

Asset Price Inflation and Wealth Inequality in the Eurozone

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Abstract

Wealth is more unequally distributed than income, and an important part of its dynamics comes from the revaluation of assets households already hold: when prices move, those who own them gain directly, without new saving. This paper measures how the asset-price movements of 2010–2023 were distributed across euro-area households. Using the four waves of the Household Finance and Consumption Survey, we apply house, bond, equity and business returns to household portfolios and trace capital gains along the wealth distribution, using alternative bond-pricing scenarios to test their sensitivity. The exercise is one of distributional incidence, not shock identification: we read them against the monetary-policy environment without attributing them to policy, and isolate the asset-inflation channel from the other channels of policy. The results are sizeable, systematic and shaped by portfolio composition. Households at the bottom, concentrated in deposits, are barely exposed; the middle mainly by housing; the top also by business wealth and equity. Capital gains rise with wealth, most sharply in the housing-driven window of 2017–2021, though the profile flattens or turns hump-shaped where housing stalls or bond prices fall. Read through a post-Keynesian lens, the unequal revaluation of balance sheets is a structural source of distributive change.

Keywords: *capital gains; wealth inequality; asset price inflation; monetary policy; Household Finance and Consumption Survey*

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1. Introduction

Discussions of economic inequality have long centred on the distribution of income. Yet wealth is not simply more concentrated than income; it is governed by partly different dynamics. As a stock accumulated out of past saving, asset returns and intergenerational transfers, wealth is revalued whenever the prices of assets already held change — independently of current income and of any new act of saving. Unrealised capital gains are, in this sense, not a residual aspect of wealth dynamics but one of their constitutive mechanisms. Because portfolio composition differs sharply across the distribution, a common movement in asset prices does not reach all households in the same way. The issue, then, is not asset-price variation in the abstract, but the unequal revaluation of existing balance sheets. It is this mechanism, rather than saving flows alone, that the paper sets out to measure.

The euro area over 2010–2023 offers a particularly revealing setting for this question. The period spans the sovereign-debt crisis, years of very low and negative policy rates, large-scale asset purchases, the pandemic emergency and the tightening cycle of 2022–2023. Across these phases, the valuation environment facing households, yields, liquidity conditions, housing prices, bond prices and equity prices, was strongly shaped by monetary-policy interventions, alongside other macroeconomic forces. Our question is therefore narrower than the headline issue of monetary policy and inequality, but analytically prior to it: given the portfolios households actually held, how were the resulting revaluations distributed across the wealth distribution? What is at stake, in other words, is how a common monetary-financial environment is translated into unequal wealth dynamics once it meets unequal portfolios.

Two limits define the exercise. The first concerns scope. Monetary policy reaches the distribution of household resources through several channels, labour income, employment, capital income, debt-service costs and credit conditions among them, and we do not attempt to aggregate or rank them. We isolate the channel that runs through the revaluation of assets already held: the asset-inflation, or portfolio, channel on wealth. The second limit concerns inference. We do not identify exogenous monetary-policy shocks, nor do we estimate the overall distributive effect of policy. What we measure instead is the distributional incidence of the asset-price movements actually observed: which households gained, which did not, and how this depended on the structure of their portfolios. The revaluations are therefore read against the monetary-policy environment in which they occurred rather than causally attributed to it.

Methodologically, the paper follows the approach developed in Gobbi, D’Ippoliti and Temperini (2026). We combine harmonised HFCS micro-data with asset-specific price and return series and apply the observed price changes of each window to the portfolio each household held at its beginning, tracing the resulting capital gains along the wealth distribution and bounding them with explicit pricing scenarios for financial assets. The contribution is twofold. Empirically, the paper maps macro-financial revaluations onto the micro-distribution of euro-area wealth across four waves and across the whole distribution, rather than at a single point of it. Theoretically, it reads that mapping through a post-Keynesian lens in which money and finance are not neutral and the revaluation of asset stocks is not a secondary residue of the cycle, but one of the places where distribution is reshaped.

The paper proceeds as follows. Section 2 reconstructs the euro-area monetary-policy and macro-financial environment of 2010–2023. Section 3 situates our focus on asset inflation within the broader literature on monetary policy and distribution and sets out the theoretical framework. Section 4 describes the HFCS data, the construction of the asset categories and the capital-gains methodology. Section 5 presents the results, portfolio composition along the wealth distribution, the decomposition of

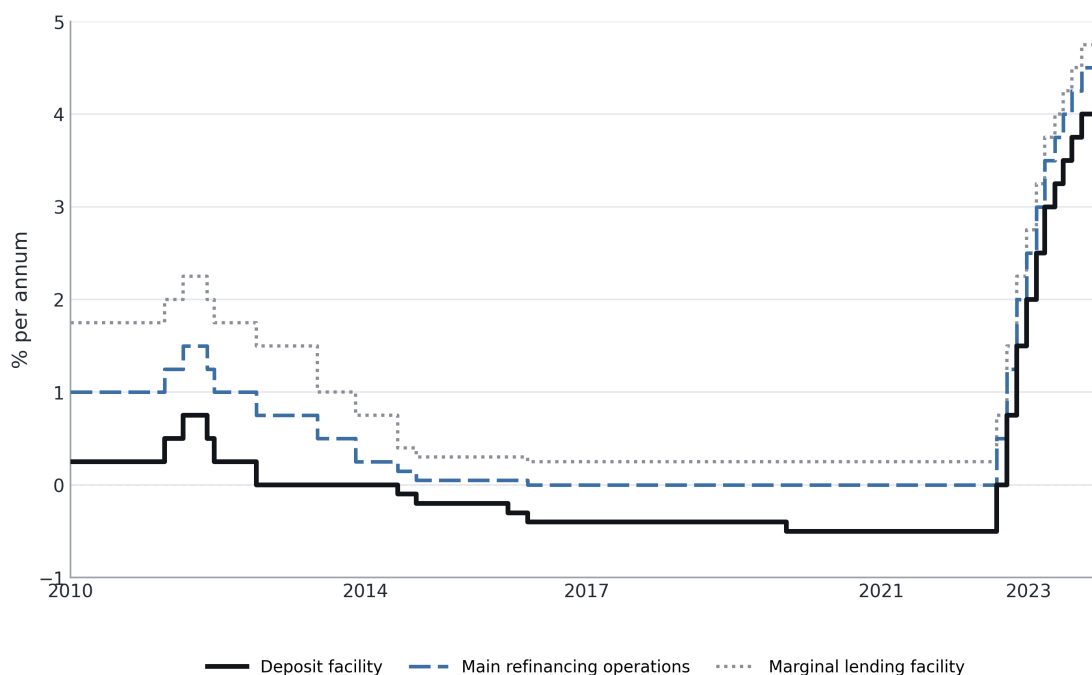
capital gains by asset class, and the comparison across scenarios and waves. Section 6 draws out the implications of these results and concludes.

2. Monetary Policy in the Eurozone

The period covered by our empirical exercise, 2010–2023, is not a neutral background but a sequence of sharply different monetary-policy regimes in the euro area. It opens with the sovereign-debt crisis, moves through negative interest rates and large-scale asset purchases, is interrupted by the pandemic emergency response, and closes with the tightening cycle of 2022–2023. This section reconstructs that institutional and macro-financial background. The point is not to claim that monetary policy alone determined asset-price movements, nor to identify policy shocks. It is, more narrowly, to specify the valuation environment in which the observed revaluations of household portfolios took place before turning to the particular channel studied here: asset-price inflation and capital gains.

The first development was the compression of policy rates towards, and eventually below, zero. Figure 1 shows the ECB's key rates falling over the decade as the conventional interest-rate framework gave way to a far more interventionist stance. The deposit facility rate entered negative territory for the first time in June 2014; the ECB's official series records it at -0.10 per cent from 11 June 2014 and at -0.50 per cent from 18 September 2019, before the subsequent tightening lifted it to 4.00 per cent in September 2023 (ECB, Key ECB Interest Rates). These cuts mattered not in isolation but as part of a broader attempt to compress financing costs across maturities and across countries.

Figure 1. ECB key interest rates (main refinancing operations, deposit facility, marginal lending facility), 2010–2023.

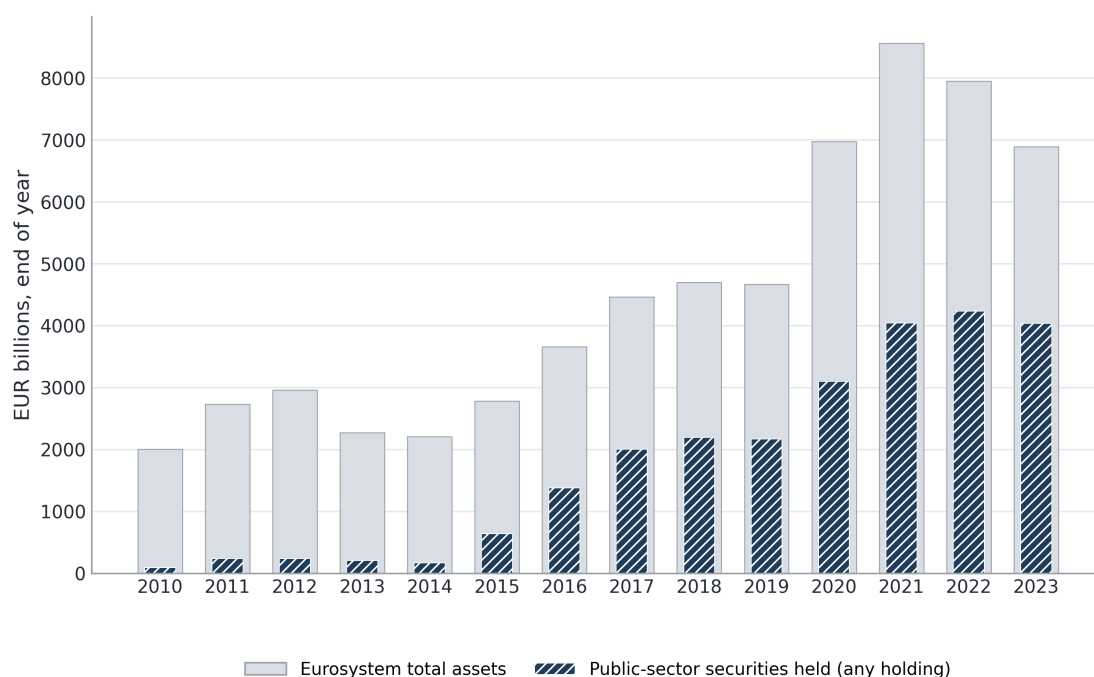


Source: ECB, Key ECB interest rates.

Once conventional rates approached their lower bound, policy turned to operating directly on the quantity and price of assets. The Eurosystem had already intervened in secondary sovereign markets

through the Securities Markets Programme (SMP) from May 2010 — the first visible accumulation of public-sector securities on its balance sheet, though sterilised and therefore not, at that stage, an expansion of the monetary base. The decisive turn came with the Asset Purchase Programme (APP), begun in late 2014 with its public-sector component (PSPP) from March 2015: the combined monthly pace was set at €60 billion from March 2015, raised to €80 billion between April 2016 and March 2017, and then tapered through 2018 (ECB, Asset Purchase Programmes). After an incomplete normalisation in 2018–2019, the pandemic required a far larger intervention: in March 2020 the ECB launched the Pandemic Emergency Purchase Programme (PEPP), covering private and public-sector securities, initially with a €750 billion envelope and later expanded to €1.85 trillion (ECB, Pandemic Emergency Purchase Programme). Figure 2 shows the counterpart of these programmes on the Eurosystem balance sheet, whose size and holdings of public-sector securities expanded markedly before contracting from 2023, as APP reinvestments ceased and TLTRO III operations matured (ECB, 2024). Altavilla et al. (2015) provide direct evidence that the APP significantly lowered yields across a broad set of euro-area market segments.

Figure 2. ECB balance sheet and total public-sector securities held by the Eurosystem (any holding), 2010–2023.

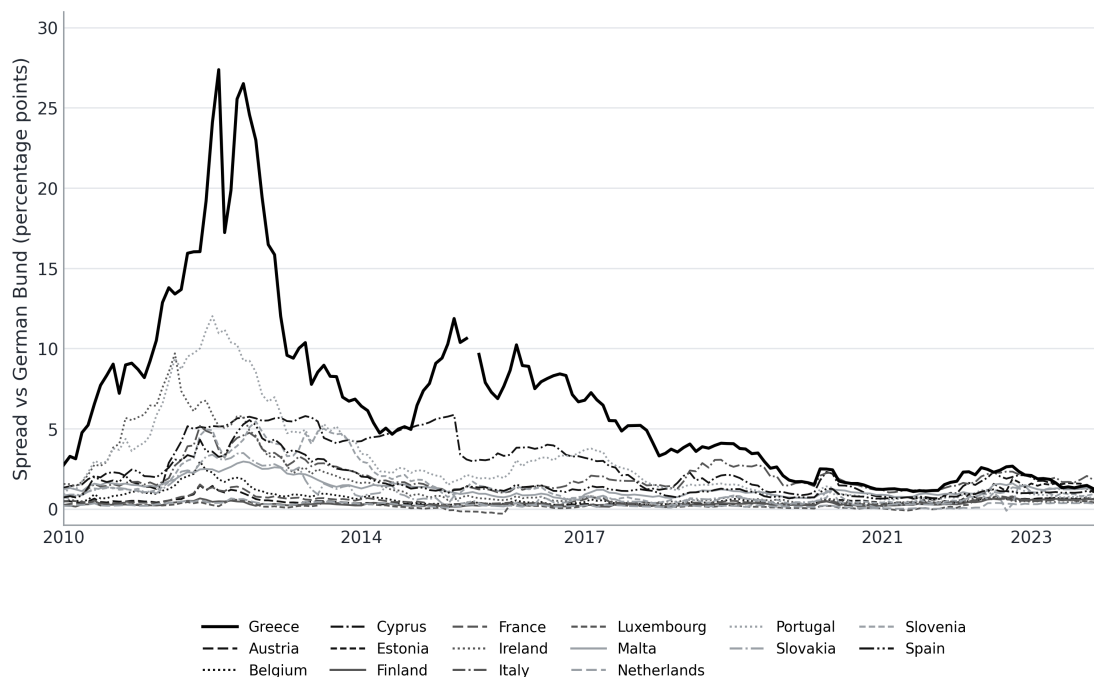


Source: own elaboration on ECB data (*Consolidated balance sheet of the Eurosystem; APP, PEPP and SMP holdings*).

These interventions did not bear on all member states with the same intensity, and their effect is read most clearly in the dispersion of sovereign yields. Figure 3 shows ten-year spreads relative to the German Bund. In the sovereign-debt crisis the Greek spread reached roughly twenty-seven percentage points in 2012, with Ireland and Portugal also well above ten points, while the core countries remained close to Germany. The SMP and then the September 2012 decision to launch Outright Monetary Transactions, never activated, yet sufficient, together with the commitment to do “whatever it takes” to preserve the euro, triggered a rapid and durable compression of these spreads, which the later purchase programmes and the PEPP narrowed further. The point is not that monetary policy mechanically

explains every movement in sovereign yields, but that the period was one in which policy repeatedly reshaped the relative cost of financing across the union.

Figure 3. 10-year sovereign yield spreads vs the German Bund, euro-area countries, monthly, 2010–2023.



Source: own elaboration on Eurostat, EMU convergence criterion bond yields.

The final phase reversed the direction of policy. The post-pandemic recovery was followed by a sharp inflationary shock, high and volatile commodity prices, global supply bottlenecks, reopening effects and, after February 2022, Russia's invasion of Ukraine, with average euro-area HICP inflation reaching 8.4 per cent in 2022 (ECB, 2023). The Governing Council responded by raising rates sharply from July 2022, exiting negative territory, and by beginning to shrink the balance sheet. Taken together, the three figures describe the macro-financial environment in which the capital gains analysed in this paper were generated: the stance of policy rates (Figure 1), the scale of the Eurosystem's asset holdings (Figure 2), and the uneven compression of sovereign financing conditions across countries (Figure 3). They should be read as contextual evidence, not as causal identification: they show why the capital-gains channel is worth isolating and at what institutional level it should be read.

3. Theoretical Framework: Monetary Policy, Asset Prices and Wealth

The distributional consequences of monetary policy are broader than the asset-price channel studied here. Surveying the empirical literature on monetary policy and personal income distribution, Kappes (2023) organises the main transmission mechanisms into five channels. Two operate primarily through labour-market outcomes: an earnings-heterogeneity channel, because wages and labour incomes respond differently across households, and a job channel, because employment risk is unevenly distributed. A third works through capital income, including interest and profit receipts. A fourth is the portfolio channel, through which changes in asset prices generate capital gains and losses depending on which assets households own. A fifth is the debt-burden channel, through which interest-rate changes

alter the cost of servicing household debt. This taxonomy matters because it prevents the distributive question from being collapsed into a single net effect.

This classification is useful because it guards against over-claiming. Expansionary monetary policy may reduce income inequality if it improves employment among lower-income households even while it raises the market value of assets disproportionately held by the wealthy. In the euro area, indeed, several studies find that unconventional policies were mildly equalising for income, largely through their effect on employment (Lenza and Slacalek, 2024), whereas evidence for the United States and Japan more often points to inequality-increasing effects through financial-asset appreciation. The issue, then, is not whether monetary policy is distributionally relevant, but through which channels, under which institutional conditions, and through which balance-sheet positions that relevance operates.

We have ourselves contributed to this debate. Gobbi, D'Ippoliti and Temperini (2025), using a stock-flow consistent model of the euro-area economy, show that different unconventional instruments, quantitative easing, the issuance of a central-bank digital currency, and heterodox interest-rate rules, operate through different balance-sheet positions and income flows, reshaping in particular the division of capital income between firms' profits and financial rents. This is consistent with the post-Keynesian premise that monetary policy is not a neutral veil placed over real allocation, but works through balance sheets, liquidity positions, interest payments and asset valuations.

The present paper isolates one part of this broader transmission map. We focus on the portfolio, or asset-inflation, channel, and shift the object of analysis from income flows to wealth stocks, terrain on which the euro-area evidence remains comparatively thin (Adam and Tzamourani, 2016; De Luigi et al., 2023). We do not study the employment effects of monetary policy, the wage channel, realised capital income, or the debt-service channel, and we do not estimate the causal effect of an identified monetary-policy shock. Instead, we take the observed asset-price movements of 2010–2023 as the relevant revaluation environment and ask how the implied capital gains are distributed across households with different portfolio structures. This narrowing is deliberate. The broader issue is monetary policy and distribution; the narrower one, and the one studied here, is how unequal balance sheets filter a common set of price movements into unequal gains.

Having delimited the empirical focus to the asset-inflation channel, the theoretical question is how asset-price changes translate into wealth dynamics. The starting point is straightforward: revaluations operate on existing stocks. A rise in house, bond or equity prices does not first pass through current income, saving or realised cash flows, but revalues immediately the balance sheets of the households that already hold the corresponding assets. The mechanism is therefore one of stock adjustment rather than flow transmission. The relevant object is not the price movement alone, but the balance sheet on which it lands.

If households hold different portfolios, the same vector of asset-price changes has different effects across the distribution. A household whose wealth is concentrated in housing is moved mainly by real-estate prices; one holding equity, bonds and business assets is exposed to a broader set of valuations; and one with little asset ownership gains little directly from asset-price inflation, whatever the macroeconomic environment that produces it. Capital gains therefore act on stocks rather than flows. Labour income and saving add to wealth gradually; asset revaluations can alter wealth positions immediately and at scale.

The larger the initial asset stock, the larger the absolute revaluation produced by a given price change. Yet the distributive point does not lie only there. Even when capital gains are measured relative to wealth, portfolio composition remains decisive, because households at different points of the

distribution own different assets and therefore undergo different revaluation patterns (Piketty, 2014). A single episode of asset-price inflation may shift wealth positions temporarily. Repeated revaluations, however, especially when concentrated in assets disproportionately held by the wealthy, can become a mechanism of persistent divergence. In this sense, the distributional consequence is prepared before the price change occurs: it is already embedded in the unequal composition of balance sheets.

We read this mechanism within a tradition that treats money, finance and balance sheets as constitutive of a capitalist economy rather than as a neutral layer superimposed on a real one. In a monetary economy of production, accumulation takes place under fundamental uncertainty, and portfolio decisions depend on expectations, liquidity preference and institutional arrangements rather than on frictionless intertemporal allocation (Keynes, 1936; Kalecki, 1943; Lavoie, 2014). Asset prices, in this view, are not passive reflections of fundamentals. They are shaped by expectations, liquidity conditions and balance-sheet positions. Minsky's analysis is central here, since the structure of balance sheets — collateral values, borrowing capacity, financial fragility — both transmits and amplifies asset-price movements, so that revaluations reach well beyond current returns (Minsky, 2008).

This perspective connects asset-price dynamics to financialisation and distribution. In a finance-dominated economy, accumulation depends increasingly on financial claims and balance-sheet revaluations, while distribution is shaped by the ownership of assets and by the institutional weight of financial markets (Stockhammer, 2004; Hein, 2015; Hein and Stockhammer, 2011). The relevance of asset inflation is therefore structural rather than accidental: different groups hold different claims on future income and different exposures to asset markets. In this framework, the proposition that monetary policy is not distributionally neutral, as discussed above, is not an empirical afterthought but a theoretical premise, in line with the post-Keynesian critique of a purely technocratic view of the central bank (Davidson, 2006; Lavoie, 2006; Rochon and Rossi, 2007). Our concern here, however, is narrower than the design of the interest-rate rule. It is the revaluation of wealth generated within the policy environment of 2010–2023 and filtered through unequal ownership structures.

These emphases differ from, more than they contradict, much recent work on monetary policy and households. In representative-agent and New Keynesian settings, distribution is largely derivative of price and interest-rate adjustment (Woodford, 2003; Galí, 2015). Even where household heterogeneity is placed at the centre, as in HANK models, it tends to enter as dispersion that shapes the transmission of policy rather than as the object of inquiry (Kaplan, Moll and Violante, 2018; Auclert, 2019). Our reading instead treats the revaluation of wealth, and its dependence on portfolio composition, as the explicit object of analysis.

This does not make the empirical literature irrelevant. On the contrary, the evidence reviewed above is what allows the present question to be posed with precision. Some of that work finds the overall effect of unconventional policy on income inequality ambiguous, or even equalising once employment and income channels are included. The reason this reinforces, rather than weakens, our narrower focus is straightforward. If different channels can offset one another in the aggregate, it becomes more important, not less, to isolate how observed revaluations translate into capital gains across heterogeneous portfolios. In this sense, the paper complements both the empirical literature on monetary policy and inequality and the recent post-Keynesian work on monetary policy and distribution (Lofaro, Matamoros and Rochon, 2024), while keeping the analysis centred on wealth stocks rather than income flows.

4. Data and Methodology

The exercise is one of distributional incidence rather than causal identification: we do not estimate a monetary-policy reaction function or identify exogenous policy shocks, but combine household balance-sheet information with the observed asset-price changes of 2010–2023 and ask how the implied capital gains are distributed across households. The unit of analysis is the household, and the object of interest is the revaluation of the portfolio held at the beginning of each window. The empirical strategy follows the methodology developed in Gobbi, D'Ippoliti and Temperini (2026), to which the reader is referred for fuller discussion; here we summarise only what is needed to read the results.

Household balance sheets are drawn from the Household Finance and Consumption Survey (HFCS), the harmonised micro-data infrastructure coordinated by the Eurosystem (European Central Bank, Household Finance and Consumption Survey). We use its four waves, with portfolio reference years around 2010, 2014, 2017 and 2021, and study the forward revaluation windows 2010–2014, 2014–2017, 2017–2021 and 2021–2023. Throughout we follow the survey's design: variables affected by item non-response are released as five multiply imputed datasets, so statistics are pooled across the five imputates under Rubin's rules and observations are weighted with the HFCS sampling weights.

Household assets are grouped into five categories — real estate, deposits, bonds, equity and business wealth — each matched to a country-level price or return series, and capital gains are expressed as a share of these selected assets. Real estate is revalued by house-price growth; deposits receive a zero nominal capital gain; equity by stock-market benchmark indices; bonds by price changes derived from sovereign yields; and business wealth is proxied by GDP growth, since unlisted business assets have no observable market price. Holdings of mutual funds, voluntary pensions and other financial assets are not left as a residual category but reallocated across real estate, bonds and equity according to the composition of the funds, so that the five categories exhaust the priced portfolio.

For each household the capital gain is the sum of these category gains, normalised by selected assets. The central scenario weights cross-border exposures using the BIS Consolidated Banking Statistics (Bank for International Settlements), relaxing the assumption that households hold only domestic assets. Around this central scenario we report a robustness band obtained by letting the bond benchmark vary between its lower and upper bounds, while all other assets are held fixed. Households are then ranked, using survey weights, along the wealth distribution, and capital gains are reported across wealth classes.

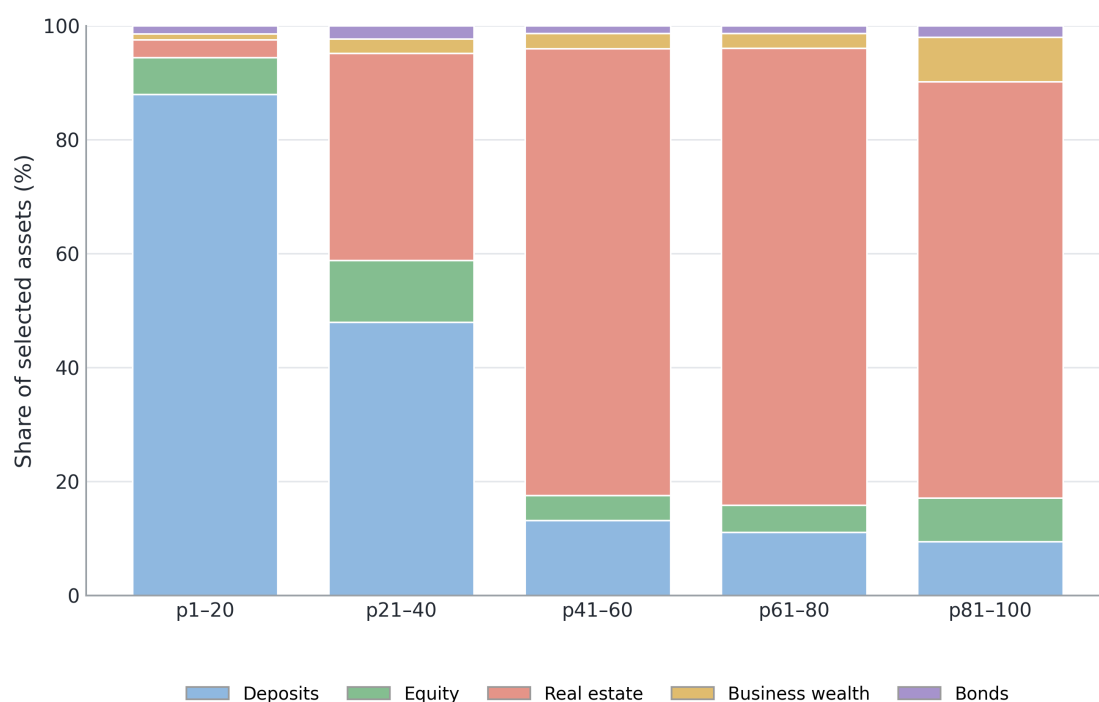
5. Results

The results are organised so as to let the mechanism emerge rather than merely to display estimates. We begin with portfolio composition along the wealth distribution, because that composition conditions the incidence of any given set of asset-price movements. We then trace the capital gains themselves, decomposed by asset class and summed to a total, across the four revaluation windows. Finally, we compare the central scenario with the bond-pricing band and read the four waves together. Throughout, the gains are expressed as a ratio to the household's total selected assets, and the distribution is summarised by five wealth classes — the four lower quintiles and a top class p81–100, obtained by aggregating the finer top-of-the-distribution sub-classes — of net wealth.

Portfolio composition changes systematically along the wealth distribution, and it is this heterogeneity that turns a common set of asset-price movements into unequal capital gains. Figure 4 shows the average composition of selected assets by wealth class for the most recent wave; we report a single wave because the qualitative pattern is remarkably stable across the four, and little is gained by repeating it. At the bottom of the distribution, wealth is held almost entirely in the form of deposits and other claims whose nominal value does not change: deposits account for some 88 per cent of the p1–20 portfolio and still close to one half of the p21–40 portfolio. As one moves up the distribution, this share collapses and housing takes over: real estate represents around four fifths of the portfolio through the broad middle (roughly 79 and 80 per cent in the p41–60 and p61–80 classes) and remains dominant, at around three quarters, in the top class. Business wealth and equity, by contrast, gain weight precisely at the top: the business share rises from one to three per cent across most of the distribution to almost eight per cent in the p81–100 class, while equity is present throughout but becomes more consequential in the lower-middle classes and at the top. Bonds are a thin component everywhere. What matters, in other words, is not wealth rank in the abstract, but where the revaluable assets sit.

The implication for what follows lies in these starting positions. Before any price change is applied, households at different points of the distribution are already exposed very differently to the assets that can generate capital gains: cash at the bottom, housing through the middle, business and equity at the top. Portfolio composition is therefore not a descriptive backdrop. It is the initial condition of the distributive mechanism — the differential exposure onto which the revaluations examined in the next subsections are mapped.

Figure 4. Average household portfolio composition by net-wealth class, euro area, Wave 4 (2021). Shares of selected assets.



Mapping these portfolios onto the observed asset-price movements produces the capital gains decomposed in Figure 5, one panel per wave. Three regularities stand out. First, the bottom class is partly insulated in every wave: holding mostly deposits, it records only small gains, which originate almost entirely from the modest equity and bond positions it does hold rather than from housing. Second, real estate is the main engine of capital gains through the middle and upper-middle of the distribution wherever house prices rose, and its contribution grows with the housing share. This is most striking in the 2017–2021 window, the strongest housing-revaluation window of the four, in which the real-estate contribution alone reaches some fourteen to sixteen percentage points of selected assets in the upper classes. The opposite case is equally instructive: in 2010–2014, when euro-area house prices were on average flat or slightly negative — the peripheral correction offsetting gains in the core — the real-estate contribution is close to zero or marginally negative through the middle classes, and the gains of that window come mainly from the recovery of equity markets. Third, business wealth and bonds matter above all at the top and in the most recent window. Business wealth becomes visible mainly in the top class, where it adds around one and a half to two percentage points in 2021–2023; bonds contribute small positive amounts during the low-yield purchase phases but turn negative in 2021–2023, when the tightening cycle depressed bond prices and subtracted around half a percentage point from the gains of every class. The decomposition therefore shows not only who gained, but through which balance-sheet positions the same macro-financial movement became distributively unequal.

Figure 5. Decomposition of average capital gains by net-wealth class, euro area, four HFCS waves (growth periods 2010–2014, 2014–2017, 2017–2021, 2021–2023). Contributions to capital gains as a share of selected assets, by asset category.



Summed across asset classes, these contributions produce a total capital gain that, in most windows, rises with wealth. The gradient follows from portfolio composition: as the zero-gain deposit share gives way to appreciating housing and, at the very top, to business wealth and equity, the total gain climbs from near zero in the bottom class to its maximum in the upper and top classes. The pattern is not mechanical, however, and the exceptions are more revealing than the rule. In 2010–2014 the profile is essentially flat and even U-shaped because the asset that carries the middle of the distribution — housing — did not appreciate. In 2021–2023 it becomes hump-shaped, with the largest gains accruing to the middle classes most exposed to housing rather than to the very top, whose bond holdings were losing value. What governs incidence, in short, is the interaction between the configuration of returns in each window and the structure of portfolios, not a standing rule that the top always gains most. Unequal capital gains do not follow from wealth ranking alone; they depend on which asset is revalued and where that asset is located in household balance sheets.

Figure 6. Total average capital gains by net-wealth class, euro area, four HFCS waves (2010–2014, 2014–2017, 2017–2021, 2021–2023). Solid lines: central scenario. Shaded bands: variability obtained by letting the bond benchmark vary between its minimum and maximum.

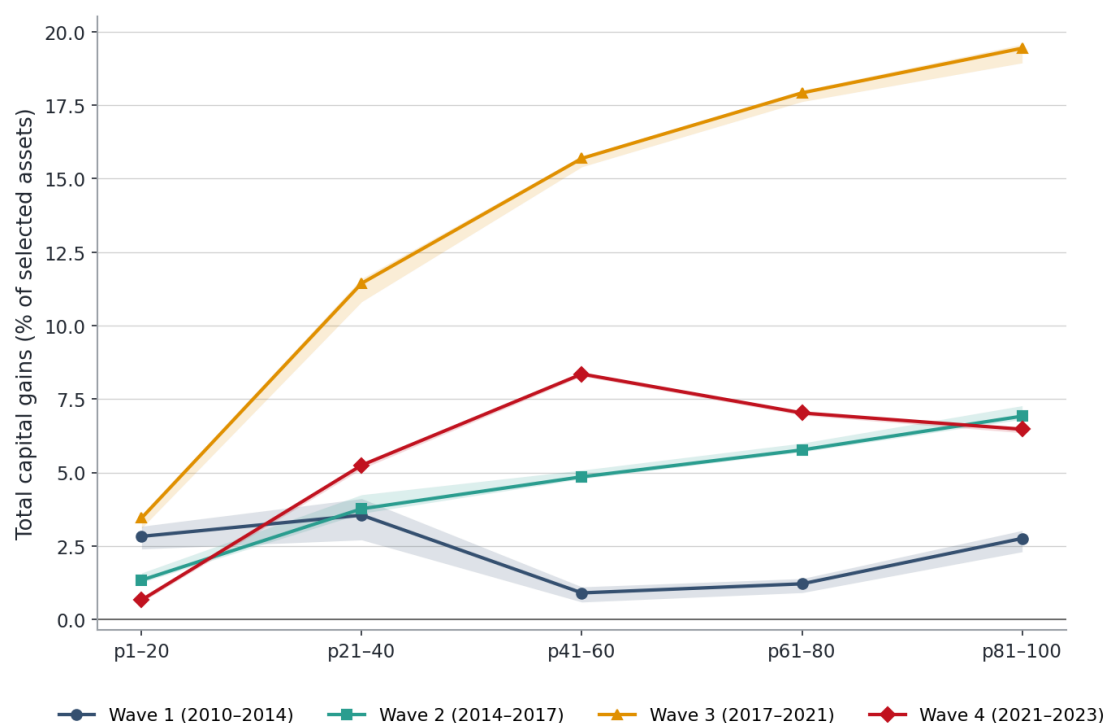


Figure 6 brings the four windows together and adds the bond-pricing band. For each wave the solid line is the central scenario, in which cross-border exposures are weighted using the BIS Consolidated Banking Statistics; the shaded band around it is obtained by letting only the bond benchmark vary between its minimum and maximum, holding all other assets at their central valuation. Two points follow. First, the band is narrow in every wave, and barely visible in 2021–2023, where the spread between alternative bond benchmarks is of the order of a tenth of a percentage point: the main qualitative pattern is therefore not driven by the bond benchmark. Second, a positive wealth gradient appears in the main housing-driven windows, but its steepness depends on what appreciated. The 2017–2021 window stands out, with total gains rising almost monotonically from around three to

nearly twenty per cent of selected assets between the bottom and the top class. The 2014–2017 window shows a milder but similar upward gradient. The two more atypical windows are precisely those in which the asset carrying the middle of the distribution did not behave in the usual way: the flat-to-U-shaped profile of 2010–2014 and the hump-shaped profile of 2021–2023. What varies, then, is not wealth alone, but the way different return configurations are filtered through different portfolios.

The bond-pricing exercise therefore reinforces rather than replaces the interpretation developed above. The main source of distributional variation is not the exact bond benchmark, but the way observed revaluations are filtered through heterogeneous portfolios. In the housing-driven windows this produces a clear positive gradient; in the windows in which housing is weak or bond prices fall, the profile flattens or becomes hump-shaped. The wealth-side incidence the paper set out to measure is therefore sizeable and systematic, but not mechanical: it depends on the asset composition of household balance sheets and on the configuration of returns in each period. The implications of this result for the monetary-policy debate and for cumulative wealth divergence are taken up in the concluding section.

6. Implications and Conclusions

This paper has measured the distributive incidence of the asset-price revaluations of 2010–2023 on euro-area household wealth. Applying observed house, bond, equity and business returns to harmonised HFCS portfolios across four waves, we find that the wealth-side incidence of these revaluations is sizeable, systematic and structured by portfolio composition. Capital gains act directly on the stock of wealth, independently of households' current income or saving; and because portfolios are heterogeneous along the distribution — deposits at the bottom, housing through the middle, business and equity at the top — the same set of price movements generates unequal gains. Read through the monetary-production and financialisation lens set out in Section 3, the central result is not merely that asset prices matter, but that the unequal revaluation of asset stocks is itself one of the mechanisms through which distribution is reshaped.

In most windows, the direction of this incidence favours households whose balance sheets are tilted towards appreciating real and business assets over those holding predominantly deposits. If such revaluations recur, they provide precisely the kind of mechanism through which household gaps can widen cumulatively (Piketty, 2014). The claim, however, must be kept within its proper bounds. Our exercise reads each revaluation window separately and does not construct a fully cumulated panel of the same households over time, so cumulative wealth divergence is a direction with which our single-period evidence is consistent rather than a magnitude we directly measure. The atypical windows reinforce this caution. Where the asset carrying the middle of the distribution did not appreciate, flat-to-negative housing in 2010–2014, or falling bond prices alongside strong housing in 2021–2023, the profile flattens or becomes hump-shaped. What governs incidence is the interaction between the configuration of returns in each period and the structure of portfolios, not a standing rule that the top always gains most.

These results bear on the monetary-policy debate, but only within a precise scope. Monetary policy reaches household distribution through several channels — labour income, employment, capital income and debt-service costs among them — and the exercise here isolates only one of them: the wealth-side incidence of asset-price revaluations. The period we study coincided with an unusually dense sequence of monetary-policy regimes — the sovereign-debt crisis, negative rates, large-scale asset purchases, the pandemic response and the 2022–2023 tightening — and the revaluations we trace took place within

that environment. We do not, however, identify monetary-policy shocks, and we do not claim that monetary policy mechanically explains every asset-price movement. What our evidence supports is narrower, and precisely for that reason more robust: the asset-inflation channel is distributionally relevant, and the wealth-side effects associated with monetary-policy environments are not distributionally neutral. This claim is consistent with the post-Keynesian tradition (Davidson, 2006; Lavoie, 2006; Rochon and Rossi, 2007) and with our earlier work on the distributive impact of unconventional policies (Gobbi, D'Ippoliti and Temperini, 2025). It matters because once different channels may offset one another in the aggregate, isolating the wealth-and-portfolio channel becomes more important, not less.

The broader implication is that wealth, and not income alone, is indispensable to understanding distributive dynamics, and that unrealised capital gains are central to that task. Their effects are not homogeneous. They depend on the asset composition of household balance sheets and on which prices move. For both distributional analysis and the assessment of monetary policy, the relevant question is therefore not inequality in the abstract, but the concrete channels through which household wealth is revalued.

Methodologically, the contribution of the paper is to make this channel directly observable at the household level. Combining harmonised HFCS balance sheets and their multiple-imputation structure with asset-specific price series, the reallocation of mutual funds and residual financial assets, and explicit pricing scenarios, the exercise maps observed revaluations onto the whole wealth distribution under assumptions that are stated and bounded, the business-wealth proxy, the alternative bond benchmarks, and the central-scenario relaxation of the domestic-asset assumption. The mapping from observed asset-price movements to household-level capital gains is, in this sense, both replicable and explicit about the level at which the claim is being made: not the total distributive effect of monetary policy, but the incidence of one channel of revaluation.

Several limitations bound these claims and indicate where the analysis can be extended. The distribution is followed as a pseudo-panel of representative wealth cells rather than as the same households tracked over time, so the cumulative reading suggested above should be developed with genuinely longitudinal data. Households are assumed to hold domestic assets, an assumption relaxed, but not removed, by the cross-border central scenario. The return on unlisted business wealth has no observable market price and is proxied by GDP growth, a deliberate approximation. The gains we measure are unrealised and computed before taxes and transfers. The exercise likewise does not model household behavioural responses or realised trading, nor the employment, debt-service and fiscal-redistribution channels through which monetary policy also reaches households; these lie outside the wealth-side accounting we undertake, even though they help determine the net distributional outcome. Finally, the exercise stops at the revaluation of stocks and does not model the realised capital-income and $r-g$ dynamics through which such revaluations might further compound; that extension is a natural next step. None of these caveats overturns the central result. What the paper establishes, more narrowly but also more firmly, is that across the euro area and across four waves the incidence of asset-price revaluations on household wealth has been sizeable, systematic, and shaped first of all by the unequal composition of household portfolios.

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