	79.54	6.13	0.07	0.25	6.46	0.03	0.95	0.98
Slovenia	78.36	12.79	0.59	0.47	13.84	0.06	1.77	1.83
Spain	88.06	10.75	1.56	0.51	12.82	0.3	1.9	2.21
Income position: 90%-95%								
Euro area	71.3	16.14	2.92	1.22	20.28	1.71	4.59	6.31
Austria	55.76	26.17	1.56	0.32	28.05	3.96	1.19	5.15
Belgium	65.43	4.71	8.14	1.27	14.12	6.73	4.79	11.51
Cyprus	82.88	11.95	2.25	1.39	15.59	0.43	5.23	5.66
Finland	92.2	2.74	7.05	0.55	10.34	0.56	2.05	2.61
France	77.96	5.96	4.98	2.04	12.98	0.4	7.67	8.07
Germany	72.97	14.07	3.17	1.65	18.89	2.06	6.19	8.25
Greece	91.29	4.89	0.57	0.15	5.61	0.02	0.55	0.57
Italy	78.69	8.93	1.26	0.29	10.48	3.52	1.08	4.6
Luxemburg	80.36	9.62	4.64	1.28	15.54	3.83	4.81	8.64
Malta	28.98	65.35	0.77	0.14	66.26	0.85	0.51	1.36
Netherlands	103.79	1.89	2.36	3.19	7.43	1.89	11.99	13.88
Portugal	78.46	14.47	0.91	0.41	15.78	0.15	1.52	1.67
Slovakia	78.03	7.68	0.01	0.13	7.82	0.02	0.48	0.5
Slovenia	89.56	4.56	0.99	0.23	5.78	0.11	0.87	0.98
Spain	80.81	10.49	2.45	0.43	13.37	0.27	1.6	1.87
Income position: Top 5%								
Euro area	61.12	20.81	6.16	1.4	28.38	2.33	5.27	7.59
Austria	49.19	33.53	2.87	0.46	36.85	2.4	1.72	4.12

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Table O.2 – continued from previous page

Country	Real estate	Business wealth	Equity	Equity via pension plans	Total equity	Bonds	Bonds via pension plans	Total bonds
Belgium	58.55	13.75	8.8	1.12	23.68	6.51	4.21	10.72
Cyprus	55.52	43.05	2.76	0.42	46.23	0.27	1.6	1.87
Finland	73.46	15.57	12.46	0.53	28.55	1.47	1.98	3.45
France	55.17	18.87	8.52	2.78	30.16	1.08	10.45	11.54
Germany	63.66	21.71	5.59	1.33	28.63	2.42	5.02	7.44
Greece	78.27	12.35	0.88	0.23	13.46	0.2	0.88	1.08
Italy	62.55	22.98	3.71	0.22	26.91	3.83	0.81	4.65
Luxemburg	87.87	5.06	2.2	0.48	7.75	0.56	1.8	2.37
Malta	68.5	17.4	3.1	0.69	21.19	2.48	2.59	5.06
Netherlands	78.34	3.94	6.88	3.5	14.33	1.98	13.17	15.16
Portugal	53.58	30.2	3.29	0.41	33.89	1.15	1.54	2.69
Slovakia	58.97	24.2	0.15	0.24	24.59	0.04	0.92	0.95
Slovenia	73.87	15.49	1.14	0.26	16.88	0.04	0.97	1.01
Spain	67.03	19.53	5.6	0.5	25.63	0.57	1.88	2.45

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